Learning to change, changing to learn: district conditions for organizational learning

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Learning to Change, Changing to Learn: District Conditions for Organizational Learning

A dissertation proposal submitted in partial satisfaction of the requirements for the degree of Doctor of Education in Educational Leadership by Victor Anthony Guthrie

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2011
The Dissertation of Victor Anthony Guthrie is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

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Chair

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2011
DEDICATION

The accomplishment of this dissertation is dedicated to my wife, Amber. “When I saw you I fell in love, and you smiled because you knew” (Arrigo Boito).

I also dedicate this work to my family: To my father, James, who taught me dedication, honor, and respect; My mother, Nora Lee, who gave me passion, conviction, and efficacy; My sister, Gina, for her easy-going and laissez-faire nature; My Nana, Grace, who’s razor sharp sense of right and wrong helped me to form my own.

And to my larger family: My OF’s, who have taken me in, shown me love, and nurtured me as though I was their own – I am indebted to you; Jim and Darlene, who once told me I was a “shooting star,” and therein changed my perspective forever; Jaime and Tami, for literally caring for me when I lacked the ability to do it myself; and to my late Nanu, Vito, who was a noble and honorable man, and someone I model my own efforts upon: Si sono ricordati.
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ABSTRACT OF THE DISSERTATION

Learning to Change, Changing to Learn:
District Conditions for Organizational Learning

by

Victor Anthony Guthrie

Doctor of Education in Educational Leadership

University of California, San Diego, 2011
California State University, San Marcos, 2011

Professor Alan J. Daly, Chair

A mixed method study was performed to investigate the district and school conditions that cultivate organizational learning, and how that influences the district’s response to a 21st Century change initiative. The interdisciplinary approach of the study explored the relationship between potential conditions for sustainable change by drawing on three bodies of literature: districts, organizational learning, and transformational leadership. A literature review of the theoretical foundations, and past research within each field, is provided. The mixed method study included a quantitative phase in which data was collected from an Organizational Learning Conditions survey, and an extant
data source. A qualitative phase explored findings obtained through semi-structured private interviews of district and school leaders, teachers, and union members. Document and archival analysis provided additional data for the qualitative phase. The mixed method research design was intended to obtain a deep understanding of what is happening in the district of study with regard to the presence of the conditions for organizational learning, and how those conditions enabled or constrained the adoption of a 21st Century literacy change initiative. Data clearly revealed the presence of four conditions for organizational learning: (a) Collaborative and Harmonious Culture, (b) Congruence of District Mission & Vision with Practices and Beliefs, (c) Leadership, and (d) Policies and Resources for Promoting Learning. A fifth condition, Organizational Communication, emerged through the content analysis of stakeholder interviews and archival data. The district stakeholder’s response to a 21st Century change initiative was primarily enabled by the influence of the organizational learning conditions. However, Culture was found to both enable and constrain the stakeholder response. The implications of this study suggest that districts considering the implementation of a 21st Century literacy initiative first inventory the existing conditions and available resources; then build or leverage the communication channels to enlist stakeholder participation in the design and scaffolding of the initiative; and finally, the implementation action should be enacted with shared stakeholder purpose and responsibility.
Chapter 1

From the highest levels of analysis and policy-making, there are competing interests in public education. Nationally, public education is under a near constant state of reform. School administrators would likely sympathize with the observation that in recent years, a "cacophony of reform proposals has produced a great deal of activity but little real change" (Hess, 1998, p. 24). Earl and Katz (2006) maintained that school leaders, disturbed by the “name, shame, and blame” game, are grappling with the political agendas around school reform (p. 11).

Togneri and Anderson (2003) acknowledge that we have a moral imperative to make systemic changes to meet the needs of all students. The No Child Left Behind Act of 2001 makes this a legal imperative as well. At the state level, the politicians vie for votes, often using public education as a primary topic. This is particularly easy in states such as California, which falls below the national average in all four core measures: Reading, Mathematics, Science, and Writing (“State Profiles”, 2009.) The message in other states is the same; we need to fix the educational system. While policies continue to be developed at the state and national levels, these policies alone cannot always mandate what matters to outcomes at the local level (McLaughlin, 1987). Are political and social artifacts capable of sustaining systemic coherence toward the ultimate goal of educating the 21st Century student? In the school systems that can affect systemic change, such efforts may mean brighter futures for those students, but the results are often isolated islands of excellence (Togneri & Anderson, 2003).
Changing Times

In an age of rising demands, dwindling resources, and increasing policy shifts, educators are forced to respond to unprecedented change. In the background, there is a growing national pressure resulting from policy enactment, specifically the No Child Left Behind (NCLB) Act of 2001. A recent report showed that, "nearly all elementary schools in California will fail to meet the [Annual Yearly Performance] requirement by 2014" (Bryant, Hammond, Bocian, Rettig, Miller, and Cardullo, 2008, p. 1782). Failure to meet NCLB’s targets has increasingly severe fiscal and governance sanctions (Gifford, 2009). Moreover, Elmore (2004) and Fullan (2006) argue that external accountability measures, like those in NCLB, will not produce long-term, sustainable growth. It is arguable that this policy does little more than shackle processes, and curtails innovation.

In the foreground, there are other challenges. New and evolving technology has changed our societies, economies, and our world. These changes are forcing the evolution of curriculum and the instructional practice of educational professionals. Some have argued that, “educators are often blamed for [their] resistance to change” (Leithwood, Louis, Anderson, & Wahlstrom, 2004, p. 34). Others have acknowledged that, “these problems were ‘actually systems’ that lured policymakers into interventions that focused on obvious symptom not underlying causes, which produced short-term benefits but long-term malaise, and fostered the need for still more symptomatic interventions” (Senge, 1990, p. 15). The problem is that at times we are bound by our own organizational structures, and chained to the existing systems. Herein is the dilemma: How can we hope to implement systemic organizational change, if we cannot see past our own practice.
The 1990’s were a boom for technological innovation, and the interconnection of people around the planet. After 20 years of service, the Advanced Research Projects Agency Network, arguably the first predecessor to today’s Internet, was formally retired from service. While ARPANET was an extremely basic network, it did connect four major universities: the University of California at Los Angeles, SRI at Stanford University, the University of California at Santa Barbara and the University of Utah (“Elon/Pew’s Imagining the Internet”, n.d.). ARPANET’s school-to-school connections allowed engineers and researchers to collaborate while simultaneously designing a more robust computer network for the same purpose. ARPANET, and the multiple iterations that followed, finally resulted in the World Wide Web’s unveiling in 1990, and the first public use thereof in 1991 (“Elon/Pew’s Imagining the Internet,” n.d.).

Four years following its first public use, an estimated 16 million users were participating on the Internet. In 1996, the Internet’s use grew to an estimated 45 million people. This meteoric rise of participation, nearly 30 million additional participants in a single year, is unmatched in history. The internet amassed 50 million users in just four years, whereas it took television 13 years to accomplish the same, and surprisingly, radio took 38 years to equal the same market (“Elon/Pew’s Imagining the Internet,” n.d.). Moreover, this pales in comparison to the Internet’s nearly ten-fold growth in the following five years. In 2000, following the Y2K scare, there were an estimated “407 million users in 218 of the 246 countries in the world” (“Elon/Pew’s Imagining the Internet”, para. 9, n.d.). In 2010, there were an estimated one billion Internet users.

Moreover, the Internet is not the sole artifact of the changing times. Nor is the researcher-driven response of educational reform a new idea (Anderson & Togneri, 2005;
Fullan, 2006; Gifford, 2009; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Shein, 2000). Nearly a century ago, John Dewey (1915, 1916, 1938) laid out a progressive new approach to education. He called for schools to break away from the traditional model of education in which teachers handed down predefined knowledge to relatively passive students. He believed that experience is the best education and created a system that would focus instead on learning-by-doing. Today, many young people learn by doing in a virtual context while using computer-based simulations – or collaborating with peers online in social networks (Goel, 2008; Daly, 2010). However, this is largely performed outside of school.

Prensky (2001) introduced the metaphor of digital natives and digital immigrants, in which students who have grown up in a time of cell phones, email, instant messaging, and ubiquitous Internet access, are considered *digital natives*. These digital natives speak “digital” fluently. Digital natives expect to be engaged and motivated, and they expect individualized and differentiated attention. People who were born before the invent of these technologies (including most educators) are termed *digital immigrants* who must learn to speak “digital” as a second language (Prensky, 2001).

Maintaining any pace of technological innovation has proven difficult for educators (Prensky, 2006). This is not necessarily the fault of the educators, nor the system. Some researchers have suggested that “such attachment to the status quo should not be perceived simply as a lack of capacity or a deliberate attempt to undermine new policies…” (Leithwood, Louis, Anderson, and Wahlstrom, 2004, p.34) Prensky (2006) writes, “our students, as digital natives, will continue to evolve and change so rapidly that we won’t be able to keep up. This phenomenon renders traditional catch-up methods,
such as inservice training, essentially useless” (p. 1). Prensky (2006) also professes the need for a far more radical idea of education, one in which technology teaches the student.

Using technology to teach, or more specifically, using video games to teach, is also not a new idea. Prensky (2001, 2006) showed how video games are being used for training purposes in the military and corporate world, and he explained to teachers and parents what students can learn from various genres of video games.

Other researchers have also found favor in the practice of technology teaching students. Gee (2003, 2004, 2005), a linguist and cognitive scientist, articulated 36 principles of learning that good games embody which many classrooms do not. He also discussed ways in which video games might be better for student’s academic performance than traditional teaching methods. Aldrich (2005) focused on the educational benefits of simulations, and even created a simulation to help players develop a traditionally difficult to teach skill: Leadership. Shaffer (2006), like Gee, was interested in using games and simulations to help students develop new identities, particularly professional identities that include innovative ways of thinking.

It would be difficult to argue against the impact of technological innovation on learning, and the resultant changes in our student’s lives and futures. In order to understand what we should teach, we need to understand what has changed.

**Technological and Environmental Changes**

Technological advancement has created new communities, new industries, and new literacies. In 2000, The National Institute for Literacy reported the following:
In order to carry out daily responsibilities at home, in the community, and in the workplace, adults—regardless of their education—are required to sift through a vast amount of information, often requiring familiarity with technical content, before they can make decisions that impact the well-being of families, neighborhoods, and ultimately, this country. Under such circumstances, the meaning of ‘knowing’ has shifted from being able to remember and repeat information to being able to find and use it. (Stein, 2000, p. 1).

According to the findings of a 2010 Pew report, an overwhelming majority of participants believed that within the next 10 years, innovative forms of online collaboration would result in more efficient and responsive businesses, governments, and non-profit institutions (Anderson & Rainie, 2010). In order for future societies to keep-up with the pace of today’s change, the educational system must mirror these innovative forms of learning and doing.

Formal K-12 education remains much as it did a century ago, but in the era of the Internet, cell phones, and video games, students have changed. Prensky (2006) writes, “Our students have changed radically. Today’s students are no longer the people our educational system was designed to teach” (para. 1). Student-focused technology may be present, likely in the form of a whiteboard at the front of the room, or a few computers in the back. In some schools, there may even be a laptop for every student. However, such classrooms are just the beginning. Much more needs to be in place for 21st Century learning to truly thrive, and for 21st Century reform efforts to develop fully.

Therefore, to understand reform, we must understand the interplay of variables related to how organizations operate and develop. Some researchers have found, and others have theorized, that organizational learning might be a beneficial tool in navigating the complexities of similar reform efforts (Leithwood, Leonard, Sharratt,
Moreover, organizational learning has been correlated to student learning (Elmore, 2000; Knapp, Copland, Ford, Markholt, McLaughlin, Milliken, & Talbert, 2003), and to human capacity development of staff (Marsh, 2000; Togneri & Anderson, 2003; Leithwood, Louis, Anderson, & Wahlstrom, 2004): both of which have been researched heavily with regard to district reform (Massell & Goertz, 2002; Spillane & Thompson, 1998). The following section will present some of these findings, and provide a case for the relationship of the variables as found in the literature.

**District Reform and Organizational Learning**

Learning is defined as a relatively permanent change in knowledge or behavior that results from practice or experience (George & Jones, 2002). Using this definition, the process of learning can be broken into three key elements: (1) permanent, (2) change, and (3) through practice. It is important to note that temporary change in knowledge or behavior or is not idiosyncratic of learning.

Learning takes place through experience, practice, or watching others (George & Jones, 2002; Louis, 2006). One of the biggest missed opportunities for leaders is the failure to capitalize on the collective learning ability of people within the organization. Senge (1990) wrote, “when placed in the same system, people, however different, tend to produce similar results” (p. 42). Leaders need to harness the relevant knowledge and experience so that the organization as a whole, and the people that comprise it, can harness this learning more effectively. It is in this organizational learning that some researchers believe is the key to systemic change.

learning and its potential for change (p.22). Senge (1990) reinforced this idea when he suggested that a truly reflective insight is the way you begin to see that the system causes its own behavior. While some researchers might call this the, “multidimensionality of knowledge” (Cross, Parker, & Borgatti, 2000, p, 12), others call it the social co-construction of knowledge, or constructivism (Gifford, 2009). Schein (2004) simply suggests that members of a group need to learn about each other in order to create common understandings, especially around abstractions such as “high quality” (p.112).

Leadership is a necessary component of organizational learning. As Senge (1990) suggested, people have a similar, or normal, level of results. However, certain leadership traits have been theoretically argued to explore, exchange, and share the learning resources of an organization (Bass, 1985). Bass and Riggio (2006) suggest that transformational leadership can enable an organization to manage an increasingly diverse workforce where it challenges workers to develop both themselves, and those around them (p. 138). Others have said that, “transformational leadership practices also aim to stimulate organizational members to think reflectively and critically about their own practices, and to provide appropriate models of the practices and values considered central to the organization” (Leithwood, Louis, Anderson, & Wahlstrom, 2004, p.249).

Many scholars have correlated the relation of student learning to that of organizational or system level learning (Elmore, 2000; Knapp, Copland, Ford, Markholt, McLaughlin, Milliken, & Talbert, 2003; Senge, 1990; Senge, 2000). Moreover, there is a growing body of knowledge that correlates the importance of the district in the development of technological improvements at the school level (Elmore & Burney, 1997; Hightower, Knapp, Marsh, & McLaughlin, 2002; McLaughlin & Talbert, 2003). The two
factors combined are necessary to meet the increased demands of a politically
encumbered and technologically evolving environment.

Research findings have also shown that the conditions, which foster
organizational learning at the core, have a positive influence on the conditions at the local
(school) level (Leithwood, Leonard, & Sharratt, 1998; Coffin & Leithwood, 2000; Marks
& Printy, 2002). These conditions are also positively associated with an increase in
student learning (Marks, Louis, & Printy, 2000).

Problem Statement and Proposition

The problem is that there are competing commitments and multiple factors that
affect the success or scalability of any change initiative. These factors include, but are
not necessarily limited to, the personal factors of the individual, the environmental factors
of the organization, and the ability for an organization to learn and relearn.

The primary proposition of this study was that organizational change
implementation success is directly related with the district conditions for organizational
learning. A second proposition was that the effect or impact of the change initiative can
be found to be directly correlated to the organization's flexibility and tolerance for
change. The third proposition was that leadership has a strong influence on the ultimate
acceptance and success of the change initiative.

The primary goal of this study was to explore the district and school conditions
that cultivate organizational learning, and how that influences the district’s response to a
21st Century change initiative. While there are multiple definitions for organizational
learning, this study focused on the compilation of three particular studies (Leithwood,
Leonard, & Sharratt, 1998; Marks & Printy, 2002; and Grubb, 2005). In this, conditions
for organizational learning are defined as Clear and Meaningful Mission and Vision, Participative Decision-Making, Collaborative and Harmonious Culture, Leadership, Policies and Resources Promoting Learning, and Knowledge and Skills.

The following research questions guided this study:

1. How does the district respond to a 21st Century literacy change initiative?  
2. To what extent are district conditions for organizational learning present?  
3. How do the district conditions for organizational learning influence – enable or constrain – the adoption of a 21st Century literacy change initiative?

Understanding the variables influencing district reform, and systemic coherence, are essential if we are to adequately enable students to learn effectively, and live productively in an increasingly digital society. This study explored key conditions for sustainable change by drawing on three bodies of literature. The first construct of review is on that of *districts*, and the organizational level of reform implementation. Secondly, the construct of *organizational learning* is unpacked into the specific strategies that promote or constrain organizational learning. Finally, an examination of *transformational leadership* provides an important understanding of organizational and sub-organizational change capabilities.

**Rationale for the Selection of the Study Site**

The district of study was the Sterling School District¹. Sterling is a small school system serving a population of 2,947 kindergarten through twelfth-grade students. The district has four schools: two elementary schools (K-5), one middle school (6-8), and one high school (9-12) (California Department of Education, 2010).

¹ Sterling School District is a pseudonym for the school district in this study, used throughout to protect the anonymity of the participants.
Sterling School District is in its fourth year of implementation of a strategic systems change initiative. Titled, Simply Integrated, the plan is a multi-year coordinated effort, designed to bring cross-curricular technologies to the classroom, paired with professional development, to provide new learning possibilities for students.

**Simply Integrated: a 21st Century literacy initiative.** The Sterling School District established a long-term plan to integrate core academic subjects, with innovative technology tools, in order to prepare students “…to navigate a rapidly changing world” (Sterling Press Release, July 2008). The district’s goal for Simply Integrated was to stimulate collaboration and enthusiasm among students through state of the art classroom technology, coupled with 21st Century Literacy curriculum, and focus professional development programs to build educator fluency. The plan was designed as a four-phase approach, including the following specific considerations:

- Prioritization by Needs Assessment
- Immediacy of Possible Deployment
- Immediacy of Student Benefit
- Prior and Ongoing Training
- Current and Future Infrastructure
- Hierarchal Support for Instructional Practice
- Framework for Technology, Pedagogy, and Curriculum
The initial plan called for an upgrade to 60 elementary classrooms, and the addition of eight mobile computer labs to the secondary school sites. The program was initially estimated to cost $1,064,800 (Internal Sterling Documents, June 2008), with the costs being almost equally divided among four phases of implementation. Due to the high cost, and the lack of available grant funds, Sterling approached its local non-profit foundation with the goal of “…jumpstarting a portion of the initial first phase, estimated at $196,000” (Sterling Press Release, July 2008).

The first phase of the program included six upgraded classrooms, each to contain the following devices: LCD projector, projector screen, Tablet PC, integrated sound system with teacher microphone, document camera, DVD/VCR, student response systems, and the associated wiring and infrastructure changes. The first phase also included two mobile labs containing: 36 Laptops, a secure and mobile cart for storage and transport, LCD projector, printer, and the related software for the laptops. The first phase of the initiative also included 16 different professional development courses for the teachers, along with curriculum and instructional materials regarding 21st Century Literacy skills. Three months were allocated for the completion of the first phase, along with at least a three month buffer before the next phase was to begin. The following

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2 The National Educational Technology Standards (NETS) are a set of standards published by the International Society for Technology in Education (ISTE) for the purpose of enabling students to learn effectively, and live productively in an increasingly digital society.
three phases followed this same protocol, with only the number of classrooms and labs increasing with each cycle.

The Simply Integrated program has moved through all four stages of implementation, and has become a standard practice within the Sterling School District today. The Assistant Superintendent of Curriculum and Instruction cited the Simply Integrated program with promoting “engaged learners, active involvement, and collaborative processes” (Personal Communication, March, 2011). Today, this initiative has moved into a monitoring and evaluation cycle. However, the district already has an early look toward the first round of hardware replacement starting in the 2012-2013 school year.

Aside from the Simply Integrated initiative, the Sterling School District offers ideal conditions for the purpose of this study. In addition to the 21st Century change initiative, the small school district setting is very important in this study. Whereas a significant focus of previous research goes toward large, troubled, or failing school districts, there is a need to understand the inverse of these organizations. Additional detailed rationale for the selection of this study site is presented in Chapter 3.

**Study Methodology**

The design of this research study was an embedded single case that used multiple methods to answer the three main research questions. Miles and Huberman (1994) define a case study as a, “phenomenon of some sort occurring in a bounded context” (p. 25). In this case, the phenomenon of study are the district conditions for organizational learning and the multiple stakeholder group response to leadership styles, embedded within the context of educational reform.
According to Yin (2003), a case study method is useful when (a) the phenomenon of interest is contemporary and occurring in a real life context, and (b) the boundaries between the context and the phenomenon are not clear (p.13). The case study method is particularly useful for this study because the overarching research question, How do the district’s conditions for organizational learning influence the adoption of a 21st Century literacy change initiative?, is focused on the conditions for organizational learning embedded in national, state, and local educational reformation contexts. Furthermore, the boundaries between the conditions and the stakeholder response are indistinguishable.

**Significance of the Study**

The results of this study have the potential to contribute to the larger field of educational reform literature in several ways. First, there is a need to study small, high achieving schools and districts to identify salient relations or contradictions to their larger counterparts. Secondly, this will contribute to the information available about school and district leadership, as well as leadership’s influence on organizational learning in this specific setting. Finally, organizational learning has the potential to support organizational structures and sustaining organizational change. As such, there is a great need to add to the body of literature in multiple contexts.
Chapter 2

The preceding chapter presented a case for organizational learning as a powerful tool for promoting large-scale educational reforms, and the need to further expand the research on district conditions that promote organizational learning on an organizational scale. Included in this chapter are three main constructs underlying the conceptual framework. The analysis of the recent research will show a relevant relation to the research questions.

Categorized based on proposed hierarchical relevance to the conditions for organizational learning, the first construct of review is on that of districts, and the organizational level of reform implementation. Secondly, the construct of organizational learning is unpacked into the specific strategies that promote or constrain organizational learning. Finally, an examination of transformational leadership provides an important understanding of organizational and sub-organizational change capabilities. This chapter concludes with an introduction to the conceptual model used to describe the theoretical correlations between districts, leadership, and organizational learning.

District

This literature review begins with an in-depth review of districts, as this is the unit of analysis. As the literature shows, most of the research on district reform efforts has focused upon the nation’s largest districts. Predominately, this research centers on New York City Community School District #2 (Bowers, 2008; Elmore, 1998; Elmore & Burney, 1997; Fink & Resnick, 2002; Resnick & Harwell, 2001; Stein and D’Amico, 2002a; Stein & D’Amico, 2002b) and San Diego City School District (Darling-Hammond, Hightower, Husbands, LaFors, Young, & Christopher, 2003; Hightower,
2002; Husbands, 2005; McLaughlin & Talbert, 2003; O’Day & Quick, 2009). Some researchers have viewed both of these districts through the same lens (Stein, Hubbard, & Mehan, 2004), while an analogous strand of the district reform literature focuses on multiple districts undergoing the same reform effort (Goertz, Floden, & O’Day, 1996; Hatch, 2001; Rorrer, Skrla, Scheurich, 2008; Spillane & Thompson, 1998).

Educational reform literature is increasingly permeated by the importance of the role of the district. Numerous studies confirm this assertion, and further prove the importance of districts in reformation matters. Marsh (2000) asserts that districts have the paramount role of interpreting, enacting, and matching policies in educational reform. The district is also charged with enhancing teaching and learning (Marsh, 2000; Togneri & Anderson, 2003). More specifically, Togneri and Anderson (2003) cite that “district’s play an essential role in providing a coherent instructional framework” (p. 49). This will become progressively more important as additional reformation efforts are enacted at federal and state levels. As such, the need for understanding district roles in these contexts will continue to grow.

Marsh’s (2000) work reviewed both the state to district, and district to school relationship literatures from the previous 15 years. The result of the review identified three variables held in common, many of which have been found by other researchers as well. The first is the importance of mobilizing capacity (human, social, physical capital) in enacting and sustaining reform goals and policies (March, 2000; Togneri & Anderson, 2003; Leithwood, Louis, Anderson, & Wahlstrom, 2004). Researchers have found that capacity extends beyond technical resources of money and personnel to include
normative aspects of district culture and values, as well as relationships, networks, and trust among individuals (Marsh, 2000; Massell, 2000).

Second, Marsh (2000) found that capacity also pertains to the districts’ understanding and knowledge of reform, which in turn influences the ways districts allocate resources, interpret, and implement policies, and the quality and quantity of support given to the reform ideas, policies, and programs. Finally, Marsh (2000) identified the importance of district leadership - the knowledge, skills, and beliefs of these leaders, their stability of leadership over time, and their ability to build cohesive professional communities and normative cultures (p. 15). Similarly, of Togneri and Anderson’s (2003) ten lessons learned, two of them included the necessity of leaders to build a shared vision, but also to develop a cohesive culture (pgs. 48-49).

Research on district roles can be organized in a number of segments depending on the granularity of the topical focus. In synthesizing the findings of Marsh (2000), Massell (2000), and Massell and Goertz (2002), this literature review of districts is focused specifically on two main facets of educational reform contexts: (a) the district role in interpreting and enacting policy, and (b) the role of the district in reform efforts. These research contexts will be important in understanding and unpacking the role that district stakeholders hold in interpreting, implementing, and responding to change initiatives, and how the district conditions influence that response.

**District role in interpreting and enacting policy.** District-wide reform refers to educational improvement policy initiatives that target most or all schools within a district (Anderson & Togneri, 2005). Although the focus might be limited to a particular grade division, such as all high schools, or even a particular category of students, such as
English Language Learners, the inclusion of district-wide policy research is what applies in particular to this review. Also included are district-wide initiatives that have a multi-year focus for improvement, as suggested by Elmore and Burney (1997). In these reform efforts, the change is implemented slowly, and strategically, and focuses on gradual development over time (Elmore & Burney, 1997).

According to Knapp (2002), studies of district policies can be categorized into two segments: inside-out and outside-in. The first perspective is the micro view of the organization. Within this view, the classroom activities, or the nominal form of individual activities, are explored. Conversely, the outside-in perspective of district policy studies focuses on the macro environment. In this perspective, the organization as a whole, or a large subsection, such as a school, is explored in research. Other researchers have followed this dually polarized model for framing their policy research.

The research is heavily populated with studies of the nation’s largest school districts. San Diego City School District, the second largest district in the state and eighth in the nation, is of particular popularity in scholarly works. In applying the inside-out and outside-in model to frame their research, Darling-Hammond, Hightower, Husbands, LaFors, Young, and Christopher (2003) reviewed three initiatives spanning a five year period, during what they described as, “one of the most ambitious instructional reforms in the state and perhaps in the nation” (p.10).

During this study, the district assumed two main roles relative to the implementation of instructional reform and state policies. The two roles included negotiating school-district relations, and mediating state policies. Negotiating the school-district relations was of primary importance. This study found a differentiation in
relations between the district and the schools, separated by school level. For example, the district changed its approach between the elementary and secondary school levels. As was expressed, the district needed to work with the high schools rather than to “do unto them” (Darling-Hammond, et al, 2003, p.54). This differentiation raised an unanswered question from the researchers, “…is this change in strategy a result of district leaders’ learning from experience the importance of engaging principals in reform work or recognition that there is no real model for multiple school instructional improvement at the high school level?” (Darling-Hammond, et al, 2003, p.54).

Throughout the implementation, it was found to be important that the whole district be involved in the reform efforts, regardless of the method of application of the policy. Although it was found that this policy of congruency conflicted with other previous reform efforts (Stein, Hubbard & Mehan, 2004), it was nonetheless part of the organizational culture to unify the innovation (Darling-Hammond, et al, 2003). As cited by Superintendent Alvarado, “One thing I think I am right about is that if you do something right, you have to do it across the board. Otherwise, the other part of the organization continues, and it eats away at the innovation” (Darling-Hammond, et al, 2003, pp. 52-53).

Similar studies have confirmed that a unifying focus is important in systemic reform efforts (Senge, 1990; Leithwood, 2000). However, sometimes exceptions must be made. In San Diego City Schools, there was a belief that “no one is exempt from the arm of reform” (Stein, et al, 2002, p.17). Although some disgruntled teachers were found to have resisted, it was reported that they needed to find creative ways to escape the reform movement. Through similar movements by entire school sites, a few exceptions were
finally made. In the end, three of the sixteen high schools were granted a “quasi-charter” status, and exempted from some of the reform efforts (Stein, et al, 2002).

It is in the strategy of application of reform implementation, that mediating variables and conflicting programs can be modified successfully (Marks, et al, 2000; Stein, et al, 2002). The San Diego City School District was found to have mediated state policies in an effort to further their local goals and programs (Darling-Hammond, et al, 2003). The district utilized the implementation of the California Reading Initiative to promote and enhance its own local Literacy Framework. It was also found that the district modified the implementation of the Peer Assistance and Review program to align with, and support the district in, improving the troubled relations between the district and the teacher’s union. It is in this continual balancing of issues that San Diego City Schools were able to mediate the school-district relations (Darling-Hammond, et al, 2003).

In a similar study, Anderson and Togneri (2005) reviewed district-level policy as it relates to change and improvement in practice. In their review of recent literature, it was found that change policies had come predominately in two forms: top down or bottom up. However, their findings show that a blending of these approaches, such as the mediating of external standards with local professional discretion, is the direction current research is leading (Anderson & Togneri, 2005). In these blending of approach, many researchers have found improvement for differentiated support implementation. However, Anderson and Togneri (2005) conclude that “further research is needed that explores empirically and theoretically the interplay between external policy mandates and support for locally differentiated actions” (p.179).
Similarly, researchers have investigated the various reforms in district and classroom levels, and have found some predictable results. For example, both Hatch (2001) and Leithwood, Louis, Anderson, and Wahlstrom (2004) found that the number of concurrent reform efforts has an influence on the implementation of the policies. Hatch (2001), in a five-year study of six schools implementing at least three reform initiatives, found that the repercussions of concurrent implementation had negative effects that were not simply a matter of resource allocation. Togneri and Anderson (2003) findings suggest that current district structures and limited resource allocations may be inadequate to sustain system wide reform. Similarly, Gifford (2009) found that creating coherence is imperative for school and district leaders to sustain change. Hatch (2001) concluded the solution lies in “whether or not we are willing to reconceptualize the relationships among all of the reform initiatives at work in schools, not just smooth the way for implementation for a wide range of independent program and approaches” (p.434).

Other researchers have ventured farther into the individual learning and practices of reform efforts. Spillane (2000) investigated the implementation of science and mathematics reforms at the district and classroom levels, and how district officials’ thinking about teaching, learning, and change influences district professional development programs. The majority of district officials – 34 of the 40 – supported the behaviorist perspective, while others supported either situative-sociohistoric, or cognitive thinking perspectives (Spillane, 2000). Those district leaders that supported the behaviorist perspective conceived teachers as learners based on their professional development preference, as opposed to their knowledge and skills, and they did not include teacher’s practice as an integral part of the curriculum. The behaviorist
perspective of professional development can constrain teachers’ learning, and pose negative implications for large-scale improvements (Spillane, 2000; Elmore and Burney; 1997).

Also focusing on the specifics of teacher learning in policy enactment, Elmore and Burney (1997) described how staff development was used as the catalyst for systemic instructional change in New York Community District #2. Leithwood, Louis, Anderson, and Wahlstrom (2004) recommend that, although the leader is the policy implementer, they should not divert their attention from teacher learning. However, focusing on teacher learning as a specified medium for district reform is not without its difficulties. Expanded upon later in this chapter, other researchers have found challenges in focusing on teacher learning, particularly if it involves technological innovation (Nelson & Sassi, 2005).

**District role in reform efforts.** Although previous policy implementation has been relegated to the state and national levels – particularly with regard to capacity-building policies – increasingly districts are assuming this responsibility in-house (Grubb, 2005). These strategies have resulted from the lack of such policy enactment at the state level. It is also the result of the need for relevant innovation at the local level.

Many researchers have examined capacity as a condition that influences district’s interpretation and implementation of policies (Gumport, 2000; Goertz, Floden, and O’Day, 1996; Massell, 2000; Massell and Goertz; 2002; Spillane & Thompson, 1998). Spillane and Thompson (1998) found that district capacity, in the forms of human capital, social capital, and financial capital, was critical to the success of reform efforts. According to Spillane and Thompson (1998), human capital exhibits itself as a
commitment to the reform effort. Similarly, human capital artifacts include a sophisticated understanding of the reform effort, and positive dispositions about learning. Gumport (2000) and Massell (2000) both confirmed the critical importance of human capital as a construct of district capacity, where Massell and Goertz (2002) confirmed the importance, and began building strategies for developing this capital.

Capacity development was one of the primary challenges found by Goertz, Floden, and O’Day (1996). Goertz et al. (1996) found that while there are many challenges in reform efforts, the struggles of capacity building needed to be overcome before achieving the desired changes in student learning. The literature shows similarities in capacity building strategies, which include: (a) a focus on increasing professional knowledge and capacity, (b) strengthening and aligning instructional direction, and (c) using data to guide instructional improvement efforts (Massell, 2000; Massell and Goertz, 2002). Massell (2000) identified a fourth strategy for capacity building: targeting resources to the schools that are lowest performing, and in greatest need for reform.

In the successfully reformed districts of study, Spillane and Thompson (1998) have found many components of social capital, including high levels of trust, the implementation of professional networks, and relationships with external agencies. Spillane and Thompson (1998) concluded that although time allocation was crucial for enabling meaningful discussions, human and social capitals were critical for learning and capacity development. These capacities and development structures have varying forms of interpretation. March (2002) redefines the human, social, and financial capital
components more broadly as physical capital. Togneri and Anderson (2003) take this even more broadly as creating a district infrastructure for continuous improvement.

