THE ROLE OF THE SUPERINTENDENT IN REDEFINING SCHOOLS
FOR STUDENTS TO BE SUCCESSFUL IN THE 21ST CENTURY

A Doctoral Research Project
Presented to
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In Partial Fulfillment of the
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Abstract

The divide that separates traditional methods of teaching and learning from how students learn new knowledge and skills for the 21st century has plagued the United States education system for the past decade. Expanded education goals have led to a more comprehensive definition of student success, which presents significant challenges for leaders regarding how to implement 21st century teaching and learning in their school districts. The challenge for superintendents in the current educational climate is how to transform school districts from a traditional framework of education to a 21st century paradigm for learning. Despite the challenges, many superintendents have made, or are in the process of making, the shift from a traditional learning paradigm to a 21st century learning model.

The changing landscape of education to 21st century learning provided an opportunity to complete a study on the actions superintendents take to implement 21st century learning in their school districts. This study utilized a qualitative research design that included interviews to examine how thirteen superintendents in public school districts across the nation made a shift in their districts from the traditional model of education to 21st century learning. The results were analyzed for themes regarding similarities and differences in superintendents' actions to incorporate 21st century teaching and learning in their districts on a system-wide scale. Findings of the research in this study support that school district superintendents take similar specific actions to transform their school districts to 21st century learning environments.

Recommendations resulting from this study focus on creating a shared vision for 21st century learning.

Key Words: 21st century learning; superintendent's actions; systemic school reform; 21st century vision, 21st century leadership.

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CHAPTER I

Introduction

Background and Overview

In recent years there has been a call for school leaders across the country to improve our education system. State and federal governments have assumed a greater role in education. Stringent standards and accountability measures, including the new Common Core Standards and the Annual Professional Performance Review, are just a few of the initiatives that indicate a higher level of state involvement in education. President Obama's *Race to the Top* initiative also represents a broader federal hand in education.

The call for school reform leaves no shortage of efforts to revise and improve teaching and learning (Leithwood, et al., 2004). However, with the advent of the 21st century and the technological revolution, the need to reform our schools has evolved into the need to transform our schools as institutions in order for students to be successful in the 21st century (Bellanca & Brandt, 2010a). The growing need to reinvent our education system to address how we educate our youth has resulted in new frameworks for education that have been created by various groups of business leaders, researchers and other experts (Bellanca & Brandt, 2010a). These new frameworks define 21st century skills.

According to Dede (Bellanca & Brandt, 2010a) the framework developed by The Partnership for 21st Century Skills (P21) is the most comprehensive of the numerous frameworks developed and designed for 21st century learning; and the one that is utilized more broadly than the others (Bellanca & Brandt, 2010a; Schwarz & Kay, 2006a). The P21 organization, which is different from the P21 framework, adopted a vision and structure for 21st century learning and identified skills that encompass more than technology. This study will use a definition of 21st

century learning that is based upon the P21 framework created by the Partnership for 21st Century Skills organization.

According to The Partnership for 21st Century Skills, twenty-first century learning encompasses "skills, knowledge and expertise students must master to succeed in work and life; it is a blend of content knowledge, specific skills, expertise and literacies" (Partnership for 21st Century Skills, 2009, p. 1). Twenty-first century learning is also "the development of core academic subject knowledge and understanding among all students", as well as skills that allow students to "think critically and communicate effectively life and career skills", such as: flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, leadership and responsibility" (The Partnership for 21st Century Skills, 2009, p.1). These skills can be embedded into the curriculum and integrated into instructional practices by infusing technology and the learning tools critical to fostering them.

Most recently the P21 framework developed by the Partnership for 21st Century Skills has condensed the framework to state it is the infusion of the 3Rs: reading, writing and arithmetic with the 4Cs which are: critical thinking and problem solving, communication, collaboration, and creativity and innovation (The Partnership for 21st Century Skills, n.d).

According to Bellanca and Brandt (2010) systemic reform to 21st century learning is not easy, yet, school districts across the country have embarked on the journey. However, no matter what the reform effort, without leaders who agree with the reform purpose and recognize what is required to make it work, the effort will not be successful (Leithwood, et al., 2004). Ziegenfuss (2010) in a recent study on 21st century leadership concluded that school district leaders must expand their knowledge, skills and disposition for leading based on 21st century skills that include careers and the future landscape of work as well as digital media and learning in the

knowledge age. He reported that leaders inconsistently translate theories of teaching and

learning for the 21st century into implementation and practice in schools and school districts. He

maintained that it is important for leaders to have a vision for 21st century learning, but suggests

that for the vision to be achieved leaders must take action (Ziegenfuss, 2010).

Leithwood, et al., (2004) conducted a review of educational leadership and the influence

leaders have on student learning. From the results of the review the authors made two claims:

leaders' influence on student learning is second only to teachers and leadership effects are largest

where they are needed most (Leithwood, et al., 2004). It is critical that there are leaders who

understand their important role in transforming districts from traditional models of education to a

21st century paradigm in order for them to advance sound, productive teaching and learning in a

rapidly changing world. The recent literature, specific to 21st century learning, has focused

largely on teaching and learning (Ziegenfuss, 2010). Research specific to the actions

superintendents take to change their district to a 21st century learning environment is not as rich

(Ziegenfuss, 2010). The research in this study intends to identify actions superintendents and

school district leaders can take to change their school districts to 21st century learning

environments. Leaders are central to any change effort, and it is important for school district

leaders to know specific actions they can take to create a 21st century school district.

This study represents a qualitative inquiry utilizing the perspectives of thirteen public

school superintendents from across the nation. The study is based on the perceptions of these

superintendents who are leading 21st century change in their districts. To guide an understanding

of the actions superintendents have taken, four research questions were developed.

The research in this study supports the view that there is a strong argument for school

district superintendents to take specific actions to transform their school districts to 21st century

learning environments. For this study, the skills defined by The Partnership for 21st Century Skills as the 4C's were the 21st century skills that were considered. These skills consist of: critical thinking and problem solving, communication, collaboration, and creativity and innovation. This study represents a qualitative inquiry utilizing the perspectives of thirteen school superintendents from across the nation.

Statement of the Problem

There are expanded learning goals that have been the outgrowth of the 21st century education movement such as the ones described by The Partnership for 21st Century Skills (Bellanca & Brandt, 2010a). The expanded learning goals have evolved from the current national agenda on education reform that arose from the need for the nation to be more competitive in a global society. The expansion of learning goals means a more comprehensive definition of student success. Advocates for 21st century learning contend that for students to be productive workers and citizens they require new knowledge and skills that are different from previous generations (Bellanca & Brandt, 2010; McCarthy, 2011; Murphy, Elliott, Goldring, Porter, 2007; Schlechty, 2009; Schwarz & Kay, 2006; Wagner, 2010; Wesch, n.d.; Ziegenfuss, 2010). For educational systems that have been in the traditional model of education, with long established customs that are outdated and disconnected from a technology rich, global society; significant challenges are presented for leaders on how they implement change to 21st century schools (Ziegenfuss, 2010). In light of this challenge, some school district leaders have made, or are in the process of making a shift to a 21st century learning framework. These superintendents have the difficult job of leading change from the old paradigm, or traditional model of education, to create and implement a more progressive educational paradigm (Wagner et al., 2005).

Creating a twenty-first century learning environment is innovative and ground-breaking work, and the superintendents who have developed and integrated the characteristics of model 21st century learning into their districts are pioneers in this process. Examining and studying the actions of these superintendents is critical in order to uncover and identify actions that others may want to replicate or study.

Purpose of the Study

The purpose of this study was to understand the actions superintendents have taken to implement 21st century learning in their school districts. This researcher examined how thirteen superintendents in public school districts made a shift in their districts from the traditional model of education to 21st century learning framework. The researcher utilized four research questions that incorporated aspects of *The 7 Steps for Educational Leaders* identified by Kay and Greenhill (2011), which is an implementation model for 21st century learning based on their work with superintendents.

The 7 Steps for Educational Leaders (Kay & Greenhill, 2011) reflect many of the "Standards for School Leaders" adopted by The Interstate School Leaders Licensure Consortium (ISLLC). The standards were initially written in 1996 and updated in 2008 by representatives of states and professional organizations in partnership with the National Policy Board for Educational Administration. The standards are research-based and serve as a foundation to the development of leaders and other educators. As of 2008, forty-three states subscribed to the ISLLC standards or used them as a template to write their own standards (*Council of Chief State School Officers*, 2008). Data were gathered through interviews with superintendents and the answers were analyzed.

Research Questions

The following research questions were designed to guide this study:

1. How did superintendents in this study create and implement a shared vision for 21st century learning among their districts and communities?

2. How did superintendents align and develop the components of their organizational systems and resources to build capacity for 21st century learning?

3. What leadership actions did superintendents take to develop, nurture and sustain the culture necessary to support 21st century teaching and learning?

4. What were the challenges and obstacles superintendents faced in implementing 21st century learning into their districts?

Significance of the Study

Limited research has been conducted on the actions superintendents take to implement a framework for 21st century learning in public school districts (Ziegenfuss, 2010). This study attempted to discover how superintendents in this study implemented 21st century learning through an analysis of the findings from interviews with the superintendents and the related literature. The study holds significance for superintendents and other school leaders in implementing practices and setting policy, as they looked to integrate a framework for 21st century learning into their districts as an effective and planned change process.

The current literature on educational practices presents and informs how instruction and learning must change in schools and districts in order for students to be successful in a 21st century global society (Bellanca & Brandt, 2010a; Callan, 2010; Fullan, 2006; Schlechty, 2009a; Stoll, 2009; Ziegenfuss, 2010). Identifying how to implement these changes is critical for success. Schwartz and Kay (2006) maintain that, "By focusing our research agenda on how best

to teach and assess twenty-first century skills, the nation will be positioning itself and each of its citizens for long term success in the emerging global competition" (p. 78). In this challenging climate of school reform, it is important to know what actions school superintendents take to implement organizational change in their districts to create a new paradigm for teaching and learning.

Other school district leaders will benefit from this research by being able to replicate these actions in order to engage students in meaningful learning so they will be better prepared for the future. This study will also benefit educational leadership programs in higher education. Educational leadership programs typically assist leaders in being effective in traditional educational institutions. It is important for leaders to acquire the necessary skills and knowledge to expand their frame of leadership and challenge the status quo when it is no longer effective.

Definition of Terms

Vision: A desired future state or an organization that is shared by others because it gives
consideration to the members' own personal visions (Fullan, 1993).

Leadership: The ability to serve an organization by providing structure, guidance and motivation
to build capacity of the organization to initiate and implement plans for sustainable
change.

Components of System: Departments in an organization that serve a specific function, interacting
together to integrate the organization as a whole (teaching and learning, finance,
personnel, operations).

Capacity: The collective knowledge, skills and abilities of the members of an organization.

Culture: The norms of behavior, shared beliefs and values of an organization (Kotter, 1996).

Professional Learning Community: A forum for people to learn individually and collectively

from one another that includes one or more cross-sections of stakeholders (Martin-Kniep,

2007). Professional learning communities serve to establish a school-wide culture that

develops the capacity of individuals and the organization to build and sustain school

improvement efforts (Stoll, 2009).

Limitations

The research in this study is limited in generalizability and was exploratory. Eighteen

superintendents from eighteen districts were invited to be included in this research study. Five of

the eighteen superintendents invited to participate did not reply to the invitation. Thirteen

superintendents agreed to be interviewed for this study. The unit of analysis was the thirteen

superintendents. A final limitation of this study was that twelve of the thirteen participant

interviews were successfully audio recorded. In one interview the audio recorder stopped

working. The data from that interview were provided from notes taken during the interview. A

final limitation of this study was that the data were self-reported and participants may have been

less than forthcoming, providing answers they believe the researcher wanted to hear.

Delimitations

A delimitation of this study was that the data were collected from thirteen public school

district superintendents in ten states. It was drawn from interviews with superintendents that have

implemented, or are in the process of implementing, the characteristics of a 21st century learning

environment. Other administrators, teachers, staff or community members were not interviewed,

all who may have had very different views of the actions of the superintendents.

The study was also delimited by the fact that there are a number of skills that are

identified as 21st century skills. For purposes of this study, the skills defined by The Partnership

for 21st Century Skills as the 4C's were the skills that were considered. These skills are: critical thinking and problem solving, communication, collaboration, and creativity and innovation. The 4C's of the 21st century skills framework were not necessarily the skills that districts were utilizing in the implementation of 21st century learning, though they did utilize similar skills from other frameworks.

Summary

This chapter provided an overview of 21st century learning, and noted that limited research has been conducted on the actions superintendents have taken to implement 21st century learning in their school districts. This chapter also explained the research problem addressed by this study and introduced the research questions that provided a guide for this study. The significance of the study was presented, and a definition of the terms was provided. The limitations and delimitations of the study were presented.

Chapter Two will provide a review of the literature as it pertains to the purposes of this study. The literature review will focus on eight areas that relate to leadership and change for implementation of 21st century skills that include a historical perspective of 21st century learning, effective organizational change, effective leadership for change, creating a vision for change, creating a strategy for change, creating a culture for change and professional learning communities.

CHAPTER II

Review of Related Literature

This chapter gives an overview of the literature that was utilized as a framework for this study. It is critical to consider the previous work of experts in the field and to examine their ideas and writing. The literature is organized around eight topics that are integral to 21st century learning and the organizational change process. A variety of literature that is related to the framework of this study was explored and is presented in this chapter. The topics include: a historical perspective of 21st century learning, organizational change in education, effective school district leadership and change, creating a vision for change, creating a strategy for change, building a supportive culture for change, building capacity for change and professional learning communities.

A Historical Perspective of 21st Century Learning

Multiple authors have identified the need to improve public education in order to enhance student outcomes to ensure a prosperous future for our nation (Brathwaite, 2011; Carter & Cunningham, 1997; Education, 1983; Fullan, 1993; Shwartz & Kay, 2006; Kennedy, 2011; Ravitch, 2010; Reeves, 2007; Schlechty, 2009a; Wagner, 2008; Senge, et al., 2000, Zeigenfuss, 2010). In the past three decades massive changes in technology have transformed the way we live and work (Bellanca & Brandt, 2010b; Schwarz & Kay, 2006a; Trilling & Fadel, 2012; Zhao, 2009). In this rapidly evolving information age school district leaders are now faced with preparing students for the 21st century. At the same time, school leaders are also confronted with mandates to change curriculum to align with traditional high stakes tests and it is argued that even the best schools, using a traditional paradigm, are not adequately preparing students for the 21st century (M. Callan, 2009; Wagner, 2010).

Education reform has been a continual theme since the 1960's (Fullan, 1993). Fullan (1993) described what ensued from that period as "a crisis of confidence" in the American education system. By the 1980's the erosion in confidence was exacerbated by the Report, *A Nation at Risk: The Imperative of Educational Reform,* which was released in 1983 (Fullan, 1993, p. 1). This report, written by a bipartisan panel of business leaders and policy makers, declared that America's public schools were in trouble and we, as a nation, would no longer be competitive in the global market. It went on to state that innovation in technology was being usurped by competitors throughout the world (National Commission on Excellence in Education, 1983). The report also maintained that education was being eroded by what they called, "a rising tide of mediocrity that threatened our future as a nation and people"; hence, the call for school reform through higher standards and expectations, with a greater degree of competition (National Commission on Excellence in Education, 1983, p.1).

The publication of *A Nation at Risk* (1983) set in motion a nationwide reform movement that was reinforced by pressure from business and industry because of their inability to successfully compete in world markets (Glass et al., 2001). Additionally "politicians and citizens of all races and socioeconomic levels" deemed the education system inequitable (Glass et al., 2001, p. 5). The job of school leaders became rife with the demands of multiple interest groups and the need to make decisions that became increasingly more complex (Carter & Cunningham, 1997). Various groups studied and reported on the deficiencies of the American education system and designed mandates for school improvement (Carter & Cunningham, 1997; Fullan, 1993; Rothstein, 2008; Schlechty, 2009). Education reform soared to the top of the political agenda in the United States and has stayed there (Carter & Cunningham, 1997).