Leadership continues to be a reoccurring theme in successful district capacity building and reform efforts. Leadership needs to both communicate the message clearly, and embody the change that is requested in others. Togneri and Anderson (2003) report that it is essential to have effective leaders who can guide districts and schools in positive systemic change. District office leaders have the potential to positively, or negatively, influence principals, teachers, parents, community members, and students (Elmore & Burney, 1997; Hightower, 2002; Murphy & Hallinger, 1988; Togneri & Anderson, 2003). In New York’s District #2, the superintendent found that two-thirds site leaders did not meet his strict criteria for leaders, and were subsequently “counseled out,” or retired (Elmore & Burney, 1997).

Leadership is also tasked with measuring change. Oftentimes these measures are mandated by the state and national level, but some districts take it upon themselves to measure change. Snipes, Doolittle, and Herilhy (2003) reported that district leaders created their own accountability systems, which were more rigorous than their state implemented measures. The designs of these systems were to inform practice relative to student achievement. Togneri and Anderson (2003) also found locally created multiple measure accountability systems in use by district and site leaders for the purpose of increasing student achievement. However, it is unclear in either of the studies how the data was used to drive the decision making process, or modify the reform efforts.

**District challenges in reform efforts.** The converse to successful district reform initiatives are those that present challenges in implementation. Togneri and Anderson
(2003) highlighted the significant challenges facing districts in their study titled, “Beyond Islands of Excellence: What Districts Can Do to Improve Instruction and Achievement in All Districts.” The three challenges found include (a) existing systems structures do not necessarily support emerging forms of professional development, (b) high schools struggled to improve student learning, and (c) finding funding for large-scale instructional improvement remains difficult, and can require a significant amount of human resources (pp. 47-48).

In addition, districts are not always successful in planning, delivering, and supporting the professional development demanded by reform agendas (Stein & D’Amico, 2002). One reason may be that leaders are not only expected to be managers, or strategic planners, but also instructional leaders who make instruction a top priority of their practice (Elmore, 2000; Knapp, Copland, & Talbert, 2003; Supovitz & Poglinco, 2001). For some leaders, this shift away from prioritizing managerial issues, toward a central focus on teaching and learning may require a different kind of knowledge, especially given expectations of subject matter knowledge for instructional reform (Nelson & Sassi, 2005). This is particularly important with emerging subjects, such as technological innovation, or 21st Century literacy skills. As a result, learning becomes a critical part of leadership practice.

Reform efforts are not always viewed the same. While many would argue that the reform efforts in San Diego City Schools were - in many ways – successful, Hightower (2002) argued that they were radical. Moreover, Hightower (2002) argues that the first three years of reform efforts in San Diego City Schools were an, “unabashedly directive change process” (p.91). Stein, Hubbard, and Mehan (2004) noted that the pace of
implementation in San Diego City Schools was created problems, and the sheer size of the district added complexity to the change process. While it takes about three years to achieve successful change in student performance, even during its fourth year some San Diego schools still seemed fragile in their reform. “A changing reform, while vital and responsive on the one hand, often undermines old policies and practices, on the other” (Stein et al, 2002, p.35).

District reform efforts cannot happen in isolation. One must understand the organizational level of reform, which predicates an understanding of organizations. Hubbard, Mehan, and Stein (2005) describe organizations as “the interrelationships between activities of individuals” (p. 263). Therefore, to understand reform, we must understand the interplay of variables related to how organizations operate and develop. This is theoretically encompassed in the paradigm of organizational learning.

**Organizational Learning Overview**

This section provides a concise review of the organizational learning literature in education, and an in-depth review of the organizational learning studies of districts that informed the development of the conceptual framework, leading to the research design of this study. This section begins with a summary of learning in organizations, which follows to the development of organizational learning theory and its history outside of education, leading to a review of organizational learning research in education, and the development of organizational learning constructs used for this study.

Learning is defined as a relatively permanent change in knowledge or behavior that results from practice or experience (George and Jones, 2002). Using this definition, the process of learning can be broken into three key elements: (1) permanent, (2) change,
and (3) through practice. There are two basic stages of learning: acquisition and maintenance (Easterby-Smith, 1999). It is important to note that temporary change in knowledge or behavior is not idiosyncratic of learning.

Learning takes place through experience, practice, or watching others (George and Jones, 2002; Louis, 2006). The initial, gradual process of learning is the acquisition stage. Once the new information is gathered, an individual will act on the new information as appropriate (Louis, 2006). A potentially missed opportunity for leaders is the failure to capitalize on the collective learning ability of people within the organization. Leaders need to harness the relevant knowledge and experience so that the organization as a whole, and the people that comprise it, can learn more effectively, and act on the learning in a way that leads to the ultimate purpose of the organization (Tschannen-Moran and Hoy, 1997).

Louis (2006) cites that professional community research has highlighted the importance of teacher collaboration and sharing, but it alone is not seen as a tool for widespread improvement. Organizational learning (OL) bridges the gaps unaddressed by professional communities. Organizational learning is a model for school reform wherein the people of an organization are part of a shared, social construction of meaning that is common to all member of the organization (Louis, 2006).

The basic premise of OL is that learning takes place in groups, and cannot be reduced to a random accumulation of individual knowledge (Louis, 2006; Leithwood, 2000). Moreover, OL is particularly effective when learning is part of a framework of systematic collection, with a focus on information (Louis, 2006). However, OL is not necessarily a construct which can be implemented through policy or regulation. Part of
the difficulty is that there is not yet an authoritative definition for organizational learning (Grubb, 2005). Therefore, it is important to understand the historical development of the construct, in order to set up its current use in research literature and practice.

**Organizational learning: historical view.** Organizational learning has a long history in business, but a relatively short history in the educational sector (Grubb, 2005). Cousins (1996, 1998a) reported that the roots of organizational learning are predominantly from outside the field of education. Resultantly, educational researchers have been using concepts and theories derived from non-educational literature when studying organizational learning and its implications for educational reform (Grubb, 2005).

Easterby-Smith and Lyles (2003) characterize the history of OL as “sudden surges of interest… followed soon after by rapid decline” (p.4). In their book, The Blackwell Handbook of Organizational Learning and knowledge Management, Easterby-Smith and Lyles (2003) developed a framework for understanding organizational learning’s history. Grouping the three major sections of classic OL research, Easterby-Smith and Lyles (2003) proposed that works produced prior to 1996 be classified as: (a) *classic works*, (b) *foundational works*, and (c) *popularizing works* (p.5).

The *classic works* are those researchers and published theories that pre-date the inception of organizational learning, knowledge management, or systems change. Most of the classical work authors can be found in the pre World War II era (Schulz, 2001). Easterby-Smith and Lyles (2003) identified four main authors that form the foundation of the *classic works*: John Dewey, Michel Polanyi, Edith Penrose, and Frederick Hayeck (p.7). Huysman and Elkjaer (2006) cited John Dewey as the pragmatic root of social

There is more uniformity in the foundational works than in the classical works. Many researchers and authors agree that the seminal works of organizational learning were developed by Cyert, March and Simon in the 1950’s (Easterby-Smith and Lyles, 2003; Schulz, 2001; Yeung, Ulrich, Nason, & Von Gilinow, 1999), and by Cyert and March in 1963 (Huysman and Elkjaer, 2006). Schulz (2001) expands this foundational author argument by writing, “behaviorists such as March, Simon, and Cyert attached the classical economic theory of the firm on the grounds that its models were overly simplistic and contradicted empirical evidence” (p.416).

These early works are critical because, according to Easterby-Smith and Lyles (2003), they represent some of the first writings about organizational learning that set the agenda for future studies (p.7). Three major works define the foundation of organizational learning: *Organizations* by March and Simon, *A Behavioral Theory of the Firm* by Cyert and March and *Organizational Learning: A Theory of Action Perspective* by Argyris and Schön (Easterby-Smith and Lyles, pp. 9-10, Schulz, 2001).

Schulz (2001) proposes that learning cycles were first proposed in *Organizations* by March and Simon. While their work focused on adjusting the specific operating procedures in response to external shocks, this was a foundational concept of organizational learning (Schulz, 2001, p.417). Easterby-Smith and Lyles (2003) proposed that the book by Cyert and March, *A Behavioral Theory of the Firm*, was “the”
foundational work of organizational learning, although the work by Argyris and Schöns set forth the framework for the field of organizational learning (p.22)

Finally, the popularizing works of organizational learning as those found to have been most visible in literature (Easterby-Smith and Lyles, 2003). Schulz (2001) proposed that organizational routines moved to the forefront of the agenda beginning with the influential 1998 paper by Levitt and March, which promoted the idea of organizational learning as the encoding of lessons in routines (p.423). Easterby-Smith and Lyles (2003) claimed that the most noteworthy popularizing work was the 1991 publication of the Special Edition of Organization Science, as it established the research agenda for that decade (p.10). Yeung, Ulrich, Nason, and Von Gilinow (1999) promoted the idea that Peter Senge’s book, *The Fifth Discipline*, created an international awareness of organizational learning (p.22), while Louis (2006) proposes both Senge’s work, along with Daft and Huber’s, *How Organizations Learn*, as setting the foundation for incorporating new elements into business innovation discussions (p.5).

As expected, the core disciplines of these early popularizing works vary from author to author. For example, Senge’s (1990) book, *The Fifth Discipline*, proposed four core disciplines necessary to build the learning organization: (a) personal mastery, (b) mental models, (c) shared vision, and (d) team learning (pp.139, 174, 205, 233). It is arguable that Schein’s (2004) contribution, *Organizational Culture and Leadership*, should be included as a popularizing work, as it deftly melds the ideas of culture and leadership, yielding the learning culture. In the learning culture, Schein (2004) proposes the following core dimensions: (a) a proactivity assumption, (b) commitment to learning in learn, (c) positive assumptions about human nature, (d) the assumption that
environment can be dominated, (e) commitment to truth through pragmatism and inquiry, (f) orientation toward the future, (g) commitment to full and open task relevant communication, (h) commitment to diversity, (i) commitment to systemic thinking, and finally (j) commitment to cultural analysis for understanding and improving the world (pp.394-402).

Organizational learning: educational view. According to Cousins (1998a), educational researchers have given very little attention to organizational learning. While there is an abundance of work outside of the educational context, organizational learning remains only lightly studied in education. Cousins (1998) proposes that the two main reasons for this disparity. First, he argues that there is a perception of organizational learning that is directly tied to the results-driven nature of businesses, conversely dissimilar to educational organizations. Secondly, Cousins (1998) proposes that businesses are accustomed to relying on outside resources, such as consultants, in order to accomplish systemic change through organizational learning. However, that belief is changing.

Since the 1990s, the numbers of studies of organizational learning in educational settings are increasing (Grubb, 2005). Leithwood and Louis (1998) and Leithwood (2000) assembled the major works into two seminal pieces, Organizational Learning in Schools and Understanding Schools as Intelligent Systems. These publications are a collection of articles wherein the authors employ an organizational learning framework to analyze schools, although not necessarily districts.

The primary purpose of these collections is to present several perspectives on school capacity improvement (Leithwood, 2000). In the works, there is a differentiation
between those organizations that are “smart” – or highly skilled – and those that are intelligent – or have the organizational capacity to learn new skills. The articles contained within are segmented into various capacity building routines and theories, including those of the individual and those of the organization (Leithwood, 2000).

There is a disparity in subject of focus in many of the articles. The current literature lacks research focused on organizational learning in districts and at the district level (Grubb, 2005). Of the 20 studies reviewed by Cousins (1998a), only two included a focus on organizational learning at the district level. Even Leithwood’s (2000) compilation of studies focuses primarily on program or school level research, with only a section looking at both schools and districts. This unequal focus is disappointing as the basic premise of organizational learning is on building collective, regular processes that focus on issues of practice, rather than radical change models (Louis, 2006). If these processes are not instituted at the district level, there is the potential for isolated areas of reform, but little likelihood of systemic change throughout the organization.

The appeal of organizational learning is that the framework, at least in part, is based on the assumption that creating organizations that are more effective does not merely require identifying a list of structural or institutional characteristics to change, but rather on the flowing ideas of how change happens (Louis, 2006). This is different from operant conditioning, wherein learning is a connection between a behavior and its consequences (George and Jones, 2002). Rather than promoting the individual to learn how to operate within their environment, organizational learning focuses on the antecedents to the behaviors.
As there is not a clearly defined methodology for studying organizational learning in districts, we must analyze the three seminal studies that do place an importance on the district as the level of study. Leithwood, Leonard, and Sharratt (1998) sought to understand how the in-school, out-of-school, and leadership conditions influenced organizational learning processes in schools. Marks and Printy (2002) study investigates high stakes accountability environments at the district level, and whether this threatens the potential for organizational learning among low-performing schools in the district. Grubb’s (2005) single embedded case study of a multiple stakeholder group response to No Child Left Behind (NCLB), examined the district’s conditions for organizational learning.

Using a conceptual framework of five organizational learning variables, Leithwood, Leonard, and Sharratt’s (1998) work created the foundation for studying organizational learning on a district level. Specifically, the district conditions found in the Leithwood et al (1998) study were: (a) missions and visions that were clear, meaningful, well-understood, and engendered a sense of community; (b) a collaborative and harmonious district culture; (c) participation in district decision-making activities; (d) multiple strategies for district outreach; and (e) district policies and resources dedicated to promoting learning (pp.261-263). Marks and Printy (2002) collapsed some of the original constructs, and added an additional. Their study measured organizational learning capacity using: (1) accountability, (2) participative decision making, (3) Shared commitment and collaborative activity, (4) knowledge and skills, and (5) leadership (pp. 16-18). Grubb’s (2005) study contained a mixture of variables from both previous seminal frameworks. In her study, the following six conditions for organizational
learning were analyzed: (a) Clear and Meaningful Mission and Vision, (b) Collaborative and Harmonious Culture, (c) Participative Decision-Making, (d) Outreach, (e) Policies and Resources Promoting Learning, and (f) Knowledge and Skills (Grubb, 2005). A correlation of the constructs from the three seminal works on organizational learning is included in Figure 2.1.

Each of these three works found that district conditions for organizational learning were present, but in diverse forms, and varied by unit of analysis. Specifically, the findings are underlined by a variance of perception of the presence of organizational learning constructs by different stakeholder groups (Grubb, 2005; Leithwood, Leonard, Sharratt, 1998). For example, all data strongly indicated that all stakeholder groups perceived a strong *congruence of district vision and mission with practice and beliefs* (Grubb, 2005, p.286). However, the stakeholder groups differed on their view of school culture enhancing participative decision making, likely arising from the various leadership styles of employ within the schools of study (Leithwood, Leonard, Sharratt, 1998).

Grubb (2005) describes this disparity as, “the district community lacked unity and reflected subcultures, although key stakeholders did not share a common agreement about the degree to which the Vineyard School District was diverse” (p.287). In concluding the study, Grubb (2005) concedes that the influence of district conditions both enabled, and constrained, the district’s response to NCLB. Leithwood, Leonard, and Sharratt (1998) describe their variance as the result of principal’s level of power and responsibility delegation.
**Organizational learning: the constructs.** Grubb (2005) argues that the greatest limitation to empirical studies of organizational learning is the lack of a consistent definition of organizational learning. While Grubb (2005) used a hybrid of constructs from both Leithwood, Leonard, and Sharratt (1998) and Marks and Printy (2002), both of these subject studies did not explicitly put forth an operationalized definition of organizational learning. “Instead, the authors offered other ways of describing organizational learning: conceptual frameworks or propositions” (Grubb, 2005, p. 72). Arguably, all three of these studies developed their frameworks from a synthesis of the historical organizational learning literature.

Leithwood, Leonard, and Sharratt (1998) included three constructs in their framework: (a) organizational learning processes, (b) causes of organizational learning, and (c) consequences of organizational learning (pp. 245-250). Marks and Printy (2002) proposed the constructs of their framework as; (a) simplified organizational structure, (b) participative decision-making, (c) shared commitment and collaborative activity, (d) adequate knowledge and skills, (e) transformational leadership, and (f) feedback and accountability (p.5).

While similar, there is a difference between the three studies. Unlike the framework developed by Marks and Printy (2002), which included constructs derived from literature inside of the educational context, Leithwood, Leonard, and Sharratt (1998) developed their framework using literature outside of education. Grubb (2005), used to the two studies to create a new conceptual framework. The constructs of her framework included: (a) clear and meaningful mission and vision, (b) collaborative and harmonious
culture, (c) participative decision-making, (d) outreach, (e) policies and resources promoting learning, and (f) knowledge and skills (Grubb, 2005, p.157).

Figure 2.1: Relations of District Constructs for Organizational Learning: Seminal Works

This study will include will include the constructs originally identified in Grubb’s (2005) work, with only minor exceptions. Grubb’s (2005) use of outreach as a construct only loosely tied to Marks and Printy’s (2002) construct of shared commitment and collaboration (Figure 2.1). As this construct was not directly included in both of the two previous seminal works, it will be dropped in favor in transformational leadership. Grubb’s (2005) conceptual framework did not deny transformational leadership as a construct of organizational learning, but rather did not specifically include leadership “because the underlying assumption in this study was that leadership created conditions and, therefore, the presence of conditions presumed the presence of leadership” (p. 81).
This study does not necessarily follow the same assumptions as Grubb (2005), and therefore transformational leadership as a construct is included. Transformational leadership was specifically included in the seminal OL studies by Marks and Printy (2002), and Leithwood, Leonard, and Sharratt (1998). In addition to the links between transformational leadership and OL, researchers have also found links between transformation leadership and human capacity development (Leithwood, Louis, Anderson, and Wahlstrom, 2004), as well as links to student learning (Elmore, 2000; Knapp, Copland, Ford, Markholt, McLaughlin, Milliken, & Talbert, 2003), both of which are tenets in this study’s design.

**Leadership**

**Transformational leadership.** This section will focus on transformational leadership; the specific types of leadership practices researchers have found to foster organizational learning (Leithwood, Leonard, & Sharratt, 1998, p.264). Transformational leadership is important in this study because it is “the most effective and most active form of leadership” according to Bass and Riggio (2006), and is one of the six constructs comprising organizational learning, according to Marks and Printy (2002). Moreover, transformational leadership was assumed present in the organizational learning constructs researched by Grubb (2005), and was more closely scrutinized and found in the empirical evidence in the three studies by Leithwood, Leonard, and Sharratt (1998).

The transformational leadership construct contains four dimensions, called the 4I’s by Bass and Riggio (2006). The following section will unpack the 4I’s, and dive into the recent literature, which shows a strong relation to the research questions.
Just as rigid, hierarchical organizational structures have given way to more agile and collaborative approaches to managing organizations, there continues to be a shift away from transaction oriented, rigid leadership approaches (Erickson, 2007; Hill, 1973; Lopez, 1980). The move is increasingly toward leadership styles that empower and lead to self-efficacy in the employees (Dvir & Shamir, 2003; Lopez, 1980). Specifically measured in their study, the empowering leadership style is transformational leadership (Dvir & Shamir, 2003).

Empowering, motivating, and enabling self-efficacy within employees, transformational leaders have the potential to reorder the competitiveness of companies (Rank, Nelson, Allen, & Xu, 2009). Leaders who have transformational skills also have consistently shown the ability to nurture and continually strengthen creativity in subordinates (Gong, Huang, & Farh, 2009), while also equipping them with resiliency and the ability to learn on their own (Strauss, Griffin, & Rafferty, 2009). These newly acquired skills can help organizational members develop tools to resist rigid responses to threats and crises.

It is arguable that leadership requires more than maintaining the status quo. Leadership is about maintaining change. “Leadership is about transformation” (Rost, 1993, p.123). Proposed on a conceptual continuum of leadership styles, the polarizing ends of this continuum are theorized as laissez-faire leadership, and transformational leadership. Laissez-faire leadership is “the avoidance or absence of leadership and is, by definition, most inactive, as well as most ineffective according to almost all research on the style” (Bass and Riggio, 2006, p.8). As laissez-faire is the absence of leadership, its
inclusion in this study is for reference, and to anchor the opposing end of the continuum, transformational leadership.

**Idealized influence: first dimension of transformational leadership.** According to Bass and Riggio (2006), “transformational leaders behave in ways that allow them to serve as role models for their followers” (p. 6). Leaders with an idealized influence are respected, trusted, and others seek to emulate their behaviors and capabilities (Avolio, Bass, & Jung, 1999; Bass & Riggio, 2006). These leaders are often considered charismatic, and the terms are often used interchangeably in the literature.

Idealized influence leadership traits are exhibited in many forms. The idealized influencer will share the risks with followers, and behave in admirable ways (Bass, Avolio, Jung & Bernson, 2003; Judge & Piccolo, 2004). This same leader will remain consistent in ethics, and is often endowed with having extraordinary capabilities by their followers (Bass & Riggio, 2006). These charismatic traits can appeal to followers on an emotional level, and contributes to a sense of collective achievement (Bass & Riggio, 2006; Judge & Piccolo, 2004).
**Inspirational motivation: second dimension of transformational leadership.** The second of four transformational leadership dimensions is the ability to motivate, enthuse, and inspire others (Bass & Riggio, 2006). In his seminal work on the topic, Bass (1985) writes, “…charisma entails massive displacements of feelings into the public stage by both leader and followers” (p. 36). This, as Bass (1985) later explains, is highly dependent upon the person. Not all personality types are as comfortable sharing their personal side. However, the inspirational leader will find the charisma endowed by the ardent followers (Bass, 1985; Bass & Riggio, 2006).

Additionally, Ross and Gray’s (2006) findings suggest that leaders should invite meaning and challenge into their followers work by setting feasible and attainable goals to increase mastery of their experiences. In this inspiring, motivating experience, leaders help followers become actively involved in creating their own future vision (Bass & Riggio, 2006). Further, in creating a shared vision collectively, the leader elevates the interest of the followers and generates an awareness of purpose and mission (Brown & Moshavi, 2002).

Charisma can be situational in nature. In times of great distress, charismatic heroes can engender loyalty by simply being there (fulfilling the urgently felt need) (Bass, 1985). This inspirational motivation can contribute to the outcomes of the followers as well as their internal needs. What remains unstudied is the effect of this charismatic (inspirational) motivation as perceived by the parent community. Does the presence of an inspirational motivator have positive effects on the parent/school relationship?
Intellectual stimulation: third dimension of transformational leadership. The ability to encourage creativity and foster innovation is the primary traits of intellectual stimulation (Bass & Riggio, 2006). In these behaviors, the leader has a greater opportunity to evoke increased effort by the followers (Bass, 1985; Brown & Moshavi, 2002). This leadership trait offers followers the allowance to see problems from multiple angles, and to address situations with new methods (Bass, 1985; Bass & Riggio, 2006). New ideas to existing problems will arise when followers are given the opportunity to share in the process. It has been found that through this exercise, followers will gain an increased level of efficacy (Ross & Gray, 2006).

Intellectual stimulation is particularly important with ill-structured problems (Bass, 1985). The leader’s willingness to delegate, provide time to think, and to articulate with simplified language are all vital responsibilities in the process (Bass, 1985). These leaders also provide clarity of roles and capture the attention of their followers (inspirational motivation) through the process of problem solving (Bass, 1985, Bass & Riggio, 2006). Overall, this construct of transformational leadership is particularly important when dealing with external social factors, as they are typically ill defined and consistently variable.
**Individualized consideration: fourth dimension of transformational leadership.**

In this dimension, leaders pay particular attention to their followers’ needs, and act as a coach or mentor to promote personal achievement (Bass & Riggio, 2006). In activity, individualized consideration is a two-way communication practice, wherein the follower is given ownership of decisions, which leads to the fulfillment of their unique needs (Bass, 1985; Bass & Riggio, 2006). This one-on-one mentoring builds respect and trust, which are foundational constructs of transformational leadership.

The measure of individualized consideration can be as simple as a quantitative investigation of a follower’s perception of the leader’s time spent in coaching and mentoring (Bass & Riggio, 2006). However, there is more depth to this construct than just being present. The mastery of this transformational leadership dimension includes the leader’s ability to personalize the experience (Bass & Riggio, 2006). Examples of this include the leader’s accurate recollection of prior conversations, the awareness of individual concerns, and the knowledge of the follower’s personal aspirations.

**Transformational leadership in study.**

Transformational leaders do not follow a pattern response to situations. Much of the appeal of transformational leadership (TL) is in the emphasis on personal interactions and the intrinsic development of followers (Bass & Riggio, 2006). In today’s complex and ever-changing environment, it is important to have inspirational leaders, who empower, develop, and challenge their followers to work and think differently. Moreover, TL is not unique to a single setting, or a single culture. While personality has been shown to be an influencing variable (Bass, 1985), the applicability of the practice is universal (Lam, 2002). In a cross-cultural comparison, researcher Jack Lam (2002)
confirmed that the TL efforts were not culturally specific. However, the findings did suggest that there are societal-cultural characteristics that are particular to the groups, and need to be developed further (Lam, 2002).

A deeper review of the TL literature shows the effects of transformational and transactional leadership styles of practice in mixed settings. TL has been shown to increase followers’ willingness to expend extra effort (Bass & Riggio, 2006; Brown & Moshavi, 2002), increase efficacy and satisfaction (Bass & Riggio, 2006; Hipp, 1997; Ross & Gray, 2006), and increase effectiveness (Ross & Gray, 2006; Thyer, 2003). Moreover, while many of the TL constructs have been positively correlated with beneficial or desired outcomes, the most prevalent factor for interpretation of the results is the charismatic (idealized) influence (Brown & Moshavi, 2002). This is likely due to its more public exhibitions than each of the other dimensions.

Efficacy and a positively envisioned future has been a running theme throughout much of the TL literature (Bass et al., 2003; Brown & Moshavi, 2002; Hipp, 1997; Leithwood & Jantzi, 2008; Ross & Gray. 2006). In their study of transformational leadership, Ross and Gray (2006) outline a very clear focus on the study of teacher collective efficacy and commitment to organizational values. Using Bandura's Social Cognitive Theory, Ross and Gray (2006) evaluated the effects of collective teacher efficacy and the results achieved over time. Their findings suggest a strong link between transformational leadership and teacher commitment, but not necessarily a direct effect on teacher efficacy.

In a study of how principal’s leadership traits influenced the teacher’s sense of efficacy, Hipp (1997) found many positive correlations between TL and teacher’s
personal efficacy. Specifically identified were the principal’s actions of modeling behavior, providing professional support, promoting a sense of community, and recognizing teacher efforts and accomplishments (Hipp, 1997). Additionally, the author found that a significant relationship exists between high teacher efficacy and principal’s building of group purpose (Hipp, 1997). In this relationship, the inspirational motivation of TL was characterized as Inspired Group Purpose, and showed positive correlations to high teacher efficacy across all three-test sites (Hipp, 1997).

Conceptual Interaction Model and Definitions

This study’s conceptual framework is comprised of the three main constructs: districts, organizational learning, and transformational leadership. This section offers an analysis of the relationships and hypothesized interactions of the constructs, which serves as the model for this study.

Comprised within this study is a focus on the relationship between the environmental influences (district reform), the organizational behaviors (organizational learning), and personal factors (transformational leadership) employed within the educational context (Figure 2.2). The proposed interaction model is a means for attributing the interplay of factors on human and social systems. This model is primarily derived from the triadic reciprocal determinism model of Bandura’s Social Cognitive Theory (1986).

As has been outlined in the theoretical framework, each of the constructs of the conceptual framework has a proposed functional dependence and influence upon each other. I am proposing that in order to understand the district conditions for district reform, organizational learning, and transformational leadership, for the purpose of
systemic coherence, one must understand the relation of the variables that influence the constructs. This model will guide the study and analysis, ultimately to answer the research questions.

Figure 2.2: Proposed Interaction of Main Study Constructs

**Definitions**

For the purpose of understanding the details of this conceptual framework, the key terms of this study will be defined. In this study, Stakeholders and Key Stakeholders will be differentiated. Key Stakeholders are those in top leadership positions, and which selection of the entire population would total less than 10 participants. This group includes site administrators, district office administrators, and superintendents. The term
Stakeholder includes personnel whose total population exceeds 10 participants, and traditionally do not hold leadership roles within the district. Teachers, school, and district staff members, as well as parents, are the participants encompassing these Stakeholder groups. The term District symbolizes all of the stakeholders listed above.

Organizational learning. Grubb (2005) argues that there is little agreement about organizational learning in the literature. To address this problem, this study will use a framework for understanding organizational terms categorized into three components: stimulus, process, and outcomes (Leithwood, Leonard, & Sharratt, 1998). These components are incorporated into this conceptual framework because they support the overarching goal of this study: to examine district conditions that foster or constrain organizational learning (outcome), and how they influence the stakeholder response (process) in a state, national, and historical context (stimulus).

Stimulus. Organizational learning occurs as the result of a stimulus (Leithwood, Leonard, Sharratt, 1998). Shein (2004) calls this stimulus a call for participants to become proactive problem solvers, while Marks and Printy (2002) cite a communal sense of urgency as a condition for organizational learning. A stimulus is not always positive. Elmore (2002) found that some changes could be as radical and invasive as to be an intrusion in process. In this study, the pressures of the state and national policy contexts, coupled with local 21st Century change initiatives, will be considered the stimulus for organizational learning.

Process. Leithwood, Leonard, Sharratt (1998) did not operationalize the learning process. Instead, they identified the conditions that influenced the organizational learning process. The authors did provide a theoretical narrative of the learning process.
that included collective learning, and mutual adaptation (Leithwood et al. 1998). Schein (2004) proposes a similar process, which he calls, “A commitment to learning to learn” (p.395). Similarly, Senge (1990) calls this process alignment for team learning. The process of “… alignment is the necessary condition before empowering the individual will empower the whole team” (Senge, 1990, p.235).

**District conditions for organizational learning.** This study’s conceptual framework will incorporate six factors that theoretically foster organizational learning. A correlation of the findings from the three seminal works on organizational learning, Leithwood, Leonard, and Sharratt (1998), Marks and Printy (2002), and Grubb (2005), are included in

Figure 2.3 shows the constructs that will be used in this study, and which are defined below.
Figure 2.3: Organizational Learning Constructs Included in this Study

**Clear and meaningful mission and vision.** All three of the foundational works to this study included the construct of mission and vision. While Marks and Printy (2002) included the construct as a shared belief about the mission and goals, Leithwood, Leonard, and Sharratt (1998) found that having a clear and meaningful mission and vision fostered organizational learning and a shared sense of purpose. Grubb (2005) found that a clear and meaningful mission and vision emerged from the data, but differed slightly different from the previous studies. Grubb (2005) found that the degree to which
the mission and vision is meaningful was variable based on the degree to which it reflected their own personal visions (p.302).

**Collaborative and harmonious culture.** Leithwood, Leonard, and Sharratt (1998) found that a collaborative and harmonious culture was one of the most important conditions of culture within organizational learning. This was exhibited in practice through a community feel within the district, wherein disagreements were settled in a professional manner (p.261). Grubb (2005) found that collaborative and harmonious culture emerged as a factor contributing to organizational learning (p.157).

**Participatory decision-making.** Grubb (2005) found that while most of the parents skipped this question on the survey (p.128), most participants reported multiple methods for input in district-wide decisions (p.235). This confirmed the earlier findings from Leithwood, Leonard, and Sharratt (1998) that found participation in district decision and multiple forms of input as two relevant elements (pp.261-262). Marks and Printy (2002) also measured participative decision-making, and the extent to which the opportunities existed.

**Leadership.** The inclusion of transformational leadership as a condition for organizational learning is purposeful in this study. While not included in the Grubb (2005) study, transformational leadership was examined in both the Leithwood, Leonard, and Sharratt (1998) study, and in the Marks and Printy (2002) study. Grubb (2005) did not include this condition in her study, citing “…the underlying assumption in this study was that leadership created conditions and, therefore, the presence of conditions presumed the presence of leadership” (p.81). This study does not share that same assumption, and therefore transformational leadership as a construct, will be included.
**District policies and resources promoting learning.** Grubb (2005) found that evidence supported the inclusion of this construct, while Leithwood, Leonard, and Sharratt (1998) found that this condition was most often cited by their teacher participants. Marks and Printy (2002) reported this construct as the building of new knowledge and skills provided through in-services and professional development.

**Knowledge and skills.** Both foundational studies in Grubb’s (2005) empirical work included knowledge and skills constructs. While Leithwood, Leonard, and Sharratt (1998) included a construct relating to Policies and Resources for Promoting Learning, Marks and Printy (2002) named their synonymous construct more aptly: knowledge and skills. Grubb’s (2005) use of knowledge and skills related specifically to the knowledge and understanding of the No Child Left Behind Act. However, the employ within this study will be slightly different. As this study focuses on the reform effort of a district’s implementation of a 21st Century literacy initiative, the knowledge and skills construct will focus on these variables.

Organizational learning processes can be embedded in multiple layers. Previous researchers have found that district conditions have the strongest influence at the school process level (Leithwood, Leonard, & Sharratt, 1998). Other researchers have proposed that district conditions for organizational learning indirectly influence process outcomes (Grubb, 2005). A major assumption underlying this proposed framework is that if district conditions for organizational learning are present, processes are influenced. The processes included in this study are the implementation of 21st Century change initiative.
**Significance of the Study**

Change is unavoidable. The pace and scope of technological advancement continues to exceed that of curriculum and textbook publishers. Research about organizational learning at the district level can help educational practitioners and policymakers to better understand organizational variables and their influence on large-scale improvements.