In 1989 President George H. W. Bush met with governors across the nation to discuss the state of education. The outgrowth of that meeting resulted in the *Goals 2000: Educate America Act,* and became a driving force in educational reform. *Goals 2000* provided a framework for national education reform to improve teaching and learning, and increased the role of the federal government in education. *Goals 2000* also established a framework for identifying academic standards, measuring student progress, and providing support for students to meet the identified standards based on the idea that students will do better if more is expected of them (Alsip, 2010; Fullan, 1993; Glass et al., 2001; Hill, 2009; Johnston & Caldwell, 2001; Kowalski & Björk, 2005; McCarthy, 2011a; Payne, 2008; Ravitch, 2010; Schwarz & Kay, 2006a; Tyack & Cuban, 1997; Zhao, 2009).

Another major shift in educational reform occurred on January 8, 2002, when President George W. Bush signed into education law, No Child Left Behind (NCLB), which became the cornerstone of school accountability, as measured by increased student performance through standardized testing (Brathwaite, 2011; Chen, 2010; Fullan, 1993; Johnston & Caldwell, 2001; McCarthy, 2011a; Ravitch, 2010; Zhao, 2009).

Elmore (2000) wrote at length about standards-based reform and the changes in policies and procedures implemented to hold school systems accountable for student performance. He stated, "standards-based reform represents a fundamental shift in the relationship between policy and institutional practice" (Elmore, 2000, p. 4). Elmore (2000) asserted that educators should be mindful of their criticisms of standards-based reform because, "the only thing worse than opening up the instructional core of public schooling to external scrutiny and debate might be not doing so, and watching the public purposes of public education drift away into individual matters of taste and preference" such as vouchers, charter schools and privatization (p. 11).

Rothstein (2008) contended that the 1983 report *A Nation at Risk*, though well intended, was based on faulty analysis. It misidentified the deficits of our schools and "set the nation on a reform crusade that has done more harm than good" (Rothstein, 2008, n.p.). Rothstein maintained that the report was flawed in its conclusion that student achievement was declining and it blamed the national economic problems on schools when the real issue is poor social and economic policies. Rothstein stressed that the report disregarded the responsibility of other social and economic institutions for learning. He argued that social and economic disadvantage are large contributors to student achievement and that a belief in decline based on education practices alone has led to irresponsibility in school reform, which reached its climax with No Child Left Behind (Rothstein, 2008). Rothstein (2008) also asserted that the greatest damage of NCLB has been the narrowing of the curriculum in order to boost math and reading scores.

It was the contention of Wagner (2008) and Kay (as cited in Trilling & Fadel, 2012), that there are two achievement gaps in the United States education system. The first is the gap separating the quality of schooling of most middle class students and the quality of schooling available for poor and minority students. Wagner argued that this gap is being addressed through the standards-based reform movement. He stated there is greater accountability for educators through increased standardized testing in order to measure student achievement (Wagner, 2008).

The second achievement gap that Wagner identified is the global achievement gap. Wagner declared an invisible gap has been fueled by rapid social, political, economic and technological changes that are shaping the future. Wagner contended that because of these changes our system of public education is antiquated, addressing the needs of a bygone era, and is "hopelessly outdated" (p. 9). He argued that because of how schools currently operate, they

are obsolete and ill equipped to effectively teach students, or prepare them for the future (Wagner, 2008).

Zhao (2009) posited that technology has affected our nation economically, politically, socially and psychologically. Zhao maintained that the current educational challenges in the U.S. revolve around global competence. He wrote that the global community we now live in is interdependent and interconnected giving employers the ability to hire from a pool of applicants from all over the world. A study by White (2009) supports Zhao's contentions (2009). White (2009) completed a study of regional business leaders and teachers regarding the preparation of students for the workforce. White reported that, "There are significant differences between employers and teachers regarding what is required for high school graduates to be successful in the workforce." (p. 64). White's study concluded that, "Teachers need to develop interactive and collaborative techniques to engage all learners and to problem-solve with each other" while aligning curriculum to 21st century careers (White, 2009, p. 67).

Wesch (2012) addressed what he calls a "crisis of significance" in education, maintaining that teachers see the use of IMing, Facebooking and texting as disruptive to the activities in the classroom when, in fact, they are how students tune out because they are not finding significance and meaning in their education (n.p.). The existing and evolving technologies become a magnifier of the problem that exists, so finding and addressing problems that are real and significant to students can be a leverage for them to become engaged in their own learning (Wesch, 2012).

Advocates for 21st century learning contend that for students to be productive workers and citizens in a global society they require new knowledge and skills that are different from previous generations. Wesch (2012) argued that classrooms were designed under the premise

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that knowledge is scarce and hard to find and reinforced the top down knowledge authority of the teacher.

In today's world, an expansive body of knowledge circulates classrooms as accessed by any number of technological devices including cell phones, iPads and laptops, and also includes networking tools such as Skype, Twitter and Facebook (Bellanca & Brandt, 2010b; Wesch, 2012). Wesch (2012) argued that most teachers experience the new media environment as disruptive to their current teaching methods. He wrote that moving toward an environment of instant information makes it less important for students to "know, memorize and recall information" (Wesch, 2012, n.p.). It is infinitely more important for them to "sort, analyze, share, discuss, critique and create information" (Wesch, 2012, n.p.).

Wesch (2012) stressed that the quantity of information that is accessible today is mindboggling, and he argues that networked digital information has the potential to be "created, managed, critiqued and organized very differently than information on paper" (n.p.). Wesch concluded that, in essence, the "information revolution" has given us "new ways of relating to one another, new forms of discourse, new ways of interacting, new kinds of groups, and new ways of sharing, creating and collaborating" (Wesch, 2012, n.p.). In short, Wesch argues, we are undergoing a social revolution rather than a technological revolution. It is a social revolution that "empowers us to rethink education and the teacher-student relationship in almost limitless ways" (n.p.).

The call to reinvent our education system to address how we educate our youth has resulted in new frameworks for education that have been created by various groups of business leaders, researchers and other experts. These frameworks consist of knowledge and skills that define 21st century learning (Bellanca & Brandt, 2010a; Schwarz & Kay, 2006a). According to

Dede (Bellanca & Brandt, 2010a), current frameworks include: "The Partnership for 21st Century

Skills, The North Central Regional Education Laboratory (NCREL), the Metiri Group (2003), as

well as the Organization for Economic Co-operation and Development (OECD, 2005), the

National Leadership Council for Liberal Education and America's Promise (LEAP), the

International Society of Technology in Education (ISTE) and standards from the Educational

Testing Service (ETS)" (Bellanca & Brandt, 2010b, p.56). Dede wrote that the frameworks are

generally consistent with one another, using the same language; though each emphasizes

different areas within overarching skill sets (Bellanca & Brandt, 2010a). According to Dede

(Bellanca & Brandt, 2010a) the Partnership for 21st Century Skills Framework is the most

comprehensive and utilized more broadly than the others and is defined for this study in the first

chapter.

Twenty-first century skills dramatically differ from the skills learned in schools in the

20th century and are the result of the ability to communicate and access information though

innovative technology (Bellanca & Brandt, 2010b). Reeves (2010) argued that standardized

testing is "antithetical to the understanding, exploration, creativity and sharing" that are the

distinctive features of 21st century learning and wrote that educators need a different set of tools

to know if students are learning essential 21st century skills (Bellanca & Brandt, Ed., 2010, p.

306). Dede (Bellanca & Brandt, 2010b) argued that current curriculum, in most schools, does

not address core 21st century skills.

Transforming K-12 public schools for the 21st century requires leaders to reframe

teaching and learning to be consistent with the 21st century frameworks and acknowledge a

different paradigm for educating our youth (Bellanca & Brandt, 2010a; Brathwaite, 2011; Chen,

2010; Fullan, 1993; Kim, 2012; Schwarz & Kay, 2006b; Senge, et al., 2000; Wagner et al., 2005;

Wagner, 2010; White, 2009). In acknowledging a different paradigm, educational leaders must

challenge the old paradigm of learning and make the transformation to a 21st century learning

organization (Ziegenfuss, 2010). Making the change to 21st century learning environment is vital

to the success of schools and students in the 21st century and beyond (Bellanca & Brandt, 2010b;

Chen, 2010; Evans, 2001; Fullan, 2006; Schlechty, 2009a; Schwarz & Kay, 2006b; Trilling &

Fadel, 2012; Wagner, 2010).

Organizational Change in Education

The purpose of this subsection of the literature review is to present an overview of

systems thinking and the learning organization as it relates to changing school districts to 21st

century learning.

Schlechty (2005) contended that in order for school districts to make changes to 21st

century learning, superintendents must be convinced that the change is necessary. Schlechty

(2009) asserted that a transformation to 21st century learning requires the intellectual pursuit of

leaders regarding systemic, organizational change, as well as leaders who are capable of creating

networks and experiences outside the world of education. Transformation is to undergo a

metamorphosis, and in organizational terms means, "repositioning and reorienting action by

putting the new business, and in this case the school district, into adopting a radically different

means of doing the work it has traditionally done" (Schlechty, 2009, p. 3).

Making the changes necessary in public schools to 21st century learning will not take

place unless leaders build capacity for, and create cultures, that are conducive to that of a 21st

century learning organization (Kowalski, McCord, Peterson, Young, & Ellerson, 2011). In order

for this systemic change to occur in districts the superintendent must be prepared to engage in the

effort (Schlechty, 2009b).

The growing number of voices calling for an emphasis on 21st century knowledge and skills raises the question of how they may be effectively integrated into schools as organizations (Bellanca & Brandt, 2010b). The literature is replete with research on organizations and organizational change (Argyris & Schon, 1995; Covey, 2004; Senge, 1990; Senge, et al., 2000; Schlechty, 2008; Wheatley, 1998).

Waters and Marzano (2006), in their groundbreaking study on district leadership, assert that not all change in organizations is of the same magnitude. They use the terms first order and second order change to distinguish between what are deemed to be routine changes verses dramatic changes (Waters & Marzano, 2006). Waters and Marzano report that, how a stakeholder perceives change denotes whether it is a first or second order change. The authors give examples of how, in most cases, a change of the first order, may, to a minority of people, be considered a second order change. Waters and Marzano assert that how stakeholders discern a change depends on their "knowledge, experience, values and flexibility" (Waters & Marzano, 2006, p.18). Waters and Marzano conclude that it is necessary for district leaders to accurately estimate the order of magnitude a change effort will have on various stakeholders to implement change successfully.

Senge (1994) described organizations as complex systems that, to be effective, and a place where excellence persists, members of the organization engage in continuous, collaborative learning rather than be managed from the top down. He believes that "every organization is a product of how its members think and interact" (Senge et al., p.19). The authors stress that it is the relationships of those in the organization that deeply influences the evolution of schools into learning organizations.

Senge, et al. (2000) described learning organizations as inclusive systems where people express their professional desires, build their knowledge and develop individual and organizational capacity. The authors note that learning organizations are possible because, at our core, we are all learners (Senge et al., 2000). The distinguishing factor of a learning organization, and what sets them apart from other organizations, is mastery of the five key disciplines that are vital to their existence (Senge, et al., 2000). A discipline, as described by Senge (1994) is a series of principles that we study, practice and integrate into our lives and include: systems thinking, personal mastery, mental models, shared vision, and team learning.

Systems thinking is the heart of a learning organization and the unifying discipline (Senge, 1994). Systems have smaller systems within them that are linked together by actions that are interrelated. Wheatley and Kellner-Rogers (1999), wrote that most organizational systems consist of components such as structures, values, communication channels, vision, standards and measures that experts or leaders design from outside the system. The leaders then strategize about how to integrate them into the system (Wheatley & Kellner-Rogers, 1999). In contrast, organizations are living systems that have the same components, but they originate within the system, rather than being imposed from the outside (Wheatley & Kellner-Rogers, 1999). The members of the organization support approaching change from within because those connected to the organization are the originators of the change effort, and because of this, are more likely to support what they create (Wheatley & Kellner & Rogers, n.p.).

Senge (1994) described Personal Mastery as the cornerstone of a learning organization. It is the discipline of clarifying what matters to us and deepening our personal vision. Those with a high level of personal mastery are continually learning. It is a process and the journey is the reward. As one moves closer to their vision as an individual, or in an organization, the practice of

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personal mastery motivates one to push themselves and expand their vision (Fullan, 2010; Senge, 1994; Senge et al., 2000; Senge, 2006).

Mental Models are the assumptions and generalizations of how individuals understand the world (Senge, 1994). Working with mental models requires reflecting on how our thoughts affect our practices. Having "learningful conversations", are a balance of being open to the influence of others, while exposing our own thoughts and ideas (Senge, 1994, p. 9).

Shared Vision requires that we have a "shared picture of the future that we seek to create" (Senge, 1994, p. 9). Senge (1994) maintained that when there is a genuine shared vision people are bonded around a common identity and sense of purpose. In successful organizations, leaders understand that it is "counterproductive to dictate a vision" (Senge, 1994, p. 8).

Team Learning is when teams are truly learning together and achieve extraordinary results. The most effective practice in communication for team learning is dialogue (Senge, 1994). Through dialogue "teams develop the extraordinary capacity to think together" (Senge, 1994, p. 9). Senge (1994) asserted that team learning is vital to the success of an organization because teams are the "fundamental learning unit in modern organizations" (p. 10).

Scharmer (2009) built on Senge's theory when he wrote about the institutional failure of our time, the challenges we face as individuals and organizations, and why we are not meeting with success on several levels. He wrote, "the causes of our collective failure are that we are blind to the deeper dimension of leadership and transformational change" (p. 1). Scharmer continued by stating, that the crisis we are experiencing "reveals the dying of an old social structure and way of thinking" (p. 1). He built on Senge's "learning organizations" by taking the reader through the journey of *Theory U,* which in essence defines a social theory for change in organizations. The foundation of the theory is to operate from the future rather than existing

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patterns. He maintained that people have a "blind spot" when it comes to collective leadership and social action and they are trapped in old patterns of thinking, conversing and institutionalizing. Senge maintained that people are highly influenced by the paradigm through which they see the world, and their relationship in the system. Scharmer (2009) agreed, and adds that to be effective leaders one must understand the place one operates from and there must be a "shift in our quality of thinking, conversing and collective actions" from the social field of which most organizations have remained (p. 4).

Superintendents are key to the process of changing to a new paradigm for learning, because they are in central leadership positions to make the changes necessary to meet the emerging demands of society (Kowalski, McCord, Peterson, Young, & Ellerson, 2011; McCarthy, 2011b). In today's world it is a requirement of superintendents to decide what improvement initiatives to undertake as well as how the improvement initiatives will be implemented (Kowalski et al., 2011). Fullan (2005) wrote "deep district reform requires leaders at the top who understand where the district needs to go and are sophisticated in getting it there" (p. 67). He argued that leaders are "systems thinkers" who understand the concepts and preconditions for sustainability, and who foster systems thinking in others. He stressed the importance of the school district as an inclusive organization that fosters a highly collaborative culture to build capacity, which he asserts is the first step to sustainability. It is critical for superintendents to be adept at implementing systemic change (Schlechty, 2005). There is "no other way to recreate school systems for success in the 21st century information age" (Duffy & Reigeluth, 2008, p. 42).

Organizational systems in education, as described in this section of the chapter, are inclusive systems. The relationships within the organization are what set them apart as learning

organizations because they operate through conversation (Scharmer, 2009; Senge, 1990). Learning organizations create change from within based on the willingness of the members in the organization to learn from one another, and believe they can make change together. Change is not imposed from outside the organization and effective school leaders are central to the process.

Effective School District Leadership and Change

This sub-section includes a discussion of effective school district leadership as it relates to the change process, specifically related to 21st century learning. It delves into the work of Kotter (2002) and Bridges (2009) and gives an overview of recent studies on effective leadership practices. It includes literature that gives insight into the structure and processes for leaders to facilitate change in organizations.