This study contributed to the research on organizational learning in public education in an “ideal-typical” case setting (LeCompte & Preissle, 2003). The desire of the researcher was to provide a deeper understanding of the conditions that facilitate and foster district learning, and how that influences literacy reform efforts.

While other studies are focused on the conditions that foster organizational learning within a bounded context of a specific nationally implemented program (Grubb, 2005), this study focused on a local literacy change initiative. This was particularly timely and critical as districts are in the process of responding to technological change, and the implications of these changes to the literacy curriculum.
Chapter 3

The former chapter reviewed the literature on organizational learning and leadership styles. The results of this analysis argues that focused case studies of organizational learning at the district level are critical to deciphering the complexities and potential of organizational learning as a strategy for knowledge transfer, and improving student learning on a large scale. This chapter reviews the instrument selection and design, along with the procedures for collecting and analyzing the data in this study.

Research Design

The design of this research study is an embedded single case, including only one school district located in Southern California. Miles and Huberman (1994) define a case study as a, “phenomenon of some sort occurring in a bounded context” (p. 25). In this case, the phenomenon of study were the district conditions for organizational learning and the multiple stakeholder group response to leadership styles, embedded within the context of educational reform. The Sterling District stakeholder groups are a subset of the larger Sterling School District case.

Embedded contexts. Understanding the context is vital to this study. The unit of analysis in case study research is the phenomenon of study, and everything outside of the unit is considered the context (Yin, 2003). This study recognizes an embedded context, and incorporates this into the framework. For this case, the district stakeholders were the unit of analysis, while the district is embedded within state and national

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3 Sterling School District is a pseudonym for the school district in this study, used throughout to protect the anonymity of the participants.
contexts, which is further embedded within a *historical* context. Other researchers have used similar embedded contexts in their design (Grubb, 2005; Marks & Printy, 2002; McLaughlin & Talbert, 2001), arguing that education settings are permeated by the contexts in which they are embedded (Elmore, 1998; Elmore & Burney, 1997, McLaughlin & Talbert, 2001).

There are multiple layers of interdependent contexts comprised within this study (see Figure 3.1). The stakeholders are embedded within the district context, while both are embedded within state and national contexts, and further embedded in a historical context. These contexts are more broadly understood as the local, state, and national influences, such as the No Child Left Behind Act. The historical context is the organizational memory of the district employees, which encompasses their mental models and personal experiences. Ultimately, all of these contexts have an influence, and must be adequately approached in any reform effort.

In providing a framework for the relationship of the embedded contexts, this study used the proposed interrelationship model, as outlined in the theoretical framework, to understand the dependence and influence of the constructs upon each other.
According to Yin (2003), a case study method is useful when (a) the phenomenon of interest is contemporary and occurring in a real life context, and (b) the boundaries between the context and the phenomenon are not clear (p.13). The case study method is particularly useful for this study because the overarching research question, “How do the district’s conditions for organizational learning influence the adoption of a 21st Century literacy change initiative,” is focused on the conditions for organizational learning embedded in national and state educational reformation contexts. Furthermore, the boundaries between the conditions and the stakeholder response are indistinguishable.

Case study research is used to investigate complex social phenomenon with multiple variables (Patton, 1990, p.41). The all-encompassing nature of a case study is
ideally suited to understand the district conditions for organizational learning. Although other researchers have suggested that multiple case studies can offer a deeper understanding of phenomenon, and embedded single case study is the most beneficial because the case, the district, is all-encompassing. For the purposes of this study, I defined *district* as all district stakeholders: students, parents, teachers, principals, administrators, and superintendent.

The small school district setting is very important in this study. Whereas a significant focus of previous research goes toward large, troubled, or failing school districts, there is a need to understand the inverse of these organizations. The purpose of this “ideal-typical case” (LeCompte & Preissle, 2003) was to learn as much as possible about organizational learning in relation to the district conditions, not necessarily to develop a theoretical framework or establish generalizability to other cases (Yin, 2003, p.48). With nearly ideal conditions for organizational learning, LeCompte and Preissle (2003) state, “if it won’t work here, it won’t work anywhere” (p.77). Moreover, an embedded single case study is an advantageous design as opposed to a holistic design because "potential problems arise when a global approach allows an investigator to avoid examining any specific phenomenon in operational detail" (Yin, 2003, p. 45).

A major strength of case study research, according to Yin (2003), is that the researcher has the opportunity to use a variety of different sources of evidence, which allows for the inclusion of a broader array of issues (pp. 97-98). Evidence drawn from multiple sources is also favorable because every type of data collection method has an inherent weakness, and alone cannot provide enough information for the researcher to fully capture a widespread perspective. For example, observations are limited by the
researcher's lens, interviews are limited by participants' personal perceptions and biases, and documents can be inaccurate and highly variable in quality (Patton, 1990, p. 244-245). For these reasons, I intentionally designed this study to include both qualitative and quantitative methods.

Triangulation is an important process to strengthen a study, and to minimize misrepresentation and misunderstanding (Patton, 1990, p. 187; Stake, 1995, p. 109). Specifically, validity and reliability increase through the triangulation of multiple data sources (Denzin, 1978; Patton, 1990; Stake, 1995; Yin, 2003). Yin (2003) emphasizes that for real triangulation to occur; "converging lines of inquiry" are required (pp. 98-99) (see Figures 6 & 7). Methodological triangulation, according to Stake (1995), is one of the most recognized protocols for triangulation (p. 114). For this study, I used both data triangulation and methodological triangulation (Patton, 1990; Stake, 1995; Yin, 2003). As shown in Figure 3.2, this study was composed of both qualitative and quantitative data sources, all of which are required to provide a deep understanding of the research questions, while minimizing misrepresentation and misunderstanding, which could arise from a single data source study.
Role as researcher. Because of my positionality within the district and study, I purposefully chose a teacher researcher role (Stake, 1995, p. 93) for the data collection in this study. In this role, I strove to learn what the audience needs to know. With the case researcher as teacher role, the intention is to, “inform, to sophisticate, to assist the increase of competence and maturity…” (Stake, 1995, p. 91-92). By doing this, my role was to help facilitate learning, not necessarily to advocate, evaluate, or theorize (Stake, 1995).

As a teacher researcher, I had chosen a moderate participation role for data collection (Spradley, 1980, p.60). For the purposes of this study, a non-participant stance is unfeasible as insider knowledge was critical to gaining an in-depth understanding of
the district’s context. Moreover, the moderate participation role helped maintain a balance between being an insider and a perceived outsider (Spradley, 1980).

**District Context**

The district selected for this case study, Sterling School District, is a small school system serving a population of 2,947 kindergarten through twelfth-grade students. The district has four schools: two elementary schools (K-5), one middle school (6-8), and one high school (9-12) (California Department of Education, 2010).

Located in an affluent area on the coast of Southern California, the district’s enrollment and demographics have remained largely unchanged for many years (see Table 3.1). Throughout the past eight years, the district has only realized a 10% gain in enrollment, without a significant change in the demographic composition. In the 2008/2009 school year, the other subgroup enrollment numbers, which do not appear in Table 3.1, were as follows: American Indian (0.2%), Pacific Islander (0.5%), Filipino (0.6%), Multiple/No Response (0.5%) (Ed-Data, 2010).

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
<th>Percent Change</th>
<th>Percent of Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>African American</td>
</tr>
<tr>
<td>2002</td>
<td>2649</td>
<td>1.1</td>
<td>2.5</td>
</tr>
<tr>
<td>2003</td>
<td>2700</td>
<td>1.9</td>
<td>1.1</td>
</tr>
<tr>
<td>2004</td>
<td>2703</td>
<td>0.1</td>
<td>1.1</td>
</tr>
<tr>
<td>2005</td>
<td>2770</td>
<td>2.5</td>
<td>1.2</td>
</tr>
<tr>
<td>2006</td>
<td>2861</td>
<td>3.3</td>
<td>1.2</td>
</tr>
<tr>
<td>2007</td>
<td>2860</td>
<td>0.0</td>
<td>1.2</td>
</tr>
<tr>
<td>2008</td>
<td>2900</td>
<td>1.4</td>
<td>1.0</td>
</tr>
<tr>
<td>2009</td>
<td>2947</td>
<td>1.6</td>
<td>1.2</td>
</tr>
</tbody>
</table>


As shown in the demographic data, the student population had remained relatively stable over time. The majority of students came from higher socio-economic
backgrounds, as reflected in the very low percentage of students participating in the free and reduced lunch program (5.6%), and even fewer of the students (3.2%) are English Learners (California Department of Education, 2010).

Selection

According to LeCompte and Preissle (2003), selection is a distinct process from sampling. Selection is an "interactive process" and a general process of focusing the study and defining the broader population under study, while sampling is the process of defining the key informants to generalize to the greater population (p. 56). As a Director within the organization, I had insider knowledge and understanding of the district and its processes. When coupled with similar knowledge of my five previous districts of employ, and when considering the stability and predictability of the demographics of the area, Sterling School District emerged as an “ideal-typical case” (LeCompte & Preissle, p. 77) of a district with potentially ideal conditions for organizational learning. Therefore, Sterling was purposefully selected for inclusion in this study.

In addition to the insider knowledge of the district’s context, the other preliminary data which supported the claim that Sterling School District is a potentially ideal-typical case of organizational learning are: (a) a comparatively low average class size, (b) extremely stable demographic population, (c) high teacher experience (only 2% first or second year teachers), (d) notably high and continuing to grow district Academic Performance Index (Table 3.2), (e) extremely low dropout rate (only 2 dropouts in 2009), and (f) nearly 64% of all graduates completed all UC/CSU Required Courses for entrance (California Department of Education, 2010).
Table 3.2: Academic Performance Index (API) Report

<table>
<thead>
<tr>
<th>Year</th>
<th>District Base API</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>817</td>
<td>--</td>
</tr>
<tr>
<td>2006</td>
<td>836</td>
<td>2.3</td>
</tr>
<tr>
<td>2007</td>
<td>846</td>
<td>1.2</td>
</tr>
<tr>
<td>2008</td>
<td>846</td>
<td>0.0</td>
</tr>
<tr>
<td>2009</td>
<td>856</td>
<td>1.2</td>
</tr>
<tr>
<td>2010</td>
<td>874</td>
<td>2.1</td>
</tr>
</tbody>
</table>


Data Collection

Given the relatively small population of employees in the Sterling School District (N < 275), the entire population of district employees was selected for inclusion in the quantitative data collection. Creswell (2008) proposes that quantitative data collection should include as large a sample as possible, in order to reduce the potential error of the sample differing from the population (p.156). Rather than sampling a representative or target population, the inclusion of the entire population minimized any sampling error. While it is unrealistic to expect 100% participation in the survey, multiple attempts to solicit the survey tool were made in an effort to achieve a 75% response rate. Through the multiple solicitation efforts, and with the cooperation of the district’s leadership team, a final response rate of 57% was achieved.

Collecting quantitative data from the entire district population would yield some rich information, and would be complemented properly with an equally rich source of qualitative data. However, collecting qualitative data, via interviews in this case, from the entire district’s population would be unwieldy and unrealistic. Therefore, the survey participants were afforded an opportunity to self-select into the interview process. From those stakeholders indicating a willingness to participate in the interviews, a
representative sampling of the demographics was initially planned to best reproduce, as closely as possible, the population as a whole. However, with only 20 survey participants, including the 10 administrative stakeholders that were specifically asked to participate; all 20 willing participants were interviewed.

There is an inherent limitation of utilizing a self-selected population for inclusion in the interview process. The act of self-selecting is by itself, a differentiator from the population as a whole. This is a limitation of this study that could not be overcome, and will be addressed in Chapter 5.

For the purposes of this study, a differentiation was made between stakeholders, and key stakeholders. In this study, key stakeholder groups were those in leadership positions, and which section of the entire population would total less than 10 participants. This included site administrators, district office administrators, and superintendents. The term stakeholder groups included personnel whose total population exceeds 10 participants, and traditionally do not hold leadership roles within the district. Teachers, school and district staff members were the participants encompassing these stakeholder groups. Extant data provided additional insight into the student perceptions.

In addition to providing evidence to answer the research questions, the multi-stakeholder composition of the research study was ideal for investigating organizational learning at the district level. This was due to the key participants representing six different stakeholder groups in the district (see Table 3.3), along with numerous participants from all stakeholder groups.
Table 3.3: District Key Stakeholder Configuration

<table>
<thead>
<tr>
<th>Participants</th>
<th>Stakeholder Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former Superintendent 1</td>
<td>Superintendent</td>
</tr>
<tr>
<td>Former Superintendent 2</td>
<td>Superintendent</td>
</tr>
<tr>
<td>Assistant Superintendent, Curriculum &amp; Instruction</td>
<td>District Administrator</td>
</tr>
<tr>
<td>Elementary Principals (2)</td>
<td>Site Administrator</td>
</tr>
<tr>
<td>Middle School Principal</td>
<td>Site Administrator</td>
</tr>
<tr>
<td>High School Principal</td>
<td>Site Administrator</td>
</tr>
<tr>
<td>Elementary Teacher</td>
<td>Teacher</td>
</tr>
<tr>
<td>Middle School Teacher</td>
<td>Teacher</td>
</tr>
<tr>
<td>High School Teacher</td>
<td>Teacher</td>
</tr>
<tr>
<td>Parent/Classified Employee</td>
<td>Parent (PTA Leadership)</td>
</tr>
</tbody>
</table>

Data Collection Techniques

I collected data using four different data collection techniques: surveys, interviews, archival evidence, and extant data analysis. These data collection techniques were chosen for their best fit and applicability. Spradley (1990, p.124) has argued that observations are ideal for capturing cultural knowledge, and Patton (1990, p.202) claims that there is no substitute for direct observation. However, because observations mainly capture participants' behaviors through the selected lens of the researcher (Patton, 1990, p. 244), and because of the inability to observe participants from all stakeholder groups, this was not selected as a source of data for inclusion in this study.

Surveys are ideal for collecting data for the purpose of describing existing conditions (Cohen, Manion, & Morrison, 2003). The District Organizational Learning Conditions Survey (see Appendix A) is an advantageous means for collecting data from district stakeholders to answer the question: To what extent are the district conditions for organizational learning present? The survey is an essential method for this study because it provided a means to collect data from a broader scope of participants than the 10 key
stakeholders who were specifically asked to participate in the interviews. The survey is also essential for the triangulation of data collected from the stakeholders about the district conditions for organizational learning through interviews, archival evidence, and extant data.

Although interviews and archival evidence can provide rich and meaningful data about the district conditions, the survey supplemented this data in two ways. First, because the total resultant interviews were relatively low (N=134), the resultant perceptions alone would not have accurately captured the district conditions for organizational learning. Second, interviews and archival evidence is of a limited quantity, and would not necessarily reflect the conditions of the district as a whole. To accurately and adequately determine if the district conditions for organizational learning are present, it is critical to collect data from a broader group of district stakeholders from diverse settings within the district.

Extant data was used to gain additional insights into the conditions for organizational learning. The district has previously, and continues to collect, various data from district personnel and selected students. This data alone was not analyzed to answer any of the research questions. However, when analyzed in conjunction with the other data sources, the extant data does help to confirm or refute the propositions of the study. This extant data also provided a voice for the students, and other stakeholders that are no longer employed within the district.

**Quantitative Data Collection: Survey**

**Pilot survey.** The survey came from Grubb’s (2005) research on District Conditions for Organizational Learning: Effects on a Multi-Stakeholder District Team’s
Response to No Child Left Behind. The survey, originally designed and used by Grubb (2005), was used within this study with permission of the author.

The survey included factors identified in research studies conducted by Leithwood, Leonard, and Sharratt (1998) and Marks and Printy (2002). Both studies were large-scale multi-method studies with results indicating district conditions that influence organizational learning. Using the six conditions described in the findings of the two studies, Grubb (2005) developed a multiple stakeholder pilot survey with a six-point Likert agreement scale, initially measuring 54 items. Grubb’s final survey instrument was trimmed to 36 items. The survey was originally designed to collect data from multiple stakeholders in the Vineyard School District; however, it had ideal applicability to the Sterling School District study as well.

Another reason for using an established survey is the challenge in developing a survey for multiple stakeholders that uses common and comprehensible wording. According to Fowler (2002), there are three principles for wording survey items: (a) items should be worded so that every respondent answers the same questions, (b) the meaning of items should be understood and all respondents should have a shared sense of the meaning, and (c) definitions should be provided for meanings that are not likely to be shared by participants (pp. 84-85). The items in the original District Conditions for Organizational Learning Survey were all worded exactly the same and did not differ by stakeholder group or language. Within this study, all of the stakeholders did receive the same survey. There was no need to include versions in alternate languages for the Sterling School District.

According to Grubb (2005, p.111-112):
The specific items in the pilot survey were based on (a) descriptions of the conditions in the findings from the two studies; (b) my understanding of the conditions based on extensive reading about organizational learning; and (c) modified items derived from surveys and interview guides used in previous organizational learning studies conducted by the Ontario Institute for Studies in Education at the University of Toronto. Using the pilot survey results and feedback from the participants, I designed a final survey that was administered to district stakeholders at three schools in Vineyard School District.

Grubb’s (2005) final survey of 36 items was the starting survey tool for the quantitative method in this study, with only slight modifications. The original survey design sought to measure district conditions for organizational learning within the context of the district’s response to the No Child Left Behind Act (Grubb, 2005). The modifications to the survey of use in this study was only that of a substitution of “No Child Left Behind” for “Simply Integrated: 21st Century skills plan.”

The starting survey in this study included the following six theoretical constructs: (a) culture, (b) participative decisions-making, (c) knowledge and skills, (d) mission and vision, (e) policies and resources, and (f) outreach (Grubb, 2005) (Table 3.4). The results of the pilot survey confirmed both the fit for the application, but also the need for only wording changes to the original initiatives, and the inclusion of Leadership as a replacement for Outreach. The Leadership questions were sourced from the original survey document. The final research survey was used without further changes.
Table 3.4: Survey Items Organized by Theoretical Construct

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
</tr>
</thead>
</table>
| Culture         | 1. Our district engenders a feeling of community among schools.  
                  2. Our district is collaborative and harmonious.  
                  3. Disagreements in our district are resolved in a professional manner.  
                  4. I would describe our district as a community.  
                  5. Change is accepted in our district.                                                                                                                                                    |
| Decision-Making | 1. Our district decision-making process is effective.  
                  2. Contributions of individuals and groups in our district are valued.  
                  3. There are multiple forums and opportunities for me to participate in district-wide decisions.  
                  4. Decision-making processes are shared and transparent.  
                  5. The decision-making process in our district provides for input from the schools.  
                  6. My stakeholder group (teachers, parents, etc.) is involved in making important district decisions.                                                                                  |
| Knowledge & Skills | 1. I have a clear understanding of the district's Simply Integrated: 21st Century skills plan.  
                             2. Lessons learned by individuals and groups in the district are quickly shared with others who can use them.  
                             4. I have participated in district workshops related to the district's Simply Integrated: 21st Century skills plan.  
                             5. I actively share my knowledge about curriculum and instruction with colleagues and friends.  
                             6. I have a clear understanding of all of the provisions of the district's Simply Integrated: 21st Century skills plan.  
                             7. Our district goals are aligned to the goals of the Simply Integrated: 21st Century skills plan.                                                                                           |
| Mission & Vision | 1. Our district mission is clear, and I understand it.  
                             2. Our district mission is meaningful to me.  
                             3. Our district has a clear vision related to improving programs and instructions.  
                             4. There are ample district learning opportunities to support teaching and learning.  
                             5. Our district vision reflects my personal vision for student learning.  
                             6. Professional learning activities reflect the district vision.  
                             7. Personally, I am dedicated to doing my absolute best to achieve the district vision.                                                                                                        |
| Leadership      | Our district identifies and articulates a vision  
                             Our district fosters the acceptance of group goals  
                             Our district conveys high performance expectations  
                             Our district provides appropriate models  
                             Our district builds a productive school culture  
| Policies & Resources | 1. Our district provides substantial opportunities for professional learning.  
                             2. Our district provides sufficient financial resources for our professional learning.  
                             3. Our district provides substantial release time for our professional learning.  
                             4. Our district provides expert personnel as a resource for our professional learning.  
                             5. Our district provides appropriate materials to support our professional learning.  
                             6. Our district has an impact on my learning.                                                                                                                                                    |
Survey participants. Given the relatively small population of employees in the Sterling School District (N < 275), the entire population of district employees was selected for inclusion in the survey data collection.

As this 21st Century literacy change initiative was formed, implemented, and moved into a monitoring phase before the employ of the district’s current Superintendent, both prior Superintendents were included in the key stakeholder group. The currently employed Superintendent was asked to pilot the survey data collection tool, and to participate in the interview protocol (Appendix F). However, as this person’s knowledge of the scenario and conditions was severely limited in comparison, this pilot survey data was only used to validate the survey tool.

Final survey. The final survey instrument was administered in May and June of 2011. The survey was formatted and administered using SurveyMonkey.com. Each potential participant was sent an email with an introduction letter (Appendix B), a link to the IRB-approved consent form, and a generic hyperlink to the online survey instrument. In total, 235 emails were sent in the first mailing of all district employees inviting their participation in the survey. A second mailing to the same group was sent one week later, in an effort to recruit more responses.

A separate mailing was initiated to the four Parent Teacher Association (PTA) presidents, and the PTA Cabinet president, soliciting their help both in the survey and in resending the invitation to their active participants in the organization. A second mailing to this same group was initiated two weeks later. In addition, I personally attended two PTA meetings and asked for additional participation from the members present.
Once the data collection window was closed, I exported the results from SurveyMonkey.com into an Excel spreadsheet. I visually inspected the results before exporting the data to SPSS. SurveyMonkey.com, by default, includes a unique code for each respondent’s data, which became the unique key within SPSS. Once the data was in SPSS, I created the SPSS codebook. This entailed a labeling all the variables, naming all the items, defining allowed values and titles to each of the survey items, and assigning titles to each proposed theoretical construct contributing items.

The first check was data cleaning. According to Fowler (2002), data cleaning is the process of ensuring the data is complete and in order. As the data was collected electronically, there was no need to reconcile stray marks, or accidental responses on a physical paper. However, a review of the data showed that only eight parent responses were recorded, and none of those data were complete. Moreover, upon review, the self-identified parent participants left more than half of the questions unanswered. Due to the extremely small response rate, and the inconsistency of resultant data, coupled with this data’s potential to become outliers and influence the resulting analysis, these records were removed from the final data file. This resulted in the total usable responses being reduced to 134. Once the foundational work was performed, a factor analysis was performed on the cleaned and prepared data.

**Factor Analysis using SPSS**

Factor analysis is frequently used to develop or revise questionnaires. As this survey was previously designed and tested, the factor analysis is used to ensure that the questions asked related to the constructs identified for the purpose of measurement. The
multiple items of the survey document should relate to the constructs of desired measure, and in this case, the factor analysis can confirm or deny the loadings of these constructs.

**Sample size.** Correlation coefficients fluctuate from sample to sample, much more in small samples than in large samples (Field, 2005). Therefore, the reliability of factor analysis is also dependent on sample size. Field (2000) initially stated that sample sizes between 100 and 200, with communalities in the .50 range were acceptable. However, this was later revised as Field (2005) argued that a sample size of over 300 is likely adequate for a factor analysis. As the results of this survey administration yielded only 134 responses, communalities after extraction might not be as reliable according to Field (2005).

Conversely, Stevens (1996) stated that popular rules allow for a range of 2 to 20 subjects per variable, with a recommendation of 5 subjects per variable at a minimum. Although the sample size in this study was rather small (N = 134), the ratio of participants to variables was 3.7:1, which falls within the acceptable range, although not necessarily the recommended range, as cited by Stevens (1996).

**Outliers.** The data were examined for outliers and violations of assumptions prior to the data screening being conducted. Box plots were generated to review each variable’s distribution of scores to find values that were numerically distant from the rest of the data. The results revealed two outliers from the data set. As this data set was so small, even a single outlier can have a dramatic effect on the results. Linear regression tests conducted with and without the two outliers revealed an impact on the results. Resultantly, I removed the two numerically distant cases from the data.
Data screening. Using SPSS, I ran a factor analysis with orthogonal rotation using all variables from the survey document, but purposefully excluded the categorizing variables from this process. I opted to use an orthogonal factor approach because, according to Tabachnick and Fidell (2007), orthogonal rotation results in solutions that are easier to interpret. However, I did not run the Varimax rotation, as I wanted to include a higher number of variables for potential inclusion in the factors. As this survey was original constructed and utilized in previous research, I did not want to make a false presumption of the accuracy of the factor loadings based on earlier findings. Therefore, I used an orthogonal rotation.

The preliminary output from the orthogonal rotation is the abridged version of the R-matrix. An examination of the significance values shows no values over 0.05, and correlation coefficients greater than 0.9. This shows there is no singularity of the data, and no variables needed to be removed. However, the Determinant reported as 4.39E-015 (which is 0.00000000000000439), and is not greater than the necessary value of .00001. Therefore, multicollinearity is possibly a problem within this data. Multicollinearity does not reduce the predictive power, or reliability, of the model as a whole; it only potentially affects calculations regarding individual predictors.

Preliminary analysis of the collinearity statistics of each construct total indicated no violation of the assumptions of multicollinearity (tolerance = .338, .600, .202, .229, and .355 with VIF = 2.958, 1.666, 4.942, 4.370, 2.818).

The Kaiser-Meyer-Olkin measure of sampling adequacy is 0.923. As this value is extremely close to the maximum value of 1, and is greater than the recommended value of 0.05, therein indicating patterns of correlations are relatively compact and the factor
analysis should yield distinct and reliable factors (Field, 2005). The result of 0.923 shows a great confidence that factor analysis is appropriate for these data (Table 3.5). Confirming this finding, Bartlett’s test is highly significant (p < 0.001), showing strong relationship between the variables.

Table 3.5: KMO and Bartlett's Test

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
<td>.923</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td></td>
<td>df</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
</tr>
</tbody>
</table>

Finally, I performed a rotated factor matrix to show the factor loadings for each variable onto each factor. This was an orthogonal rotation, with suppression of values less than 0.4, and sorted by size of the loading. While the survey design was based on six theoretical components, the rotated component matrix confirms the presence of an expected six components⁴. Moreover, the factor matrix showed that most of the variables load highly into a single factor. However, some variables show a strong loading into multiple factors.

**Survey Construct Reliability**

Upon completion of the factor analysis, I generated an alpha reliability score for the survey items by individual construct. The purpose of a reliability analysis is to determine how consistently the selected variables measure the proposed constructs.

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⁴ The results of a component analysis are called *components*, whereas the results of a factor analysis are called *factors* (Tabachnick & Fidell, 2001, p. 582).
Following the final survey administration, Cronbach's Alpha reliability was generated again. As shown in Table 3.6, the results confirm the reliability of the survey constructs. As the results in Table 3.6 show, all alpha scores are over .800, which is very high and indicates strong internal consistency among the individual construct items.

However, Pallant does acknowledge the sensitivity in the Cronbach Alpha, particularly with regard to short scales (scales with fewer than ten items). In survey instruments with short scales, such as the one in employ for this study, Pallant explains that “it is common to find quite low Cronbach values (e.g. .5)” (p. 95). Further exploring the internal consistency of the items included in this survey instrument, the consistently high Cronbach Alpha indicates an appropriate reliability and confidence in the measurement of the underlying items relation to the construct. As such, this scale should be considered reliable for the measurement of the identified constructs to the extent desired by this study.

Table 3.6: Alpha Reliability Scores by Construct for Final Survey

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item Numbers</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>Q 1, 5, 6, 8, 15</td>
<td>.835</td>
</tr>
<tr>
<td>Decision-Making</td>
<td>Q 2, 4, 9, 20, 26, 35</td>
<td>.898</td>
</tr>
<tr>
<td>Knowledge &amp; Skills</td>
<td>Q 3, 10, 14, 16, 21, 32, 33</td>
<td>.899</td>
</tr>
<tr>
<td>Mission &amp; Vision</td>
<td>Q 11, 18, 19, 23, 25, 29, 34</td>
<td>.893</td>
</tr>
<tr>
<td>Leadership</td>
<td>Q 7, 21, 22, 30, 36</td>
<td>.850</td>
</tr>
<tr>
<td>Policies &amp; Resources</td>
<td>Q 12, 13, 17, 24, 27, 28</td>
<td>.855</td>
</tr>
</tbody>
</table>

To review for major deviations from the assumptions of normality, linearity, and homoscedasticity, Pallant (2007) suggests analyzing the Normal P-P Plot and the Scatterplot. The Normal P-P Plot should show a relatively straight diagonal line from bottom left to top right (Pallant, p. 156). In addition, the Scatterplot should show a
relatively rectangular shape with most scores around the 0 point. My review of the Normal P-P Plot and the Scatterplot showed no deviation of assumptions regarding normality, linearity, and homoscedasticity.

Of the 36 variables listed, SPSS identified six extracted factors, each with eigenvalues greater than 1 (Appendix H). SPSS has extracted the factors following Kaiser’s criterion, however, this criterion is accurate when there are less than 30 variables. The inclusion of 36 variables forces us to find communalities after extraction that are greater than 0.7. This is especially true as our sample size is under 250. In considering these rules, Kaiser’s rule may not be accurate.

**Demographics**

A total of 235 individuals were selected for possible participation in this study, not counting the parent and PTA groups. With the removal of the few parent responses, the total usable surveys totaled 134, which represent a response rate of 57%. A breakdown by experience in position, experience at the work site, education, position, and participation in union leadership (see Table 3.7 - Table 3.12). Of note, teachers were the largest sub-group of participants (61%), most of the participants do not hold leadership positions (87%), roughly 32% of participants held a MA+15 degree, were in their current position and work site for 6-10 years (38%), and had been in education for 11-15 years (30%).
Table 3.7: Survey Participant Position

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Office Administrator</td>
<td>6</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Site Administrator</td>
<td>7</td>
<td>5.2</td>
<td>9.8</td>
</tr>
<tr>
<td>Certificated</td>
<td>82</td>
<td>61.2</td>
<td>71.4</td>
</tr>
<tr>
<td>Classified</td>
<td>38</td>
<td>29.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Blank</td>
<td>1</td>
<td>0.7</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.8: Survey Participant Union Leadership

<table>
<thead>
<tr>
<th>Hold Union Leadership</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>17</td>
<td>12.8</td>
</tr>
<tr>
<td>No</td>
<td>116</td>
<td>87.2</td>
</tr>
<tr>
<td>Blank</td>
<td>133</td>
<td>.7</td>
</tr>
</tbody>
</table>

Table 3.9: Survey Participant Education Level Achieved

<table>
<thead>
<tr>
<th>Education Level Achieved</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA/BS</td>
<td>24</td>
<td>19.4</td>
<td>19.4</td>
</tr>
<tr>
<td>BA+15</td>
<td>20</td>
<td>16.1</td>
<td>35.5</td>
</tr>
<tr>
<td>MA/MS</td>
<td>35</td>
<td>28.2</td>
<td>63.7</td>
</tr>
<tr>
<td>MA+15</td>
<td>40</td>
<td>32.3</td>
<td>96.0</td>
</tr>
<tr>
<td>Ed.D/Ph.D</td>
<td>5</td>
<td>4.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Blank</td>
<td>10</td>
<td>7.5</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.10: Survey Participant Years in Education

<table>
<thead>
<tr>
<th>Years in Education</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>11</td>
<td>8.3</td>
<td>8.3</td>
</tr>
<tr>
<td>6-10</td>
<td>30</td>
<td>22.7</td>
<td>31.1</td>
</tr>
<tr>
<td>11-15</td>
<td>39</td>
<td>29.5</td>
<td>60.6</td>
</tr>
<tr>
<td>16-20</td>
<td>22</td>
<td>16.7</td>
<td>77.3</td>
</tr>
<tr>
<td>21+</td>
<td>30</td>
<td>22.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Blank</td>
<td>2</td>
<td>1.5</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.11: Survey Participant Years in Current Position

<table>
<thead>
<tr>
<th>Years in Current Position</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>39</td>
<td>31.0</td>
<td>31.0</td>
</tr>
<tr>
<td>6-10</td>
<td>48</td>
<td>38.1</td>
<td>69.0</td>
</tr>
<tr>
<td>11-15</td>
<td>19</td>
<td>15.1</td>
<td>84.1</td>
</tr>
<tr>
<td>16-20</td>
<td>11</td>
<td>8.7</td>
<td>92.9</td>
</tr>
<tr>
<td>21+</td>
<td>9</td>
<td>7.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Blank</td>
<td>8</td>
<td>6.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.12: Survey Participant Years at Current Work Site

<table>
<thead>
<tr>
<th>Years in Current Work Site</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>36</td>
<td>28.1</td>
<td>28.1</td>
</tr>
<tr>
<td>6-10</td>
<td>49</td>
<td>38.3</td>
<td>66.4</td>
</tr>
<tr>
<td>11-15</td>
<td>21</td>
<td>16.4</td>
<td>82.8</td>
</tr>
<tr>
<td>16-20</td>
<td>12</td>
<td>9.4</td>
<td>92.2</td>
</tr>
<tr>
<td>21+</td>
<td>10</td>
<td>7.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Blank</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Quantitative Data Collection: Extant Data

The Sterling School District has amassed a sizeable repository of existing data on student performance, student perception, and some data specifically centered on 21st Century literacy skills as collected through the EdTechProfile survey. Additional extant data from multiple years of reflective leadership practice perceptions, which was previously collected by an UCSD Education Studies professor as part of a larger study of district/school practices, was available in limited form.