Making the change to 21st century learning is difficult and the ability for school district leaders to understand the complexities of implementing a transformational change effort to improve an organization is essential. Schlechty (2009) maintains that reform efforts in education focus on procedures and processes of improving school performance, whereas transformation makes it possible for the organization to do things that have never been done before, by making radical changes to the traditional way of doing things.

To create and implement a change to 21st century learning in school districts requires superintendents to expand their role of leadership (Ziegenfuss, 2010). Today's superintendents must not only be instructional leaders, they must also have a strong knowledge of systems thinking, understand organizational change, grasp the universal influence of technology and how it affects the purposes of education for the future, and know how to transform their districts into 21st century learning districts (Schlechty, 2009b; Ziegenfuss, 2010).

Educational leadership theory in the 21st century no longer endorses the traditional theory of the authoritative, hierarchical leader in a single executive or administrative position (Bridges, 2009; Copeland, 2003; Elmore, 2000; Murphy, et al.; 2002; Kotter, 1996; Kowalski & Björk, 2005; Kowalski et al., 2001; Leithwood & Seashore-Louis, 2011; Senge, 1994; Senge, et al., 2000). Grunner, Grogan and Björk (in Murphy, Ed., 2002), stated that the "recent discourse in educational leadership encourages superintendents to be collaborators" (p. 226). They argued that where leadership used to be associated with words such as control, power, authority and management, it is now associated with words like, collaboration, cooperation, community, teams and relationship-building (Murphy, Ed., 2002).

Leithwood and Seashore-Louis (2011), reinforced this notion in their recent study on leadership by maintaining that, "raising the bar" and "closing the gap" in school districts will not be accomplished if we rely on leaders as "heroes" (n.p.). Leaders must now embrace new concepts of schools as learning organizations because it is no longer a question of what a superintendent knows, but rather a function of how the superintendent works with others to implement change (Leithwood & Seashore-Louis, 2011).

Kotter (2002) describes eight specific stages for how to implement successful large-scale change in an organization. The eight stages he describes include (1) establish a sense of urgency, (2) build a guiding coalition or team, (3) create a clear vision, (4) communicate the vision, (5) empower others to act on the vision, (6) plan for short term wins, (7) don't let up, and (8) make change stick.

Kotter (2002) gives prescriptive and practical applications for making change in an organization and how to sustain it. He conveys that the first three stages encompass establishing a sense of urgency, which is critical in making a transformational change. A sense of urgency

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gives people a focus to bring them together. In Kotter's second stage he maintains that it is critical to form a guiding coalition or team of people who have a high trust level to plan for the change effort. Creating and communicating a vision, and strategy to implement the change, which Kotter identifies as the third step, accomplishes this. Step four in Kotter's eight stages is that the guiding coalition will communicate the vision and strategies to "induce understanding and develop a commitment by liberating more energy from a critical mass of people" (p. 4). In the fifth stage, empowering others, Kotter addresses the importance of removing obstacles that keep people from acting on the vision. He builds on this stage with the short-term wins to gain momentum that are the essence of stage six. If there are small successes along the way they will provide credibility to the change initiative and will entice more people to believe that the change will be for the better.

All of the steps in Kotter's eight stages of change are important, but the one that will ensure that the change effort will become sustainable is, keeping the urgency and creative tension going. That way, the momentum does not die, and eventually the effort becomes, what Kotter describes as, "part of the new culture" (p. 6). It is a culture that has been developed by engaging the emotions of those who work in the organization, knowing they are involved in something greater than existed before.

Bridges (2009) identifies the role of transitions in an organization as the seven stages in organizational life. He contends that transitions take place between each stage of the life cycle of an organization as well as how the people in the organization experience its development. Ultimately Bridges gives leaders a map to move through organizational transitions in a way that renews and rejuvenates the organization, while not putting the people in the organization under unnecessary stress (Bridges, 2009). Bridges argues that transition in organizations is a three-

stage process and is very different from a first order change effort. He describes transition as a

psychological process, where people move through phases and gradually come to understand and

accept the transition from the old way of doing things, to the new (Bridges, 2009). The transition

is deemed effective if people actually do things differently (Bridges, 2009). In order for people to

successfully make the transition they must first go through three phases. Bridges describes the

three phases as the ending, the neutral zone and the new beginning (Bridges, 2009).

The "ending" is letting go of how things use to be. This is done effectively in an

organization by acknowledging and supporting people in the organization through the loss of the

way things were. Bridges (2009) gives examples of how endings have affected people, not only

in work, but in life. He describes moving to a new house and letting go of the old one, or having

a new baby and letting go of a good night's sleep. He maintains that beginnings depend on

endings, but that people do not like endings, which is why it is so important to plan for and deal

with the losses that endings bring (Bridges, 2009). He asserts that losses must be dealt with

openly and sympathetically, and conveys that, initially, it is not advisable to discuss the change

so much, as it is to listen and acknowledge peoples' feelings of grief about what they are losing.

Finally, he advises to be respectful of the past but cautions not to delay the ending (Bridges,

2009).

The "neutral zone" is a time of chaos. Bridges (2009) describes it as a time of "flux"

where things are no longer clear. This stage is often wrought with anxiety due to the ambiguous

nature of this phase of the transition. People often feel directionless. According to Bridges,

teamwork and loyalty to the organization can be undermined during this phase. Bridges asserts

that this phase is a time of reorientation and redefinition and that it is important to convey that to

people, in order to "normalize" this stage of the transition. Bridges maintains that people need to

understand that it is natural to feel confused and anxious. Bridges advises that leaders use of a positive metaphor to get through this time such as a "voyage at sea" where the ship has not yet reached its destination. He emphasizes that this is a way to provide structure, by giving time to redesign how people do what they do within the organization (Bridges, 2009).

The "new beginning" or final phase of the transition process is "marked by a release of new energy in a new direction" (Bridges, 2009, p. 57). Bridges (2009) declares that to make a new beginning people need the four "Ps" or "the purpose, the picture, the plan and the part they will play" (p. 60). Bridges maintains that the purpose needs to come from within the organization, specifically from its "will, abilities, resources and character" and that it cannot be copied from another organization (p. 65). Along with the purpose, there also needs to be a picture of what the outcome with look like, so people can visualize what the end result will be (Bridges, 2009). Creating a plan for people to receive the training, information and support they need to make the transition is key to a successful beginning. It is important to have a step-by-step process to leave the past behind, and as Bridges states, "emerge with new attitudes, behavior and identity" (p. 67). Finally, Bridges emphasizes that giving people a role in the process facilitates the process in five ways. It gives people insight into the problems faced by the organization and, through sharing the problems, people feel more allegiance to the effort and the other people involved. People also have more firsthand knowledge of the issues in order to help solve problems. It also gives people knowledge about the human issues and self-interest of various individuals affected by the transformation. Lastly, everyone who has a role to play is implicated in the outcome (Bridges, 2009).

Collins (2001), and his research team, studied what turns a good organization into a great organization. Collins and his team identify the criteria for what makes an organization great as

well as the tipping point for transformation from a good organization to a great organization. He identifies the concepts of a great organization as including what he calls a "level five" leader or someone who is humble, but has a laser-like focus on excellence and values. He continues on to highlight that good leaders ensure that they get the right people on the right bus, understanding that an employee should be in a position that matches his or her skills and strength areas. Collins identifies that great companies also confront the "brutal facts" about why they are not improving with honesty and openness, having an ability to reflect on and evaluate their practices. He also explains that great companies have a consistent belief in their ability to succeed. He describes great companies as having a culture of discipline whose employees engage in honest dialogue and debate, valuing the voices of all those who work in the organization. Finally he underscores the need for persistence and building momentum (Collins, 2001). Collins maintains that great leaders are guided by values and their values do not change over time.

Waters and Marzano (2006) in their seminal study on effective school superintendents found that certain responsibilities of district leaders have a significant relationship with student achievement when effectively addressing their responsibilities. The authors found that effective superintendents implement a collaborative process for setting goals for their districts that includes all stakeholders. Goals are specific, for both the school and students, and ensure the use of instructional strategies that are research based (Waters & Marzano, 2006). Waters and Marzano found that districts with a high level of student achievement have boards of education that support the instruction and achievement goals of the district as well as ensure that they remain the primary focus of the district. The authors of the study found that effective superintendents monitor the instructional goals to ensure they remain the driving force of the district's actions (Waters & Marzano, 2006). Finally, the research findings point to the fact that

effective superintendents provide resources and make them available to accomplish the district's goals. This includes time, money, personnel and materials (Waters & Marzano, 2006). Other recent studies on effective leadership include studies by Leithwood and Seashore-Louis, (2012), Murphy, et al., (2007), and Posner and Kouzes (2011) as well as a recent case study on 21st century leadership by Ziegenfuss (2010).

Leithwood and Seashore-Louis (2012) aimed to identify the nature of successful leadership that includes leadership from a district level perspective. The authors found that in creating conditions for improving instruction and student learning, though they are common practices in effective schools, there is no one list of district leader actions that will lead to school and district improvement (Leithwood & Seashore-Louis, 2012). Instead, the authors argue, there must be a sustained focus on highly interdependent actions that leaders take (Leithwood and Seashore-Louis, 2012). To begin with, Leithwood and Seashore-Louis' study replicates the identification of four practices from prior research that they deem fundamental to effective leadership. The categories included:

- Setting direction.

- Developing people.

- Redesigning the organization.

- Improving the instructional program (n.p.).

Setting direction involves bringing a focus to the work of the district through a visioning process and communicating the direction (Leithwood & Seashore-Louis, 2011). It also involves fostering acceptance of the goals and creating expectations for high performance (Leithwood & Seashore-Louis, 2011).

Developing people is when the leader builds capacity of the organization by supporting and modeling values and practices (Leithwood & Seashore-Louis, 2011). The leader shows respect for people in the organization and demonstrates care and concern for the members (Leithwood & Seashore-Louis, 2011).

Redesigning the organization is the act of leaders to establish the conditions in the organization that allow people to develop and grow to achieve the goals of the organization (Leithwood & Seashore-Louis, 2011). It includes building collaborative cultures, restructuring the organization to support collaboration and building community relationships (Leithwood & Seashore-Louis, 2011).

Improving the instructional program is what Leithwood and Seashore-Louis (2011) agree is the most influential leadership practice on student achievement because it directly impacts teaching and learning. Leithwood's and Seashore-Louis' study highlights the importance of leadership actions, defining ambitious goals for all students, and speaks to the need for district leaders to be "vigilant and strategic about sustaining good performance" (n.p.). The authors indicate the need for leaders, when engaged in the process of improving their districts, to have standardized curriculum and instruction as a platform for improving schools through support systems (Leithwood and Seashore-Louis, 2011). Leithwood and Seashore-Louis offer the following five conclusions regarding effective school district leaders:

- Establish clear expectations across multiple dimensions of improvement activity as the basis for increasing the effectiveness of district improvement efforts.
- Provide support for efforts to implement district expectations that is differentiated and aligned to the needs of individual schools.

- Develop effective school leadership practices through intentional leadership development efforts that include both formal professional development activities and collegial work.

- Continuity in district leadership is integral to the development and implementation of a coherent support system for improving and sustaining school performance.

- Monitor and sustain high levels of student performance and set ambitious goals for student learning that go beyond proficiency levels on standardized tests (n.p.).

In their study, Leithwood and Seashore Louis' (2011) then took a deeper look at leadership in context and examined the specific circumstances leadership is employed. They also took a closer look at strategies and specific practices that successful leaders participate in. The authors found that beyond the initial four practices of effective leadership is the ability of the leader to develop collective efficacy, which is the ability of leaders to build capacity to foster a culture of collaboration and change (Leithwood & Seashore-Louis, 2011). Leithwood and Seashore-Louis identified six conclusions regarding leadership that affects student learning:

- It is targeted at working relationships, improving instruction, and indirectly, student achievement.

- It requires formal leaders to share power and influence.

- It develops capacity through supporting strong relationships among formal leaders, teachers and other stakeholders that cement a commitment to student learning.

- It strengthens professional community for all members of the school community – a special working environment within which educators work together to improve their practice and focus their work on student learning.

- It is adaptive to the specific needs of the local setting, which includes significant variation in capacity, structure and needs among buildings in the same district.

- It takes advantage of external change for pressure rather than fighting against them (n.p.).

Murphy, et al., (2007) also identify common components of leadership for learning utilizing research based on high performing schools, principals and superintendents. They identified eight dimensions of behavior that define the practices that effective leaders follow.

- Vision for learning.

- Instructional program.

- Curricular program.

- Assessment program.

- Communities of learning.

- Resource acquisition and use.

- Organizational culture.

- Advocacy (p. 182).

Consistent with Leithwood and Seashore-Louis' (2011) study, in each of these domains the evidence for the importance of leaders acting as guides in professional learning is a dominant theme.

Murphy, et al., (2007), maintain that effective school leaders are proficient in developing and fostering a shared vision with members of the school and community. They have a laser-like focus on teaching and learning. They also support their teachers in enhancing their knowledge, by creating opportunities for them to meet together to discuss their practice within the workday. They give teachers opportunities for learning that sustain the organizations goals. The authors

highlight that learning leaders understand the importance of a strong core curriculum and pedagogy and continually show their support for teachers in ensuring their involvement in the coordination of instruction, curriculum materials and assessment (Murphy et al., 2007, p. 186). Learning leaders ensure that there is a comprehensive assortment of methods for assessment of student learning and make sure that teachers are knowledgeable about the methods (Murphy, et al., 2007). They expect that teachers are involved in the process of assessment, taking on a more comprehensive role by assessing the data together to make informed decisions. Learning leaders continually foster professional growth of the teachers, ensuring that there are opportunities for them to work together often.

Posner and Kouzes' (2011) recent study on leadership experiences resulted in the identification of five key practices of exemplary leadership that will change the performance of individual and organizational performance. The authors refrained from subscribing to any specific theory of leadership. The five practices Posner and Kouzes identify are common to other effective leadership practices and include:

- Model the way.

- Inspire a shared vision.

- Challenge the process.

- Enable others to act.

- Encourage the heart (Kouzes & Posner, 2011, p.14).

In a recent study by Ziegenfuss (2010), on leaders who implement 21st century learning, the author argues that in order for leaders to be successful in the 21st century, they are required to expand how they conceptualize or understand learning (Ziegenfuss, 2010). Ziegenfuss' findings confirmed that the leaders he studied who were implementing 21st century learning do not have a

consistently clear understanding of teaching and learning in the 21st century, and that the knowledge they do have is based on theory and not practice. He found that leaders are often confused by 21st century education terminology and the conceptual understanding of what 21st century learning is. He reported that this results in leaders' actions not matching those required for second order change. Ziegenfuss argued that this is important because a leader's understanding of 21st century learning directly impacts how he/she implements a 21st century vision. Ziegenfuss contends that for leaders to implement change to meaningful 21st century learning, they must have a full understanding of second order change, understand 21st century learning, and make a shift in leadership responsibilities. A vision for 21st century learning requires leaders to be participants in developing a collaborative culture and develop leadership in teachers to implement a 21st century vision. Finally, Ziegenfuss argues that leaders must take action. The author argues that there must be clear goals and a plan for implementation. Though he does not specify the actions leaders must take to implement a 21st century vision, Ziegenfuss writes that without action "even the most compelling vision will not occur" (Ziegenfuss, 2010, p. 148).

District leaders play a significant role in how change is implemented. Transforming a school district to a 21st century learning environment changes the essential framework of the organization (Ziegenfuss, 2010). A transformational change to 21st century learning reaches deeply into a community and creates opportunities for children to be successful in the future.

In summary, as indicated in the studies referenced above, effective leaders provide guidance and support learning, but ultimately, to implement a 21st century vision for learning they must take action by having a plan for implementation (Ziegenfuss, 2010). Without taking action, the change to a 21st century learning paradigm will not be successful and traditional

learning will continue unchanged (Ziegenfuss, 2010). School district leaders for the 21st century

must work with district and constituent groups to develop a vision for 21st century learning and

act on it (Ziegenfuss, 2010).

Creating a Vision for Change

This subsection of the literature review includes a discussion on vision as it relates to

organizational change.

A vision is imperative and provides the catalyst for change, as well as the success of an

organization (Bellanca & Brandt, 2010a; Covey, 2004; Fullan, 1993; Kotter, 1996; Kotter &

Cohen, 2002; Kouzes & Posner, 2008; Wagner, et al., 2005). Vision, Covey (2004) asserts, is

seeing what is possible in people, projects and organizations. Once leaders, on an individual

basis, identify what they see to be important they are challenged to create a vision that is a shared

view of what matters most in an organization (Covey, 2004; Kouzes & Posner, 2008).

According to Posner and Kouzes (2007) leaders improve their capacity to see the

possibilities for the organization and find a common purpose for its membership. An

organization's vision is fluently and coherently expressing the future state of an organization that

is realistic and credible, and will move the organization from its present condition to one that is

much improved (Schlechty, 2009b).

School superintendents are expected to formulate a vision that will inspire stakeholders

and guide them as they move to transform their organizations (Abu-Tineh, Khasawneh and Al-

Omari, 2008; Copland, 2003; Covey, 1992, 2004; Johnson, 1996; Schlechty, 2009b). A clear

vision coupled with a plan for change can focus the efforts of teachers, administrators and

stakeholders as they take steps to improve their schools (Johnson, 1996). Sustaining school

improvement is a shared responsibility among a wide group of school and community members

(Copland, 2003). Helping people understand and commit to the goals of an organization requires them to be involved in the decision-making process regarding what those goals will be (Covey, 2004). Ultimately, a shared vision is vital to an organization's success, and everyone in the organization should be involved in determining the organization's destination (Copeland, 2003; Covey, 2004; Fullan, 1993; Kotter 1996; Kotter & Cohen, 2002; Wagner et al., 2005).

Involving all stakeholders is how all members of an organization embrace the process of deciding what path will lead to the designated destination. Kotter (1996) asserts that change often starts with a small cadre of people, which in successful transformations, then grows, depending on the size of the organization, to twenty or even fifty people.

Senge (1990) maintained that the foundation for a successful organizational vision is built on each member's personal vision. Covey (2004) builds on Senge's theory and declares that, "When people have no vision, they neglect the ability of the mind's capacity to create" (p. 65). Most importantly, Covey states, is to "develop a personal vision, sense of self and unique mission in the world" (p. 76).

Fullan (1993) stressed that ownership of an organizational vision must be achieved through learning that comes from full engagement in problem solving. He quoted Senge adding that ownership of the vision is a process, and to create a shared vision increases "clarity, enthusiasm, communication and commitment" to an organization (as cited in Fullan, 1993). Schlechty (2009) conveyed that two conditions must exist to transform schools from bureaucracies into learning organizations. The leader must have a clear vision of the future and they must have an understanding of the organizations current state (Kouzes & Posner, 2008; Schlechty, 2009). Schlechty maintained that leaders must also have considered what it will take

to make the vision a reality. Where a leader intends to take an organization is done through the visioning process while at the same time developing structures for participatory leadership.

Posner and Kouzes (2008) concluded from their study on leadership that in order to have a vision of the future one must have a big picture perspective of the future of an organization. They must see trends and patterns for the future by paying attention to emerging developments and how those trends can be pieced together into that larger view (Kouzes & Posner, 2008). Yet, the authors state, only three percent of senior managers are forward thinking and that it is incumbent upon leaders to be "more pro-active in thinking about the future" (Posner & Kouzes, 2008, p. 110).

This subsection of the literature review focused on the importance of having a shared vision and common purpose for the future of the organization built on the personal visions of all stakeholder groups. For school district leaders to implement a vision for the future they must have a clear understanding of 21st century learning, be able to articulate the vision, and develop a strategy for implementation (Ziegenfuss, 2010).

Creating a Strategy for Change

This subsection of the literature review focuses on defining strategic planning and strategy. It also touches on the key elements of the process of strategic planning in order to develop a strategy to implement a vision for 21st century learning.

Advancing social, political, economic and technological changes have transformed how we live and work, creating a gap between how schools currently educate children and their readiness to compete in a global society (Carter & Cunningham, 1997; Fullan, 1993, 2010; Reeves, 2009; Ravitch, 2010; Schlechty, 2009; Zhao, 2009). To bridge the gap necessitates that

schools create a vision of their desired state and an organizational strategy to get there (Bryson &

Alston, 2004).

Reeves (2007), defines strategic planning as a "disciplined process that links the vision,

mission and goals of a school system with a set of coherent strategies and tasks designed to

achieve those goals" (p. 86). Closing the gap between what is required of school districts and

their current state is the aim of effective strategic planning. Acting purposefully to move to a 21st

century paradigm of teaching and learning can be realized by having a common vision and belief

in what is possible, committing to the vision, and acquiring the knowledge and skills to get there

(Curtis & City, 2009). The vision then manifests in the culture of the organization.

To build sustainable educational institutions, decisions must be made around

organizational strategy (Eacott, 2007). Though often viewed as synonymous with strategy,

strategic planning in high performing organizations is the vehicle for developing the strategy to

implement the shared vision of an organization (Curtis & City, 2009). Implementing a school

district's vision requires a clear, coherent strategy to get there (Eacott, 2007). It produces

decisions and actions that guide an organization (Bryson & Alston, 2004).

Reeves (2007) wrote that effective strategic planning involves many team members who

have the organizational and emotional support to challenge themselves, and one another, as they

create and evaluate strategies to implement their vision. Building strong teams is a key

component of high performing organizations (Curtis & City, 2009). The strategic leadership

team includes representation from all components in the system, including business, human

resources and information systems in order for system components to be aligned and for people

to do their jobs well (Bryson & Alston, 2004). Strategic leadership teams also often include

external decision makers and business leaders to obtain support for the strategic plan (Bryson & Alston, 2004).

The focus of effective strategic planning involves the entire organization and is considered a living process that is continually assessed and re-evaluated (Bryson & Alston, 2004). Successful strategy execution requires that people at all levels in the system and the community understand the vision, as well as how they contribute to the implementation of the vision (Curtis & City, 2009). Political will is gathered by assessing the current state of the organization and identifying groups of people who will support the effort, as well as understand who will need to be persuaded (Curtis & City, 2009). Assessing the organization includes internal and external assessment of the issues facing an organization, which includes assessing strengths, weaknesses, opportunities and threats, and is often referred to as a SWOT analysis (Bryson & Alston, 2004).

Once an organization has a vision, assessed the current state of the organization for problems and opportunities, and puts strong teams in place, the process for developing strategy begins (Curtis & City, 2009). This entails identifying initiatives to accomplish the purpose (*Center for Strategic Planning*, 2001). Effective strategic planning is critical to prioritizing resources (people, money, time) to the different components of the organization in terms of what is needed to carry out the vision (Curtis & City, 2009).

Once the strategic plan is in place and the initiatives decided upon, the next step is to form action teams to carry out the plan. Action teams involve operational and administrative stakeholders and are an important step for the implementation of the strategic plan (Bryson & Alston, 2004). Action teams bridge the gap between strategy and implementation. Actions teams plan, in significant detail, how the initiatives of the plan will be executed (Curtis & City, 2009).

Moving to action includes assessing what initiatives to start, what initiatives to continue, as well as what initiatives to stop (Curtis & City, 2009). The focus of effective strategic planning involves the entire organization and is considered a living process that is continually assessed and re-evaluated (Bryson & Alston, 2004).

There is a wide array of models and approaches that are used for strategic planning that provide alternatives for organizations to utilize (*Center for Strategic Planning,* 2001). Customizing a model that will be most effective for the organization is essential in addressing the issues facing the districts (*Center for Strategic Planning,* 2001).

In summary strategic planning is the process of closing the gap between the current state of an organization and the desired future state. Creating a vision, assessing the current state of the organization through a SWOT analysis, forming strong teams and identifying initiatives, are the first steps of the strategic planning process. Taking action involves assessing the initiatives for implementation and planning a strategy for execution. The final step is implementing a process for reassessing and re-evaluating the progress.

Building a Supportive Culture for Change

This sub-section of the chapter defines organizational culture and gives an overview of what it takes to build a supportive culture for 21st century learning.

Sergiovanni (2007) writes that the culture of a school organization, at its heart, has shared vision, values and beliefs that serve as the compass, guiding the organization in a common direction. Culture holds the organization together (Bellanca & Brandt, 2010a; Copland, 2003; Fullan, 1993; Kotter, 1996; Kotter & Cohen, 2002; Sergiovanni, 2007; Stoll, 2009; Thigpen, 2011; Wagner et al., 2005). Kotter (1996) defines an organizational culture as norms of behavior, shared beliefs and values. Kotter maintains that culture is powerful in organizations and exerts

itself through the actions of several people, occurring without much conscious intent. For successful change to occur in an organization, the change must be made through the power of culture (Kotter & Cohen, 2002). As DuFour and DuFour (Bellanca & Brandt, 2010a) indicate, most educational reforms focus on structure rather than culture.

Pearlman (2009) wrote that fundamental to a 21st century school district is "a culture of students at work" where trust, respect and responsibility are the underlying attributes (p. 19). It is, in essence, a participatory culture (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2006) Authors Jenkins, et al., described participatory culture as one:

- With relatively low barriers to artistic expression and civic engagement.

- With strong support for creating and sharing one's creations with others.

- With some type of informal mentorship whereby what is known by the most experienced is passed along to novices.

- Where members believe their contributions matter.

- Where members feel some degree of social connection with one another (p. 7).

The authors argue that a participatory culture involves social skills developed through collaboration and networking that build on traditional subject matter (Jenkins, et al., 2006). These skills require a systemic approach to education to build capacity for 21st century learning (Jenkins, et al., 2006).

Fullan (2002) describes cultural change leaders as sophisticated thinkers who see the big picture and can transform the organization by facilitating people to work together as teams. Fullan maintains that re-culturing is the key to instituting lasting change and that there are five essential components leaders must have in making a cultural shift in an organization. These components consist of:

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- Moral purpose.

- Understanding of the change process.

- The ability to improve relationships.

- Knowledge creation and sharing.

- Coherence making (p.4).

Moral purpose is what leaders exhibit who are successful at cultural change (Fullan, 1993). Leaders display a strong sense of moral purpose through relationships with stakeholders, and show concern for how all children will meet with success.

In understanding change, Fullan (2002) stresses cultural change leaders understand that the implementation of new ideas is difficult and will be met with resistance, yet successful cultural change leaders redefine resistance (Fullan, 1993). Cultural change leaders do not mind those who are negative, believing they can offer much by raising issues that have not been thought about before.

Fullan (2002) identifies building relationships as the third component for creating a culture for lasting change. He asserts that this is the most important factor to successful culture change. He states that this is also the most difficult aspect of implementing cultural change. Fullan maintains that for this component of cultural change, leaders must manage their own emotions while at the same time pull in those staff members who are disconnected from the organization, stressing that this can have a deep and lasting effect on the overall climate of the organization.

The fourth component Fullan (2002) identifies in re-culturing an organization is knowledge and creation sharing. Fullan maintains that in order to be an effective cultural change leader, creating and sharing knowledge through a social process is essential. He contends that

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because of this, relationships and professional learning communities are essential. This is done through collaboration, engagement in scientific discovery, action research and inquiry based learning, which fuels moral purpose in schools (Fullan, 2002).

Fullan's (2002) final component for re-culturing an organization is coherence making, or bringing an understanding of the complexity of the four other components to the membership. The leader does this through the checks and balances imbedded in how the other four components are achieved (Fullan, 2002). Fullan summarizes that it is these components, addressed simultaneously, that lead to "deep and lasting change" (p. 19).

Schein (1990), describes culture as "what a group learns over time as a group solves its problem of survival in an external environment and its problems of internal integration" (p. 111). Schein argues there are three levels in which culture manifests itself. They are: (1) observable artifacts, (2) values, and (3) basic underlying assumptions. Schein defines artifacts as what one observes and feels as they enter the organization. This includes the layout, how people address one another, as well as how people dress and the emotional intensity. It can also include records, products and statements of philosophy (Schein, 1990). The values of an organization, Schein states, can typically be understood by interviewing the organizations members.

Sergiovanni (2007) identifies six questions that teachers, parents and students should ask in order to provide an understanding of the culture of a school as an organization (p. 146). These questions are: (1) What is this school about? (2) What is important here? (3) What do we believe in? (4) Why do we function the way we do? (5) How are we unique? and (6) How do I, and how do others, fit into the scheme of things? From the understanding generated from these questions a sense of purpose is obtained which helps those who make up the school community actually become an "effective learning community, or a community of mind and heart" (p. 146).

Sergiovanni recognized that culture, meaning and significance coupled with organizational efficiency are what drive the effectiveness of the organization to achieve its goals.

In order for school districts to make the shift from an traditional model of education to a 21st century learning environment it is important for superintendents to create a culture of collaboration where people feel free to communicate openly about their work (Curtis & City, 2009; Fullan, 2011; Lambert, 2003; Stoll, 2009). Developing a culture of collaboration and communication is essential for the successful alignment of district components as well as defines the expectations for behavior to build capacity of the organization (Clay, Soldwedel, & Many, 2011).

This sub-section of the chapter defined organizational culture and gave an overview of how a leader creates a culture for 21st century learning through relationship building, communication and collaboration. It gave a brief overview of what a 21st century school culture looks like, as well as how a leader works with others to orchestrate that culture.

Building Capacity for Change

This sub-section of the literature review gives an overview of building capacity for change and the importance of capacity for sustainability and the future of an organization.

Schlechty (2009) maintains "capacity is meaningless unless we know what we want to build capacity for (p. 224). Schlechty identifies that schools are limited in their capacity for dramatic innovations regarding systems change because they are organized as bureaucracies. Capacity for change is about learning, both individually and collectively, and if schools were organized as learning organizations, as described by Senge (1994) innovating would be the norm and they would be poised for sustainability (Fullan, 2005; Stoll, 2009).

Stoll (2009) writes that "capacity is the engine that powers the journey to sustainability"; sustainability of inquiry and reflection, sustainability of conversations, and sustainability of continuous learning (p. 10). In essence, capacity building is developing organizations for the future (Fullan, 1993; Schlechty, 2009, Stoll, 2009).

Stoll (2009) identifies seven interlinked school improvement issues and their implications for capacity building. The issues are: (1) Varied contexts and capacity necessitate differentiated capacity building, (2) Broader aims of schooling mean capacity building needs to go beyond focusing on supporting instructional improvement to emphasize learning, (3) In a rapidly changing world capacity building needs to address both the present and the future, (4) Ensuring sustainability depends on a capacity building state of mind, (5) Leading school improvement cannot be accomplished by one person alone: developing leadership capacity is essential, (6) An increasing networked society requires lateral capacity building, and (7) Improvement does not depend on individual schools, systemic capacity building is required.

Schlechty (2009) theorizes that the most critical capacities in organizations are "those needed to innovate on a continuous basis and to adjust critical systems in ways that are supportive of the innovations that are installed" (p. 224). Schlechty identifies three general capacities that school districts must have in order to be successful in supporting and sustaining systemic changes, as well as introduce innovations as well as standards that must be met in order to sustain capacity. The three capacities are: (1) the capacity to establish and maintain a focus on the future, (2) the capacity to maintain direction once the clear focus has been established, and (3) the capacity to act strategically by reallocating existing resources, seizing opportunities, and creating a new future.

Both Stoll (2009) and Schlechty (2009) underscore the need for capacity building to be future oriented. Stoll maintained school districts need to have a common vision for the future "while meeting current needs and challenges" (p. 8). Stoll makes the case that capacity building has to connect to the new world order where emerging technologies influence the learning process. Stoll argues it takes courage to move away from the constraints of standards and accountability pressures that narrow the focus of learning, and that mixing creativity and innovation within the context of the standards approach is not easy for educators. Schlechty describes that future oriented capacity depends on the ability of the leaders to achieve a shared understanding of the issues that underlie the need for change. The leaders must also communicate and develop a shared vision of what that change will entail (Schlechty, 2009a).