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5 EdTechProfile is a survey administered through the California Department of Education State Educational Technology Service (SETS) project.
There are multiple reasons for the inclusion of extant data within this study. Primarily, this data was rich in information as it had been collected over multiple years, using various collection tools. The amount of data available was greater than this researcher could amass without a significant investment of time and funding. These datasets also included information from stakeholders that are no longer employed within the district, and those not necessarily identified as a specific stakeholder group, such as students. As the focus of this case was on the district conditions for organizational learning within an already implemented change initiative, it was imperative to gather as many voices, and as much data, from everyone involved in the initiative from the start.

There are inherent limitations to using available extant data. Rudestam and Newton (2007) explain that extant data might not contain direct applicability to the proposed research questions. Additionally, there are limitations on understanding or testing the reliability and validity of the data. These concerns are valid, but minimized, as this was a secondary source of data. This data was collected in an effort to better triangulate other found and collected data. No attempt was made to modify the existing research questions to correspond with any extant data.

**Qualitative Data Collection: Interviews**

In addition to surveys, interviews with key stakeholders, and representatives from the self-selected participants from the other stakeholder groups, were conducted. The purpose of conducting interviews was to triangulate the data collected through survey and archival analysis, as well as to enter into member’s perspectives (Patton, 1990, p.278). According to Patton (1990), researchers can go beyond participant’s external behaviors and explore internal states through interviews. Moreover, interviews can serve as a
source of corroboratory or contrary evidence of the presence or absence of a phenomenon (Yim, 2003, p.90). The phenomenon of question in this study was district conditions for organizational learning.

Following the survey results, the interview process began. Because of my positionality, I employed the services of a neutral third party, research interviewer to conduct the interviews for this study. The interviewer was provided a standardized set of open-ended questions from which to perform the interviews. The advantages of standardized open-ended interviews include an increased ability to compare the results, reduced interviewer effects, and an ease of analysis (Patton, p.288). This was also advantageous should it have been necessary to utilize multiple interviewers over the course of the study. The interview protocol, contained in Appendix F, was designed to answer the research questions, and is based primarily on the review of the salient literature of the three main topical constructs.

The interviews, with permission of each participant, were recorded on tape or digital media. The recording of the interviews were transcribed verbatim by my research assistant, and by a qualified transcriber. Additionally, some hand-written field notes drafted by the interviewer were reviewed, and used to provide additional insight in the analysis process.

**Interview participants.** The 12 members of the key stakeholder groups were specifically, and personally, invited to participate in the interviews. A detailed description of the key stakeholder participants is included in the survey section. Survey participants in the other stakeholder groups were presented the opportunity to participate in the interviews as well via an option presented within the survey tool. From those
stakeholders indicating a willingness to participate in the interviews, a representative sampling of the demographics was initially planned to best reproduce, as closely as possible, the population as a whole. However, with only 20 survey participants, including the 10 administrative stakeholders that were specifically asked to participate; all 20 willing participants were interviewed.

**Qualitative Data Collection: Archival Evidence**

Archival evidence can be particularly useful in case studies. Merriam (1990) explains that archival evidence can ground the research in the context of the problem. Merriam (2009) explains that archival evidence is beneficial, as it does not rely on the participation or cooperation of human beings (p.139). However, there are many limitations to using archival analysis. These limitations include (a) an incompleteness and lack of continuity between events, (b) lack of correspondence to the conceptual model, and (c) built-in biases (Merriam, 1990, p.124).

Some guidelines exist to reduce selection bias in archival evidence. LeCompte and Preissle (2003) argue that being attentive to what is not in the evidence, *physical traces*, is equally important to collecting evidence that does exist (p.218). This includes comparing the similarities and differences of materials in the same category, and understanding the history of those who produce and consume the material.

Archival evidence varies in importance and relevance depending upon the case study of employ (Yin, 2003, p.89). For this case, archival evidence was collected for building a descriptive case of the presence or absence of district conditions for organizational learning. As expected at the outset of this study, archival analysis encompassed (a) district and site web pages, (b) the California Department of Education
website, (c) agendas, meeting minutes, and artifacts arising from relevant Board meetings that were related to “Simply Integrated: 21st Century literacy plan.”

The primary purpose of these documents was to facilitate an understanding of the district conditions that led to the introduction of the 21st Century literacy change initiative from the Board’s perspective; to assist in answering the first research question, How does the district respond to a 21st Century literacy change initiative? Secondarily, these documents provided triangulation relative to the themes and findings of the other data collection methods.

The methodological approaches included in this study address the following research questions:

1. How does the district respond to a 21st Century literacy change initiative?
2. To what extent are district conditions for organizational learning present?
3. How do the district conditions for organizational learning influence – enable or constrain – the adoption of a 21st Century literacy change initiative?

Figure 3.3 shows the relation of the data collection techniques to the research questions, while Figure 3.4 summarizes the relationship of the research questions, data collection techniques, and data analysis methods.
Figure 3.3: Source Data by Research Question

Data Analysis

This section describes the strategies that were used to analyze the survey, interview, archival and extant data in an effort to answer to research questions. Simons (2009) explains that data analysis is an inductive process of breaking down data into segments, which can be categorized, ordered, and examined (p.117). Merriam (1990) stated, “The process of data collection and analysis is recursive and dynamic” (p.155).

Yin (2003) claimed that having a general analytic strategy is of the highest priority for data analysis (p.111). Four different strategies were used within the data analysis of this study. These were (a) theoretical propositions, (b) content analysis, (c) exploratory, descriptive and factor statistics, and (d) archival analysis. Carried throughout each strategy, the data analysis focused primarily on the theoretical propositions.
Data analysis: theoretical propositions. According to Yin (2003), the preferred strategy of data analysis is relying on the study’s foundational theoretical propositions to help “focus attention on certain data and ignore other data” (p. 112). The conceptual framework presented in Chapter 2 visually represented the theoretical propositions used to guide this study: organizational learning occurs in a school district because of an educational reform movement when the district conditions for organizational learning are present, which influences the district’s stakeholder’s response to the reform effort. Yin (2003) proposes that this strategy is particularly useful for answering how questions (p.112), and is therefore used to answer the question: How do the district conditions for organizational learning influence – enable or constrain – the district stakeholder response to a 21st Century literacy change initiative?

Data analysis: surveys. The first step in the analysis of the survey data was to organize and prepare the data (Creswell, 2008). As the survey included a five-point Likert scale response, each question will be scored on a continuous scale from “1” to “5.” Summed scores were calculated for the whole of each theoretical construct. The data was then reviewed, and missing data was cause for elimination of that participant record. The desired response rate is greater than 75%, but the resultant response rate was slightly lower (57%).

Initially, the six main constructs of the organizational learning survey were assessed for suitability in a factor analysis. First, the items were subjected to a principal component analysis (PCA). In this, the number of questionnaire items were found to be related to a small number of factors that relate to the research questions. This confirmed that the survey items related to their theoretical constructs listed in Table 3.4. The
reliability coefficient for each construct determined how strongly the questionnaire items that represent a construct are related to one another. The resultant loadings of the components identify very little variances in the variables used, and subsequently helped to confirm the validity of the constructs.

Descriptive statistics were used to analyze the resultant survey data, and to provide general tendencies of the variables. The descriptive statistics helped to describe the characteristics of the sample, and to address the research question: To what extent are district conditions for organizational learning present? Descriptive statistics were also used to identify potential relationships of the constructs. For example, are there relations between leadership and culture; are any of the constructs correlated directly or inversely to another? Within this analysis, tendency and variability was identified and documented. Within the descriptive statistics, I also explored the range, variance, and standard deviation of the data for the purpose of exploring the balance in the distribution of the data, and to interpret the average dispersion in the distribution of responses.

The research questions of this study include both descriptive and multivariate associational aspects. In order to assist in answering the descriptive questions, mean, frequency, and factor analysis statistics were performed. Frequency distributions assist in describing the data for each of the district conditions for organizational learning identified in the factor analysis, as well as for each of the respective survey items. Another frequency distribution compared the key stakeholders' aggregate survey response data to the aggregate data collected for the other participants as well as to the entire sample's responses. Finally, central tendency data assisted in describing the stakeholder group response of the factored constructs.
To assist in answering the multivariate associational questions, a series of correlation statistics were performed against the data of the surveys. The correlations are used to measure the relationship between two or more of the variables. The correlation coefficients found help identify positive or negative correlations of the variables. This study attempted to identify statistically significant correlations, identified by $p < .05$. For those statistically significant correlations, the coefficient of determinism was analyzed to understand the effect of the correlation of the variables. The researcher understands that correlation statistics can only indicate the presence or absence of a relationship of the variables, but not the nature of the relationship. The understanding that perfect correlation is not causation confirms the need for the hypothesized interaction model to give theorized context to the nature of the relationship of the constructs of study.

As the survey tool included some categorizing variables, including demographics and work experience, a series of inferential statistics were conducted using these data. The purpose was to identify patterns or themes within the data, and possibly make inferences about the populations. The inferential statistics analysis provided baseline data to answer the remaining research questions, as well as to provide initial information regarding the presence or absence of relationships among the variables and constructs within the selected case.

Foremost, the response rate of the participant stakeholder groups was evaluated for variance amongst the groups. Next, inferential statistics were used to check the probability of a statistical event occurring due to variation in the data characteristics. This was in the form of an $F$-test. The $F$ statistic is used as there are more than two
groups of stakeholders involved in this study and survey data. The statistical significance, identified as $p < .05$, is documented in Chapter 4.

The results of the statistical analysis are presented in table form, providing summaries of the researcher’s findings. Charts and graphs are used when visual representation of the data is beneficial. The SPSS computer program, version 18.0, was employed to derive the necessary statistics.

**Data analysis: interviews.** Content analysis was used for analyzing the transcripts of the recorded interviews. Within the content analysis, there were three steps: (a) coding patterns in the data, (b) segmenting the data, and (c) interpreting the data. To assist in the content analysis for this study, the software program Atlas/ti was used to code, group, and visually arrange the qualitative data.

The process of content analysis began with, “identifying, coding, and categorizing the primary patterns in the data” (Patton, 1990, p.381). Miles and Huberman (1994) simply describe this as coding the transcripts into the meaningful parts. In this process, the transcripts were read thoroughly to find the patterns in the data. Specifically, the intent of this first step was to identify any data that reflect the district conditions for organizational learning, primarily derived from the theoretical propositions, and secondarily from emergent patterns.

The second step was to assign codes to meaningful words or phrases. Miles and Huberman (1994) describe these as “chunks” (p. 56). Always with an eye to the research questions, theoretical propositions, or emerging patterns, the chunks were identified. This was an iterative process of both automatic coding through the Atlas/ti program, and through a manual reading and evaluation of the data, codes, and chunks.
According to Miles and Huberman (1994), the next step is to cluster the chunks into “data bins” (p.62). For the purposes of this study, the data bins were the district conditions for organizational learning, the research questions, and theoretical propositions and frameworks. There was a need to create data bins for emergent patterns outside of the pre-identified list, and those are documented in Chapter 4.

Finally, in an effort to maintain a high level of reliability, “check coding” was performed with my interview assistant and with a colleague in the doctoral cohort. In this process, my data assigned codes were reviewed by both researchers, with the goal of reaching at least 70% inter-coder reliability using the formula: “the number of agreements/total agreements + disagreements” (Miles and Huberman, 1994, p.64). This goal was ultimately achieved with all three participants.

**Data analysis: archival evidence.** Similar to interviews, and opposite the surveys, each archival document used to describe the presence of the district conditions for organizational learning was analyzed separately. This included data found within the identified websites, as well as the minutes from relevant Board meetings. The archival evidence was coded using a document analysis form that is based on the three components of the literature review, and was informed by the ongoing data analysis. This form, similar to an interview protocol form, served as the primary information repository for the salient points of the attached archival evidence, along with identification of major themes emerging from the contents. The information from the document analysis form was entered into Atlas/ti, where it was coded and analyzed similarly to, but separately from, the interview data. This analysis also included the
basics of statistical analysis, including word frequencies, or variable matching. The final
document analysis form is included as Appendix G.

**Data analysis: extant data.** The extant data was used as a secondary data source.
As such, no direct determinations were made from the data. However, the data did
provide additional information as to the conditions and perceptions of district staff and
students. This data assisted in the triangulation of other data sources, and helped provide
additional inferences to the theoretical propositions.

Because of the various forms, quantity, and quality of the extant data, some of the
data was normalized, scored, and entered into SPSS for analysis. As best as possible, the
data was cleaned, and missing data was cause for removal of that specific data record. As
both the individuals, and the survey instruments, are unavailable for review, only the
clean and complete data was included in the analysis.

As this data is a secondary data source, there was no PCA or factor analysis
performed. The sole purpose of this data was to support the other main, primary data
sources, in answering the research questions. In this, both descriptive statistics,
mimicking the survey data analysis procedures, and exploratory data analysis, yielded the
richness of the data’s contents. The primary objective of these procedures was to
minimize misrepresentation in confirming or denying existing theoretical propositions
relative to the conditions for organizational learning. However, this exploratory data
analysis did also provide information to corroborate research findings. This extant data
also gave voice to a meaningful population which helped capture a wider perspective
than the identified stakeholder groups of survey and interview populations. A summary
of the research questions, data collection, and analysis techniques is included in Figure 3.4.

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Data Source</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• How does the district respond to a 21st Century literacy change initiative?</td>
<td>• Interview Transcripts • Archival Evidence</td>
<td>• SPSS - Descriptive Statistics, Factor Analysis • Transcribe, Code, Theme, Interpret</td>
</tr>
<tr>
<td>• To what extent are district conditions for organizational learning present?</td>
<td>• Survey Data • Extant Data • Archival Evidence</td>
<td>• SPSS - Descriptive Statistics, t-Tests, Correlations • Code, Theme, Interpret</td>
</tr>
<tr>
<td>• How do the district conditions for organizational learning influence – enable or constrain – the adoption of a 21st Century literacy change initiative?</td>
<td>• Survey Data • Interview Transcripts • Archival Evidence</td>
<td>• SPSS • Transcribe, Code, Theme, Interpret</td>
</tr>
</tbody>
</table>

Figure 3.4: Data Source and Analysis by Research Question

**Ethical Considerations for Human Participants**

I completed all of the required steps to protect the rights of the participants in this study. First, I have successfully completed the Human Research Protections Program Approval process with the Institutional Review Board (IRB) at University of California,
San Diego. Successful achievement of the IRB approval was reached prior to initiating the study.

All of the participants signed or verbally consented to the use their data from the survey or interviews for my dissertation research. All of the stakeholders invited to participate in the survey and interview received a copy of the consent form at the time of the administration of the survey or interview. This form outlined the purpose of the study, and explained how the data will be kept confidential. Two additional steps protected the anonymity of the participants: (a) there are no individual identifiers on the survey, only stakeholder group identifiers and (b) pseudonyms are used for the district as well as the four schools in the study.

Data from individual stakeholders was not relevant to this study because the unit of analysis is the district, and therefore data are used in aggregate form only.

Furthermore, I developed a district case specific to its conditions for organizational learning. I analyzed the data in three ways: (a) by district, (b) by position, and (c) by subsection of the groups at the request of the superintendent or of the principals. The latter analysis will not necessarily be part of this study, and will only be provided to the principals and the superintendent as a courtesy if requested.

The potential risk to the participants is varied by data collection methods. There is minimal potential risk to the stakeholders who participate only in the survey because there are no individual identifiers on the survey, and only aggregate district results are presented due to the small population size (N < 275). However, the potential risk of identification to the key stakeholders will be greater due to the small sample size of their population (N = 12) and because they can more easily be identified by gender,
stakeholder group, and role in the district. To minimize this risk to the key stakeholders, they were provided with the opportunity to read field notes on an ongoing basis, and respond if they found anything objectionable.

**Limitations**

As with all studies, there are several factors that limited this one. First, as a single case study, including a district that is arguably an “ideal-typical” case, the study lacks direct generalizability. However, the concepts identified have relevance and potential generalizability to inform and guide future studies. Next, because this study examined the Sterling School District conditions and stakeholder response after the implementation of the 21st Century literacy initiative, the district was beyond the stages of design and implementation, and had moved into a “monitoring” phase. As such, this study was limited in breadth regarding the conditions surrounding the development conditions, although the richness of the data collected offered useful insights especially about post-development conditions that enable organizational learning. Third, although the Organizational Learning Conditions Survey collected district data, and triangulated the qualitative data collected from 20 stakeholders, the small sample size (N = 134) limited the findings. Finally, the qualitative data from this study suggested Organizational Communication as a viable condition for organizational learning, and suggests that this condition be included in future studies.

Response and participation rate was another limitation of this study. While the 134 surveys were a potential limitation of the survey findings, the 57% response rate introduced a potential for response bias. The survey design sought at least a 75% response rate to minimize the bias, but this was not achievable. Moreover, there were
only 20 interview participants, which included 10 key stakeholders that were specifically asked to participate. The remaining 10 stakeholders opted to participate in the interview process. While all willing participants were included in the interview process, the inclusion of only 20 total participants has likely introduced response bias. Moreover, the process of self-selection creates a bias as participants, through the process of volunteering, have disassociated themselves from the larger population. While the reason and rationale behind the stakeholder’s decision to participate in the interview process is unknown, the self-selection process is a limitation which likely has implications on the findings.

Another limitation of this study is that the Sterling School District is not currently encumbered by the same sanctions and heavy-oversight as many of its peer districts. This district has made sufficient Adequate Yearly Performance, and therefore is not identified for Program Improvement (PI) under the Elementary and Secondary Education Act. As a result, the district maintains more autonomy than those in PI, and also faces fewer state and federal requirements. While it is beneficial for Sterling, it does limit the ability to generalize the findings from this study.

**Summary**

Data collection and analysis strategies must be employed as data sources can yield disparate, incompatible, even apparently contradictory information (Merriam, 2009). The purpose of this chapter was to identify the data sources, collection techniques, and analysis procedures to minimize the challenges that will inevitably arise during this case study analysis. The multiple procedures for deriving meaning from the qualitative and
quantitative data were meant to help provide a holistic understanding of the embedded case, and to best answer the research questions and theoretical propositions.

This case study included some limitations. Specifically, the case is built from a single school district, which prohibits generalizability of the findings. In addition, participation is voluntary, and interviews might not be representative of the population as a whole. Finally, this study included a focus on leadership as a mitigating variable of the theoretical constructs, but there are no actual measurements of transformational leadership traits as identified in the Multifactor Leadership Questionnaire (MLQ). The Multifactor Leadership Questionnaire has been the salient tool for transformational leadership assessment since its inception (Bass, 1985). However, this study was not designed to measure transformational leadership, but rather the conditions that foster organizational learning, of which transformation leadership is an influencing variable.

The methods support the primary purpose of this study, and have allowed the researcher to gain an in-depth understanding of the conditions for organizational learning within the context of the district’s response to a 21st Century literacy change initiative. The analysis is not predictive, but rather informative: the collection, analysis, and findings are meant to inform, rather than prescribe.
Chapter 4

The previous chapters articulated this study’s relation to the existing research, and to the conceptual framework. It also included a detailed account of this study’s research-based design, and the methodology used. Focusing primarily on the topic of organizational learning, this study was aimed at identifying the district’s response to a 21st Century change initiative, titled Simply Integrated, and to identify the extent to which conditions for organizational learning influenced the outcome. This chapter recorded the results of the study and presents the data in response to each of the research questions:

1. How does the district respond to a 21st Century literacy change initiative?
2. To what extent are district conditions for organizational learning present?
3. How do the district conditions for organizational learning influence – enable or constrain – the adoption of a 21st Century literacy change initiative?

To present the results of this study, this chapter is organized into two sections, which introduces the results in relation to the three research questions. First, this chapter describes the district’s response to Simply Integrated: a 21st Century change initiative. Second, it records the extent to which district conditions for organizational learning were present in the Sterling School District, while connecting the evidence of the district’s conditions for organizational learning that enabled or constrained the participant’s response to Simply Integrated.

Due to the small size of the school district, and the limited number of participants, maintaining confidentiality of individual stakeholder response was very important. In addition to the measures taken to protect participant confidentiality in data collection, as
cited in Chapter 3, this chapter maintained confidentiality in reporting the findings from the interview transcripts. With only 20 total interview participants, segregating each transcript into a narrow group (i.e. middle school teacher) would jeopardize the participant’s assurance of confidentiality. Moreover, there was also a strong consistency and similarity in the stakeholder responses within the larger position groups. Therefore, because of the need to maintain confidentiality, and because the stakeholder data was substantially similar, the qualitative data derived from the interview transcripts has been consolidated to just three participant groups: Administrator, Counselor, and Teacher.

Specifically, the “administrator” stakeholder groups includes all ten interview participants, which individually comprise the roles of superintendent, two previous superintendents, central office administrators, and school site administrators who participated in the interview process. The “counselor” stakeholder group includes all three school and district counselors that participated in the interview process. Finally, all seven non-counselor and non-administrator participants, including both union and non-union leadership, as well as certificated and classified staff, are consolidated into a single stakeholder group of “teacher” in order to maintain anonymity and confidentiality of these participants. There is some uniformity of the collective responses by group, which also suggested that this grouping would provide an adequate association of all participants.

The district’s goal for Simply Integrated was to stimulate collaboration and enthusiasm among students through state of the art classroom technology, coupled with 21st Century Literacy curriculum, and focus professional development programs to build educator fluency. The focus of this study was not to measure the success or the outcomes
from this initiative. This study sought to examine the organizational conditions around Simply Integrated, the stakeholder responses to Simply Integrated, and how the conditions enabled or constrained the response. To address the first research question, this next section explores the specific stakeholder responses to the initiative.

**District Stakeholder Response to a 21st Century Change Initiative**

The district stakeholders’ response to Simply Integrated provided three emergent themes from the interviews. These responses included a positive perception of the availability of technological tools, individual integration of those tools into the daily instruction, and the opportunity for differentiated instruction as a result of these tools. Two other themes emerged from many of the stakeholders, but were not shared uniformly by all. These themes included an emphasis on student critical thinking, and a concern regarding the sustainability of the initiative over time. This section explores each of these stakeholder responses, and begins with an analysis of the stakeholder’s perception of the implementation.

Through the interview process, each stakeholder was presented the opportunity to quantify the progress the district has made in implementing Simply Integrated: the 21st Century literacy initiative. Of the 20 respondents, the mean score of their perception on a five-point Likert scale (1= Not at all, 5=Completely Implemented) was 3.97. As shown in Table 4.1, the Counselor group had the highest perception, while the Teacher group held the lowest perception.

This data was confirmed through an exploration of additional perceptions via the interview protocol (Appendix F). When asked if they believed the district was continuing to implement the initiative, most agreed. When asked specifically, “Based on your
understanding of the 21st Century literacy skills plan, do you think your district is implementing it?” there was only one stakeholder that responded, “No” (Teacher 7, Interview Transcript, June 2011). Other than this outlier, all other respondents confirmed their belief that the district has, or is continuing to implement the initiative. The following section introduces the major themes found in the stakeholder responses.

Table 4.1: Stakeholder Perception of Implementation of Simply Integrated

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td>3.90</td>
<td>4.00</td>
<td>0.70</td>
</tr>
<tr>
<td>Counselor</td>
<td>4.33</td>
<td>4.50</td>
<td>0.29</td>
</tr>
<tr>
<td>Teacher</td>
<td>3.68</td>
<td>3.75</td>
<td>1.21</td>
</tr>
</tbody>
</table>

**Availability of technological tools.** A theme that emerged from nearly all stakeholders was a positive perception that Simply Integrated provided technology tools for every classroom. This was not always the case at Sterling. One administrator highlights this point by saying, “If you have a technology expert, they would have this great technology in their classroom, but the other teachers wouldn’t. I think what’s been great about Simply Integrated and the 21st Century Learning initiative is that we made it so that everyone has access to that [technology], and uses the same tools.” (Admin 1, Interview Transcript, May 2011).

Another stakeholder referenced the availability of technological tools as a standard offering through Simply Integrated when they said, “Simply Integrated to me means the technology is part of the regular classroom, just like blackboards were, or
white boards” (Teacher 3, Interview Transcript, May 2011). A teacher shared this same theme when they said the following:

Simply Integrated actually grew into this whole planned vision thing for the school district. I mean, the idea is bringing, taking Sterling, kind of into the 21st century technologically by getting every teacher whatever they need. Whether it is a projector or a Smart Board or class set of computers; whatever it might be, that is Simply Integrated. I think it is the name for globally bringing Sterling up to snuff in technology. (Teacher 2, Interview Transcript, May 2011)

In addition to leveling the technological opportunities, other stakeholders shared that the 21st Century skills initiative brought about an empowerment of opportunity throughout the organization. “It’s about putting the tools into the teacher’s hands and allowing them to integrate what they do with the students” (Admin 4, Interview Transcript, May 2011). A teacher referenced the technology as more than an add-on to the classroom offerings; “It’s not technology like, ‘oh let’s play a math game,’ it’s far more directed than that” (Teacher 4, Interview Transcript, June 2011). This teacher continues on by talking about the need for “human intervention” with the proliferation of the technology, and how students interact with it. This need for intervention both highlights the availability of the technological tools as an instructional offering, but also alludes to the steps that stakeholders have taken to integrate them in the classrooms.

Integration of technology in the classroom. The Simply Integrated initiative provided staff with multiple opportunities to integrate the technology through their own means. “It’s no longer an adjunct piece; technology is no longer something we do over here; it’s got to be part of how we deliver the instruction” said a Counselor (Counselor 1, Interview Transcript, May 2011). A teacher raised this opportunity into a necessity when they said:
I see a society where technology is becoming like a third arm in terms of how we function as humans, and I want to be a part of a school district that recognizes that, and tries to utilize it to our advantage to keep students not only engaged, but to tap into resources that without technology we could never have access to... Simply Integrated is a way for us to try and weld those components together. (Teacher 1, Interview Transcript, May 2011)

“The idea of Simply Integrated means that not only do you have technology, but that it is used in classrooms for instruction” (Admin 6, Interview Transcript, June 2011). This administrator continues by expressing the idea and need of this initiative as a way to connect with kids using the same tools that they have and use. “So, how can the kids have an experience that has at least the same amount of technology as what the kids have in their pocket, so try to keep it more lively and tap into what already exists out there” (Admin 6, Interview Transcript, June 2011). From this proliferation and integration, some teachers found opportunities to reach students differently. These comments are just the beginning of what many other stakeholders would come to discuss as differentiated instruction.

**Differentiated instruction.** Differentiated instruction was the predominant theme that resonated with the stakeholder responses. According to one stakeholder, the focus of Simply Integrated is to focus on student learning. This stakeholder continues by saying, “We integrate technology as a tool for student learning” (Admin 9, Interview Transcript, June 2011). Another stakeholder discussed the influence of Simply Integrated on student core instruction; “[Simply Integrated] can give our students a voice through writing and new eyes to the world through reading – it’s gonna open every door that they need to have” (Counselor 3, Interview Transcript, June 2011). The focused theme of students learning continues and develops into differentiated instruction.
According to the stakeholders, differentiating instruction was accomplished through multiple means. “Simply Integrated means having in place a system that supports learning so that we can provide very strong educational programs and opportunities for kids to have differentiated instruction.” (Admin 3, Interview Transcript, May 2011). Another teacher talked of the technology performing the differentiation for the teacher. This person said, “You just put them on the computer and it levels them – it figures out where they are and then it goes where they are starting” (Teacher 4, Interview Transcript, June 2011). Another stakeholder identified Simply Integrated as “realizing different methodologies that are required for meeting different students and appropriating differentiated curriculum” (Admin 5, Interview Transcript, June 2011).

The expression of differentiation came in multiple forms. While some talked broadly about a differentiation of methodologies, others were grounded in the differentiation of core subjects. One administrator said, “There are some things that have been done historically which worked well, and today they work as well as ever. But there are some new ways of helping kids learning that are truly new and cutting-edge, and they need to be integrated into the old ways so that they can be able to write well and speak well” (Admin 8, Interview Transcript, June 2011). A teacher talked about using the technology for differentiation through small group activities. This teacher shared, “You can design little mini lessons while the kids are at the computer, and it allows you during that time while the kids are engaged, to pull small groups [of students] back as needed to understand numeration” (Teacher 4, Interview Transcript, June 2011).

“That’s it, I guess: [Simply Integrated] means to have some differentiated instruction to meet their needs” (Admin 3, Interview Transcript, May 2011). While many
reported the use of technology, provided through the Simply Integrated initiative, as a means for differentiating instruction, there were still other common responses among the stakeholder data.

**Other responses.** Critical thinking skills were often identified in the stakeholder responses. “If we just focus on learning the newest technology as part of the 21st Century instruction we have completely missed the boat – it is really learning that discernment that applying cognitive strategies to think critically, and to evaluate, to analyze and to synthesize what’s needed” (Admin 9, Interview Transcript, June 2011). Simply Integrated is “a top priority, we have to help them, teach them how to think critically” (Teacher 1, Interview Transcript, May 2011). Another teacher said, “It kind of goes back to critical thinking. I need my students to be literate when they are learning information and understanding it” (Teacher 3, Interview Transcript, May 2011).

Another common theme that emerged was a cautious look toward the future finding available for replacement of equipment. “I think the challenges are going to be outside of us, in a sense of how we are influenced by the state budget constraints” (Admin 2, Interview Transcript, May 2011). Similarly, an administrator said, “money is always an issue” (Admin 3, Interview Transcript, May 2011) while another administrator said, “finances are probably an issue going forward” (Admin 5, Interview Transcript, June 2011).

Moreover, this financial response was also shared by counselors and teachers. One counselor said, “We need a line item in the budget to make sure we continually have the right equipment, the best equipment, the newest equipment” (Counselor 1, Interview Transcript, May 2011). A teacher echoed, “Finances are going to be an issue because
even in the year we were flush with cash there wasn’t enough” (Teacher 7, Interview Transcript, June 2011).

Overall, most of the interview participants had positive perceptions and comments when discussing Simply Integrated. The district stakeholder responses were largely centered on the availability and integration of technology in the classrooms, and the use of this technology to differentiate instruction and promote critical thinking. However, many stakeholders also shared a concern that finances would be insufficient in the future, thereby potentially limiting the continuance of the initiative over time. The next section explores the perception of organizational learning conditions and the influence of those conditions on the adoption of Simply Integrated.

**District Conditions for Organizational Learning, and the Influence on Simply Integrated**

The previous section described the district’s stakeholder responses in relation to Simply Integrated: a 21st Century change initiative. This section presents evidence of the presence of the district’s conditions for organizational learning, and the influence that these conditions had on enabling or constraining the district adoption of Simply Integrated. Although research questions #2 and #3 were presented separately in the methodology section, the results are presented together in this chapter as it provides context and a deeper understanding of both the presence of the conditions, and the influence of the conditions. The results showed a high perception of most of the conditions, and that district conditions for organizational learning generally enabled and only somewhat constrained the organizational actions.
Because the phenomenon of study is past, the boundaries between the context and the phenomenon are not clear. Moreover, the organizational actions are formed within the context of the district conditions; therefore the conditions will resultantly have an influence on the actions and outcomes. However, the conditions and the stakeholder described actions are two separate, but closely related phenomenon of this study. Many of the stakeholder interview responses provided little boundary between the conditions, the initiatives, and the actions. Therefore, the results presented here are in part, the stakeholder’s representation of the structures and actions surrounding the initiative, as well as the conditions that enabled the success of those structures, and ultimately of the successful adoption of Simply Integrated.

Based on analysis of the interview and archival data, the district actions surrounding Simply Integrated revealed four emergent themes. These organizational actions include (a) creating a shared commitment to collaboration, (b) scaffolding initiatives into systemic coherence, (c) providing a systematic structure for involvement and communication, and (d) focusing on activities, data, and decisions that support student achievement. Each of these actions and structures are explored within the context of the organizational learning condition in which it was enabled or constrained. This section is organized by the organizational learning conditions.

This study examined a conceptual framework based on six conditions for organizational learning previously identified by Leithwood, Leonard, and Sharratt (1998), Marks and Printy (2002), and Grubb (2005). These conditions include Collaborative and Harmonious Culture, Congruence of District Mission & Vision with Practices and Beliefs, Leadership, Policies and Resources for Promoting Learning, Knowledge and
Skills, and Participatory Decision-Making. The convergence of survey and extant data demonstrated the presence of all six conditions initially expected. However, only four conditions, Culture, Mission & Vision, Leadership, and Policies & Resources quantitatively emerged as the strongest conditions for organizational learning.

Two conditions, Participatory Decision-Making and Knowledge and Skills, did not clearly emerge from the survey and extant evidence in the Sterling School District. While the mean scores from the survey results showed a slightly favorable response to these constructs (3.19 and 3.4 respectively), they were significantly below the reported perception of the other four constructs. Additionally, these two conditions for organizational learning recorded the lowest total codes and themes in the interview analysis (61 and 54 respectively). Their presence and influence was strongly supported in the interview and archival data, suggesting that although less important, they are still factors supporting organizational learning.