Stoll (2009) outlines that capacity building must go beyond focusing on, and supporting, instructional improvement. The author builds on this notion stating that capacity building has a much wider agenda than literacy, numeracy and science (Stoll, 2009). The wider agenda should play to what is known about learning "rather than measuring a narrow range of academic outcomes" (Stoll, 2009, p. 7). Schlechty maintains that the goal should be that all students are learning at high levels, and in order for this to happen, assessment of student learning must be done on a continuous basis.

Both Stoll (2009) and Schlechty (2009) espouse that systemic capacity building and collaboration is required to improve schools. Stoll maintains that building capacity is not a linear process but rather systemic and on-going learning by individuals as a collective body. Stoll writes it means better learning for everyone as well as learning in new ways. It also means aligning systems to provide a coherent and collective system of improvement (Stoll, 2009). Schlechty maintains that continuity is dependent on effective induction programs and executive

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succession planning. Attention must be paid to ensuring that the beliefs and values of the organization that guide action are instilled in those new to the organization (Schlechty, 2009). Schlechty posits that executive succession planning is more important than anything else.

Schlechty (2009) also maintains that developing relationships and trust to support a collegial approach to risk-taking, as well as creating learning environments that are collaborative and support innovation, is important to the process of capacity building. Schlechty purports that engaging in collaboration is essential to the survival of public schools, and schools that are not sufficiently cohesive and collaborative will compromise their mission. Schlechty informs that permeable boundaries and interactions with others must be a part of the culture of the organization.

Stoll (2009) makes the case that, though still the primary agenda for some, there has been a shift to include students' voices regarding what they think about learning and schooling, as well as implications for teaching and learning with the rise of the innovation in technology. Schlechty (2009) states that fostering innovation and flexibility are important to build capacity to support innovations through the difficult stages of disruption (Schlechty, 2009). Deep, lasting and sustainable change, where people are engaged in continuous, challenging and purposeful inquiry and learning, that is designed to enhance student success, is the state that most school districts hope to achieve (Stoll, 2009). In this kind of environment capacity building cannot be an add-on, but rather should be a way of doing business (Stoll, 2009).

Both Schlechty (2009) and Stoll (2009) agree that leaders can no longer lead alone. Schlechty identified direction and focus and developing structures for participatory leadership as important for capacity building. Schlechty claims that participatory leadership is essential to capacity building by making it possible for those in the midst of change to survive the difficulties

inherent in the change process by being in it together. Stoll ultimately claims that leadership must be distributive and embedded within the district's culture. Stoll maintains that the demands on leaders are far too great for one person. Distributed leadership involves a wider group of people to improve schools (Stoll, 2009). Leadership capacity builds supports for other stakeholders to play a leading role in improving student learning as a team (Stoll, 2009). Stoll also makes the case that leadership capacity includes developing the leadership capacity of students to be "leaders in their own learning" by evaluating the quality of their learning experiences as well as being participants in selecting new school leaders (Stoll, 2009, p. 12).

Stoll (2009) and Schlechty (2009) both highlight the importance of technology in building capacity. Stoll describes the virtues of an increasingly networked society in an increasingly interdependent world and argues that learning networks, such as school-to-school or district-to-district, build lateral capacity. Stoll maintains that networks should have no boundaries. Aided by technology, global opportunities for networking that result in dialogue and conversation to re-examine and enhance learning are crucial (Stoll, 2009). Stoll maintains that it is the responsibility and moral purpose of leaders to create networks for people to learn from one another. Schlechty identifies employing technology as important to building capacity. He maintains that with emerging technological advances it is incumbent on leaders to ensure that school districts have the ability to implement and support them (Schlechty, 2009). Schlechty posits that not being able to do so is the greatest threat to public education.

Schlechty identifies developing structures for results oriented decision-making as essential to building capacity. Schlechty states that schools produce many results and it is important to attend to results deliberately and intentionally in order to stay on course and achieve the desired outcomes. Schlechty (2009) also identifies strategic action as important to capacity

building. This refers to the leader's ability to act strategically and address issues, ensuring there is appropriate resource support. Risk taking is encouraged, and requirements needed for innovations are addressed and supported. Strategic action means that relationships are developed in and among schools, districts and the larger community (Schlechty, 2009).

Stoll (2009) posits that the research points to the fact that prescriptive strategies for building capacity do not work and that they have been replaced with "informed professionalism, where school leaders and other school staff play a greater role in how change should occur" (p. 5). Stoll goes on to inform that more recently there have been increased attempts to focus on capacity building from outside organizations. Stoll adds that differences in school context affect improvement, which supports the need for differentiated capacity building.

In summary, capacity building for 21st century learning is multifaceted and viewed to be essential to sustain school districts for the 21st century. Capacity building is future oriented, goes beyond core subject matter, is systemic, collaborative, fosters leadership in others, embraces technology and innovation, is strategic, and is differentiated to the specific needs of each district.

Professional Learning Communities

This subsection of the literature review gives an overview of professional learning communities and their importance for effective 21st century learning organizations.

Professional learning communities play a significant role in building capacity of a district for 21st century learning. DuFour and DuFour (Bellanca & Brandt, 2010b) contend that critical to the implementation of 21st century learning is the Professional Learning Community (PLC). It is the means for changing a culture and building capacity in school organizations to achieve their vision. There is an increasing body of research that suggests implementing lasting change in schools requires strong professional learning communities (Barth et al., 2005; Heifetz, Grashow,

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& Linsky, 2009; Leithwood & Seashore-Louis, 2011; Martin-Kniep, 2007; Murphy, 2002; Senge et al., 2000).

DuFour and DuFour (Bellanca & Brandt, 2010a) maintain that effective professional development for 21st century learning is embedded in the work of educators, is collective and collaborative and builds on the organization's capacity to achieve its goals. DuFour, et al., (2004), impart that a professional learning community consists of the following attributes: (1) a shared mission, vision, values and goals, (2) collaborative teams, (3) collective inquiry into current best practices, (4) action orientation and experimentation, (5) commitment to continuous improvement, and (6) result orientation. These six characteristics of a professional learning community delineate the differences between a group of teachers working together and a true learning community that is working towards a shared vision for 21st century learning. In moving toward the established vision, the professional learning community uses data as a vehicle to explore best practices and procedures in the organization.

DuFour, et al., (2004) suggest that utilizing focused goals assists in closing the achievement gap while at the same time providing professional growth. Professional growth requires teachers, administrators and staff to engage in reflective dialogue about the fundamental aspects of their teaching, and the work must be systemic and collaborative (Barth et al., 2005; Fullan, 2006; Heifetz et al., 2009; Martin-Kniep, 2007; Murphy, 2002; Schlechty, 2009b; Spillane & Seashore-Louis).

The effectiveness of the professional learning community should be judged on how well the schools and districts are able to create cultures of professional learning on a system-wide scale (Fullan, 2006). Hord (2009), states that professional learning communities are defined, "to learn deeply with colleagues about an identified topic, to develop shared meaning, and identify

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shared purposes related to the topic" (p. 42). Hord asserts that school PLCs are characterized by six researched based conditions for success: (1) shared beliefs, values and vision of what the school should be, (2) shared and supportive leadership, (3) supportive structural conditions of time, place and resources, (4) supportive relational conditions that include respect and caring among the community, (5) collective learning that is intentional and deliberate to address student needs, and (6) peers sharing their practice to gain feedback for individual and organizational improvement. Hord (2011) maintains that when a PLC operates under these conditions the outcomes result in improved student achievement.

Martin-Kniep (2007) describes professional learning communities as addressing a practitioners need for affiliation by providing structures and processes for sharing a social identity for a cause, [21st century learning] and for developing and sharing the wisdom of experience. She asserts that professional learning communities can help schools and districts transform themselves. Martin-Kniep (2007) describes PLCs as having, at their core, a belief in teacher leadership and their involvement in school improvement efforts. The author contends that the belief is grounded in the conviction that professional learning communities are evolving and expanding in their work to improve student learning (p. xv).

Martin-Kniep (2007) contended that professional learning communities capture current practitioners' expertise as well as creates new knowledge and understandings. Professional learning communities are important in an organization in order to model the kind of learning that promotes 21st century skills for learners (Bellanca & Brandt, 2010a).

Martin-Kniep (2007) states that the aim of education should be to enable individuals to learn with and from others. The author maintains that, "the Professional Learning Community provides the structure and opportunity for its members to engage in deep conversations and

inquiry around significant problems, issues and ideas" (Martin-Kniep, 2007, p. 78). Membership in a Professional Learning Community can vary depending on what is being studied, but in all Professional Learning Communities "participants are active and avid learners, who document and share their questions, discoveries and knowledge" collaboratively for a greater good (Martin-Kniep, 2007, p. 90).

Morrissey (2000) contended that many of the organizational supports that are necessary to run effective schools lie in professional learning communities. The author maintains that they provide supportive conditions to engage in learning with a focus on school improvement supported by three conditions: (1) supportive leadership, (2) shared vision and values, and (3) collective learning and application (Morrissey, 2000). Morrissey posits that social and human resources in schools and districts are the most important resources, and that beyond the need for well-prepared teachers are the social conditions of schools. Morrissey suggests that for effective social conditions to exist, trust and respect are critical and the "foundation on which collaboration, reflective dialogue and de-privatization of practice could occur" (Morrissey, 2000).

The resources needed to initiate the process of professional learning communities and the processes to sustain them are critical (Barth et al., 2005; Bellanca & Brandt, 2010b; Martin-Kniep, 2007). In addition, the transformation of a professional learning community from an activity, to being ingrained in the school's organizational culture, is also of importance.

This sub-section gave an overview of the attributes of professional learning communities and their importance in building capacity for changing the culture of a school district to 21st century learning. Professional learning communities are collective and collaborative bodies of

educators where professional development is imbedded in the process of engaging with other professionals and teacher leadership is fostered.

This chapter focused on eight areas that relate to leadership and change for implementation of 21st century learning as a framework for this study. The sections included a historical perspective of 21st century learning, effective organizational change, effective leadership for change, creating a vision for change, creating a strategy for change, creating a culture for change and professional learning communities.

Chapter Three will provide an explanation of the research design and methodology to collect and analyze data associated with the superintendents in this study who are implementing, or in the process of implementing, 21st century learning in their districts. It will include the purpose of the study, the research design, the population, the sample in the study, the sampling method, the instrument used for data collection, the plan for analyzing the data, limitations and delimitations, validity, reliability and a summary of the chapter.

CHAPTER III

Methodology

This chapter provides a description of the research design and methodology used in this study to gather and analyze data related to superintendents who are in the process of implementing 21st century learning in their school districts. It includes the purpose of the study, the research design, the population, the sample in the study, the sampling method, the instrument used for data collection, the plan for analyzing the data, limitations and delimitations, validity, reliability and a summary of the chapter.

Purpose of the Study

The purpose of this qualitative study was to examine the leadership actions public school superintendents have taken to integrate the characteristics of 21st century learning in their districts. The study sought to identify the leadership actions that superintendents in this study utilized to implement change in their districts to 21st century learning, which is the definition of 21st century learning used for this study.

Research Design

This qualitative study was designed to investigate the actions public school superintendents have taken to implement 21st century learning in their school districts. This topic was studied to gain a deeper understanding of how superintendents implement 21st century learning in their districts in order to understand whether or not there are similarities in superintendents' actions when implementing 21st century learning on a district-wide scale.

Qualitative research studies are designed to explore issues and develop a deep awareness and understanding of a central phenomenon (Creswell, 2011). A qualitative approach was chosen for this study because qualitative research design allows the researcher to explore topics in

greater detail and discover similarities in the responses of the participants prior to drawing conclusions (Creswell, 2008). In this study, it was important to explore the leadership actions of the superintendents through interviews so that a wide range of leadership actions and superintendent responses could be considered. In addition, the analysis of the data in a qualitative study is inductive and establishes themes or patterns (Creswell, 2008). The process of research flows from "philosophical assumptions, to world views, and through a theoretical lens and on to the procedures involved in studying social or human problems" (Creswell, 2008, p. 37).

The research questions in this study were designed to allow the researcher to elicit the stories of the participants and their perceptions and experiences regarding the implementation of 21st century learning. The researcher was then able to gain the insights of the participants as well as an in-depth understanding of the actions the superintendents took to implement 21st century learning in their districts.

Grounded theory design was used in this study because grounded theory methodology explores a process and generates a theory of how a process occurs over time (Creswell, 2011). This study explored the process of actions taken by superintendents to implement 21st century learning in their school districts. The researcher explored the process of how superintendents implemented 21st century learning in their districts, by engaging in dialogue with the superintendents regarding the actions they took to implement 21st century learning as defined for this study.

Grounded theory is an inductive strategy of theory development that emerges from direct contact or close involvement with the empirical world (Patton, 2001). Grounded theory methodology evolves from studying the data of social research in a qualitative, systemic procedure (Creswell, 2011). The result is a theory that "explains at a broad conceptual level a

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process, an action, or interaction" about a topic that occurs over a period of time (Creswell, 2011, p. 423).

Systemic grounded theory design, which is the design used for this study, uses set procedures in developing a theory (Creswell, 2011). A framework of coding procedures provides standards to the analytical process by having rules to build a theory from (Patton, 2001). The procedures in the systemic design of grounded theory are open, axial and selective coding (Creswell, 2001, Patton, 2009). Open coding is the first phase of the process, when the researcher identifies initial categories gleaned from the data. Axial coding is the second phase. In this phase the researcher selects a category from the open coding process as a core phenomenon and relates the other categories from the open coding process to the chosen category (Creswell, 2011). These categories represent the conditions that influence the core phenomenon (Creswell, 2011). Selective coding is the final phase and consists of the researcher writing a theory from the interrelationship of the data in the axial coding process (Creswell, 2011).

The researcher used research questions that allowed for potential themes to be developed through the procedures of open, axial and selective coding. These steps assisted the researcher in the development of a visual picture or logic paradigm of the generated results (Creswell, 2011). The researcher attempted to get a clear picture of the actions that superintendents took to implement 21st century learning utilizing this standardized procedure.

Population

The population for this study was superintendents who have implemented, or are in the process of implementing, the key characteristics of 21st century learning as defined for this study, in their school districts. The districts have implemented all or some of the skills identified in the definition of 21st century learning used for this study. Considerations such as district size, socio-

economic characteristics of districts or leadership attributes of the public school district superintendents were not examined for this study.

Study Sample

According to Russell and Gregory (2009), "qualitative research studies with small samples may help to identify theoretically provocative ideas that merit further exploration" (p. 37).

Initially, eighteen superintendents from eighteen districts were invited to be included in this study. Five of the eighteen superintendents who were invited to participate did not respond to the invitation to be included in this research study. Thirteen superintendents did agree to be interviewed for this study.

The thirteen superintendents represented thirteen different school districts. The superintendents were from districts that self-reported some or all of the characteristics of 21st century learning used in this study. The superintendents represented school districts in ten states that include: Arizona, California, Massachusetts, Missouri, Nebraska, New York, Ohio, Virginia, Washington and Wisconsin. The size of the districts ranged from 3,680 students to 175,296 students. Nine of the districts were suburban districts, three were county districts and one was an urban district. Four female superintendents and nine male superintendents participated in this study. The length of time the superintendents served in their districts as superintendents ranged from 1½ years to 18 years. The superintendents were chosen because their school districts were self-reported to have met some or all of the criteria of the definition for 21st century learning as defined in this study.

Table 1

Superintendent and District Profiles

Superintendent	Gender	Race	Years as Current District Superintendent	District Size	District Type
A	M	W	2 ½	4,392	Suburban
B	F	W	16	5,000	Suburban
C	M	W	18	7,400	Suburban
D	F	W	7	3,680	Suburban
E	M	W	11	4,162	Suburban
F	M	W	6	5,081	Suburban
G	M	W	7	24,000	Urban
H	M	W	6	59,509	County
I	M	W	4	5,000	Suburban
J	M	B	8	175,296	County
K	F	W	5	4,000	Suburban
L	M	W	1 ½	17,000	County
M	F	W	6	4,389	Suburban

Sampling Method

The researcher completed this qualitative study through a sampling method known as purposeful sampling. Purposeful sampling is the intentional selection of individuals and sites in order to study and understand a "central phenomenon" (Creswell, 2012, p. 626). This technique includes the selection of participants, archived data or documents that represent criterion of interest to the researcher (Glaser & Strauss, 1967). The individuals and sites are chosen because they have the ability to provide a wealth of information about the topic of interest (Patton, 1990, as cited in Creswell, 2012).

Purposeful sampling was chosen for this study because it was the researcher's intention to learn more about the actions the superintendents have taken to implement 21st century learning from the superintendents' perceptions, experiences and beliefs. The researcher desired to gain a clear understanding of what the superintendents did to put 21st century learning into practice. There were a limited number of districts who were self-reported to be in the process of implementing 21st century learning which led to a small target group of district superintendents.

All of the districts in this study demonstrated some or all of the characteristics of 21st century learning that are used to define 21st century learning for this study. The school districts identified for this study were obtained from a list of school districts profiled as "innovative 21st century school districts" on the website of Dr. Robert Pearlman, who serves as a strategic planning consultant for 21st century school and district development (Pearlman, 2011, n.p.). According to Pearlman (2011), the list is part of a larger project to profile exemplars for 21st century districts. Criteria for being on the list include that the district is "innovative in its practices and communication around 21st century learning" and that the districts have "sufficient web-based resources, articles, videos, research and other documents to adequately profile the

district" (Pearlman, 2011, n.p.). This researcher then cross-checked the districts by reviewing each district's website, as well as their vision and mission statements, in order to verify that the districts indeed met the criteria for implementing 21st century skills. The artifacts reviewed indicated that the skills paralleled with 21st century skills, although some were not specifically named 21st century skills.

Instrumentation

In-depth interviewing and utilizing open-ended questions was used to glean information from participants to allow them to express their opinions, ideas and knowledge about the actions they took to implement 21st century skills in their districts (Weber & Byrd, 2010). According to Patton (2001) there are three types of interviews used when collecting qualitative data. The three interview types consist of the informal conversational interview, the general interview guide approach and the standardized open-ended interview (Patton, 2001). The type of interview used for this study was the standardized open-ended interview. This interview process asks each interviewee the same questions in the same order. The questions are open-ended so that participants are able to respond to the questions by expressing their experiences without constraints of the researcher or former research findings (Creswell, 2011).

Comprehensive and complete answers to interview questions are indicative of the adequacy of a sample for a given study (Russell & Gregory, 2009). There are some scholars who view open-ended questions as a possible concern, based on the belief that the willingness of a participant, or level of communication skills, may be compromised in some way and their views not fully represented (Geer, 1988). However, most people answer open-ended questions and those who do not may, in part, not be interested in the question or questions being asked (Geer, 1998).

The researcher developed the interview questions. They were e-mailed to each participant prior to the interview in a matrix that detailed the research question and each interview question that was aligned to the research question (Appendix B). The interview questions were based on Kay and Greenhill's (2011), 7 Steps for Educational Leaders, that are posted on the EdLeader 21 website, which is a seven-step guide for leaders in implementing the Partnership for 21st Century Skills Framework. In this study, a panel of experts reviewed the interview questions. Three faculty members affiliated with the Sage doctoral program who work in the field of doctoral research for educational leadership completed an expert check of the interview questions. The questions were reviewed for clarity, consistency and content in order to assure that they would elicit the most comprehensive and detailed answers. The researcher then conducted a practice interview with a seasoned superintendent who was not a participant in the study. In the practice interview no data were collected and feedback was given during the interview in order to become familiar with utilizing the interview guide and interview protocols prior to conducting the actual interviews.

The interviews with participants were a combination of one-on-one, Skype and telephone interviews depending upon the availability of the participants and the limited availability of the researcher to travel to different areas of the country. There was one in-person interview, one Skype interview and eleven telephone interviews. All interviews were audio recorded with a digital voice recorder. A telephone adapter was utilized for the telephone interviews to get a clear recording of the conversations. A disadvantage of the telephone interview, "is that the researcher does not have direct contact with the participant" as well as a dependence on the recording devices working properly (Creswell, 2008, p. 219). The digital recorder stopped working five minutes into one of the superintendent interviews. Creswell (2009) recommends taking notes in

the event that the audio equipment fails. As a back-up to the audio recordings copious notes were taken during all thirteen interviews.

Data Collection

In data collection, standard procedures are of the utmost importance (Creswell 2011). Each superintendent was sent a letter (Appendix C) requesting permission for an interview after the school districts and superintendents were identified. The letter (Appendix C) provided an introduction of the student researcher, explained the purpose of the study, explained how the interviews were to be conducted and reassured participants of confidentiality. Each participant was asked to sign an informed consent agreement (Appendix D). This was consistent with The Sage Colleges IRB approval. Thirteen superintendents responded affirmatively that they would participate.

Following standard procedures in the interviews was important in order to accurately compare responses of the participants and to reduce bias (Patton, 1989). The researcher followed a strict interview protocol regarding the interview process. All interviews were audio recorded. Notes were also taken while conducting the interviews. Open-ended interview questions were developed and asked of each participant to guide the interview. If necessary, follow-up questions were asked related to the prepared questions for clarification purposes or to have the participants elaborate on their answers. Every effort was made to keep the interviews conducted in a forty-five to sixty minute time frame for a total of over twelve hours of interview time. Informed consent was acquired from the participants regarding the study (Appendix D) and the participants were apprised of their right to opt out of the study in the informed consent document the participants signed when they agreed to participate in the study (Appendix D). The interviews were held in places that were free from distractions and that supported the use of

audio recording (Creswell, 2012). The audio files of the interviews were saved on the digital

voice recorder and secured in a locked cabinet in the researcher's home. The audio files were

also transferred to the researcher's computer and saved for the purpose of having a back-up

should it be needed.

An independent transcriptionist transcribed the audio-recorded answers of the participant

interviews. Twelve of the thirteen interviews were transcribed. The digital voice recorder

stopped recording five minutes into one of the interviews. Data were gathered from that

interview from notes taken during the interview. The transcriber signed a confidentiality

agreement (Appendix E) regarding the identification of participating superintendents and their

districts. According to Creswell (2012), "Transcription is the process of converting audio taped

recordings or field-notes into text data" (p. 239). Transcribers use a special machine that they can

start and stop in order to play back the recordings, or they can play the recordings at a speed that

the recordings can be easily understood (Creswell, 2012). The transcripts were e-mailed to each

of the twelve superintendents to be reviewed and edited for approval. If the researcher did not

receive a response from the superintendent after e-mailing the transcript it was the researcher's

assumption that the transcript was approved for this study. The transcripts were then coded and

analyzed.

Documents were also collected for the purpose of data collection. The collection of

documents included vision statements and mission statements. The documents were analyzed

and coded along with the interview transcripts to determine the extent to which they have

information that meets the criteria and framework for 21st century teaching and learning

characteristics as defined for this study. Every effort was made to review and codify the data

with the precision required by the systemic process of grounded theory.

Analysis of Data

The data were organized and prepared for analysis by placing the transcripts, mission and vision statements in a binder separated by district. Each district was assigned a letter name. The researcher then coded the material according to each research question. Coding is the process of organizing the data by "segmenting and labeling text to form descriptions and broad themes" to make sense out of it (Creswell, 2011 p. 243). The data were analyzed using the systemic grounded theory data analysis steps of open, axial and selective coding to develop a logic paradigm or a visual picture of a theory (Creswell, 2012).

An exploratory analysis of the data was completed first, to obtain a general interpretation of the data, by reading the transcripts and reviewing the notes and documents, which included mission and vision statements as well as websites (Creswell, 2012). Each document was read through at least once. This led to the identification of open coding categories, which were recorded on a chart.

After the open coding process was completed the researcher moved to axial coding to develop a coding paradigm from the core categories (Creswell, 2012). At this point the researcher identified sub-categories for each main category and used a graphic organizer as a visual aid. The researcher then reanalyzed the data to identify "causal conditions, intervening and contextual categories, strategies and consequences to develop the axial coding process" (Creswell, 2012, p. 441).

The process of select coding was the third and final process in this procedure, culminating in identified themes (Creswell, 2011). In select coding the researcher identifies a theory from the interrelationship of the categories identified in the axial coding process

(Creswell, 2011). During this process the data were further analyzed by making comparisons with each district in order to determine similarities in the actions of the superintendents.

Validity

Validity in a qualitative study pertains to verifying the accuracy of the findings utilizing specific procedures (Creswell, 2009). Triangulation and member checking are two of the procedures that are used to accomplish this task. Creswell (2012) states that triangulation gives the researcher multiple insights and perspectives of the same information by using different data sources to justify a theme, which then gives validity to the study. Russell and Gregory (2009) support this theory and state that, "triangulation is a metaphor and does not mean literally that three or more sources are required. The appropriate number of sources depends on the importance of the findings, their implications for theory, and the investigators' confidence in their validity" (p. 37). In this study triangulation refers to the number of times the transcripts were reviewed by the researcher prior to coding the data. Member checking refers to the researcher checking with participants in the study to determine the accuracy of the information. In this study, member checking was completed by asking the participants to verify the transcripts for accuracy of information. In order to ensure consistency of superintendent responses for this project the audio recordings were transcribed. Twelve participants were sent a transcript to review for accuracy. Inaccuracies from the perspective of the superintendent were corrected. Corrections by the superintendents were few and entailed spelling errors of names and words, as well as some punctuation for clarification of meaning.

For the purposes of this study the data were obtained from individual interviews with superintendents that were completed from an instrument developed by this researcher. An interview protocol for asking questions and recording answers was also utilized in order to

standardize the interview process. Twelve of thirteen interviews were successfully audio recorded. In a thirteenth interview the digital audio recorder stopped working. The data from the thirteenth interview was provided from notes taken during the interview. The transcripts from the interviews were reviewed and studied several times before being coded and themes deciphered. The interview transcripts provided the researcher with rich data from which to discover findings (Creswell, 2009, p. 191). The notes the researcher took during the interviews were also studied and reviewed several times, as were the mission statements and the vision statements.

Bias

In qualitative interview studies it is incumbent upon the researcher to make every effort to conduct the interviews after reflecting on their own bias (Edmonson & Irby, 2007). Schwandt (2001) maintains that bias or prejudice is not a characteristic that one should get rid of, but rather something that one should be aware of. Schwandt (2001) asserts that researchers all have biases and that they must engage them and examine them in order to understand prejudices and change them should they interfere with the understanding of others. He maintains that meaning is negotiated mutually through dialogue, altering those prejudices and assisting us to have a better awareness and comprehension of others, while at the same time testing preconceptions and prejudices (Schwandt, 2001). Understanding is produced through the logic of question and answer (Schwandt, 2001). This researcher's perceptions and biases were developed through the personal and professional experiences as a school administrator.

Reliability

Reliability in a qualitative study refers to how the researcher ensures consistency with other research and projects in their approach to a study (Creswell, 2008). This researcher cross-checked that the districts were implementing 21st century learning by reviewing each district's

website, as well as their vision and mission statements, in order to verify that the districts indeed met the criteria used in this study for implementing 21st century skills. The artifacts reviewed by the researcher indicated that the skills were synonymous with 21st century skills as defined for this study, although some were not specifically named 21st century skills.

The names of all participants and school districts in this study were protected using pseudonyms and the researcher assured participants of confidentiality both verbally and in writing. The researcher listened to twelve recorded interviews of each superintendent one time and read each transcript at least four times.

Summary

This chapter provided a description of the research design and methodology used in this study to gather and analyze data related to superintendents who are in the process of implementing 21st century learning in their school districts. The following chapter will provide an analysis of the data collected and the researcher will describe the themes that evolved from the source of this material.

CHAPTER IV

Analysis of the Data

The purpose of this study is to examine the actions superintendents have taken to implement 21st century learning in their school districts. Four research questions were designed to provide structure and guide a deeper understanding of how superintendents implement 21st century learning.

Eleven interview questions were designed for this study that relate to each research question in order to obtain the depth of information needed for this study and to address each research question. The research questions and corresponding interview questions are displayed in a matrix at the end of this study (Appendix B). Findings emerged through an analysis of the data regarding the superintendents' actions, to implement a vision for 21st century learning. The findings are presented in this chapter in relation to each research question.

There are seven sections of this chapter. The first section lists the research questions for this study. Section two gives a brief overview of the participants. Sections three through six are devoted to the four research questions and the responses from participants. These sections include quotes and summarize the results of the answers to the research question. The final section is a summary of the entire chapter.

Research Questions

Each research question will be stated and the findings that relate to each research question will be presented. The findings include themes supported by participant responses. The research questions are:

1. How did superintendents in this study create and implement a shared vision for 21st century learning among their districts and community?

2. How did superintendents align and develop the components of their organizational systems and resources to build capacity for 21st century learning?

3. What leadership actions did superintendents take to develop, nurture and sustain the culture necessary to support 21st century teaching and learning?

4. What were the challenges and obstacles superintendents faced in implementing 21st century learning into their districts?

Participants

For this study thirteen superintendents represented thirteen different school districts from ten different states. The size of the districts ranged from 3,680 students to 175, 296 students. Nine of the districts were suburban districts, three were county districts and one was an urban district. Four female superintendents and nine male superintendents participated in this study. One superintendent was African-American and twelve were Caucasian. A more in-depth discussion of the participants can be found in Chapter Three.

Research Question 1

How did Superintendents in this study create and implement a shared vision for 21st century learning?

The first research question addressed how superintendents in this study created and implemented a shared vision for 21st century learning. There were six findings identified from the data obtained from the interview responses from this research question. The findings are discussed in this section. The findings are as follows:

- All districts had a vision for 21st century learning that is shared extensively with constituent groups.

- The majority of superintendents used a formal planning process to create the vision and implementation plan.

- The majority of superintendents who used a formal planning process used a strategic planning process.

- The districts that used a formal planning process began the process with a guiding team.

- The guiding teams represented a broad cross-section of stakeholders.

- Action teams were created to implement the initiatives identified in the implementation plan.

Five interview questions were asked of the participants to explore how the superintendents in this study created and implemented a shared vision for 21st century learning. The first finding that emerged was the importance of having a vision for 21st century learning that is shared extensively with district and community stakeholders. All thirteen superintendents indicated that their districts had a vision for 21st century learning that was shared extensively with constituent groups. Superintendent H explained that his district has a vision for 21st century learning and that a broad range of community members were engaged in the process:

Yes, we do have a vision for 21st century learning. We have integrated it into our strategic plan that we call our Design for Excellence. We are in the process of updating that plan, called Design for Excellence 2020, which by its name is designed to carry us into 2020. We have integrated the concepts of 21st century learning into our curriculum document. We have engaged our community in the process of including business leaders, parents, and experts in the field, internal educators, elected officials, to get buy-in into our Design

for Excellence. Again, which includes the concepts of 21st century skills (personal communication, February 22, 2012).

Superintendent E explained that there was a visioning process to create the vision and how the process culminated in adopting the Standards for Success as the aspirational goals for the vision:

I was engaged in some formal and informal discussions with students, parents, staff members and Board members, about where they wanted to see the district in say three to five years. ...and then I also began a more formal process with parents and we had a number of open meetings using a visioning process. Again, where do we want to be in three to five years? About two-thirds, three-quarters of the way through that process, David Conley, produced a study, Standards for Success. I had worked with David when I had been Superintendent of Schools in city, state and also with the university system, and Pew Charitable Trust had awarded a number of school districts with very substantial grants on standards-based education. The one to city and to the university system was the only case where it was both a K-12 and a university grant from Pew on standards-based education simultaneously. …so we essentially adopted their proficiencies for college admissions, [Standard of Success] as our aspirational goals for our students so that it would be ideally a seamless basis for education based on proficiencies going from Kindergarten through college (personal communication, March 2, 2012).