Beginning with descriptive statistics from the quantitative sources, the data described the characteristics of the sample, and provided the general tendencies of the variables. Descriptive statistics were also used to identify potential relationships of the constructs. Table 4.2 shows the measure of central tendency for all six identified constructs measured in the survey instrument. As shown in the table, Mission and Vision reported the highest perception amongst the survey participants. This item was followed by Leadership, Policies and Resources, Culture, Knowledge and Skills, and Decision-Making.
Table 4.3 displays the mean case summaries by stakeholder position and perception of organizational learning condition. This table provides a summary of the survey constructs, the mean score by sub-group population, and the total participants reporting in that group. The remainder of the chapter is arranged and presented by each of the organizational learning condition, where therein the data is unpacked by both quantitative and qualitative data source.

Table 4.2: Measures of Central Tendency for Constructs of Organizational Learning

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>4.0299</td>
<td>4.0000</td>
<td>.62897</td>
</tr>
<tr>
<td>Decision-Making</td>
<td>3.1935</td>
<td>3.3333</td>
<td>.57594</td>
</tr>
<tr>
<td>Knowledge &amp; Skills</td>
<td>3.3840</td>
<td>3.4286</td>
<td>.84173</td>
</tr>
<tr>
<td>Mission &amp; Vision</td>
<td>4.2800</td>
<td>4.2857</td>
<td>.60810</td>
</tr>
<tr>
<td>Leadership</td>
<td>4.2677</td>
<td>4.2000</td>
<td>.57531</td>
</tr>
<tr>
<td>Policies &amp; Resources</td>
<td>4.2231</td>
<td>4.3333</td>
<td>.72531</td>
</tr>
</tbody>
</table>
Table 4.3: Mean Case Summary by Position and Construct

<table>
<thead>
<tr>
<th>Position</th>
<th>Culture</th>
<th>Decision-Making</th>
<th>Knowledge &amp; Skills</th>
<th>Mission &amp; Vision</th>
<th>Leadership</th>
<th>Policies &amp; Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Admin</td>
<td>3.9667</td>
<td>3.5238</td>
<td>4.0408</td>
<td>4.4694</td>
<td>4.3429</td>
<td>4.690</td>
</tr>
<tr>
<td>Classified</td>
<td>3.9514</td>
<td>3.0185</td>
<td>3.0571</td>
<td>4.2563</td>
<td>4.2824</td>
<td>4.008</td>
</tr>
</tbody>
</table>

Organizational learning condition: culture. To start, I analyzed the questions relating to constructs derived from the existing research, as identified in the literature review. Beginning with the mean scores for the survey items related to a Collaborative and Harmonious Culture, the data revealed a strong internal consistency of the five survey items included, resulting in a Cronbach Alpha reliability of 0.835 (Table 3.6). Based on the 5.0 Likert scale, the district’s overall Culture mean score was 4.0299 (Table
4.2). This is evidence of the positive level of the district stakeholder perception of climate and culture.

Table 4.4: Frequency Distribution for Culture

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>N</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Somewhat Agree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our district engenders feeling of community among schools</td>
<td>130</td>
<td>0.8</td>
<td>2.3</td>
<td>23.8</td>
<td>30.8</td>
<td>42.3</td>
</tr>
<tr>
<td>Our district community is collaborative and harmonious.</td>
<td>130</td>
<td>0.8</td>
<td>2.3</td>
<td>22.3</td>
<td>46.2</td>
<td>28.5</td>
</tr>
<tr>
<td>Disagreements in our district are resolved in a professional manner.</td>
<td>130</td>
<td>0.0</td>
<td>3.8</td>
<td>15.4</td>
<td>51.5</td>
<td>29.2</td>
</tr>
<tr>
<td>I would describe our district as a community.</td>
<td>129</td>
<td>0.8</td>
<td>0.8</td>
<td>10.9</td>
<td>41.1</td>
<td>46.5</td>
</tr>
<tr>
<td>Change is accepted in our district.</td>
<td>128</td>
<td>0.8</td>
<td>6.3</td>
<td>34.4</td>
<td>40.6</td>
<td>18.0</td>
</tr>
</tbody>
</table>

To aid in the understanding of the responses to the survey items comprising the presence of the theoretical construct of Culture, a frequency analysis of each survey item was performed. More than 90% of the survey participants agreed with the presence of the variables describing the construct of Culture (Table 4.4). Moreover, the data shows that there is not a substantial difference between the perceptions of Culture between stakeholder groups. The data mirrors the qualitative interview data, which also reports a very high perception of a Culture of Collaboration amongst and across stakeholder groups.
Table 4.3 shows that Central Office Administrators reported the highest perception of Culture (mean = 4.34), whereas Site Administrators, Certificated, and Classified staff all reported similar perceptions (means = 3.97, 4.00, and 3.95 respectively). Table 4.3 further explores the mean response of the six constructs broken by position within the district.

Amongst the other categorical variables, the mean scores continue on this same trend. Overall, the mean continued to be above 3.5, and in most cases was above 4.0, which falls somewhere on the continuum between Agree and Strongly Agree with all the statements on the survey document related to the perception of Culture. Upon further analysis, participants’ education level appeared to have an influence on their individual responses.

All subgroup populations reported nearly analogous perceptions of the organizational learning condition of Culture, with the exception of one. This is an unexpected subgroup finding with regard to the highest education level achieved. The MA/MS subgroup’s mean score for Culture was 3.90, while all other subgroups has mean scores above 4.0, with BA+15 and Ed.D/Ph.D. posting mean scores at or above 4.40.

A one-way between-groups analysis of variance was conducted to explore the impact of personal education on the perception of the Culture construct, as measured by the survey instrument. Participants were self-sorted into five groups according to their responses (Group 1: BA/BS; Group 2: BA+15; Group 3: MA/MS; Group 4: MA+15; Group 5: Ed.D/Ph.D). There was not a statistically significant difference at the $p < .05$ level in Culture scores for the five groups: $F(4, 121) = 1.1, p = .38$. This confirms the findings of quite small difference in mean scores between the groups, but does show that
the different mean scores between MA/MS and Ed.D/Ph.D. were not significantly different.

Where previous literature showed a differentiation in union leadership perception, the Sterling results showed none. Specifically, there is nearly no differentiation between union leadership with regard to the perception of community and Culture. Participants in union leadership posted a mean score of 4.02 while those not in union leadership positions posted a flat 4.00 mean score. Statistically, there was no significant difference between the groups \[F (1,125) = .002, p = .964\].

Additional one-way ANOVAs were conducted on the impact of years at current work site, years in current position, years in education, position, and participation in union leadership on the perception of the Culture construct. In all five ANOVAs, none of the findings showed a statistically significant difference at the \( p < .05 \) level. The results of these ANOVAs were: \(F (4, 117) = 1.5, p = .21\); \(F (4, 115) = 0.21, p = .93\); \(F (4, 113) = 1.9, p = .12\); \(F (3, 123) = 0.7, p = .56\); and \(F (1, 125) = 0.0, p = .96\) respectively.

Throughout the subgroup populations, there is an overall coherent perception of the Culture construct as reported by district stakeholders.

Culture was a construct of measure in a separate survey administration performed by the Sterling School District. An analysis of this extant data, which sought to measure the extent to which the climate fosters shared beliefs and a sense of community, showed a nearly perfect logarithmic trend to the positive. The results of three administrations of the survey over time, showed a collective means starting at 3.48, and rising through 3.58, to settle at 3.68.
Overall, the quantitative data showed a high perception of the Culture construct. The relationship between the variables showed small variances in means, but not at a statistically significant level. The qualitative data, however, provided deeper insights into this construct.

**Influence of culture on stakeholder response.** While the results have shown a strong quantitative perception of a Collaborative and Harmonious Culture, this section explores how this organizational learning condition enabled and constrained the adoption of Simply Integrated. This learning condition of Culture, different than the other organizational learning conditions, both supported and constrained the district organizational response.

At Sterling, culture was a variable that influenced practice. Usually the culture was supportive. One of the ways in which the district implemented Simply Integrated was to leverage the shared commitment to collaboration. The organizational condition of Collaborative and Harmonious Culture supported the stakeholders in this response. Specifically, staff response indicated an environment where communication was respectful, there was a community feel, decisions were shared, and disagreements were settled in a professional manner.

Interviewees indicated that his attribute of a collaborative culture started long before Simply Integrated, and continued throughout the duration of the study. Moreover, as this theme was evidenced in multiple responses, from multiple data sources, I discuss it first as it appeared to be a foundational activity for the other organizational activities. So strong was this response, for example, this theme was identified in 120 quotations
throughout the 20 interviews, which was nearly 25% greater than the next closest evident theme. The resultant interview data showed little difference between the responses included for each of the three interview participant groups.

Multiple stakeholders supported the theme of celebrating a collaborative culture, with one teacher articulating that “…everybody is involved, everybody knows what’s going on, the community knows what’s going on, the district is a very physical sign of what’s happening in the community, which I love, I love all those aspects of it” (Teacher 1, Interview Transcript, May 2011). An administrator’s perception of celebrating the collaboration included the following:

We exemplified a culture of collaboration and continuous improvement. If you looked at all the activities taking place and if each year you looked at goals and objectives and at how we moved forward, I think you would see it as dynamic and a culture where we were continuously benchmarking ourselves against best practices and striving to be better than we were the year before. It was exciting. I loved it. (Admin 7, Interview Transcript, June 2011)

Another administrator reported:

The other thing that we did was we didn’t care who got the credit. It was much more important to share the credit… we tried to spread the credit out very widely, so that we didn’t make a few heroes, and we could have because certainly there are always a few people that carry more weight, but we wanted groups to feel proud of the accomplishment. So when we did the reports, we had a filled house, with lots of committees and lots of people, and they all were thinking that they did their part in making it happen. (Admin 8, Interview Transcript, June 2011)

In support of the overall theme, a counselor shared the following:

There is definitely a genuine collaborative nature here, and it’s not only warm and fuzzy in the sense that it is collaborative, but it is an expectation. You are expected to collaborate and make that work, so it is warm and fuzzy, but it is also expected. People come in with really good attitudes. (Counselor 1, Interview Transcript, May 2011)
The document analysis of Board Meeting minutes from June 1, 2009, and the presentation handouts from the same night, articulates the staff’s adherence to this culture in multiple aspects. Specifically, when reporting on district goals, staff included the following statements in their report, “We believe that a while child education is the only important option that support our ambitious mission” [emphasis added]. Reports publicized on the district’s website (Presentation Handout on April 27, 2010), and district press releases, are further evidence of the theme that emerged from the interview transcripts. These findings summarize the shared commitment, the unique collaborative culture, and the focus on continually merging those two constructs. Finally, in summary, a district stakeholder asserted, “I’ve never seen a place that’s more collaborative” (Admin 6, Interview Transcript, June 2011).

Shared amongst the interview responses, and evident in the document archives, is a commitment to the culture of the small school district, sometimes referred to as a family in the documents. As one administrator articulated, “We are such a small district that it really breeds its [sic] good communication… intimate discussions, and allowance for trying different things” (Admin 1, Interview Transcript, May 2011). This administrator continues, “We have a culture of doing it our way. There’s a saying, ‘only in Sterling’ (Admin 1, Interview Transcript, May 2011). Another administrator echoed this unique culture when they said, “… everyone in Sterling likes to be unique, and it’s a community

6 Sterling is the pseudonym for the town and district name, and is used to protect the anonymity of the participants. This change is reflected in both reference and in direct quotations.
that has always had a unique and creative culture…” (Admin 5, Interview Transcript, June 2011)

Nearly everyone interviewed used “we” to describe the district shareholders. One administrator responded, “…we work as a team; we don’t have the distinction between classified and certificated personnel” (Admin 2, Interview Transcript, May 2011). “Well, I think that we all work together as partners, honestly” (Counselor 1, Interview Transcript, May 2011) responded a counselor. Teachers reported, “We support excellence” (Teacher 3, Interview Transcript, May 2011) while another echoed a similar response, “…we worked very hard to create a culture of continuous improvement” (Teacher 7, Interview Transcript, June 2011).

A communal sense of responsibility was also evident in the culture. A stakeholder shared, “we are all in this together.” Another stakeholder reported, “I think every single person in this district is in one way or another involved in making it a good environment for kids.” The originally proposed organizational learning condition of Culture closely reflects these collegial and supportive norms. There was, however, some variation with regard to the district culture’s supporting stakeholder response to change.

While the organizational learning condition of collaborative culture was primarily supportive, this quality also created tensions the district stakeholder response to Simply Integrated. The affluence and educational level, and thus influence of the local community provided challenges in addition to the local, state, and federal mandates that all districts must meet. For example, with receipt of a large anonymous donation, district administrators and teachers indicated that extra work is required for “maintenance” the funding source and the local foundation. One participant reported this as a “double-
edged deal” (Teacher 5, Interview Transcript, June 2011). Specifically found was evidence where the receipt of a large donation consumed large amounts of staff time creating projects, detailing implementation plans, and providing multiple update reports. In 2009 alone, Sterling’s non-profit foundation was named specifically in 6 district press releases, 17 Board Reports, and 20 Board Meeting minutes (there were only 25 Board Meeting minutes published in 2009 for Sterling). While the appearances were not reported in a negative way, the sheer size of their involvement, and the amount of attribution that is paid by the district, was an archival finding that emerged supporting the strong influence of the community stakeholder group.

Another stakeholder reported of “intricate deals” (Teacher 7, Interview Transcript, June 2011) at play in the district. With these deals and donations, staff members felt the need to provide extra work, and extra data, for review by the community. Additionally, there was evidence of overlap between the school board, the PTA, and the local foundation. As such, one stakeholder referenced their professional life as being in a “fishbowl.”

The constraining effect of the role of the community in the district’s collaborative culture wasn’t evident in all data sources. However, there was sufficient interview data, coupled with archival documents, to show that the community’s involvement in the district’s collaborative culture was not always perceived as a positive attribute. In this case, the community’s role appeared to be particularly constraining situation because of the need for funding to acquire technology. This, as documents have shown, is a donation opportunity that the local foundation has prided itself upon providing for the district, but resulted in some internal challenges. Overall, however, Sterling’s
Collaborative and Harmonious Culture predominately enabled implementation of the 21st Century literacy initiative.

**Organizational learning condition: mission & vision.** The Congruence of District Mission & Vision with Practices and Beliefs construct contained seven questions (Table 4.5), and had a Cronbach Alpha reliability of 0.893 (Table 3.6). The collective mean for this construct was 4.2800. The Likert score of 4.0 equates to the survey response of Agree, and therefore, the collective mean of 4.2800 is a response slightly toward the highest possible value, Strongly Agree (5.0). Moreover, this was the highest collective mean of all the constructs contained in the survey instrument.

Table 4.5: Frequency Distribution for Mission & Vision

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>N</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Somewhat Agree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our district mission is clear, and I understand it.</td>
<td>130</td>
<td>0.0</td>
<td>1.5</td>
<td>9.8</td>
<td>44.7</td>
<td>42.4</td>
</tr>
<tr>
<td>Our district mission is meaningful to me.</td>
<td>128</td>
<td>0.8</td>
<td>3.8</td>
<td>14.4</td>
<td>42.2</td>
<td>35.6</td>
</tr>
<tr>
<td>Our district has a clear vision related to improving programs and instruction.</td>
<td>127</td>
<td>0.8</td>
<td>3.0</td>
<td>18.9</td>
<td>38.6</td>
<td>34.8</td>
</tr>
<tr>
<td>There are ample district learning opportunities to support teaching and</td>
<td>128</td>
<td>2.3</td>
<td>1.5</td>
<td>6.1</td>
<td>34.1</td>
<td>53.0</td>
</tr>
<tr>
<td>learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our district vision reflects my person vision for student learning</td>
<td>126</td>
<td>1.5</td>
<td>2.3</td>
<td>12.9</td>
<td>35.6</td>
<td>43.2</td>
</tr>
<tr>
<td>Professional learning activities reflect the district vision.</td>
<td>128</td>
<td>0.0</td>
<td>0.0</td>
<td>14.4</td>
<td>42.4</td>
<td>40.2</td>
</tr>
<tr>
<td>Personally, I am dedicated to doing my absolute best to achieve the district vision.</td>
<td>128</td>
<td>0.0</td>
<td>0.0</td>
<td>8.3</td>
<td>31.1</td>
<td>57.6</td>
</tr>
</tbody>
</table>
To investigate the relationships, a series of one-way between-groups analyses of variance were conducted to compare the means of the stakeholder perceptions of Mission & Vision. There was no statistically significant difference in perception between union and non-union leadership \( F(1,122) = 3.709, p = .056 \), nor position \( F(3,120) = 1.152, p = .331 \). There was also no significant difference between education levels \( F(4,111) = 1.504, p = .206 \) or years of experience \( F(4,112) = 0.489, p = .744 \). Other than some relatively small differences in the mean scores, there was no statistically significant difference among the stakeholder groups with regard to perception of this construct. This was almost uniformly high amongst all survey respondents.

Adherence to the district’s mission and vision was similarly found in extant data. Specifically, data from a local survey administration showed higher than normal collective mean response to the items related to the perceived set of goals, structures, and procedures within the district. In a five point Likert scaled survey, the mean response of all participants to the construct of mission and vision was initially 3.56. This perception increased to 3.79, to finally plateau at 3.80 over a three-year period of time. This higher than center response indicates a positive perception of the construct, and is similar to the results of this study’s survey administration. In addition, the qualitative data brings this concept deeper, and shows a strong linkage between this organizational learning condition, and many of the stakeholder responses.
Influence of mission & vision on stakeholder response. The predominant outcome exhibited in stakeholder response, and confirmed through archival analysis, is the scaffolding of initiatives into systemic coherence. Arguably, all of the district conditions for organizational learning are present in this response. However, Congruence of District Mission and Vision with Practices and Beliefs clearly enabled a positive stakeholder response to the initiative. Interview participants continually cited the methods by which the district was working toward systemic coherence in all of its endeavors. The coding for this theme appeared in 91 quotations, and in more than 15 archival artifacts. Specifically, the stakeholders referenced or named numerous district initiatives that have been “woven” or “instructionally scaffolded” toward the goal of student achievement.

District teams have been responsible for multiple simultaneous initiatives, including Simply Integrated: a 21st Century change initiative, Response to Instruction initiative, Positive Behavior Intervention Support initiative, and the Professional Learning Community initiative. While Simply Integrated was a multiyear initiative, not all of the other initiatives had such a lengthy implementation timeframe. Moreover, as the evidence shows, the importance is not on the scope or duration of the initiative, but in the resultant goal of building and sustaining change.

One initiative, the establishment of Professional Learning Communities (PLCs) appeared as the foundational activity for all other initiatives reported at Sterling. As the data showed, the PLC implementation was the first reported attempt at leveraging communication into small and focused working groups. One administrator articulated the initial PLC implementation as foundational, “…PLC began this whole, actual, good way
to monitor how kids are responding to instruction in the classroom every day. “ (Admin 2, Interview Transcript, May 2011). The same administrator continues, “Then it became more broadly accepted, and gained a more positive appeal...” (Admin 2, Interview Transcript, May 2011). This positive appeal of the appeal of the PLC was tied to both the communication efforts, and the small initial successes at the outset of the initiatives.

A very early initiative was to use the communication channels, and the PLC structure, to improve the perception of the administrative offices. An administrator identified the effort to change the name of the district office as one of the first in a series of changes meant to build discussion, perception, and momentum. Specifically, this administrator shared:

A few years back, we used to have a ‘district office’ and now we call it the ‘central office’. It’s the kind of thing that really is hard to get over; specifically referring to everything as the district. But the district is us. The semantic difference is the name. The systemic difference is that the district is us: the staff, the principals, the administration. The systemic difference is that we are very happy about it. It is very positive. (Admin 2, Interview Transcript, May 2011)

While the name change was a short-lived endeavor, it did build a shared successful experience among the stakeholders. Another early initiative that built a foundation for, and enabled the uptake of, the 21st Century change initiative was titled Response To Intervention (RTI). Numerous participants included narrative describing the importance of RTI as a foundation for future initiatives. One administrator reported:

Response to Intervention (RTI) is a multi-tiered approach to help struggling learners, where students' progress is closely monitored at each stage of the intervention to determine the need for further instruction and/or intervention.
We, over the last few years, we have really been able to focus on the
dynamic coherence. Having a single focus such as RTI, kind of like an
overarching umbrella-initiative, allows us to have that single purpose so
that if something comes up, we can evaluate it and see if it would fit.
(Admin 6, Interview Transcript, June 2011)

Another administrator built upon the positive and lasting impact of RTI by saying,
“We’ve taken RTI one step further now, instead calling it Response to Instruction”
(Admin 3, Interview Transcript, May 2011) while yet another administrator shared that
their site calls it “Really Terrific Instruction” (Admin 2, Interview Transcript, May 2011).
Regardless of the title, it is readily apparent that RTI has been the foundation for many of
the district’s endeavors. RTI, leveraged the PLC structure, and became the second rung
of scaffolding for other initiatives.

From these early initiatives, many of the interview participants shared their
positive experiences with setting and aligning goals against RTI. This was a shift for
many in the district, and the actions further changed the conditions for future initiatives.
One teacher energetically articulated this theme of building on a foundation, saying:

We have cycles here every year of how we perform our functions, and
every year we get better and better at it, and then something new comes
along that makes it better for us so it frees us up to do it a little
differently, so we accomplish our goals quicker, sooner, better: more
proficiently. (Teacher 6, Interview Transcript, June 2011)

As RTI was changing the stakeholder practices, the practices were changing the
district conditions. District leadership subsequently formed and initiated Simply
Integrated building on the positive conditions. While a separate initiative, Simply
Integrated was to many stakeholders an extension of previous practices. “RTI lead to
first best instruction, so Simply Integrated helps with that, no question” (Admin 3,
Interview Transcript, May 2011) cites an administrator. A counselor also ties these initiatives together as scaffolding for systemic coherence:

The district’s primary focus, really, still remains on building our RTI program, our [Positive Behavior Intervention Support] PBIS program, and our PLC’s, so we’re still focused on that. (Counselor 3, Interview Transcript, June 2011)

So well were these initiatives scaffolded, some stakeholders reported on both interchangeably. While RTI’s reflective activities were primarily behavior and performance based, Simply Integrated was focused on delivering 21st Century literacy. These subtle lines melded into one larger initiative as reported by some. A counselor ties Simply Integrated and RTI into this singular focus by saying:

Simply Integrated means that we are integrating technology into our delivery of instruction and our curriculum, so it’s no longer an adjunct piece. Technology is no longer something we do over here; it’s got to be part of how we deliver the instruction and also how we measure student performance. So, that’s what it means: it’s completely integrated in achieving our objectives. (Counselor 2, Interview Transcript, May 2011)

The Sterling data showed a tight integration amongst many of its initiatives. As such, it was difficult to disentangle Simply Integrated from the other district initiatives. To this point, a teacher reported a perception of the Simply Integrated initiative as a means to make other initiatives work together. This teacher shared, “Simply Integrated means integrating technology in different strategies into the instructions, so it’s not just a section of teaching but part of the whole thing” (Teacher 5, Interview Transcript, June 2011). Another teacher reported of the implementation factors around Simply Integrated, “Cooperation, compliance, integration, collaboration, enthusiasm and interest.” (Teacher 6, Interview Transcript, June 2011).
The success of scaffolding, aligning, and integrated initiatives has helped to create momentum on maintaining common goals. An administrator explains, “Through our professional learning communities, and our response to instruction initiatives, we work very closely with the district administration and school board, and we’ve kept the goals intact for several years so that it’s not changing every year” (Admin 9, Interview Transcript, June 2011). A teacher echoed similarly of the coherent integration of the goals, “…you could say they’re aligned; we spend quite a bit of time in our PLC identifying what it is that we can do that will make our goal more proficient or better so we purposefully stay within those parameters” (Teacher 6, Interview Transcript, June 2011). Another teacher cited the alignment of “…student data, student learning, common assessments, and common instructional practices…” (Teacher 3, Interview Transcript, May 2011) with the activities performed within their PLC meetings.

An administrator, in talking about keeping a singular focus, shared:

The board has their vision and their goals, and then we align our goals with the board goals, and the superintendent goals, and so if it’s done correctly it can kind of scaffold upon each other. We do this to make sure the goals are met so that you’re not playing a game where you’re being pulled off-course all the time. (Admin 4, Interview Transcript, May 2011)

A counselor encapsulated this theme nicely sharing, “We always go back to the core mission, which is the RTI, PBIS, and PLC. It all falls under those arenas. I think that it is an ongoing function for our district” (Counselor 1, Interview Transcript, May 2011). Overall, the results clearly suggest that scaffolding of initiatives was both important, and perceived as beneficial to the district stakeholders. This scaffolding allowed the district to build larger initiatives on the success and momentum of previous
and often smaller change initiatives. The melded initiatives, coupled with the previously reported commitment to communication, influenced the district’s organizational learning conditions.

Another response that emerged from stakeholders combined both the commitment to collaboration with the scaffolded initiatives. A counselor shared, “We have a very kid centered approach here at my school, where we work together to accomplish our goals and we enjoy tremendous support in the district office” (Counselor 3, Interview Transcript, June 2011). An administrator echoed this sentiment by saying, “I think everybody needs to be on the same page, which is focusing on what is best for the student” (Admin 3, Interview Transcript, May 2011). Some participants also correlated the current goals to those of the past. Referencing a previous administration, one administrator voiced the disparity of those goals to today’s goals, when they said, “out of the 26 goals we had, not one of them was focused on English Language Learner improvement” (Admin 6, Interview Transcript, June 2011). This same administrator continued by citing some of the other tangents that would previously derail focus from student achievement, such as a “cuisine committee” (Admin 6, Interview Transcript, June 2011).

The data collection and analysis wasn’t solely limited to student achievement. Simply Integrated posed the challenge of 21st Century literacy, which includes the social use of technology for networking purposes. This required discussion on the behavioral aspects inside and outside of the classroom. Often, there were references to a pyramid of intervention, which also appeared in document analysis, and shows delineation between
the academic and behavioral needs of the students. This was a roadmap for applying the RTI process to the various classroom activities, including Simply Integrated.

This was resonated by one administrator as, “… a need to look at the academics and the social side of kids” (Admin 10, Interview Transcript, June 2011). A teacher related the behavior and academic side of students when they said, “I think everybody in this project has the same goal in mind when it comes to making student learning more efficient and proficient and exciting and 21st century and state-of-the-art, easy” (Teacher 6, Interview Transcript, June 2011).

Some teachers shared a mixed message with regard to student achievement. One of the teachers shared:

I think our district has really been headed in the right direction over the last 5 years in terms of the number of kids involved in the performing arts, in terms of school spirit, just an overall positive vibe in the schools; in terms of success in athletics, in terms of classroom performance. Our API scores have continued to go up over the last like 6 or 7 years, and I fear now we are reaching this peak, where we are really not going to be able to go much higher. So I think the future will be interesting. But, I think over the past several years, nothing but positive movement for our school district. (Teacher 4, Interview Transcript, June 2011)

The organizational learning condition of mission & vision also enabled the stakeholders to maintain a focus amidst leadership changes. The Sterling School District had undergone a few key leadership changes in the past five years. Primarily at the superintend level, Sterling had seen two leaders retire during this period. Their third superintendent within five years is now entering her second year of a four-year contract. This turnover, although noticeable in media reports, did not appear to disrupt the instructional focus of the district. Conversely, there were many accounts of the leadership change playing only a minor role in changing the direction of the district.
This continuance of the mission and vision, as revealed in interview and archival data, is due in large part to the work of many stakeholders who originally set the direction in 2007. Working collaboratively, and under the direction of the Assistant Superintendent of Curriculum, the district stakeholders “focused on multiple initiatives that are each focused on student learning.” By their reports, and the artifacts in existence, there had been a continuous effort to “keep the main thing, the main thing.” This emphasis has held through to the current superintendent.

“The arrows,” as many have titled it, referred to multiple Board reports showing the alignment of the district’s initiatives into a single direction. The arrows imagery was synonymous with the single focus of staff efforts and district financial resources. Moreover, this systemic series of efforts have resulted in noticeable differences.

According to one administrator:

We can look back at ’07 and see what were the roadblocks that we identified. Now we can see in 2011 that we have eliminated those roadblocks; we have moved past these. Our focus is a way to take that longitudinal look at our outcome measures. We see how good is our first instruction, and then we use that data to go back and improve within a collaborative framework. (Admin 8, Interview Transcript, June 2011)

This single focus was on instruction. What originally started as Response to Intervention morphed into Response to Instruction (RTI) at Sterling. “RTI gives us a really good road map that tells us not only where we are going, but where we came from, so the prompts are the same on each of the processes,” said a stakeholder. RTI is also called the overarching umbrella, under which all other initiatives operate. Whether it is Positive Intervention Behavior Support, Simply Integrated, or Professional Learning Communities, everything must conform to, collaborate with, or support RTI. Moreover,
there is an effort to promote awareness of the RTI and systemic coherence among outside stakeholders such as PTA and the local foundation. A stakeholder summarized this nicely, “it has all been a targeted effort to improve instruction” (Teacher 5, Interview Transcript, June 2011).

The Congruence of District Mission and Vision with Practices and Beliefs condition also enabled staff to create structures for involvement and communication. Although leadership was important in recognizing the need for structured communication channels, the underlying act of creating these channels was enabled by the practices and beliefs of the stakeholders.

The core of this communication process was a shared set of beliefs regarding the system and the vision. The actual process of creating the shared vision both modeled the communication structures, and encouraged its continuance in aligning future processes. A PLC report explained, “The committees created with those passionate about school improvements are key. RTI, PBIS, Etc. is all about working from the bottom-up, not the top down, and allows shared responsibility for students” (PLC Report to the Board, April 2010). Moreover, some stakeholders suggested that an ongoing process of aligning communication was needed to achieve a focus on shared goals.

According to participants, the PLC structure proved to be invaluable in aligning the information and communication throughout the district. Through the PLC process, including various fidelity checks, the information was passed bi-directionally with and among the sites. Through this same structure, the various stakeholder groups were presented the opportunity to review and provide input on the various district initiatives, including Simply Integrated. Moreover, because of the regularity of the PLC meetings,
some meeting weekly, the communication channels appeared to facilitate information dissemination very quickly.

The other exhibited response regarding the systematic structures for communication was in maintaining focus, and controlling rumors. Some extant data reported a disconnect between schools, and between the district and school sites. This was confirmed as “perpetuating rumors” with misinformation. However, the communication channels and guided discussions that had been built as a result of the aligned initiatives have helped to address this problem. While it might hold a negative connotation in some contexts, one stakeholder referred to the “institutionalization” of the district as a very positive artifact of recent efforts (Admin 10, Interview Transcript, June 2011). Another stakeholder referenced the structured communication channels as positively removing barriers to change. This teacher said:

When there is a common interest and goal that people can get excited about, you can move mountains here. Some of the boundaries that exist in other places simply don’t exist here. So, if you have a great idea, even if it doesn’t completely align with the district’s direction, but you can align to the goal, you can make it happen. (Admin 6, Interview Transcript, June 2011)

Congruence of Mission and Vision also enabled stakeholder’s commitment to focusing on student achievement. The district’s previous implementation of Professional Learning Communities was a primary vehicle for this commitment. Through the PLC structure, stakeholders understood the need for data, and discussed the implications of teaching based upon data-driven decisions made in their PLCs. Because of the district’s allowance of time, and the focus on shared understandings in the PLCs, stakeholders began to use data to inform their practices.
Many stakeholders reported an aligned vision, while some called it a unified vision. One stakeholder referenced the “common vision” driving the communication among teachers, while others have reported that the vision is driving the actions. Furthermore, some stated that the entire instructional program had been modified to fit the focus of supporting student achievement. As one administrator responded:

I think the instructional program is now the addition of a collaborative PLC, Simply Integrated, into what is now Response to Instruction. That is the best first instruction. And that methodology have been well received and it really works. We’ve made relatively dramatic strides at all the schools. The trajectory has been great the last four years. (Admin 5, Interview Transcript, June 2011)

Mission & Vision as an organizational learning condition was evident in the high stakeholder perception as reported in the survey document. In addition, this condition enabled a positive stakeholder response to Simply Integrated by allowing stakeholders at all levels to participate in the scaffolding of initiatives without competing commitments. This condition also enabled staff to create structures for involvement and communication and to focus on data, activities, and decisions that supports student achievement. The stability and presence of the district leadership also influenced these same stakeholder responses.

Organizational learning condition: leadership. The results of the survey data demonstrated the presence of the organizational condition of Leadership in the Sterling School District. Moreover, evidence of the presence and perception of the Leadership condition emerged as a vital influence to the other constructs, including the aforementioned mission and vision.
Recording the second highest collective mean (4.2677), and the highest possible collective mode (5.00), the participants in this study reported a very high agreement with the presence of Leadership as a construct for Organizational Learning. For example, over 99% of the survey participants responded “Somewhat Agree,” “Agree,” or “Strongly Agree” on the item, “Our district builds a productive school culture.” The results are similar for the perceived influence of leadership on the acceptance of group goals (95%), and on the provision of appropriate models for learning (96%).

The survey data relating to the Leadership construct contained an anomaly in which the other constructs did not. The unique and noteworthy result in the survey data was the perception of leadership’s conveyance of expectations. In this single survey item, not a single participant disagreed with the statement, “Our district conveys high performance expectations.” While only 7% “Somewhat Agreed” with the statement, 36% “Agreed,” and the majority “Strongly Agreed” (57%).