In the following example Superintendent D reflected on her district's vision and how it was conceived, shared and communicated. Superintendent D stressed that a broad cross-section of stakeholders know what the vision is:

Our vision, which is that the District will become an exemplary 21st century learning

environment whose graduates are prepared to excel in a complex interconnected,

changing world. It was actually born out of the development of the strategic plan. There

was a cross-section of stakeholders from parents and students and teachers and

administrators, business representatives, higher ed representatives, community

organization representatives. And the vision was actually a part of the work of the core

team; the vision and the mission, and the overarching goals and the strategic plan. The

vision was actually developed over several meetings and then was shared in its draft form

with all the internal and external stakeholders and continued to be revised and refined

until the final vision statement was actually published as part of the overall strategic plan.

And it has been our vision and both communicated extensively and integrated into...

everything we do is actually what guides…our vision and mission guides our decision-

making and how we organize and align our resources and our…and our, again, our

priorities since the approval of the strategic plan in 2008. As far as to the extent to which

it is shared; it's shared in every aspect in everything we do, whether it's part of our

opening of school, the work that we do with our school improvement teams, the work we

do within each building in program development. It's also shared with all our parents, it's

in our…it's communicated via various electronic means and it's posted in every building.

I think more importantly, people actually know what the vision is (personal

communication, February 21, 2012).

Other superintendents in this study described different ways that their visions are shared

and communicated. Their responses included promoting the vision through different means of

communication in order to gain broad based support. They promoted vision by utilizing

electronic media sources, such as television, radio, blogs, district websites, Facebook, etc. They spoke about holding public engagement sessions, faculty meetings, leadership meetings, as well as being visible in all buildings in their districts and the community to promote the vision. Engaging in constant dialogue and communication with stakeholders was also indicated to be important in order for constituents to have a better understanding of the vision and how it would impact their districts.

Eleven superintendents discussed the need for the vision to be the main focus of the district and that all activities in a district should revolve around the vision. The superintendents stressed that the vision guides decision-making and priorities for the districts, and that communicating the vision was necessary in order to reinforce it.

All thirteen superintendents said the district vision for 21st century learning was shared extensively with district and community constituent groups. One superintendent believed he could have done a better job in regard to the extent the vision was shared with the parents and community members in his district. Superintendent C explained:

> We call our vision Classroom 10. Some people would relate it to 21st century, but not all, because we haven't really focused on the term that much. But it is completely aligned with the 21st century vision. It is a vision that has taken hold throughout our school community and at the Board level. It's now become one component of our Classroom 10; it is a district goal on key content. It is certainly something that has been driving our behavior. If you went in our community and asked community members about it, it would depend totally on where you were at. For example, at the Chamber level and the PTA level you would get people who understand about Classroom 10 and the direction

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we're going. In the general community, with the parent community, we probably haven't done as good a job (personal communication, February 21, 2012).

Data supporting this finding indicate that all of the superintendents in this study had a district vision for 21st century learning that was shared extensively with a broad cross-section of stakeholders. The 21st century visions were characterized by using different names that encompassed similar skills. The evidence from this section demonstrates that the superintendents took action to create a 21st century vision that involved representatives from all constituent groups.

A second finding from this research question was that the majority of superintendents who participated in this study reported that they used a formal planning process to create the 21st century vision and the plan for implementation of the vision. Eleven of the thirteen superintendents reported that they used a formal planning process to implement the vision. A formal planning process is a process that analyzes the future state of an organization and determines objectives to reach that state. A course of action is then determined to achieve the desired objectives (Stueart & Moran, 1993).

Nine of the eleven superintendents who reported using a formal planning process made the distinction that the process was a strategic planning process. The third finding was that nine, or the majority, of the eleven superintendents who utilized a formal planning process, utilized a strategic planning process to create a vision and implementation plan. According to Stueart and Moran (1993) strategic planning is different from other forms of planning in that it assesses and focuses resources in the areas that can make a difference. The most frequently reported way that superintendents created the vision and a plan for implementation of the vision was through a formal planning process or a strategic planning process.

Superintendent L had been in his District for a year and a half and maintained that the visioning process and strategic plan had been completed before he arrived. He stated that it was his responsibility to continue the focus and implementation of the strategic plan. Superintendent A stated that his visioning process resulted in strategic objectives. Superintendents E and I never mentioned a formal implementation plan, although they discussed at length graduation competencies aligned with 21st century learning. They both stated that their district's vision was a part of the culture or the fabric of their district and the way they do business. Superintendent E noted that their district has a culture of making decisions collectively and people are constantly challenging one another. Superintendent I stated that everything the district does is connected to the competencies.

The interview questions for this research question asked the superintendents what steps they took to create the shared vision and how it was implemented. The majority of the superintendents explained their planning process in-depth. Superintendents B and F stated they were involved in a fourth or fifth iteration of the strategic planning process while Superintendent K was beginning the process for the first time. Five superintendents in this study used models of strategic planning that they embraced to move forward. The models entail different approaches or processes for achieving a strategic plan (Center for Strategic Planning, 2001). Superintendent F and Superintendent E identified utilizing the Cambridge Model of strategic planning. Superintendent B, who has led the district for sixteen years, said that the district used to use the Cambridge Model but that they have done the process so many times they now have their own process and lead it themselves. Superintendent G identified the Baldridge Model as the strategic planning model the district adopted, while Superintendent M utilized the Scenario Planning Model. Superintendent D's district used a hybrid model of strategic planning. Superintendent D

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and her team looked at multiple strategic planning models and took the elements of the models they thought would be the best fit for their district. Superintendent D explained:

> As I began the third year, during year one and year two we laid the groundwork for the development, we began to look at various planning models, those models we felt would be the best match for our district. We had all shared that we wanted a model that would be a high degree of engagement of our stakeholders and that we wanted a model that would also be…transformative in the sense that it would not just continue to improve the current system, but it would allow us to actually breakthrough, you know, to areas that we had not yet been able to explore, and therefore 21st century learning; because our district was actually built on the platform 20th century learning. So we knew that we had to come up with a model that would allow us to take on new areas that had not been explored before and transform other areas. And so the launching of the development of the strategic plan was a major effort (personal communication, February 21, 2012).

> Superintendent D stated: "We actually developed our strategic plan with what we found

to be the best research based practices from multiple models. So rather than just signing on to a single model we took the best practices from three different models" (personal communication, February 21, 2012).

The analysis of the data and examples presented above resulted in the second and third findings in this study. The second finding is that an action that most of the superintendents used in implementing 21st century learning in their districts was to engage in a formal planning process to design the procedures and actions they would take to implement the shared vision for 21st century learning. The third finding was that a strategic planning process was employed for most of the superintendents who engaged in a formal planning process. There were several

different ways that superintendents went about this process. Some used formal strategic planning models to carry out the plan for implementing the 21st century vision.

A fourth finding was that the superintendents formed guiding teams to begin the process of creating a vision and a formal plan for implementation of 21st century learning. Data related to this finding support the practice of the use of guiding teams to create a 21st century vision and plan for the implementation of the vision. Only two of the thirteen superintendents interviewed did not indicate that they utilized a planning team. However, they did report there was a culture in each district where people feel free to challenge one another. Superintendent E stated, "People are constantly challenging each other and supporting each other in doing what they have decided to do. That is not directed by us [meaning the district leadership]" (Personal communication, Superintendent E, March 2, 2012).

The fifth finding that emerged from this research question was that superintendents involved a broad cross-section of stakeholders in the visioning and planning or strategic planning process. The data related to this finding revealed that the majority of superintendents had representation from constituent groups including business leaders and university officials. Superintendent B explained how district leaders involved a broad cross-section of stakeholders:

> During the strategic planning process in 2005 we really deliberately took a look at what
> we thought, and when I say we, we had representation from all kinds of stakeholders in
> our community, but particularly an advisory group of CEO's and entrepreneurs,
> university officials, professors, students, parents, teachers who would get together over a
> couple of months and talk about what knowledge and skills our students needed when
> they left us. And out of that came those twelve skills that…which are now six, seven
> years later, because we are now working the next strategic plan, they've been honed to

seven based on our experience in the last five years (personal communication, March 22, 2012).

The data and examples shared from this finding demonstrate that superintendents value the input of a broad cross-section of stakeholders to engage in the creation of the vision, planning and implementation process for 21st century learning. Stakeholders were encouraged to be engaged in all phases of the process in the majority of school districts represented in this study.

The sixth and final finding that resulted from this research question was the formation of action teams to implement the identified plans to achieve the 21st century vision. Eleven of the thirteen superintendents created action plans or teams to implement the plan initiatives. The process for each of the eleven districts resulted in breaking into smaller teams to implement the agreed upon initiatives. The superintendents often brought experts in to advise or facilitate action teams or task forces to develop plans for 21st century learning that would be implemented systemically within their districts. Superintendent D explained how the goals were implemented through action teams:

> Simultaneously people who had been signed up on the task forces were given a choice of either staying on board for an action team, of either the same one they had been on, or transferring to a different one. Other people were given the opportunity to sign up for the action teams. So now, from task forces we went to action teams. So we had an action team for academic excellence and rigor, an action team for communications, an action team for systems and structures, a communication…an action team for digital literacy and information technology, an action team for partnerships for learning, and an action team for youth development and leadership (personal communication, February 21, 2012).

Superintendent D went on to state that the action teams were comprised of students, teachers, community members, business leaders and a broad cross-section of stakeholders.

Action teams were also reported in Superintendent F's district. Superintendent F reported how action teams to imbed and support 21st century skills were comprised of district and community members:

> Once the Strategic Plan was adopted by the Board we turned that over to the action team. Probably comprised of, actually, let me backup…one of the specific results we were looking for is that we said we will create the committee comprised of passionate district personnel to lead the district through the implementation of 21st century skill and technology integration. So then as part of our action team we had a forty-member group of people. Again, not only staff and administrators, a couple of students, but also parents, senior citizens, representatives from the university committee and representatives from the State Department of Education draw up literally the blue print over the next five years of how we would imbed and support 21st century skills in all areas (personal communication, February 22, 2012).

Summary of how Superintendents created and implemented a shared vision for 21st century learning. As a result of the analysis of the data for this research question several findings emerged regarding the actions superintendents that participated in this study took to implement a shared vision for 21st century learning among their districts and communities.

Six findings emerged from this research question. The first finding suggests creating a vision for 21st century learning that is shared extensively with district and constituent groups is vital to making the shift from an industrial model of learning to 21st century learning model. The second finding resulted in the importance of engaging in a formal, disciplined process to create

the vision and design a plan to implement the 21st century vision. The majority of the superintendents who said they employed a formal planning process said that they applied a strategic planning process. This resulted in the third finding of utilizing a strategic planning process to create and implement a shared vision for 21st century learning. The fourth finding that resulted from this research question was that district superintendents in this study employed guiding teams to initiate the process of creating and implementing the 21st century vision. The teams were established to guide the process of the creation of the vision and the plan to implement the vision. A fifth finding from the data resulted in engaging a broad cross-section of stakeholders in the process of developing the vision and the strategic plan. In some districts a broad cross-section of stakeholders were involved from the beginning of the process. In others the guiding teams expanded further along in the process to involve a broad cross-section of stakeholders, in order to make sure the district and community constituents had input into the process. The sixth and final finding from this research question was that action teams were established to ensure that the initiatives determined by the formal planning teams were implemented.

Research Question 2

How did superintendents align and develop the components of their organizational systems to build capacity for 21st century learning?

The second research question addressed how superintendents align and develop the components of their organizational systems and resources to build capacity for 21st century learning. Each participant was asked three interview questions related to aligning the components of their districts to build capacity for 21st century learning. The data from this

section resulted in six findings that are important for building capacity for implementing a vision for 21st century learning:

- Align component systems of the district.

- Communicate and collaborate often to build capacity to implement the vision.

- Align or realign resources to system components to build capacity for the district initiatives.

- Involve the chief financial officer or budget administrator in the process.

- Imbed professional development in the culture of the district.

- Establish professional learning communities.

The first finding from this research question was that aligning district system components are important actions that superintendents must take to implement a vision for 21st century learning. This data revealed a pattern of responses where superintendents described their districts as organizational systems as collaborative cultures where the alignment of the component systems is integral to the work of the districts. Ten of the thirteen superintendents interviewed for this study described how the alignment of component systems in their districts was imbedded in the culture of the districts. The superintendents gave examples of how aligning the district components was fundamental to the work of the district. Superintendent E stated that decisions are made collectively and decision-making is a collegial process that is inclusive of the school business official. Superintendent E explained:

> You've got to want to be a part of this culture. It's interesting because the culture will…I think it's wonderful…but it will also chew up and spit out someone who doesn't want to participate in it. So you know, in terms of building capacity…you're sort of 2.2 question, part of the building capacity is to make sure that people who are here understand what the

rules of the game are and are fully participating on a collegial basis (personal

communication, March 2, 2012) .

Superintendent G also described how the alignment of district components was part of

the culture of the district.

It is imbedded in the culture. And the reason it is, is because of continuous improvement

in the culture. So it's really very easy for us, whereas conversations I have had with other

superintendents, it's very difficult for them because they see it as another program,

another system. And our staff, our teachers are very excited about it because they

understand it. They see it is a part of continuous improvement and that's all about the

process. And that's all about identifying processes that are going to really bring across

the main theme…and our main theme here would be communication (personal

communication, February 23, 2012).

Superintendent D talked about her role as a leader in assessing and evaluating the

organizational structure in terms of what types of leadership and supports were necessary to

implement and sustain the transformation to 21st century learning:

We needed to be mindful of the fact the systems and structures that currently existed at

the time would not suffice in sustaining the transformation of the system. As

superintendent, one of the bigger pieces I have looked at in the overarching district was

the organizational structure and what types of…both leadership areas and support

systems we needed going in. When we first looked at the main areas for example, the

areas that report directly to the superintendent, the primary areas initially were the area of

deputy superintendent overseeing building operations, the school business administrator

overseeing the financial and non-instructional operations and then the human resources

person overseeing the curriculum and instruction and the implementation of assessments. The piece…one of the major pieces that was missing was development, planning, and technology component. So, one of the first things coming, even preceding the work of the strategic plan was to reorganize some of the administrative roles to also allow for that position. Because while technology would not be the primary aspect of 21st century learning, it was going to be an essential component, woven into the system and accelerating the system, as Jim Collins would put it (personal communication, February 21, 2012).

One district is at the beginning stages of the process of implementing a 21st century vision. Superintendent K described that the system components of this district were not yet aligned, and that their initial step in aligning district components was to assess how they would use existing resources:

Well, we're not there yet, but I certainly agree that it should be systemic. You know, it should definitely be systemic. We have tried to take an approach from the financial end of…I…we've had like everybody else, some pretty tough times with school finance, so conversations about if this is our vision and mission, then how will we use our resources to support that? And what kinds of things will we maybe stop doing? What are we going to do? So for instance, we limit people taking professional development, going to workshops and conferences, it has to be…it has to fit our vision and mission and to fit things that we are doing in our action plans related to the 21st century. There's a lot of great stuff out there. You can't go to everything so we've tried to do that. We had to make some reductions in programs and staff over the last couple of years and we've realigned our K-12 system…a building-wise or attendance level wise…and so we did that

around the conversation of, you know, what would be in the best interests of students to meet those…that vision statement and those specific goals that we have (personal communication, February 24, 2012).

In this example the superintendent described the challenge of aligning system components in her district in tough financial times. She emphasized the importance of distributing resources in a way that best supports the 21st century vision.