The ANOVA results show little variance amongst the groups. Specifically, there were no statistically significant differences at the p<.05 level for position [$F(3,119) = 0.563, p = .641$], union leadership [$F(1,121) = 2.588, p = .110$], level of education [$F(4,109) = 1.884, p = .118$], or years in education [$F(4,117) = 1.309, p = .271$].
### Table 4.6: Frequency Distribution for Leadership Survey Items

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>N</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Somewhat Agree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our district identifies and articulates a vision.</td>
<td>130</td>
<td>0.8</td>
<td>0.0</td>
<td>7.7</td>
<td>46.2</td>
<td>45.4</td>
</tr>
<tr>
<td>Our district fosters the acceptance of group goals.</td>
<td>128</td>
<td>0.8</td>
<td>3.9</td>
<td>21.1</td>
<td>47.4</td>
<td>26.6</td>
</tr>
<tr>
<td>Our district conveys high performance expectations.</td>
<td>127</td>
<td>0.0</td>
<td>0.0</td>
<td>7.1</td>
<td>36.2</td>
<td>56.7</td>
</tr>
<tr>
<td>Our district provides appropriate models.</td>
<td>127</td>
<td>0.0</td>
<td>3.9</td>
<td>18.1</td>
<td>42.5</td>
<td>35.4</td>
</tr>
<tr>
<td>Our district builds a productive school culture.</td>
<td>126</td>
<td>0.0</td>
<td>0.8</td>
<td>10.3</td>
<td>43.7</td>
<td>45.2</td>
</tr>
</tbody>
</table>

Extant data confirmed the existence of Leadership. Data from a three-year study of the same district reported the existence of leadership as involvement and empowerment constructs. The data reports a raise in the collective mean of the involvement construct over three consecutive survey administrations. Rising from 3.25, through 3.45, and ending near 3.60, the mean data reported a trend in the increase of survey participant perception of the extent to which stakeholders were involved in the design and implementation of important decisions and policies.
**Influence of leadership on stakeholder response.** The predominant leadership influence exhibited in stakeholder response is in the fostering and enabling of staff to scaffold initiatives into systemic coherence. Leadership, as an organizational learning construct, enabled and fostered this systemic coherence toward a unified goal. Three transformational leadership aspects were evident in the data: Idealized Influence, Inspirational Motivation, and Individualized Consideration (Leithwood, Leonard, and Sharratt; 1998).

There was evidence of respect for the district and site leadership. The district leadership, in particular, demonstrated an idealized influence amongst most of the stakeholders. These leaders engender the trust and respect of the staff, and some are referenced as role models within the district. Moreover, the respect that many of these leaders command had allowed them to set a vision, and to build a sense of mission through their actions. One way this had been exhibited was in modeling the data use and analysis behavior they expected to see in others. Board reports and PLC meeting notes both confirm that the modeling of data analysis was important in setting the expectation for staff. One PLC document shared at a Board meeting explained, “Working in teams and collaborating on a weekly basis help us to understand how to use data” (Board Meeting Minutes, September 2010).

The district leaders, and to a similar extent the site leaders, enabled a positive stakeholder response through inspirational motivation. With the exception of a single stakeholder, all interview participants reported a similar desire to “try harder” for the benefit of the organization. Few accounts appeared to be out of fear of ridicule by their peers, while most responses stemmed from an allowance to fail and try again. Many
board reports support the qualitative evidence that the PLC structure supports the leader’s ability to move the teachers beyond the status quo. One report contained the following information, “When protested by teachers, out Principal said ‘We are [sic] going to do this. Now how do you [sic] want to accomplish it.’ I’m so glad he made us a part of it” (Board Meeting Minutes, September 2011). Another report explained one teacher’s perspective on PLC and professional development opportunities, “All of our trainings support the goals. Our team tries to support each other, and we attend almost all classes” (Board Meeting Report, April, 2010). The growing professional development offerings, and the increased attendance in these classes, are further testament to the leadership’s ability to motivate their staff.

A final exhibited transformational leadership trait was individualized consideration for both the staff literate in 21st century skills, and those that were not. Again, the PLC structure was instrumental to the leader’s ability to “coach” and “foster” skills within their followers. One stakeholder reported, “I’ve participated [in trainings] and have probably contributed more to the department goal, which extends to the special ed department goal, which extends to the district goal” (Counselor 3, Interview Transcripts, June 2011). These opportunities enabled staff to gain fluency with new technological tools, but also with developing new behavior such as “classroom management skills in a 21st Century classroom.” Moreover, these opportunities for development and coaching were not mandated, but encouraged primarily through intrinsic motivation and recognition.

The organizational learning condition of Leadership also enabled the stakeholder response of creating structures for involvement and communication. The systematic
structures built within Sterling School District were not overtly evident, and were sometimes invisible to the stakeholders. However, these structures served a purpose much like the scaffolding of initiatives. As such, the structures warranted recognition as the response is continually drawn from the evidence.

Leadership, coupled with Congruence of District Mission and Vision with Practices and Beliefs, were two of the conditions that enabled the building of systemic structures for involvement and communication. It is worth noting that the structures referenced here are not those found in an organization chart. While some stakeholders believe “structures” to mean the design of work flow or organizational reporting, in this case it is the process by which decisions are made, communicated, and enacted. Reduced simply, the systematic structure for involvement and communication is a pattern of interrelationships among programs and processes.

The interview data suggested the existence of bidirectional communication channels between staff and administration. Nearly all interview participants specifically named or referenced communication channels that were participative, with some form of solicitation from all members and often all levels. These channels are the embodiment of the culture and commitment to communication, facilitated by leadership. When speaking of the administration, one teacher reported:

They always have the district goals in mind, and we work together to talk about them and how we can accomplish them. We do a lot of brainstorming and throwing ideas around, and we have regular meetings and send out things in writing, and come up with ideas that are heard. So, we collaborate together to find the best way to do what we have to do to meet the district goals. (Teacher 6, Interview Transcript, June 2011)
These communication channels are also bound by mutual respect. This respect and trust-bound communication resulted in a deeper commitment to the communication process than just relaying information or performing duties. The leadership was enabling of this trust by allowing individual uniqueness. Similarly, a teacher reported:

I think that one of the absolutely most effective steps that the district has taken in terms of leadership on administrative levels is letting the teachers teach. You can go to a lot of other districts that have such a top down mentality that it can be even so extreme as to be told how you will teach certain lessons every single day. That has never been the case in Sterling… I think that the district has done a phenomenal job of trusting the people that they’ve put into position to teach kids on a daily basis.

(Teacher 2, Interview Transcript, May 2011)

The empowerment of staff reinforced the desired behaviors, and adherence to the process. This created value in personal efforts, which was reflected by many stakeholders. This individualized consideration and involvement did not land solely with the certificated teachers. An administrator reported:

The leadership is funny. I think if you asked, if you asked people in our district, name 5 of our leaders in our district, probably 3 of them will be classified employees. And so, it really feels like some of the classified positions do the best job of taking care of everyone’s daily basics needs. (Admin 6, Interview Transcript, June 2011)

Many of the exhibited traits could be linked back to leadership. Sterling’s qualitative data showed a link between communication, process, and practice, which were facilitated by the organizational learning condition of leadership. This linkage of activities, and the leadership that fostered it, was important to the district stakeholders. Moreover, this link was evidenced not as a goal but as a path or process, and was reported by nearly all participants. Summarizing this theme, an administrator reported the following:
The growth or the progress of the organization as a whole; that is not a single moment where all of a sudden it’s great, but that is the result of continuous contributions. That notion permeated what we were doing because we had all these people looking for ways to improve the organization collectively. I believe that’s what moved us forward, and we were very active at it. We embraced the community, parents, teachers, and even students had some involvement. (Admin 8, Interview Transcript, June 2011)

The district’s Leadership also enabled the stakeholders to identify the need to focus on student data. While the districts already had a technological infrastructure to store and analyze student data, it was not being utilized on a regular basis prior to Simply Integrated. In particular, the student data available included both behavioral and achievement information. However, access was previously restricted to a few key individuals. Through a concerted effort, the district and site leaders modeled the desired collaborative behavior, and simultaneously provided professional development opportunities, enabling stakeholders to access and use this data. In addition, the district provided multiple stakeholders with the data on an ongoing basis, which they reportedly used to monitor student learning. These opportunities were primarily enabled through the Professional Learning Community structures in place within the organization.

As a result of the organizational learning condition of Leadership being present, district stakeholders were enabled to share a common understanding about the need to improve student learning by focusing on activities and data that supports student achievement. For example, the stakeholder response showed little variance about the stakeholder’s focused effort to use student data. More than one stakeholder cited a specific district administrator as the “queen of data.” Moreover, many shared the same
commitment to using the available data to inform instruction, and to guide discussions amongst their peers.

There was one constrictive response that stemmed from the leadership turnover in the past few years. While there was an overall positive atmosphere as evidenced in the quantitative and extant data results, there was an undercurrent of concern regarding the potential changes a new superintendent might make. Moreover, although the vision and goals have continued on the same path for multiple years, the uncertainty remained for some people in the district. One teacher summarized what many reported when they shared:

We have a systematic structure to how the district operates, and to how the committees meet and guide different important visions. I guess that rolls to the superintendent. We have a new superintendent, so I’m not sure what direction things will head. (Teacher 2, Interview Transcripts, May 2011)

Leadership, as an organizational learning condition, was plainly evident in the survey data. In addition, the attributes of the Leadership condition enabled the stakeholder responses in many ways. Leadership helped to scaffold initiatives, build structures for involvement, and to align a focus on data for student achievement. While Leadership was not highest perceived condition on the survey, it appeared most prevalent in the qualitative data results.

Organizational learning condition: policies & resources. Survey participants agreed that the district provided an adequate amount of professional development. More participants “Strongly Agreed” that the professional learning opportunities were “substantial,” than the combined total responses for all other responses. Moreover, an
overwhelming 98% agreed to some degree, that the district provided “substantial opportunities” for professional learning, while only 2% disagreed.

Survey participants also agreed that the district provided appropriate materials (97%), expert resources (98%), and sufficient financial resources (98%) to support individual professional learning. The only variance is in regard to the amount of release time given for professional development. Participants reported a very high, yet comparatively lower overall agreement (91%), with the amount of release time provided. Finally, nearly 97% of all survey participants indicated a district impact on their personal learning.

Collectively, the mean for the District Policies & Resources Promoting Learning construct was 4.22, while the mode was 5.00. This further represents a high level of agreement with the survey item questions regarding Policies & Resources for Promoting Learning. Moreover, a review of the Cronbach Alpha reliability test for the Policies & Resources construct of the survey instrument revealed a reliability of .855, which demonstrating a very good internal consistency among the professional development questions. As previously stated, Pallant (2007) suggests a value of .8 or above as an ideal indicator for measuring the same underlying construct.
Table 4.7: Frequency Distribution for Policies and Resources for Promoting Learning

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>N</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Somewhat Agree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our district provides substantial opportunity for professional learning.</td>
<td>130</td>
<td>0.8</td>
<td>0.8</td>
<td>8.5</td>
<td>23.8</td>
<td>66.2</td>
</tr>
<tr>
<td>Our district provides sufficient financial resources for our professional learning.</td>
<td>130</td>
<td>0.8</td>
<td>0.8</td>
<td>8.5</td>
<td>25.4</td>
<td>64.6</td>
</tr>
<tr>
<td>Our district provides substantial release time for professional learning.</td>
<td>126</td>
<td>1.6</td>
<td>7.1</td>
<td>17.5</td>
<td>38.1</td>
<td>35.7</td>
</tr>
<tr>
<td>Our district provides expert personnel as a resource for our professional learning.</td>
<td>127</td>
<td>1.6</td>
<td>0.8</td>
<td>18.1</td>
<td>35.4</td>
<td>44.1</td>
</tr>
<tr>
<td>Our district provides appropriate materials to support our professional learning.</td>
<td>127</td>
<td>0.0</td>
<td>2.4</td>
<td>11.0</td>
<td>40.2</td>
<td>46.5</td>
</tr>
<tr>
<td>Our district has an impact on my learning.</td>
<td>127</td>
<td>0.0</td>
<td>3.1</td>
<td>15.7</td>
<td>39.4</td>
<td>41.7</td>
</tr>
</tbody>
</table>

_Influence of policies and resources on stakeholder response._ The condition, District Policies and Resources for Promoting Learning, enabled a positive district stakeholder response to Simply Integrated by facilitating the creation of a shared commitment to communication. The primary drivers for this collaborative communication were the resources made available through the PLC structure. Staff shared that they felt heard in these PLC meetings, and valued the utilization of this time to discuss opportunities, and to voice their opinion.

In addition to placing an importance on the communication process, and providing channels for involvement, promotion of professional development resonated throughout the document analysis and the interviews. There were many opportunities for professional development that supported staff practices. Not only was this an emergent
theme, but also it was such a prevalent offering in the district that one stakeholder equated it to an additional challenge to overcome. This counselor shared:

…there is such an emphasis on training that it is boggling. It can get confusing. So, if you have this district vision and they almost saturate you to the point where you go to so many things and they’re all valuable, then next year you go to more valuable things, and more valuable things, and you never really have a chance to let that sink in. So, it’s almost like it’s evolving too quickly. It should be train, sustain, train, sustain. (Counselor 2, Interview Transcript, May 2011)

However, those tasked with developing the professional development opportunities shared a difference response. “Through our PLC, and our RTI, we work very closely with the district admin and school board to provide professional development,” (Admin 4, Interview Transcript, May 2011) said one administrator. Another administrator reported, “…the leadership really works on taking the vision, creating the action plan, offering PD, and of course, the teachers are the ones on the front lines ensuring that kids learn” (Admin 6, Interview Transcript, June 2011).

In addition to the opportunities for professional growth through trainings, staff was also recognized for their efforts and achievements. An administrator brought forward the idea that the models of communication, involvement and shared leadership are recognized as models for other schools. This administrator shared, “…our elementary teachers are instructional leaders, and at this site in particular, they are a model where they bring folks in to see how we’re doing it” (Admin 3, Interview Transcript, May 2011).

One stakeholder shared, “We always did a quick shout out, like your five top things that you’re really interested in, and then we tailored things to it” (Admin 3, Interview Transcript, May 2011). This PLC time of collaboration was referenced as
“sacred” and “untouchable” by some staff. There is a familiar bond within the PLCs, and between PLCs. Additionally, District and Board reports show that the PLC structure has spurred relationships with outside agencies, and other school districts. Two analyzed Board Reports indicate a large attendance of visitors from other school districts, at an elementary school’s hosting of professional development classes. The reports specifically name the breakout opportunities for visitors pertaining to PLC-designed outcomes.

This same structure of PLC, coupled with an allowance of resources to promote innovation, also enabled risk taking. One example of this was evident with a new type of technology called Student Response Systems. These devices allow every student to participate in questions, polls, or short answer responses per the teacher’s instructions. However, they are reportedly difficult to use. As one stakeholder reported, “…you can’t expect everyone to buy-in and have the same involvement from day one.” (Teacher 1, Interview Transcript, May 2011). Herein, the PLC structure enabled a few participants to experiment with these devices, and share their findings with the whole. Not all of the teachers found it to be a worthwhile endeavor, but many who did, became the “core of teachers” that helped others build a knowledge foundation. Without the condition of collaborative culture, fostered by professional learning communities, it was likely the innovative response would have been constrained.

Another way that this organizational learning condition enabled the adoption of the 21st Century literacy initiative was to focus on activities, data, and decisions that support student achievement. As one stakeholder put it, this focus is now a district commitment, or “mission.” Although this condition overlaps with Leadership, the
District Policies and Resources Promoting Learning was found to enable a focus on activities, data, and collective decisions that support student achievement. Primarily, this was evident in two forms: opportunities for professional development, and providing resources for differentiated instruction; such as student achievement data, and research-based practices of PBIS.

As reported earlier, the opportunities for professional development focused on the vision of the district. Moreover, while some professional development was coming from “national speakers,” there was a growing trend away from this practice at Sterling. The offerings were shifting to a model of professional development being developed and deployed from in-house resources. A stakeholder reported, “…we’re tapping into the expertise of the people that we have to provide training for others” (Counselor 1, Interview Transcript, May 2011). Other stakeholders referenced this as “going deeper” with the staff. Another claimed that this in-house sharing breaks the traditional “islands of expertise.”

In addition to the training and professional development, the stakeholders reported an adequate number of resources to support their instructional practices. Some reported that there were extra resources for differentiated instruction, whereas others referenced “struggling kids.” However, it was a resounding theme that there were adequate resources for “infusing technology” to “engage kids.” Many also reported the numerous tools available for formative and summative assessments, as well as naming the various data reporting tools in use in their PLCs.

While not overtly a threat, many stakeholders were “nervous,” “cautious,” or “worried” about the availability of resources in the future. A large number of
shareholders shared personal experiences of when the County Offices declared bankruptcy in 1994. As they witnessed firsthand, all resources were removed from the classrooms, and from the district. Many reported that a relapse of those times would be damaging to the instructional program in use today. While the threat does not appear to be eminent, the concern is evident in the stakeholder responses.

Overall, reported a high perception of the Policies and Resources condition as recorded by the survey document. This included high agreement rates with the policies, materials, and professional development opportunities available. Moreover, this condition enabled district stakeholders to create a shared commitment to communication, and fostered a focus on data for student achievement.

**Organizational learning condition: decision-making.** The theoretical construct of Participatory Decision-Making, as articulated in the literature review, was included in the survey instrument. Similar to the construct of collaborative culture, the data revealed a strong internal consistency for the six survey items included in the construct for Decision-Making. The resulting Cronbach Alpha reliability score of 0.898 (Table 3.6) was higher than that of Culture, and is the second highest reliability score of all the identified constructs.

While the reliability of the items to the respective construct was very high, the overall results regarding perceptions of participatory decision-making were the lowest recorded on the survey. The stakeholder’s overall response to the six survey items, which measured the construct of Participatory Decision-Making, had a mean score of 3.1935 (Table 4.4). It is noteworthy that this is the lowest overall mean score recorded amongst the six constructs. Moreover, this construct contains the second lowest standard deviation
amongst all constructs, thereby indicating a tight response pattern around this mean, and further confirming the results.

Table 4.8: Frequency Distribution of Decision-Making

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>N</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Somewhat Agree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our district decision-making process is effective.</td>
<td>129</td>
<td>0.0</td>
<td>0.8</td>
<td>23.5</td>
<td>53.0</td>
<td>20.5</td>
</tr>
<tr>
<td>Contributions of individuals and groups in our district are valued.</td>
<td>129</td>
<td>0.8</td>
<td>2.3</td>
<td>20.5</td>
<td>29.5</td>
<td>44.7</td>
</tr>
<tr>
<td>There are multiple forums and opportunities for me to participate in district-wide decisions.</td>
<td>130</td>
<td>2.3</td>
<td>13.6</td>
<td>26.5</td>
<td>37.1</td>
<td>18.9</td>
</tr>
<tr>
<td>Decision-making processes are shared and transparent.</td>
<td>127</td>
<td>1.5</td>
<td>12.1</td>
<td>34.1</td>
<td>39.4</td>
<td>9.1</td>
</tr>
<tr>
<td>The decision-making process in our district provides for input from the schools.</td>
<td>127</td>
<td>0.8</td>
<td>4.5</td>
<td>26.5</td>
<td>38.6</td>
<td>25.8</td>
</tr>
<tr>
<td>My stakeholder group (teacher, parent, etc) is involved in making important district decisions.</td>
<td>127</td>
<td>0.8</td>
<td>9.1</td>
<td>22.0</td>
<td>37.9</td>
<td>26.5</td>
</tr>
</tbody>
</table>

Based on the 5.0 Likert scale included in the survey, a mean response just slightly higher than 3.0 indicates only a slight agreement (Somewhat Agree as it appears on the survey) with the statements contributing to the Participatory Decision-Making construct. The highest mean responses originated with the participants whom have achieved an Ed.D/Ph.D (mean = 3.83) and those whom have been at their current work site for 21 years or more (mean = 3.77). Site Administrators, and participants who have achieved a BA + 15 were almost identical in their perceptions (mean = 3.52 and 3.51 respectively).
At the opposite end of the scale, participants with Master’s Degrees (MA/MS) reported the lowest perceived existence of Participatory Decision-Making construct of any identified sub-group population. Recording a collective mean of just 3.03, this group perceived the second lowest mean of any construct amongst any group. Bested only by the lowest mean (3.02), recorded by participants having worked in the current work site for 16-20 years sharing their perception of the Knowledge & Skills of the 21st Century literacy initiative.

While the organizational learning construct of Participatory Decision-Making posted the lowest overall mean scores, the variance of perception amongst survey respondents varied only minimally. Within the ANOVA results for this construct, there was only one statistically significant difference at the p<.05 level in mean scores for the five groups of highest level of education achieved \[ F(4,110) = 3.062, p = .020, \text{effect size} = .100 \]. Post-hoc comparisons using Tukey HSD test indicated that the mean score for survey respondents with Ed.D/Ph.D. degrees (M = 3.83, SD = .31) was significantly different from survey participants with MA/MS degrees (M = 2.99, SD = .61). No other survey participant education group differed significantly from the other groups reported. Moreover, there was no statistically significant difference at the p<.05 level within years of experience \[ F(4,118) = 0.775, p = .543 \], position \[ F(3,120) = 2.281, p = .083 \], or union leadership participation \[ F(1,122) = 2.486, p = .117 \].

In addition to posting the lowest mean scores of all the constructs, this organizational learning condition was also less evident in the qualitative results. A discussion of the probable causes is presented in the next chapter.
Influence of decision-making on stakeholder response. The organizational learning condition of Participatory Decision-Making was not as strongly perceived by stakeholder groups. However, the presence of this condition was evident in interview transcripts. There is sufficient data to show a reoccurring theme of enabling stakeholder voice, which is related to the organizational response of creating a shared commitment to collaboration and providing a structure for involvement and communication.

The stakeholders acknowledged the impact of their voice, and how those voices link to student achievement. While the level of focus and actions varied by stakeholder group, there was still a commonality throughout the responses. For example, a counselor reported, “We are professionals who meet together to collaborate, look at data, and make decisions that support student achievement” (Counselor 2, Interview Transcript, May 2011).

Enabled by this condition, a teacher explained that, “…we’ve shifted a lot more into making data driven decisions and keeping track of our students’ progress” (Teacher 5, Interview Transcript, June 2011). While this view does not perfectly align with the belief that student data has always been important, it does show the eventual incorporation of data into practice. Similarly, this teacher reports, “I think that the district, Sterling, has done a really good job of providing the necessary resources and culture that our kids need to succeed and I think we have a lot of tangible results from our kids that once they leave the district they have shown that they have some great preparation from inside this district” (Teacher 5, Interview Transcript, June 2011).

Another administrator summarized:
The big vision for the district is that we meet each child’s needs without limiting potential. Each and every child is really the focus, and that we would know every child by name and by need, and that we would be able to identify if the kid needs more enrichment, more depth, or if this kid really needs help with the basics. And to understand that kids are fluid. People need help, and kids need help at different times. So that vision of reaching each and every child and developing that potential is the stated vision for the district, and we try to bring everything back to that. (Admin 9, Interview Transcript, June 2011)

Additionally, a few administrators spoke of the district condition of decision-making as an enabling facet of the communication with external stakeholders, such as the local foundation. An administrator commented upon the foundation’s involvement with the district activities when they said, “[the foundation] is very involved and very supportive…we have three to four community members on any given committee” (Admin 4, Interview Transcript, May 2011). Another administrator said, “They [the foundation] were there. We reached out to them and sought their input and involvement so that they could participate” (Admin 7, Interview Transcript, June 2011).

Some participants reported that district initiatives, including goal setting, were made by “lots of different people, and not just principals” (Admin 8, Interview Transcript, June 2011). The culture also fostered a positive rapport among the staff and administrators, and between both union and non-union employees. “I think because the initial foundation is laid so thoroughly, and communication is so well done, people continually are involved” (Admin 2, Interview Transcript, May 2011).

The district had numerous opportunities for staff to participate in site and district functions. These opportunities, more importantly, were not relegated to a select few individuals. The opportunities were open to most, if not all staff members. This also included classified staff, who were offered the opportunities to work with teachers and
leaders on district initiatives. A stakeholder echoed, “We have the chance to talk and work together and not be just independent contractors” (Admin 1, Interview Transcript, May 2011).

The district also recognized the varied expertise among staff at all levels. Although attendance at professional development classes outpaced attendance at committee meetings, the opportunities were nonetheless available. One of the district leaders was named in particular for finding and encouraging involvement among staff members. This same leader was referenced as having the ability to “recognize and strategize” the use of “the positive staff member” within groups (PLC Report to the Board, May 2010).

The involvement opportunities were also extended to the PTA, foundation, and local community. For example, the earliest planning stages of Simply Integrated included stakeholders from inside the district, as well as participants from PTA, PTA Council, and the local foundation. The subsequent committee that was formed to develop the implementation plan included local community members as well as local business owners. Moreover, the entire plan was presented at various media outlets with an encouragement for our community to become “partners in education.”

These structures for involvement were not without troubles. One committee that provided guidance on the direction of classroom technology was temporarily disbanded in favor of a larger committee to drive the 21st Century literacy initiative. Unfortunately, these new structures were not adequately communicated. Therefore, some stakeholders reported feeling “left out of [the decision making process].” Another echoed, “I was on
the Tech committee, and honestly, nobody has asked me for anything lately” (Teacher 7, Interview Transcript, June 2011).

Conversely, there were constraining actions as well. The interview data bore differences in stakeholder opinion much like the survey data showed statistically significant differences in perception. While the administrators saw the local foundation’s involvement as enabled via this condition, the teachers reported a different perception. One teacher reported that the “parents here are a tricky brood” (Teacher 4, Interview Transcript, June 2011). This teacher continued the theme of parental over-involvement when they referenced the likelihood of the parents pressing an agenda to the superintendent directly “while having a Cappuccino” in town. This same teacher talks about the parent’s role in influencing smaller decisions, such as participation in sports:

It's not like boys and girls club, where everyone plays and everyone participates. It's not like that at all. In every other high school you try out and you get cut from the team if you're not good enough to make it. You are cut from the team if you don't attend practices, if you go on vacation during the season, if you have a foul mouth, or whatever. There is a lot of discretionary cutting going on. Well, here in Sterling; there has been more than one situation of a parent who has kids that doesn't belong on the team, and not necessarily because of ability, but because of behavior, etc. But the parents will plead their kids before the Board which I've heard because you run into each other all the time and there is that, you don't understand my kid, fill in the blank, and what happens is, by keeping the kid, enabling the kid to stay where maybe he should have a natural consequence, [the decision to keep them] works towards the kid's detriment, the team's detriment, and the school district's detriment. I think that we could stand to be a little more, 'by the book' in certain areas like that. (Teacher 4, Interview Transcript, June 2011)

These data suggest concern for who gets to participate in the decision-making and the nature of the process. Overall, the data showed participatory decision-making had notable effects on the stakeholder’s perception and organizational response. Primarily,
this condition evidenced a reoccurring theme of enabling stakeholder voice, which is related to the organizational response of creating a shared commitment to collaboration and providing a structure for involvement and communication. Similar to the next section on knowledge & skills, this organizational learning condition enabled and at the same time may have constrained participants’ perception of full participation in deciding the organization’s adoption of Simply Integrated.

Organizational learning condition: knowledge & skills. As this study focused on the reform effort of a district’s implementation of a 21st Century literacy initiative, the Knowledge and Skills construct of the survey document focused on the perception of these variables. Although the construct contained seven questions on the survey instrument (Table 4.9), this construct recorded the highest Cronbach Alpha reliability of all the constructs at 0.899 (Table 3.6). However, overall, the construct of Knowledge & Skills recorded the second lowest cumulative mean (3.3840) of all six constructs measured by the survey instrument. Moreover, it had the highest standard deviation of any construct.
Table 4.9: Frequency Distribution of Knowledge & Skills

<table>
<thead>
<tr>
<th>Survey Items</th>
<th>N</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Somewhat Agree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a clear understanding of the district’s Simply Integrated: 21st Century Literacy plan.</td>
<td>130</td>
<td>0.0</td>
<td>1.5</td>
<td>9.8</td>
<td>44.7</td>
<td>42.4</td>
</tr>
<tr>
<td>Lessons learning by individuals and groups in the district are quickly shared with others who can use them.</td>
<td>128</td>
<td>0.8</td>
<td>3.8</td>
<td>14.4</td>
<td>42.4</td>
<td>35.6</td>
</tr>
<tr>
<td>I understand my role under the Simply Integrated: 21st Century skills plan.</td>
<td>127</td>
<td>0.8</td>
<td>3.0</td>
<td>18.9</td>
<td>38.6</td>
<td>34.8</td>
</tr>
<tr>
<td>I have participated in district workshops related to the district’s Simply Integrated: 21st Century skills plan.</td>
<td>128</td>
<td>2.3</td>
<td>1.5</td>
<td>6.1</td>
<td>34.1</td>
<td>53.0</td>
</tr>
<tr>
<td>I actively share my knowledge about curriculum and instruction with colleagues and friends.</td>
<td>126</td>
<td>1.5</td>
<td>2.3</td>
<td>12.9</td>
<td>35.6</td>
<td>43.2</td>
</tr>
<tr>
<td>I have a clear understanding of all the provisions of the district’s Simply Integrated: 21st Century skills plan.</td>
<td>128</td>
<td>0.0</td>
<td>0.0</td>
<td>14.4</td>
<td>42.4</td>
<td>40.2</td>
</tr>
<tr>
<td>Our district goals are aligned to the goals of the Simply Integrated: 21st Century skills plan.</td>
<td>128</td>
<td>0.0</td>
<td>0.0</td>
<td>8.3</td>
<td>31.1</td>
<td>57.6</td>
</tr>
</tbody>
</table>

Recording a standard deviation of .84173, the results show a fairly wide dispersion of responses among the participants. As such, the mode becomes more important to understand the data. In this construct, the mode of the average participant is 3.29. This indicates that there are more responses below the mean than above. Alternatively, while this is still a fairly positive mean (equating to above “Somewhat
Agree” on the survey instrument), this is an example of a low perception of the construct compared to the others in the survey.

The Knowledge & Skills construct, which measured the perceived knowledge and fluency of the 21st Century literacy skills initiative, recorded the lowest mean when broken by participant subgroup. The mean, 3.02, recorded by participants of high longevity in the current work site, was the lowest recorded collective mean of any construct amongst all sub group populations. Comparatively, this same population found a very favorable perception of the Policies and Resources available within the district. Recording a collective mean of 4.50, these participants of high longevity (16-20 years at current work site) had the fourth highest perception of the construct amongst all 26 subgroup permutations. However, this subgroup contained only 12 participants, which was the second lowest in the survey at only 9.4% of the total sample.

Similar to the organizational learning condition of Participatory Decision-Making, the condition of Knowledge & Skills also showed statistically significant differences amongst groups of respondents. Years of experience in education showed a statistical difference at the p<.05 level \([F(4,104) = 2.769, p = .031, \text{effect size} = .096]\). Post-hoc comparisons using Tukey HSD test indicated that the mean score for survey respondents with 16-20 years of experience in education (M = 3.01, SD = .72) differed significantly from respondents with 21+ years of experience in education (M = 3.81, SD = .80). No other groups within the years of experience differed significantly from each other.

The survey participant’s position within the district varied the response to Knowledge & Skills amongst multiple groups. Statistically significant at the p<.05 level, the four groups of positions had a difference in mean scores \([F(3,105) = 4.171, p = .008,\)
effect size = .106]. Post-hoc comparisons using Tukey HSD tests showed multiple
differences with the Classified group of survey participants. The mean scores for Central
Office Administrators (M = 4.02, SD = .64), and Site Administrators (M = 4.04, SD =
.66), differed significantly from Classified survey respondents (M = 3.06, SD = .87). The
difference between Classified and Certificated (M = 3.34, SD = .81) was not statistically
significant at the p<.05 level, nor did Certificated significantly differ from the other two
groups.

The remaining ANOVA results showed no other statistically significant
differences at the p<.05 level. Neither the education level groups [F (4,98) = 1.622, p =
.175], nor the union leadership groups [F 1,107) = 0.254, p = .615] showed statistically
significant differences.

The organizational learning condition of Knowledge & Skills posted the second
lowest mean scores of all survey constructs. This construct also had the largest number of
statistically significant differences amongst the population survey respondents. It also
contained the largest standard deviation, which shows the widest variance in perception
to the survey items which comprise this construct. However, this construct also had the
highest Cronbach Alpha reliability of all the constructs at 0.899. Therefore, even though
the items tie together, there is a low perception of the overall construct, and the widest
variance in responses of all the conditions in the survey. This was also evident in the
qualitative results, and is addressed in the discussion of Chapter 5. The lack of this
condition is also addressed in the implications for practice and areas for future research.
Influence of knowledge & skills on stakeholder response. The low mean scores (stakeholder perceptions) of this condition compared to all other conditions were similarly evidenced in the interview transcripts. This organizational learning condition was least evident in the qualitative results with only 54 code appearances. Primarily, the codes and quotations, which collectively show the influence of the Knowledge & Skills construct, tell a story of mixed learning levels. While some administrators acknowledge this disparity (Admin 2), another administrator (Admin 3) avoids the issue by focusing on the high number of participants in the professional development offerings. Another administrator believed, “…staff development and continuous training are critical to move [the organization]” (Admin 4, Interview Transcript, May 2011). However, this same administrator acknowledged the, “challenge of technology is the buy-in from staff;” the fact that “each teacher brings a different understanding of technology;” and yet speaks of combining the groups together in training without regard the aforementioned considerations. Specifically, this administrator said, “they will hopefully come together [in training] so they don’t have that fear” (Admin 4, Interview Transcript, May 2011).

Another administrator reported:

There are now gatekeepers to approve staff development. They want the context, the workshop, the training, the conference… aligned with district goals. This was not the case five years ago. We had people going all over the place, like to yoga classes. Now that would generate a question, ‘how in the world does this help us improve our district in the 21st century?’ So we’ve moved, and now the sky is the limit if your activities can show me how it makes a connection to district goals. (Admin 8, Interview Transcript, June 2011)

The counselors and teachers were similarly mixed on this condition enabling or constraining effects. A teacher talked of the knowledge of technological skills as a
“potential challenge” because of the amount “of learning that’s involved with it and the
time it takes to develop new [teaching] strategies to new things” (Teacher 2, Interview
Transcript, May 2011). One counselor reported that, “we’re building capacity in our
ability to use [technology] and integrate it into the delivery of instruction” (Counselor 1,
Interview Transcript, May 2011). This same counselor continues by discussing the
benefits of training and the positive effects on “collaboration and the use of common
language around technology” (Counselor 1, Interview Transcript, May 2011). The flip
side of this is another counselor’s belief that “there is such an emphasis on training that it
is boggling, it can get confusing” (Counselor 2, Interview Transcript, May 2011).

In general, the organizational learning condition of Knowledge & Skills was
relatively lightly apparent in the data. While the interview data can be construed as
enabling the stakeholder response of a community of collaboration, there was insufficient
evidence to back this assertion as a result. Moreover, the variance in response between
the enabling and constraining effects of this condition, further emphasize the differences
already reported from the quantitative data. When coupled with the highest number of
statistically significant differences in survey data, the interview data simply reinforces the
premise that this condition was insufficiently present in the Sterling stakeholder
perception and response and thus may be constraining full implementation of the Simply
Integrated change initiative. The strong positive perceptions of the power and
effectiveness of the Professional Learning Communities and the believe that professional
development is available, maybe mitigating to some effect the negative perceptions of
knowledge and skills regarding the initiative.
Correlation of all Constructs

Correlation analysis of the survey data was used to describe the strength and direction of the relationship between two variables, while interview information was used to confirm the statistical findings. A scatterplot was performed on the data to ensure no violation of the assumptions of linearity and homoscedasticity. Next, the relationship between the six identified theoretical constructs (Culture, Decision-Making, Knowledge & Skills, Mission & Vision, Leadership, and Policies and Resources) was investigated using Pearson product-movement correlation coefficient. This test yields an r coefficient that calculates a confidence level (Weinberg & Goldberg, 1979). Cohen (1998) suggests the following guidelines for interpreting the r value: r = .10 to .29 (small); r = .30 to .49 (medium); r = .50 to 1.0 (large).

Table 4.10 shows the strong positive correlation between nearly all the variables. This strong correlation indicates, for example, that high levels of perceived Collaborative Culture are associated with high levels of perceived Leadership. The data also showed a large positive correlation between Certificated stakeholder response to the Knowledge and Skills construct with the Decision-Making construct, r = .58, n = 72, p < .0005. This correlation shows that the lower the reported Knowledge and Skills of the stakeholder, the lower their perception of the Decision-Making process. An exception to the high correlations was a medium positive correlation found between the perceived construct of Knowledge and Skills and the perceived construct of Policies and Resources. This correlation of the variables, r = .49, n = 109, p < .0005, indicates high levels of perceived Knowledge and Skills is associated with medium levels of perceived Policies and Resources.
The interview data bore witness to very similar results. District stakeholders often cited a connection between their high perception of the district leadership and the resultant district culture. For example, an administrator said:

While we have had change in leadership, I still feel like we’re moving forward. I still feel like we’re pushed, which is a good place to be. We don’t just say we are great, but kind of pushed to make sure that we are always providing every opportunity for students to be successful. (Admin 10, Interview Transcript, June 2011)

This view was similarly echoed by a teacher:

…the leadership is excellent. I think they give us a lot of leeway to do what we need to do to meet the goals, and I think we pick or choose or design the most efficient way of doing it and they appreciate that, and they see that. So, I think that we are well received by everyone. I think they get more bang for their buck, you know, they get more than they expect they’re going to get, and so when we get done with what we do, they’re happy with the work that we do. (Teacher 6, Interview Transcript, June 2011).

There are also some examples of district stakeholders who have self reported a lower perception of their own knowledge and skills coupled with a lower perception of the district’s decision-making conditions. As one teacher reported, “Honestly, I think that both parts, site-wide and with the district, are very knowledgeable, but they speak in tech-speak, which teachers do not. The [decision making] process is fragmented because we don’t speak the same language” (Teacher 7, Interview Transcript, June 2011). These stakeholder responses deepen the understanding highlighted by the statistical correlations derived above, while proving actual stakeholder words to confirm the numeric results.
Table 4.10: Total Construct Correlations

<table>
<thead>
<tr>
<th></th>
<th>Total C</th>
<th>Total DM</th>
<th>Total KS</th>
<th>Total MV</th>
<th>Total L</th>
<th>Total PR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total C Pearson Correlation</td>
<td>1</td>
<td>.723**</td>
<td>.534**</td>
<td>.721**</td>
<td>.763**</td>
<td>.644*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>127</td>
<td>122</td>
<td>108</td>
<td>123</td>
<td>122</td>
<td>127</td>
</tr>
<tr>
<td>Total DM Pearson Correlation</td>
<td>.723**</td>
<td>1</td>
<td>.584**</td>
<td>.724**</td>
<td>.767**</td>
<td>.698*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
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<td>.000</td>
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</tr>
<tr>
<td>N</td>
<td>122</td>
<td>124</td>
<td>107</td>
<td>121</td>
<td>121</td>
<td>124</td>
</tr>
<tr>
<td>Total KS Pearson Correlation</td>
<td>.534**</td>
<td>.584**</td>
<td>1</td>
<td>.589**</td>
<td>.551**</td>
<td>.487*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
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</tr>
<tr>
<td>N</td>
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<td>107</td>
<td>109</td>
<td>109</td>
<td>106</td>
<td>109</td>
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<tr>
<td>Total MV Pearson Correlation</td>
<td>.721**</td>
<td>.724**</td>
<td>.589**</td>
<td>1</td>
<td>.851**</td>
<td>.779*</td>
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<tr>
<td>N</td>
<td>123</td>
<td>121</td>
<td>109</td>
<td>125</td>
<td>122</td>
<td>125</td>
</tr>
<tr>
<td>Total L Pearson Correlation</td>
<td>.763**</td>
<td>.767**</td>
<td>.551**</td>
<td>.851**</td>
<td>1</td>
<td>.707*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<tr>
<td>N</td>
<td>122</td>
<td>121</td>
<td>106</td>
<td>122</td>
<td>124</td>
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</tr>
<tr>
<td>Total PR Pearson Correlation</td>
<td>.644**</td>
<td>.698**</td>
<td>.487**</td>
<td>.779**</td>
<td>.707**</td>
<td>1</td>
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<tr>
<td>Sig. (2-tailed)</td>
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</tr>
<tr>
<td>N</td>
<td>127</td>
<td>124</td>
<td>109</td>
<td>125</td>
<td>124</td>
<td>130</td>
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</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Summary

Chapter 4 has presented an analysis of the data which resulted both from the survey instrument, participant interviews, archival analysis, and from extant data. The participants included staff from all four schools in the Sterling School District, categorized in multiple sub-groups. The results of this study were aimed at identifying the district’s response to a 21st Century literacy initiative, and to identify the extent to which conditions for organizational learning influenced the outcome of the initiative.
This chapter began with the district’s response to Simply Integrated. The second half of the chapter connected the perceived existence of the organizational learning conditions at Sterling to enabling or constraining of the organizational actions regarding the adoption of Simply Integrated (summarized in Figure 4.1 and Figure 4.2). The results show only a few statistically significant differences in stakeholder perception, and those are primarily relegated to the least perceived conditions of Participative Decision-Making, and Knowledge & Skills. The remaining conditions were all highly perceived by the survey participants: Policies and Resources for Professional Learning, Congruence of District Mission and Vision with Practices and Beliefs, Leadership, and Collaborative and Harmonious Culture. Additionally, this high perception of the conditions also had a high influence on the stakeholder response. This discussion and implications of these findings are addressed in Chapter 5.
Figure 4.1: Summary of Organizational Activities

Creating a Shared Commitment to Communication

- Valuing Culture of a Small School District
- Practicing Respectful Communication and Collaboration
- The Use of "We" in Decision, Action, and Outcomes

Scaffolding Initiatives Into Systemic Coherence

- Building Consensus on a Single Focus
- Evaluating Initiatives for Fit and Application
- Integrating Initiatives into Existing Foundations
- Reviewing the Actions and Direction with the Focus and Goals

Providing a Systematic Structure for Involvement and Communication

- Providing Focused Opportunities for Professional Growth
- Creating and Using Structures for Collecting and Disseminating Information
- Encouraging Participation and Involvement in District Decision Making

Focusing on Activities, Data, and Decisions that Support Student Achievement

- A District Focus on Student Achievement
- Multiple Assessment Measures for Assessing Student Learning
- District-wide Access to Data
- Continuous Monitoring of Student Learning
Figure 4.2: Influence of District Conditions on District Activities Related to Simply Integrated
Chapter 5

Summary, Findings, and Implications

This chapter is broken into four sections. The first section provides an overview of the study, including the purpose, research questions, the study methodology, and a brief summary of the results. The second section presents the findings within the context of the findings, literature, conceptual framework, and theoretical propositions. The third section addresses the theoretical and practical implications, while the final section addresses the limitations and recommendations for future research.

Overview

As stated in Chapter 1, technological and environmental changes have created new communities, new industries, and new literacies. These factors have created an increased sense of urgency in reforming district practices to meet the needs of an evolving student population. The problem is that there are competing commitments, and multiple factors that affect the success or scalability of any change initiative.

The bulk of the research on districts has been focused primarily on the district’s role in making and interpreting policy, and to a lesser extent on the district strategies for improving student learning. Of the studies that have investigated organizational learning, they have predominately focused on sub-organizational groups, such as schools, departments, or specific business-function groups (Cousins, 1998; Leithwood, 2000; Leithwood, Leonard, & Sharratt, 1998; Marks, Louis, & Printy, 2000; Marks & Printy, 2002; Schwandt, 1997; Wang & Ahmed, 2004). Additionally, there is a lack of research focused on multiple stakeholders’ response to innovation and technological change initiatives (Mauchet, 2011).
The purpose of this research was to investigate the school and district conditions that cultivate organizational learning, and how that influences the district’s response to a 21st Century change initiative. At the core, this study sought to provide insight into the conditions that enable or constrain stakeholder response at a district level, and to fill the gap in the existing literature relative to the subject.

**Methodological Review**

This study examined district conditions for organizational learning from the perspective of multiple stakeholder groups, in a small school district located in Southern California. This research utilized both quantitative and qualitative data, derived from three data sources to provide a deep understanding of the district conditions and responses to the 21st Century change initiative. While the duration of Simply Integrated; a 21st Century change initiative, the focus of this study, was four years, this case covered the last five months at the end of the program.

Derived from three data sources, this study primarily relied on the following methods: survey, interview, and archival and extant data analysis. A total of 235 Organizational Learning Condition surveys were sent to district stakeholders, which yielded 134 usable surveys (57% response rate). Additionally, 20 semi-structured interviews from key stakeholders and all self-selected survey participants, which lasted an hour each, were conducted in May and June 2011. Finally, archival documents of meeting minutes and promotional material, coupled with extant data on leadership, perceptions, and beliefs, were collected.
Summary of Results

The results of this study answered three research questions: How does the district respond to a 21st Century literacy change initiative? To what extent are district conditions for organizational learning present? How do the district conditions for organizational learning influence – enable or constrain – the adoption of a 21st Century literacy change initiative? This section summarizes the results.

The district stakeholders’ response to Simply Integrated provided three emergent themes from the interviews. These responses included a positive perception of the availability of technological tools, individual integration of those tools into the daily instruction, and the opportunity for differentiated instruction as a result of these tools. Two other themes emerged from many of the stakeholders, but were not shared uniformly by all. These themes included an emphasis on student critical thinking, and a concern regarding the sustainability of the initiative over time.

District conditions for organizational learning. Although this study identified six conditions for organizational learning, only four clearly emerged as strong factors in this study. Moreover, the degree to which they were perceived to be present varied by condition and by stakeholder group. Survey data for the four conditions provided mean scores (on a five-point Likert scale) that described their varying degree of presence in descending order: Congruence of District Vision and Mission with Practices and Beliefs, Leadership, District Policies and Resources for Promoting Learning, and Collaborative and Harmonious Culture. In addition, the analysis of qualitative data helped to explain the nature of the variations within and among all the present constructs.
**Influence of the district conditions on district stakeholder response.** The district conditions for organizational learning both enabled and constrained the district stakeholder response to Simply Integrated; a 21st Century change initiative. The district conditions, Policies and Resources, Mission and Vision, and Leadership enabled the stakeholders’ response. The organizational learning condition of Collaborative Culture both enabled and constrained stakeholder response.

**Policies and resources for promoting learning.** This condition enabled the district stakeholder perception of, and attendance in, professional learning opportunities, while also providing resources for differentiated instruction. Many of these professional development opportunities were reported as “going deeper” into content and practice areas. The professional development opportunities also focused on using data to inform practice, and on the use of the data systems employed in the district. Additionally, these trainings on data and practice were reinforced within the PLCs at all levels. This sharing within the PLC structure further facilitated the shared decision-making and the sense of community.

**Congruence of district mission and vision with practices and beliefs.** Data from stakeholders showed that this condition enabled the district to scaffold initiatives into systemic coherence. Because key stakeholders enabled bidirectional communication channels, they were able to establish a shared commitment to the district and site goals. Specifically, through the use of the PLC structure, the key stakeholders facilitated a “common vision” which was aligned to district and site goals, which were focused on student achievement.
Leadership. While there was turnover of staff at the superintendent level in the past few years, the district and site leadership maintained an alignment on a similar set of goals. Focusing on the goal of student achievement, the leadership scaffolded multiple initiatives in an effort to support current efforts while trying to “keep the main thing, the main thing.” This was exhibited in the PLC structure, which facilitated the Response to Instruction (RTI) initiative, the Positive Behavior Intervention Support (PBIS) initiative, and the Simply Integrated initiative. While there are multiple efforts enacted simultaneously, there is a reported single focus on instruction and student achievement. Moreover, the district and site leadership modeled the desired behavior of data analysis through a series of PLC meetings and professional development offerings.

Collaborative and harmonious culture. There was a positive rapport among all stakeholder data in the Sterling School District. Specifically, the qualitative data of stakeholder perspectives helped to show that the culture included respectful communications and a community feel, while allowing disagreements to be settled in a professional manner. Moreover, this condition enabled a shared sense of decision-making and goal-setting, thereby reinforcing the shared commitment to communication and teamwork.

This condition also constrained some of the stakeholder response. Some of the stakeholders reported a separation of the team culture with regard to the local community. There is a sense of increased scrutiny and accountability in only certain situations, primarily tied to community funding sources. The “we” concept was also challenged when outside stakeholders were reportedly involved.
Discussion of Findings

This study sought to provide insight into the conditions that enable or constrain stakeholder response at a district level. The conceptual interaction framework presented in Figure 5.1 visually represents the theoretical propositions used to guide this study, while Figure 5.2 includes the conceptual framework for organizational learning conditions that were derived from previous research and included in this study.

![Proposed Interaction Model]

Figure 5.1: Proposed Interaction of Main Study Constructs
This section, which is divided into three parts, presents the findings within the context of the literature and findings. First, the district stakeholder response to Simply Integrated deepened the original conditions, while suggesting an organizational learning condition not previously employed in the foundational studies. Second, the data promotes methods for improving bidirectional communications by breaking mass communications into structured mini-conversations at multiple levels. Finally, this study found some formal organizational structures that have the potential to function as a
catalyst for internal action toward educational reform efforts, while also revises the initially-proposed conceptual interaction framework.

**Organizational communication as an organizational learning condition.** The district stakeholder response suggests a new organizational learning condition not previously employed in the foundational studies: Organizational Communication. Leithwood, Leonard, and Sharratt (1998) identified Outreach as a similar condition in their studies. Specifically, Leithwood, Leonard, and Sharratt (1998) reported:

> To foster learning, it was perceived to be useful for districts to use many different strategies for reaching out to schools-through newsletters, workshops, informal and electronic forms of communication, and the like. Especially influential were workshops--and mentoring programs, and specific change initiatives designed to assist in achieving district goals and priorities. (p.262)

This primarily uni-directional communication practice, while similar to Organizational Communication, lacks the reciprocal nature of the communication conditions found at Sterling. Moreover, the specifics of Leithwood et al’s. condition, while including some of the characteristics of the proposed Organizational Communication condition, aligned more closely with Marks and Printy’s (2002) condition of Shared Commitment and Collaboration due to its predominately unidirectional communication methods. Moreover, Marks and Printy’s (2002) condition included “deprivatized practice,” which is a method which allows for flexible professional grouping practices for the purposes of reflexive dialog and collaborative inquiry. Neither of these conditions, nor the Outreach construct, encompasses the method and activity proposed in Organizational Communication.
Grubb (2005) included Outreach in the Organizational Learning Condition Survey, but dropped the condition due to inconsistent loading of the variables to the construct. Moreover, when referencing Outreach, Grubb (2005) wrote, “the variables did not hang well together, they were weak, and their alpha reliability score was much lower than the other four conditions in the factor structure. As a result it was eliminated from the factor structure” (pg. 314-315). However, Grubb (2005) did suggest that Outreach should be included in future studies. This study dropped Outreach from the survey instrument in favor of the Leadership condition questions. This creates an implication for future research that is addressed later in this chapter.

While previous research findings on Outreach may be useful for districts interested in developing district capacity, the Organizational Communication condition is proposed as an ongoing commitment to bidirectional sharing and combination of information from stakeholders for purposes of learning, applying, or refining practice. The findings from this study support and deepen this premise of Organizational Communication as an organizing process, and further suggest it as an organizational learning condition.

Drawing from research involving private organizations, researchers have suggested organizational communication as a link between communicating and organizing. Orlikowski and Yates (1994) suggest that the “practice of communicating” is “a routine organizing activity” (p. 514). These researchers further suggest that communication is an essential factor in the organizing process (Orlikowski & Yates, 1994).
Organizational communication has also been explored in direct relation to organizational learning. Through an empirical study, Gennai (2006) proposed a link between organizational learning and organizational communication. While Gennai’s study employed an economical focus of organizational learning, much like those cited in the foundational works (see Chapter 2), the study used organizational communication as an analytic tool to see if the organizational learning process occurred. Gennai’s (2006) findings suggest that the original organizational learning construct be migrated from a “communication channel and communication efficiency to communication practices as [an] organizing process” (p. 13-14).

The findings from this study of Sterling School District support Gennai’s conclusion and suggest that Organizational Communication plays a role in organizational processes, and in organizational learning. The bidirectional communication channels found within Sterling give testament to a level of communication for understanding rather than an activity of one-way information promotion. The two-way communication process differentiation is proposed for consideration as it deepens the condition of Outreach. Moreover, there was evidence of the transmission and reception of information being an active exchange process.

Specifically, stakeholders at multiple levels echoed a theme of “good communications” and “intimate discussions” when discussing organization process and activity. Sterling’s stakeholder response was also notable for internal communication without undermining processes or questioning decisions. An early organizational learning researcher, Schein (2004), proposed some necessary organizational learning activities include a commitment to full and open task relevant communication. As
reported in the findings from the Sterling study, some stakeholders confirmed this theory, and added that an ongoing process of aligning communication was a necessary precursor for there to be a focus on shared goals.

Similarly, stakeholders echoed a theme of “open communication” which occurred often within the context of the Professional Learning Community. These open discussions were often cited within a context of behaviors, both internal and external. For example, with the exemption of a single participant, all interview participants specifically named or referenced communication channels that were participative, with some form of solicitation from all members and often all levels. Used similarly, Senge (1990) cites Openness as an environmental building block of the Shared Vision discipline. He writes that Openness is the combination of being “participative and reflexive” (Senge, 1990, p.277) and that both are necessary to produce true Openness. Senge further describes the behavioral aspect of Openness as a process to develop skills in mental modeling and team learning. “While reflective openness benefits significantly from reflection and inquiry skills, and from systems thinking knowledge and skills, openness is more than a set of skills [alone]” (Senge, 1990, p.284). Openness “is the heart of the learning organization” because it allows people “to create something new, something that has value and meaning to people” (Senge, 1990, p.286).

This participative and reflexive interaction does allow participants to create new knowledge within the individual, and within in the organization. As Nahapiet and Ghoshal (1998) argue, it is in the sharing, exchange, and combination of individual information that new knowledge is formed. Of “combination and exchange,” writes Nahapiet and Ghoshal, “…we believe that these two [aspects] indeed are among the key
organizational communication is the facilitation of these mechanisms, which allow for openness and the formation of social knowledge.

In addition to the behavioral leadership aspects of creating openness, this condition has close ties to the organizational learning condition of Leadership as well. The transformational leadership tenet of individualized consideration is a two-way communication practice, wherein the follower is given ownership of decisions, which leads to the fulfillment of their unique needs (Bass, 1985; Bass & Riggio, 2006). Not only was this transformational leadership principle evident in the findings, but also it appeared in sufficient quantity to warrant its own “data bin” in the qualitative analysis phase.

The results of this study suggest that Organizational Communication – encompassing information flow, communication climate, message content, and organizational development (Greenbaum, Hellweg, and Falcione 1987) – are as relevant an organizational learning condition as Leadership. Further mixing leadership, culture, and communication, one administrator reported, “These communication channels are also bound by mutual respect” (Admin 10, Interview Transcript, June 2011).

Summarizing this finding, Organizational Communication was a condition that emerged in the analysis of the qualitative data. However, as this condition, in its proposed form, was not included in any of the three foundational studies, it thusly was not included in the survey instrument. As a result, there was no quantitative data to suggest how the presence of this condition compared to the other four conditions. Nevertheless, there was ample qualitative data to support its presence and present a case
for inclusion as an organizational learning condition; deepening and expanding the previous condition of Outreach (Figure 5.3). While some might argue that Organizational Learning is actually foundational for the other conditions, one thing is obvious, “communication is as vital in organizational processes as learning” (Arlestig, 2007).

![Figure 5.3: Proposed Organizational Learning Conditions](image)

**Structures necessary for disseminating information at all levels.** The significant effect of organizational learning conditions on stakeholder response to a 21st Century change initiative suggests that organizational learning subsystems are important constructs, and have value as a diagnostic model for guiding actions. Focusing specifically on the condition of Congruence of Mission and Vision with Practices and
Beliefs, coupled with conditions of Leadership and the emergent Organizational Communication, the results suggest that structures are necessary for communicating information across all levels of the organization. The premise and discussion of this finding is that the organizational structures “can grow large while staying small” (Morgan. 2006, p.100). The Professional Learning Community model is a great example of this structure.

Empirical results from Sterling School District suggest that in addition to the importance of communication processes to be replicated within the organization, it is also important to have structures that allow for communication to happen at different levels. For example, it is insufficient to simply communicate a single message to all internal and external stakeholders in a mass communication action. Rather, the research findings suggest that the whole of communication be broken into multiple parts, including the requisite variety and redundancy based on the audience and responsibility of the intended participants.

Drawing loosely from Morgan’s (2006) theory of “networked intelligence,” communication systems need to be accessed from multiple points of views in order for individuals to become full participants in an evolving system. In accomplishing an analogous objective, Sterling began by holding informational focus groups with key stakeholders regarding the design of the initial 21st Century reform effort. From those meeting outcomes, the district formed an initial conception of the initiative, and held formal meetings with two stakeholder groups regarding the design of Simply Integrated. Although the initial design discussions were at a high level (mass communication), the district leadership reproduced this efforts deeper into the organization. Through this
action, similar discussions on the same topic were initiated at the district level, down to the administrative level, moving to the site, and ultimately at the PLC level.

These site and PLC level discussions included a micro lens of focus of the initiative, very similar to the “inside-out” reform perspective of Knapp (2002). Knapp’s perspective highlights the multiple demands on the teachers’ working lives, the way they make sense of these demands, and the conditions under which they try to engage students in learning” (p. 7). Sterling’s actions in creating the communication channels, specifically in leveraging the PLC structure, appeared as a combination of “networked intelligence” with the “inside-out” perspective. At the granular level, these discussions of Simply Integrated carried the same topic, but evidenced varied levels of discussion and specialization. For example, the initial focus group responsible for originating the 21st Century reform effort was comprised largely of key stakeholders with a high familiarity with 21st Century literacy skills. The specialization of these discussions was similar, but different as they were at a granular level of detail, and focused on the teacher’s individual activities. The subsequent communication forums evolved from a holistic design through the specific implementation strategies as the initiative traversed through the hierarchal levels of the communication structure.

The importance of these varied discussions is that multiple stakeholders had the opportunity to receive information and provide feedback on the initiative before it was enacted as policy at the district level. The district’s leadership provided the opportunity for these discussions, and in so doing, shared the leadership with multiple participants. The micro level of enactment was important as the principal had only a finite level of authority over the initiative as a whole, but a lot of authority at the school and classroom
levels. Similar to the shared leadership finding of Chrispeels (2004), these principals were not presented training on strategies for sharing leaderships, yet regardless they shared their authority with the teachers in the PLC groupings. The principal’s sharing of the decision-making and implementation process both empowered, and engendered the staff’s commitment. Although it was not measured in this study, it is highly likely that these actions created a high collective efficacy of the PLC participants, as indicated by the positive stakeholder response and subsequent successful enactment of Simply Integrated.

These structures of communication, coupled with the principal’s shared leadership, generated two primary benefits for the organization: First, individual stakeholders were provided to opportunity to become active participants in the process and to provide feedback that had a direct channel to the key stakeholders. Second, this mass and individualized communication process created a capacity for an “organizational mind”, which Morgan (2006) has theorized as “a new source of intelligence and growth throughout an organization” (p.101). So, not only was the staff encouraged to buy-in through personal encouragement, their involvement and experience benefited the larger whole.

This shared leadership and personal connection to the initiative, likely raised stakeholder opinion of the presence of the organizational learning conditions. Therefore, the communication structures surrounding Simply Integrated are likely an influencing variable in the stakeholder response to the organizational learning construct of Mission and Vision, which reported the highest mean score amongst all constructs. Moreover, these structures rely on a high level of trust with the district leadership, which is likely
influenced by the high perception of the Leadership condition reported by the survey participants.

**Methodological consideration of communication structures.** The findings from this study suggest that not only are structures for information dissemination necessary at all levels, but also that leadership must have an awareness of the communicative competence of the participants prior to creating these information structures. This is an important finding as it aids in both the communication structure design, and in the implementation conditions of the Organizational Communication construct. Without an awareness of the knowledge, skills, and beliefs of the staff, it is possible that communicative differences can arise. The phenomena of communicative differences exhibited itself in the Sterling data. Primarily, the effect manifested itself in a varied perception of inclusion in the decision-making process.

Despite the growing prevalence of technology in modern society, there remain large gaps in familiarity with 21st Century literacy skills amongst educators. “Digital immigrants,” as Prensky (2001) termed the population born before the advent of today’s technology, are being increasingly forced into a “digital native” world. Therefore, there is a need to identify both ends of this spectrum, and to account for individual association onto this continuum for the purposes of shaping the conversations regarding technological proficiency and 21st Century literacy skills.

“One often wants to generalize to social or culturally defined groups,” (Hojier, 1990, p.51), but as researchers and practitioners we must overcome these tendencies. The findings of this study suggest that Sterling made many assumptions about the level of
familiarity when designing the both the focus groups, and in designing the professional
development opportunities. The results of both the survey and interview data give voice
to assertion.

Specifically, the two lowest perceptions of organizational learning constructs
were Decision-Making and Knowledge and Skills. As these two constructs were
significantly less perceived compared to the other constructs, they were dropped from the
results. However, the qualitative data provided insight into the probable cause of these
low perceptions: low or incorrect methodological consideration by key stakeholders.

Methodological consideration is used in this context as an active plan to divide
the communication process into discrete groups based on fluency and competence of 21st
Century literacy skills (Hoijer, 1990; Kearns, 1991; Prins and Chupina, 2006). This is
very similar to Marks and Printy’s (2002) “deprivatized practice,” which is a method for
flexible professional grouping practices for the purposes of reflexive dialog and
collaborative inquiry. The precursor to any grouping design should be a functional
assessment of stakeholder participant’s knowledge, skills, and beliefs. This assessment
should inform the methodological or design consideration, resulting in a greater
communicative competence in and among the group members.

The lack of a functional, ideological, or cognitive assessment resulted in the
design of functional groups based on previously established criteria, primarily driven by
existing position within the organizational structure. The drawback to this design is the
possible alienation of stakeholders based on technological knowledge and experience.
The quantitative and qualitative results evidence this in multiple forms.
As the results showed, the participants existing knowledge of 21st Century literacy and skills likely has an influence on how participants viewed the decision-making process, and on the derived policies and resources from the district. This might be attributed to a lack of consideration when the leadership at Sterling designed the functional groups. This could also be an area for future development at Sterling. Additionally, the Knowledge & Skills construct included some highly varied, and statistically significant differences in mean scores. As these variances centered largely around the Classified sub-group, suggesting that importance needs to be placed on both including this group and in understanding the unique system roles of the individuals that comprise these groups.

While the scope and size of this study is relatively small, this is still an important finding. The data evidenced a highly positive perception of the conditions for organizational learning, and a generally positive influence of those conditions on the stakeholder’s response to the change initiative. However, there are groups of stakeholders who have been inadvertently minimized in the process. The voice of the Certificated participants in the 16-20 year bands would likely have benefited from more careful consideration when the district developed the focus groups.

The need for differentiation in group design transcends the topics of this study. However, the data suggest that those same design principles apply here. When undertaking a reform effort such as a 21st Century literacy initiative, leaders must assess and discuss the differences in knowledge and fluency between and among participants, and between the leadership and participants. This includes the differences in knowledge, context, role and interpretation. The purpose of these assessments is to create groups
where language is shared, and participants can fully participate, and not be intimidated as they develop the technical language and terminology correctly. Much like the challenges of foreign language learners, this communicative competence is important to “emphasize adequate translation for data collection” (Prins & Chupina, 2006, p.306).

Sterling likely would have benefited from a functional and cognitive assessment of participant 21st Century literacy skills before designing the communication channels and focus groups. This finding, which was evidenced from the results of this study, should assist other researcher practitioners in at least possessing an awareness of communicative competence and methodological considerations in the earliest stages of any reform design. The outcome of the reform, as well as the conditions for organizational learning, would likely have been affected with the foreknowledge and implementation of this finding. The actual influence of these constructs and conditions on the communication structures is an area for future research.

**Professional learning communities as a catalyst for internal action.** The results of this empirical study also suggest that formal structures are necessary not only for moving information throughout the organization, but also for instigating and maintaining change actions. Specifically, Professional Learning Communities (PLC) were found to be a vital link in Sterling School District’s ability to implement Simply Integrated. The PLC structure, implemented at all levels, contributed to the district’s enactment of a 21st Century change initiative by facilitating Organizational Communication, allowing for shared responsibility and personal ownership of change, while also functioning as a vehicle for implementing the specific actions required for the change initiative.
This study is not the first to propose that PLCs can positively influence both organizational learning conditions and change implementation. From the start, the architect of PLC proposed that “Learning by doing develops a deeper and more profound knowledge and greater commitment than learning by reading, listening, planning, or thinking” (DuFour, 2008, p.16). Hord (2008) expands this premise of intentional collegial learning in education:

People everywhere generally agree that the purpose of schools is student learning. Further, people are generally in agreement that the most significant factor determining whether students learn well is teaching quality. Teaching quality is improved through continuous professional learning. Today, the most promising context for continuous professional learning is the professional learning community. The three words explain the concept: Professionals coming together in a group - a community - to learn. (p. 10)

As reported in Chapter 2, many researchers have cited the importance of mobilizing human, social, and physical capacity in reformation efforts (March, 2000; Togneri & Anderson, 2003; Leithwood, et al., 2004). Moreover, researchers have found that physical capacity extends beyond technical resources of money and personnel to include normative aspects of district culture and values, as well as relationships, networks, and trust among individuals (Marsh, 2000; Massell, 2000). These are the specific tenets of this finding: that the professional learning community implementation at Sterling enabled stakeholders to leverage physical, social, and cultural capacities in implementing a 21st Century change initiative.

Whereas the results showed that Sterling scaffolded initiatives into systemic coherence, the findings suggest that the PLC structure was integral in enabling this response. Weathers (2009) proposed a similar scaffolding structure through the employ
of PLC. Specifically, Weathers (2009) reported that scaffolding structures should be investigated for potential benefits to teacher development, teaching strategies, and student performance. While ancillary to this specific finding, Weathers (2009) also found a positive relationship between learning communities and teacher efficacy, which supports the finding of methodological consideration identified earlier in this chapter.

“Because schooling is inherently a social enterprise”, Scaglierini (2008) reported that PLC “emerged as the catalyst for change” (p.288). He continues the description of successful PLC dynamics as “…the interplay of relational trust, leadership dynamics, interpersonal relationships” (Scaglierini, 2008, p. 288), which also have an impact on the personal and collective efficacy of the people involved. It is likely that although methodological consideration was not found at Sterling, the proposals of both Weathers and Scaglierini suggest that the presence of the PLC structure might have overcome the communicative challenges, and resulted in higher normative efficacy amongst the participants. This suggestion cannot be substantiated in the available data, but is an area for future research.

The PLC structure at Sterling also enabled the stakeholders to create a shared understanding of the details of the 21st Century change initiative, which enabled the implementation of the initiative. Marsh (2000) found that districts’ understanding and knowledge of reform influences the ways districts allocate resources, interpret, and implement policies, and the quality and quantity of support given to the reform ideas. Similarly, Sterling leveraged the regular PLC meetings to share information and lesson plans, which incorporated technological literacies.
Also in these PLC meetings, the bidirectional communication channels enabled the teachers at the middle school to implement an improved process for scheduling and using the multiple mobile computer labs available. The PLC structure provided means for the teachers to collaborate in developing the plan to meet a need, while simultaneously providing a structured communication channel to the principal who ultimately enacted the teacher’s recommendation. These small communicative successes build a foundation for other work. Reeves (2009) cites the importance of “creating short-term wins” as a vital psychological component in implementing change. This change to the mobile lab scheduling, both created a win for the PLC teachers, while supporting their implementation of Simply Integrated.

The aforementioned actions embody two of the five dimensions reflecting the essence of a PLC according to Hord (1997): Supportive relational and structural conditions, and Shared personal practice. Hord’s three remaining essential conditions of a PLC are Shared and supportive leadership, Shared vision and values, and Collective learning and application. All three of these essential conditions are closely aligned with the original organizational learning conditions proposed and found in this study. Therefore, it is indeterminate whether the organizational learning conditions enable the PLC response, or if the PLC conditions enabled the organizational learning response, or if it is a combination of the two. However, it is significant to identify that both were evident in the data from this study.

In addition to fostering organizational conditions for Sterling, the PLC structure had become the organizational glue which tied the various functional groups together. The PLC meetings provided the opportunity and context for collegial learning which
resulted in classroom action. Barth (2009) explains the importance of congeniality and collegiality in reform efforts. The former are the social aspects which allow people to work together, whereas the latter are the aspects of collaboration and accountability. The PLC structure implemented at Sterling provided both the time, and the opportunity for participants to build both congeniality and collegiality. However, according to Reeves (2009), 45 to 60 minutes three to five times per week, would still be insufficient without accountability. The accountability in this case, was realized through the stakeholder response of a focus on activities and data that supports student achievement.

Michael Fullan (2007) suggests that “it takes a fortunate combination of the right factors” (.p 26) to sustain change. This study was not directly focused on the outcomes of Simply Integrated, but rather the organizational learning conditions, which enabled or constrained the stakeholder response to the initiative. Therefore it would be presumptuous to evaluate the sustainability of initiative’s impact. However, it is probable, given the results of this study that Sterling happened upon their own fortunate combination of factors surrounding this initiative. These fortunate factors, as researchers have proposed, have been exhibited to various degrees within Sterling’s PLC implementation. Therefore, it is important to realize that the PLC structure was a catalyst for implementing this 21st Century change initiative.

**Initiative implementation model.** The Sterling data suggests that there are some key success factors that need to be considered when designing and implementing a 21st Century change initiative. Primarily, it is important to understand the context of the environment, the existing resources available within the district (including human, social, and physical capital), and to assess the extent to which organizational learning conditions
are present according to all stakeholders. After the assessment, a commitment to a shared vision is foundational to all other activities in order to promote a successful implementation of a 21st Century literacy initiative.

The initial step in the implementation of any initiative should be a thorough assessment of the organization, including feedback from all stakeholders. It is important to have an understanding of the resources available, stakeholder perception, and the organizational learning conditions present, prior to any action. These pieces of information will inform the decisions, and modify the actions. Moreover, the lack of an existing organizational learning condition does not necessarily negate success any more than the complete presence of all conditions would guarantee success. However, the lack of an organizational learning condition is likely to have major ramifications to the success of any initiative, and would need to be accounted for at the outset.

As the data suggest, the most important organizational learning condition is Congruence of District Vision and Mission with Practices and Beliefs. This condition is foundational to the success of 21st Century change initiatives. Therefore, it is important for district leadership to build a shared vision throughout the organization. This vision will be leveraged throughout the life of the initiative.

Next, district leadership must ensure that the initiative fits within, or is scaffolded upon, existing stakeholder successes. Moreover, these successes need to be tied to the district’s communal sense of Mission and Vision. This scaffolding of successes, coupled with a deliberate grouping of stakeholders based on their communicative competence of the subject matter, will promote additional successful conditions for the initiative’s uptake into the organization.
It is also vital to create or leverage the organizational learning communication structures to facilitate bidirectional communication regarding the initiative in the earliest planning stages. Moreover, bidirectional communication is as important as the level of trust the stakeholder have in the communications themselves. The lack of trust or use of the communication channels will have consequences for, or manifest themselves in, both implementation and practice.

Finally, as Sterling’s data showed, it is also vital to have a method to share leadership, create distributed ownership, and enable action at all levels. This includes an appropriate building of communities wherein stakeholders can pay personal attention to the individual circumstances that affect their development, and the initiatives deployment. If the stakeholders are not invested in the idea, premise, or purpose of the initiative, there will be little momentum for action. Conversely, with buy-in, including sharing and communicating, stakeholders can do amazing things.

Findings from this study suggest a possible model for conceptualizing organizational conditions that support organizational learning. This model is graphically summarized Figure 5.4. As shown in Figure 5.4 every change initiative is influenced by context and environmental influences. In this case, the district context such as an affluent and educated community and external national recognition of the need to focus on 21st century skills, shaped the districts change initiative, This study confirmed that previously identified conditions for learning were present and influenced the successful implementation of the initiative. Although knowledge and skills and shared decision-making were not confirmed as strong pre-existing conditions, they were present to a reasonable degree as confirmed both in the interviews and surveys. The study also
confirmed that leadership for this specific change initiative was critical. Its transformative importance is indicated in the model by placing it as a major factor driving the initiative. Through leadership a shared vision and purpose for the specific change was achieved. Leadership was also found to be critical in crafting two other critical organizational variables that supported the change: bi-directional organizational communication and participatory structures for involvement. These two factors are given prominence in the model because the data showed they were critical to organizational learning and shed new light on conditions that may need to be present for deep organizational learning. The importance of these last two variables seems to have been under-estimated in the literature as drivers of successful learning and change. As shown, the Initiative Implementation Model places a heavy emphasis on the understanding and accounting of the environmental context, including the resources and conditions in both abundance and scarcity within the organization. Next, a very high importance is placed on the shared vision, which is leveraged by communication and structures These structures will be used by the leadership to collectively develop the initiative, while ensuring that the efforts are in conjunction or concurrence with existing efforts (scaffolding). Finally, the change initiative itself must engender a shared purpose and a shared responsibility amongst the stakeholders in order to enable action.
Implications for Practice

This study offers many implications for practice, particularly for districts interested in effecting large-scale improvements in 21st Century literacy. First, practitioners need to analyze the embedded conditions in which schools exist within the district. Awareness of the conditions should provide district and site leaders with information by which to facilitate reform efforts. Also, as shown in the Initiative Implementation Model, the context of the environment is vitally important. Existing research proposes, and the findings of this study confirm, that human, social, and physical resources are all necessary in the implementation of policies. Therefore, these resources must be accounted for in the earliest stages of consideration. Moreover, the
existence or absence of the resources should be a preliminary consideration for routine operations outside of reform efforts.

Next, practitioners need to understand that bi-directional communication is vital, and likely more important than the other organizational learning conditions. Leadership at all levels needs to build structures that promote and facilitate communication and participation throughout the organization. Little (1986), argues “Greater success occurs as a result of frequent communication, working together, and sharing new ideas and possibilities for accomplishment (as cited in Chrispeels, 2005, p. 74). District and site administration do not need a reform or change initiative in order to build, use, or monitor these communication channels, but these structures will enable the resultant change initiatives. Member checking and other reciprocal communication activities can facilitate the building and monitoring the communication channels. An example of this would be the “Leadership-Network Reciprocation Model” as proposed by Gross (2011).

It is also important for district and site leaders to assess current district conditions that promote organizational learning before launching a new initiative. As shown in this study, organizational learning conditions primarily enabled a positive response to a 21st Century literacy change initiative. If the conditions are not present, leaders may need to create or build more effective communication channels and participatory structures before launching programmatic changes. As the case with Sterling, the low stakeholder perception of a condition should be cause for development in this area. This forethought and action should be prepared as a precursor to starting a large scale reform effort.

Additionally, it is important to promote the engagement of multiple stakeholders in district activities. Engaging and supporting multiple stakeholders may require
differentiated practices that address the individual needs and strengths of each stakeholder group. As shown in this study, different strategies may be necessary for engaging and sustaining the engagement of stakeholder groups based on their level of competence with the initiative’s details or subject matter.

Finally, invest in an effort to scaffold initiatives into systemic coherence. Change takes times, and scaffolding initiatives better allows for the requisite time to enact change. Scaffolding also provides a guide by which additional initiatives are judged for fit and application. The data also suggests that prior success can enable positive stakeholder response to continued action.

**Implications for Policy**

Districts are charged with interpreting, implementing, and making policies which influences and drives reform efforts. This study is timely in that districts will be facing an increased need to integrate these literacies into policy, especially in light of the adoption of the Common Core State Standards. It is also highly likely that the current state of technology has already created additional 21st century literacies, which further highlights the need to consider implementation now.

Moreover, this study has shown that organizational learning conditions influence the implementation of the 21st Century literacy plan. Therefore, it is important for policymakers to understanding the interplay between these conditions and the application of policy on both a small and wide scale. This understanding should influence the development of future policy to ensure that districts attend to developing these conditions before undertaking major reform initiatives.
Another implication for policymakers is to understand the interaction of subsystems within the organization prior to policy formation. Used in this context, the subsystems are the communication channels, and the participatory structures. The findings from this study suggest that organizational communication is critical to successful implementation, but the communication structures must facilitate two-way exchanges especially between policy initiators and the primary policy implementers—classroom teachers. Too often teacher voices are left out of policy design. Although not all shareholders in this study had as much voice as they may have desired, they did have sufficient voice and ownership of the initiative to embrace it and implement it in their classrooms. However, the interactions between these two findings, and how that influence changes based on the social context, is important for accountability policy development.

Specifically, this embedded case study captured phenomena about the interaction of stakeholders within a certain context. From these interactions, another implication arose. District policymakers need to balance different approaches to student data collection and use. While data should be used to inform practice and guide decisions, the selection and unification of data points is an area that policy needs to address. It is important to include multiple stakeholders in the policy development for data indicator use within the district. Without a wide voice in policy implementation, a difference in shared responsibility will manifest itself. This difference can challenge the stakeholder’s idea of shared purpose, impacts the organizational learning conditions, and will likely impact the resultant data the policy was meant to analyze. The lack of a shared
responsibility and purpose might also affect stakeholder practice, thereby unraveling current reform efforts.

Finally, Districts accountability policies should increase the use of best instructional practices that combine multiple methods (visual, auditory, kinesthetic & tactile) with multiple modalities (hi-tech, low-tech, and no-tech). This integration of 21st Century tools (technological tools), coupled with 21st Century literacies, will create in-district mechanisms to change practices to align with a changing environment. This implication for policymakers is important regardless of a reform effort.

**Implications for Research**

Findings from this study indicate three avenues for future research. First, this study suggested that districts would likely benefit from a functional and cognitive assessment of participant 21st Century literacy skills before designing the communication channels and focus groups to be used in reform implementation. The premise is that organizational learning conditions would be enabled or constrained by the communication channels, and the communicative competence of the participants. While the finding was suggested from the results of this study, the actual influence of these communication structures is an area for future research.

Next, the findings of this study suggest the PLC structure might have overcome communicative challenges in reform implementation, and resulted in higher normative efficacy amongst the participants. However, this suggestion cannot be substantiated in the available data. While researchers have suggested similar implications for PLCs (Hord, 1997; Scaglierini, 2008, Weathers, 2009), this specific influence on outcomes remains an area for future research.
Outreach, as an organizational learning condition, was dropped from the survey instrument used in this study. However, the findings clearly suggest that communication is important. Future research should include the Outreach condition questions. Moreover, the proposed Organizational Communication condition needs to be explored and refined in future research.

Finally, it is possible that the underrepresentation of two organizational learning conditions (Knowledge & Skills and Decision-Making) had an impact on Sterling’s outcomes. Additional research is necessary to investigate the phenomenon of the low perceptions of these conditions, and to derive if they are unnecessary within the context, or if they should be fostered and developed within the organization. Moreover, future researchers need to explore how these organizational learning conditions influence each other, and not just the resultant responses of the stakeholder actions. It is possible that these two conditions were embodied in the other conditions, thereby negating their influence in isolation. However, these cannot be explored fully given the available data from this study, and therefore remains an area for future research.

Closing

The purpose of this study was to assist in deciphering the complexities and potential of organizational learning as a strategy for knowledge transfer, and improving student learning on a large scale. Four conditions for organizational learning were identified as strongly present in the study: Collaborative and Harmonious Culture, Congruence of District Vision and Mission with Practices and Beliefs, Leadership, and Policies and Resources for Promoting Learning. Additionally, four district actions emerged, including: Creating a Shared Commitment to Collaboration, Scaffolding
Initiatives into Systemic Coherence, Providing a Systematic Structure for Involvement and Communication, and Focusing on Activities, Data, and Decisions that Support Student Achievement. Findings from this research demonstrated empirical support for the relationship between the conditions and the responses.

This research contributed to theory primarily by elaborating and refining the conditions needed for organizational learning to enhance educational practice by showing the importance of transformational leadership for planned specific reform, and the critical role of bi-directional organizational communication and participatory structures. The model presented in Figure 5.4 provides a new framework for thinking about conditions for organizational learning that can be tested in future research. Finally, on a practical level, this study provided support for making organizational learning a priority in building long-term initiatives at the district level. In summary, this study suggests a need to make organizational learning and the conditions that support it a priority in research, policy, and practice.
APPENDIX A

District Organizational Learning Conditions Survey: Final

Classification: Please check the appropriate box(es) for classification purposes only (responses will remain anonymous)

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<th>1-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>21 +</th>
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<tr>
<td>Years in Education</td>
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<td>Years at Current Work Site</td>
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<td>Years in Current Position</td>
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<td>Highest Education Level</td>
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Achieved

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<th>BA/B</th>
<th>BA + 15</th>
<th>MA/MS</th>
<th>MA+15</th>
<th>ED/PHD</th>
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<td>BA/B</td>
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<td>BA + 15</td>
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<td>MA+15</td>
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<td>ED/PHD</td>
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Position: Please check the appropriate box(es) to indicate your role(s) in the district.

- Central Office Administrator
- Classified Employee
- Parent
- Student
- Site Administrator
- Superintendent
- Teacher

To what extent do you agree or disagree with the following statements?

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<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td>1</td>
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<td>Our district engenders feeling of community among schools.</td>
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<td>2</td>
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<td>Our district decision-making process is effective.</td>
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<td>I have a clear understanding of our district's Simply Integrated: 21st Century literacy plan.</td>
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<td>4</td>
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<td>Contributions of individuals and groups to our district are valued.</td>
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<td>5</td>
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<tr>
<td>Our district community is collaborative and harmonious.</td>
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</table>
Disagreements in our district are resolved in a professional manner.

Our district identifies and articulates a vision.

I would describe our district as a community.

There are multiple forums and opportunities for me to participate in district-wide decisions.

Lesson learned by individuals and groups in the district are quickly shared with others who can use them.

Our district mission is clear, and I understand it.

Our district provides substantial opportunity for professional learning.

Our district provides sufficient financial resources for our professional learning.

I understand my role as an educator under the district's Simply Integrated: 21st Century literacy plan.

Change is accepted in our district.

I have participated in district workshops related to Simply Integrated: 21st Century literacy plan.

Our district provides substantial release time for professional learning.

Our district mission is meaningful to me.

Our district has a clear vision related to improving programs and instruction.

Decision-making processes are shared and transparent.
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<thead>
<tr>
<th></th>
<th>Our district fosters the acceptance of group goals</th>
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<tr>
<td>21</td>
<td>Our district conveys high performance expectations</td>
<td></td>
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<td>22</td>
<td>There are ample district professional development opportunities to support teaching and learning.</td>
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<td>23</td>
<td>Our district provides expert personnel as a resource for our professional learning.</td>
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<td>24</td>
<td>Our district vision reflects my personal vision for student learning.</td>
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<td>25</td>
<td>The decision-making process in our district provides for input from schools.</td>
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<td>26</td>
<td>Our district provides appropriate materials to support our professional learning.</td>
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<td>27</td>
<td>Our district has an impact on my learning.</td>
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<td>28</td>
<td>Professional learning activities reflect the district vision.</td>
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<td>29</td>
<td>Our district provides appropriate models.</td>
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<td>30</td>
<td>I actively share my knowledge about curriculum and instruction with my colleagues.</td>
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<td>31</td>
<td>I have a clear understanding of all of the provisions of Simply Integrated: 21st Century literacy plan.</td>
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<td>32</td>
<td>Our district goals are aligned to the goals of Simply Integrated: 21st Century literacy plan.</td>
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<td>33</td>
<td>Personally, I am dedicated to doing my absolute best to achieve the district vision.</td>
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<td>35</td>
<td>My stakeholder group (teachers, parents, etc) is involved in making important district decisions.</td>
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<td>36</td>
<td>Our district builds a productive school culture</td>
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<td>Would you be willing to participate in a follow-up interview regarding these topics?</td>
<td>Yes</td>
<td>No</td>
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<td>If Yes, please type your name in the box (your responses will remain anonymous regardless of your participation in the interview process)</td>
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</table>
Victor Guthrie, Ed.D candidate at UCSD, is conducting a research study to find out more about conditions influencing organizational learning. You have been asked to participate in this study because you are a stakeholder within the Sterling School District. There will be approximately 250 participants in this study. The purpose of this study is to assist in deciphering the complexities and potential of organizational learning as a strategy for knowledge transfer, and improving student learning on a large scale.

If you agree to be in this study, the following will happen to you:

You will complete a survey, which will take 30-40 minutes to complete. The survey includes questions about your experiences in the district. Other survey questions will address your perceptions of district leadership, programs, and change initiatives. I also will ask for some classification information (e.g., years in education, years at current work site, years in current position, highest education level achieved, and current position classification) so that I can accurately describe the general traits of the group of participants who participate in the study.

Participation in this study may involve some added risks or discomforts. These include:
1. A potential for the loss of confidentiality. Confidentially is of the utmost importance. I will be the only person who has access to participant data, and will keep it protected in a secured location. Two additional steps will protect the anonymity of the participants: (a) there will be no individual identifiers on the survey, only stakeholder group identifiers and (b) pseudonyms will be used for the district as well as the four schools in the study. Moreover, research records will be kept confidential to the extent allowed by law. Research records may only be reviewed by the UCSD Institutional Review Board.

Because this is a research study, there may also be some unknown risks that are currently unforeseeable. You will be informed of any significant new findings.

The alternatives to participation in this study are simple. You can simply opt not to participate.

There may or may not be any direct benefit to you from participating this study. The investigator, however, may learn more about conditions fostering organizational learning, and society may benefit from this knowledge.

Participation in research is entirely voluntary. You may refuse to participate or withdraw or refuse to answer specific questions in an interview or on a questionnaire at any time without penalty or loss of benefits to which you are entitled. If you decide that you no longer wish to continue in this study, simply discontinue your participation.

The principal investigator may remove you from the study without your consent if the principal investigator feels it is in your best interest or the best interest of the study. You may also be withdrawn from the study if you do not follow the instructions given you by the study personnel.
You will be told if any important new information is found during the course of this study that may affect your wanting to continue.

This is an unfunded study. There will be no compensation for your time.

There will be no cost to you for participating in this study.

Victor Guthrie has explained this study to you and answered your questions. If you have other questions or research-related problems, you may Victor at 714-371-3487.

You may call the Human Research Protections Program Office at (858) 455-5050 to inquire about your rights as a research subject or to report research-related problems.

You have received a copy of this consent document.

Your agreement to participate is indicated by your completion of the survey document.
Victor Guthrie, Ed.D candidate at UCSD, is conducting a research study to find out more about conditions influencing organizational learning. You have been asked to participate in this study because you are a stakeholder within the Sterling School District. There will be approximately 250 participants in this study. The purpose of this study is to assist in deciphering the complexities and potential of organizational learning as a strategy for knowledge transfer, and improving student learning on a large scale.

If you agree to be in this study, the following will happen to you:

You will complete an interview, which will take 30-45 minutes to complete. The survey includes questions about your experiences in the district. Other survey questions will address your perceptions of district leadership, programs, and change initiatives. I also will ask for some classification information (e.g., years in education, years at current work site, years in current position, highest education level achieved, and current position classification) so that I can accurately describe the general traits of the group of participants who participate in the study.

Participation in this study may involve some added risks or discomforts. These include:
1. A potential for the loss of confidentiality. Confidentially is of the utmost importance. The interviewer will collect the data, but Victor Guthrie will be the only person who has access to participant data, analysis, and summary reporting. All data will be kept in protected and secured location. Two additional steps will protect the anonymity of the participants: (a) there will be no individual identifiers in the interview, only stakeholder group identifiers and (b) pseudonyms will be used for the district as well as the four schools in the study. Moreover, research records will be kept confidential to the extent allowed by law. Research records may only be reviewed by the UCSD Institutional Review Board.

Because this is a research study, there may also be some unknown risks that are currently unforeseeable. You will be informed of any significant new findings.

The alternatives to participation in this study are simple. You can simply opt not to participate, or conclude the interview at any time. You may also ask to revoke any part of your participation at any point during or after the interview.

There may or may not be any direct benefit to you from participating this study. The investigator, however, may learn more about conditions fostering organizational learning, and society may benefit from this knowledge.

Participation in research is entirely voluntary. You may refuse to participate or withdraw or refuse to answer specific questions in an interview or on a questionnaire at any time without penalty or loss of benefits to which you are entitled. If you decide that you no longer wish to continue in this study, simply discontinue your participation.

The principal investigator may remove you from the study without your consent if the principal investigator feels it is in your best interest or the best interest of the study.
You may also be withdrawn from the study if you do not follow the instructions given by the study personnel.

You will be told if any important new information is found during the course of this study that may affect your wanting to continue.

This is an unfunded study. There will be no compensation for your time.

There will be no cost to you for participating in this study.

Victor Guthrie and/or __________________ has explained this study to you and answered your questions. If you have other questions or research-related problems, you may Victor at 714-371-3487. You may call the Human Research Protections Program Office at (858) 455-5050 to inquire about your rights as a research subject or to report research-related problems.

You have received a copy of this consent document.

You agree to participate.

_________________________  _______________________  _______________
Subject's signature  Witness  Date
APPENDIX D
UNIVERSITY OF CALIFORNIA, SAN DIEGO

Learning to Change, Changing to Learn: District Conditions for Organizational Learning

Audio Recording Release Consent Form

As part of this project, an audio recording will be made of you during your participation in this research project. Please indicate below the uses of these audio recordings to which you are willing to consent. This is completely voluntary and up to you. In any use of the audio recording, your name will not be identified. You may request to stop the recording at any time or to erase any portion of your recording.

1. The audio recording can be studied by the research team for use in the research project.

   ________
   Initials

2. The audio recording can be used for scientific publications

   ________
   Initials

3. The audio recording can be reviewed at meetings of scientists interested in the study of Organizational Learning.

   ________
   Initials
You have the right to request that the recording be stopped or erased in full or in part at any time. You have read the above description and give your consent for the use of audio recording as indicated above.

__________________________________________

__________________________________________

Signature    Date    Witness

Date
Victor Guthrie, Ed.D candidate at UCSD and CSUSM, is conducting a research study to find out more about conditions influencing organizational learning. You have been asked to participate in this study because you are a stakeholder within the Sterling School District (*Sterling is the pseudonym used throughout the study to protect the identity of all participants*). There will be approximately 250 participants in this study. The purpose of this study is to assist in deciphering the complexities and potential of organizational learning as a strategy for knowledge transfer, and improving student learning on a large scale.

If you agree to be in this study, the following will happen to you:

You will complete a survey, which will take 30-40 minutes to complete. The survey includes questions about your experiences in the district. Other survey questions will address your perceptions of district leadership, programs, and change initiatives. I also will ask for some classification information (e.g., years in education, years at current
work site, years in current position, highest education level achieved, and current position classification) so that I can accurately describe the general traits of the group of participants who participate in the study.

Confidentiality is of the utmost importance. I will be the only person who has access to participant data, and will keep it protected in a secured location. Two additional steps will protect the anonymity of the participants: (a) there will be no individual identifiers on the survey, only stakeholder group identifiers and (b) pseudonyms will be used for the district as well as the four schools in the study. Moreover, research records will be kept confidential to the extent allowed by law. Research records may only be reviewed by the UCSD Institutional Review Board.

There may or may not be any direct benefit to you from participating in this study. The investigator, however, may learn more about conditions fostering organizational learning, and society may benefit from this knowledge.

Participation in research is entirely voluntary. You may refuse to participate or withdraw or refuse to answer specific questions in an interview or on a questionnaire at any time without penalty or loss of benefits to which you are entitled. If you decide that you no longer wish to continue in this study, simply discontinue your participation.

If you have questions regarding this study, I will be happy to answer them now. If you have any questions in the future, please contact me at 714-371-3487, or vulthrie@ucsd.edu. Additionally, questions can be directed to my advisor, Dr. Alan Daly, at ajdaly@ucsd.edu. If you have any questions about your rights as a research participant, you may contact the Institutional Review Board at the University of California, San Diego Human Research Protections Program at 858-455-5050.
Victor Guthrie and/or __________________ has explained this study to you and answered your questions. If you have other questions or research-related problems, you may Victor at 714-371-3487. You may call the Human Research Protections Program Office at (858) 455-5050 to inquire about your rights as a research subject or to report research-related problems.

You have received a copy of this consent document.

Your agreement to participate is indicated by your completion of the survey document.
APPENDIX F

UNIVERSITY OF CALIFORNIA, SAN DIEGO

Learning to Change, Changing to Learn: District Conditions for Organizational Learning

Interview Protocol

Introduction: 8 minutes. Introduce the interviewer; hand bio

Before we begin this interview, let me describe a little about the purpose of the interview. We are conducting a research study to find out more about conditions influencing organizational learning. The purpose of this study is to assist in deciphering the complexities and potential of organizational learning as a strategy for knowledge transfer, and improving student learning on a large scale.

You have been asked, or have been selected, to participate in this study because you are a stakeholder within the Sterling School District (Sterling is the pseudonym used throughout the study to protect the identity of all participants).

Your participation in this interview is completely voluntary.

This interview consists of four sections. The first section focuses on you as an individual member of the district. The second section asks questions about your role as a stakeholder representing a particular group (e.g. parents, teachers, union, administrators, school board, etc.). The third section explores specific questions about the district. The final section centers on Simply Integrated and the continuance of 21st Century literacy initiatives.
There are no right or wrong answers to these questions. We want to know your thoughts right now. If you cannot answer, or do not want to answer any question, that is fine. Please feel free to say so.

To help us more accurately capture your ideas, we would like permission to audio tape this interview. Do we have your permission? (GIVE THEM THE CONSENT FORM, SIGNATURE REQUIRED).

All written, audio, and oral information will be transcribed and maintained in a locked file cabinet in the research office of the Principal Investigator. Information from this interview will not be used for any purpose other than this study. All information will be treated with utmost confidentiality and no individual will be identified.

The composite information from the interviews, and our ongoing study, will help us to understand the conditions which affect organizational learning. We would like to take no more than 45 minutes of your time. We appreciate your willingness to participate in this study and collaborate with this research endeavor.
A. Individual Stakeholder: (SUGGESTED TIME: 8 minutes)

In this section, we will be asking you questions related to your role as a representative of the _______________________ (e.g., parents, teachers, union, administrators, etc.) at LBUSD.

1. Briefly describe your role in the group you represent?
2. What is your personal vision for student learning?
3. In what ways do other groups of stakeholders (e.g., parents, teachers, administrators, etc.) contribute to achieving your vision?
4. As a _________________ (e.g., parent, teacher, administrator, etc.), do you feel your voice is heard in the district? In what ways?
5. As a representative of the _________________ (e.g., parents, teachers, administrators, etc.) group, how would you describe the quality of communication among your group's members?
6. Describe one or two ways your _________________ (e.g., parents, teachers, administrators, etc.) group has contributed to achieving district goals.
   a) You mentioned that ____ was a contribution your group has made, how well was that contribution received by the district administration, the board?
   (Note if interviewing administrators, ask how well received by union, parents, board)

B. District Team: (SUGGESTED TIME: 8 minutes)

In this section, we ask you to tell us about the group that you are a member of through participating in Simply Integrated, and the continuance of 21st Century Literacy
advances. We realize that you may not be able to answer all the questions. Just tell us what you know.

1. How do you perceive your role in this group?
2. How would you characterize the relationships among the stakeholders in this group?
3. What do you see as the strengths of this group?
4. What do you see as potential challenges?
5. In what ways do you feel this group might be able to make organizational change?

C. District Culture: (SUGGESTED TIME: 20 minutes)

In this section, we will ask you to tell us about your district.

1. In your own words, tell me about the district's direction over the past 4 years.
   a) Is this direction consistent with the district's stated goals?
   b) How do the different stakeholder groups participate in helping to achieve district's goals?
2. What is the district focusing on right now?
   a) Do you think this is what the district should be focusing on? If not, what should be the focus?
   b) How is the group that you represent involved in the current focus?
   c) Are there some stakeholders that are not involved?
3. When you say district, what does that mean to you?
4. Briefly, how would you describe or characterize the climate and culture in this district?
a) Why do you say that?

5. As a (e.g., parent, teacher, administrator, etc.), tell me a little about how various groups of people work together in this district.

6. Tell me about the leadership in this district.
   a) Who are the leaders?
   b) How do you draw that conclusion?

7. What actions has the district recently taken to improve learning and instruction?

8. What opportunities does the district provide for your professional learning and development?
   a) Are these opportunities aligned to the district focus?

D. Simply Integrated and 21st Century Literacy initiatives: (SUGGESTED TIME: 7 minutes)

   In this section, we are going to ask you questions about Simply Integrated and the continuance of 21st Century Literacy initiatives.

   1. Tell me what Simply Integrated, and/or 21st Century Literacy, means to you?
   2. Based on your understanding, do you think your district is implementing it?
   3. On a scale of 1-5, how far do you feel the district is in this process of implementation of 21st Century Literacy skills (1 not at all- 5 completely implemented)
   4. What factors do you feel need to be in place for 21st Century Literacy initiatives to be successful?
5. How will the district measure its success?

6. What issues do you see the district encountering in implementing Simply Integrated and 21st Century Literacy initiatives?

7. Is there anything else you would like to tell us?
APPENDIX G

UNIVERSITY OF CALIFORNIA, SAN DIEGO

Learning to Change, Changing to Learn: District Conditions for Organizational Learning

Document/Archival Analysis Protocol

1. TYPE OF DOCUMENT (Check one):
   ___ Memorandum  ___ Report  ___ Board of Education policy
   ___ Letter  ___ Press Release  ___ Board of Education record/agenda
   ___ Flyer  ___ Meeting Minutes  ___ Board of Education report
   ___ Other

2. UNIQUE PHYSICAL QUALITIES OF THE DOCUMENT (Check one or more):
   ___ Letterhead  ___ Notations
   ___ Handwritten  ___ "RECEIVED" stamp
   ___ Typed  ___ Other
   ___ Seals

3. DATE(S) OF DOCUMENT:

   _______________________________________________________________________

4. AUTHOR (OR CREATOR) OF THE DOCUMENT:

   _______________________________________________________________________

   POSITION (TITLE):

   _______________________________________________________________________
5. FOR WHAT AUDIENCE WAS THE DOCUMENT WRITTEN?

________________________________________________________________________

6. FOR WHAT PURPOSE WAS THE DOCUMENT WRITTEN?

________________________________________________________________________

7. DOCUMENT INFORMATION

A. List three things the author said that you think are important: (Historical content)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

B. Why do you think this document was written? (Historical context)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

C. What evidence in the document helps you know why it was written? Quote from the document.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

D. List any things the document tells you about the district’s culture at the time it was written:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

E. List any things the document tells you about the district’s leadership at the time it was written:

________________________________________________________________________
F. List any things the document tells you about the district’s learning, or learning processes, at the time it was written:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

G. List any codes that arose from the document:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

H. List any themes that arose from the document:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

I. Write a question to the author that is left unanswered by the document:

________________________________________________________________________
________________________________________________________________________
References


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Thyer, G. L. (2003). Dare to be different: Transformational leadership may hold the key to reducing the nursing shortage. Journal of Nursing Management, 11(2), 73.