A second finding that emerged from this research question supported the idea that communication and collaboration was the foundation to aligning component systems that can build capacity to implement a vision for 21st century learning. Ten out of thirteen superintendents emphasized communication to align components of their districts and described it as important for changing practices that are sustainable. The superintendents shared experiences about the importance of collaboration that included having a common understanding, common language and common knowledge about the vision for 21st century learning for all constituent groups. They also shared their insights about the need to communicate openly and transparently, giving people the information they need in a timely manner, and how being able to do so contributes to district success. Superintendent C described the depth of communication used to align component systems in her district:

To have that shift that sustains over time, you have to have the capacity to have those difficult conversations and that doesn't come without knowledge around these communications. That shared vision, you know, you come together in normal conversation and people jump to advocacy and you never explore issues. You need to be intentional about ensuring that that doesn't happen, so you will see it. We put a lesson design together for all of our meetings and we are very conscious and intentional, often

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labeling, we have table tents for example, about advocacy and inquiry and all of those

things I just said, and, you know, for the next half-hour, there will be no advocacy. We're

just trying to understand at a deeper level what each other is thinking so ideas come out.

We're, let's…look for probing questions. We use a thing called spaced silence,

paraphrasing, accepting language, clarifying and asking for evidence, which is another of

our communication foundations. That one by itself supports many, many people I think

within the culture for alignment (personal communication, February 21, 2012).

Superintendent H described both communication processes in his district as both formal

and informal. He explained that he has weekly cabinet meetings that include representatives from

different district components. The meetings are held so that the component systems can

communicate openly and share information as well as challenges. He referred to this as a more

informal process than the more formal communication that comes out of the Community

Relations Office he implemented. He stated that he implemented an office of community

relations in his district to keep the work force and constituent groups informed about the work of

the district. Superintendent H explained:

One of the offices we have is the Office of Community Relations. Basically there are two

people who do most of the work. And I would have to give a lot of credit to our

Community Relations Office. It's hard to believe that an office that small can kind of

keep the lines of communication open and…but he's a part of the leadership team, the

director of that department. And I would have to give a lot of credit to our community

relations department for keeping our work force informed of what we do (personal

communication, February 22, 2012).

Superintendents reported the importance of creating cultures that support the work of implementing their districts' visions. All superintendents reported that the work of carrying out the vision is systemic and supported by the systems and structures that have been put in place. Superintendent B stated that in her district there is a long history of systems thinking being perpetuated as part of the culture of the district. Superintendent C stated that it is important to create a supportive culture at the systems level. He referred to Senge and the importance of professional learning communities and adult learning.

Professional learning communities and fostering teacher leadership were said to be important to the superintendents' efforts in building capacity for a vision for 21st century learning. Superintendent A spoke of strong collaborative working groups, working and sharing best practices together. Four superintendents discussed the importance of hiring the best people for positions in the district who understand and support the tenets of the vision. Superintendent B stated that the district approaches everything systemically and that the district structures itself to support the vision.

The superintendents in this study reported that stakeholders must have a common understanding of what the focus of the district is as vital to the success of the districts. They discussed communication as the foundation for successfully implementing the vision. The superintendents reported the need to communicate and continually discuss what it means to be moving in a new direction to create a different way of learning for students. The venues for these discussions were reported to be leadership meetings, team meetings, cabinet meetings, faculty meetings, learning communities, and collegial circles. Some superintendents discussed formal ways that information was disseminated in terms of electronic media, newsletters, minutes of meetings, etc.

A third finding that emerged from the data from this research question was that realignment and reallocation of resources is necessary to build capacity in the districts for the vision to be implemented successfully. The superintendents referred to the difficult financial times that they have had to withstand in recent years due to the state of the economy. The superintendents emphasized the importance of realigning and reallocating resources to build capacity to support the district initiatives while at the same time ensuring there were proper systems and structures in place to build capacity for the implementation of the vision. Ten of the superintendents interviewed discussed the importance of the budget in ensuring that systems and structures are aligned to attain the vision, specifically putting a focus on teaching and learning.

Superintendent C spoke about her experiences with the budget in tough economic times and the importance of intentionally keeping the work of the teaching and learning department the focus. She spoke about the need for everyone to have a common understanding of what the focus of the district vision is and ensure that the leadership team meets regularly to dialogue about the work the district is doing. She offered that communication has been the biggest part of the district's success because it is the foundation for people to come together.

Superintendent F explained budget and allocation of resources and all district initiatives are directly aligned with the strategic plan:

> Then that becomes, in a sense, use the old phrase, you plan the work and then you work the plan. And over the next five-year period then, our budget becomes nothing more than the strategic plan expressed in dollars and cents. So we defined the resources in ways we want to make…achieve that goal and again…we allocate resources and the time and the training to that. And we have professional learning communities in all of our buildings. We have a central office professional learning community whereby we constantly re-

examine our goals and we focus on and from time to time we have to tell our Board of

Education, they…remember our focus. You know, when you have a new fad, or a new

flavor of the week comes up we say…that's not in our current plan. We need to go back

to what we've defined (personal communication, February 22, 2012).

Superintendent A spoke about how his district realigned resources to build capacity to

build a wireless infrastructure to support the district's Bring Your Own Devices (BYOD)

initiative for 21st century learning. Superintendent A explained:

It has taken about three years for it to happen. But we kept reallocating resources, you

know, essentially taking funding from what we didn't feel was a high priority anymore

and in putting it into…making sure that our infrastructure and server capacity was robust

so that we could move forward with the use of mobile devices. We wouldn't want to do

the BYOD without the wireless infrastructure. So we needed to make sure we had the

capacity, the wireless capacity and the server capacity, to be able to do this (personal

communication, March 29, 2012).

The examples about aligning, realigning and reallocating resources shared by the

superintendents represented more than how to achieve individual goals. Superintendent F

explained that aligning or redistributing resources must be purposeful in terms of achieving the

initiatives of the district plan. He explained that the process of aligning system components is not

linear and needs continual reassessment and monitoring to ensure that the resources are aligned

with district components to build capacity for successful implementation of initiatives of the

district plan, and ultimately the vision.

The fourth finding that resulted from this research question is that it is essential that the

chief financial officer/business administrator be directly involved in the alignment of resources.

Nine superintendents in this study thought that the business administrator must have a clear understanding of the initiatives identified in the district and work closely with the planning team in order to build capacity to implement successfully the initiatives of the implementation plan. Superintendent D stated that the district changed the paradigm of the budget process from planning for a budget to budgeting for a plan and that the business administrator was integral in the realignment of district components to build capacity for the implementation plan. Superintendent D explained:

> At all district levels the budget administrator asked for a high degree of resource alignment to the strategic plan which raised the awareness of people to be intentional and deliberate at all levels of the organization about how to creatively increase revenues and keep expenditures down while implementing the initiatives (personal communication, February 21, 2012).

Superintendent A also highlighted the role of the business manager in reallocating resources to realign systems and structures to build capacity around their district's plan. Superintendent E maintained that aligning time and resources was important to the process of implementing the vision and was teacher and department driven. When the business administrator knows and understands the needs of different system components regarding the identified goals of the district, the person can plan accordingly. It was evident from the answers of the ten district superintendents that the role of the business administrator was essential to the alignment process in their districts.

The fifth finding that resulted from this research question was that professional capacity (i.e. knowledge, skills and abilities) of administrators, teachers and other staff members was built through professional development. All thirteen superintendents in this study responded that

building capacity for 21st century learning was expanded by providing professional development. When discussing professional development, eleven out of the thirteen superintendents discussed professional learning communities. Four of the superintendents stated that their professional learning communities were called collaborative work groups, which they identified as having the same characteristics as professional learning communities. Three of the thirteen superintendents discussed data as an important professional development tool, as well as having a common language and understanding about what the focus of the district is in terms of the district vision. Superintendents also reported that they fostered teacher leadership to imbed professional development into the culture of the districts, which was important. They reported that teachers working with other teachers to improve teaching and learning expanded the capacity of the district to achieve the vision as reported by Superintendent K:

> We're trying to build a core group of teachers who would have the knowledge and be able to share it with other people in the buildings as we kind of move in that direction. We have a staff of a little over 300 certified teachers and 70 of them participated in that, just on their own time once a week, and so we've tried to build on that. We have brought in John and Sue from ABC and we do effective instructional skills training with everybody, which is how to engage students for the most part, lots of pockets of that. But we also have…starting last year implemented a professional learning community here across the district and we dismiss every week at 2:00 and have weekly professional learning communities that we meet in and, you know, work on…you know…21st century skills isn't the only thing we work on, but other things related to that (personal communication, February 24, 2012).

Superintendent B described a specific example of the good work a teacher leader is doing relative to supporting teachers in implementing 21st century learning at the building level, yet she also describes some of the frustrations to create and sustain the culture:

And there are always designated teachers on those teams who have responsibility for working with teachers at the school as we try to, you know, deliver curricular design work. So it's a perpetual thing. You know, it is the one area, Sarah, where I think many school districts just can't figure out how to do this internally in their own place. So it's not unusual to click on a website of a school district and you get a link to the state department, right? And you see all the standards documents or you see whatever, but that's one level. But to make this work on the ground, in classrooms with students, that really requires heavy lifting and, mind you, right in the local school district. And I understand the frustration on the part of people like me, and in other school districts trying to figure out how you do that. Not only finding the resources, be it time or money, but find the people, you know, who have the capacity to lead this. So that is the big, in my view, sticking point, and frustration for many (personal communication, February 22, 2012).

When discussing developing, nurturing and sustaining a culture to support 21st century learning, Superintendent G stated that the support for imbedding the skills in the culture comes from having a system in place for continuous improvement:

Again, it goes back to making sure that the system is in place as far as continuous improvement, not just in a manner of informing and laying out the getting buy-in by having their site plans and classroom plans reflect the type of language. And so we've already started the understanding, or have that in place, so when we put out the measures,

we put out the indicators, it will just be automatic for them to put that in place (personal communication, February 23, 2012).

Some of the superintendents discussed professional development in terms of their district practices regarding the process for evaluating teachers. They also talked about risk-taking in terms trying out new ideas and feeling safe to do so. The importance of principals participating in and modeling effective professional development was also discussed. Superintendent H talked about the component of his professional development department called PD 360, which is an observation tool to collect data to improve instruction. Superintendent I discussed coupling professional conversations with recognizing and celebrating the work of teachers and administrators. Superintendent L discussed the need for aligning professional development of the administrators with the professional development of the teachers. Superintendent A referenced the research regarding the role of the principal and maintained that the principal was key to the effort. He asserted that having building administration as participants in professional development activities was essential so they could model and support the teachers in taking risks. Superintendent F also stressed support for teachers taking risks as an essential part of professional development to building capacity:

> I think that different teachers and principals participate in the process of challenging and supporting each other. Some are very, very active and some are less so. But the culture pulls and pushes people along. And keeps bringing people…it's very hard for people to sit here like a lump because there's going to be somebody who's going to say, how do you feel about this? You haven't said anything. How do you know…is this right? Is this wrong? How do you feel about it (personal communication, February 22, 2012)?

Superintendents also discussed professional development for 21st century learning that is imbedded in the districts but is also shared across districts, specifically focused on rubrics and assessments. Superintendent J reported that imbedding professional development in the culture of the district as a way of doing business or how it was manifested in the culture for creating rubrics for the 4Cs. He stated that though professional development is imbedded in the culture of the district it is also about expanding the work to partner with other districts to achieve the goal. Superintendent J explained:

> Professional development programs…our principal meetings are all focused around that. So it becomes just part of our work. And then we start picking off different projects that support that. For example, right now we're involved with a set of other school districts in the nation on defining rubrics for the four Cs: critical thinking, collaboration, communication and creativity, and having benchmarked rubrics for the elementary, middle and high school. So we're in the process of developing those, and then once we try to begin to implement those, and try to imbed those in our program and studies and our curriculum, then we'll have teachers and administrators helping with that process (personal communication, April 25, 2012).

The final finding that resulted from this research question is that professional learning communities are important to building district capacity for 21st century learning by improving teaching and learning. The superintendents reported that professional learning communities played an important role in building capacity for implementing a 21st century vision. It was reported by the superintendents that professional learning communities allow district administrators, teachers and staff the ability to communicate about teaching and learning as it applies to a 21st century vision in meaningful ways. Seven out of the thirteen superintendents

stated that they subscribe to the DuFour model of professional learning communities. Five of the thirteen superintendents stated that the work of the professional learning communities was to improve teaching and learning through data driven decision-making. Superintendent A stated that there were no formal professional learning communities. He referred to his teams as very collaborative, strong work groups, though he did state that he had professional learning communities that focus on student data. Superintendent E stated that his district did not call them professional learning communities but rather, collegial work groups. Superintendent I maintained that his district was so horizontal that there were no formal structures like professional learning communities in place. Three of the superintendents added that professional development was accomplished by advancing 21st century skills. Superintendent J said that the development of collaborative teams was at the core of the districts work and was a mechanism for delivering professional development. Three superintendents emphasized that the work of the professional learning communities is to have decisions made from the bottom up. Superintendent M was one of these superintendents and added that professional learning communities help people reorganize the needs for student learning.

Superintendent B described data teams as professional learning communities that plan together as well as identify what works and doesn't work in terms of student learning. She also explained the role of professional learning communities at the administrative level in her district:

> Our administration...we are a district of 5,000 kids and 20 administrators. The beauty of that is that we can all be in the same room together, which is the case whenever we meet. So there is no issue with, you know, interpreting what might have happened because you weren't in the room. But we spend most of our time, at least on a bi-weekly basis,

working professionally to build our own skill set (personal communication, March 22, 2012).

Superintendent C described how professional learning communities helped shift the district from a central office driven system to one that is a collaborative effort between representatives of district stakeholders:

That's an interesting question because we moved from a system in the beginning with this work that was pretty much driven from the central office level to a system that went completely 180 degrees to building driven, to one now much more collaborative; and I've realized that this works. We're not going to be successful if we don't have the collaboration teaching and learning with our building principals and supporting the work. And we have not subscribed to any model of professional learning communities, though we have used the DuFour work. He influenced our work in our principal institutes and teacher leader institutes (personal communication, February 22, 2012).

Superintendent L explained the role of professional learning communities in developing compassion, conviction and optimism for implementing the vision. He described a meeting he had with his administrators earlier in the day and how the focus of that meeting was on building strong professional learning communities. Superintendent L described the role of professional learning communities in his district this way:

And is that empathy...no; compassion, conviction, optimism. So those are the things that we need to train our principals for because sometimes when they're...like in their professional learning community there is a teacher, there is maybe let's say a fifth grade and three of the fifth grade teachers are working really well and two just don't want to do it, they don't believe in it. They've been successful teaching it on their own, closing the

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door, and they don't want to participate. And so we need to show them, at that point, that

no, this is part of the job. This is what we're doing. That is what we're about. And so

giving principals the language rather than back off and say, well you three can meet and

the other two can go off and do their own thing. We can't afford to do that. Our kids are

waiting. So I think those are the kinds of professional development we need to do with

our principals, more than anything else, is how you have those conversations, create those

conversations. What do you look for in a PLC? What are some of the deep conversations

that could be happening? What can we do as a district to support you? People want

language. Sometimes I know I want language. I want someone to do the same things.

So...they're powerful (personal communication, February 23, 2012).

Summary of how superintendents aligned and developed the components of their

organizational systems and resources to build capacity for 21st century learning. As a result

of the analysis of the data for this research question there were six findings that resulted from the

superintendent interview responses regarding the actions superintendents have taken to align and

develop the component systems of their organizations.

Aligning district system components was the first finding and an important action that

superintendents take to implement a vision for 21st century learning. The data revealed a pattern

of responses from ten superintendents who described their districts as organizational systems as

collaborative cultures where the alignment of the component systems is integral to the work of

the districts. The superintendents described how the alignment of component systems in their

districts was imbedded in the culture of the districts.

The second finding suggests that communication and developing a culture of

collaboration is important to build capacity for 21st century learning. Communication and

collaboration can build capacity to implement a vision for 21st century learning. Ten out of thirteen superintendents emphasized communication to align components of their districts and described it as important for changing practices that are sustainable.

The third finding analyzed from the data in this research question indicated that the realignment and reallocation of resources is necessary to build capacity in the districts for the vision to be implemented successfully. Ten of the superintendents interviewed discussed the importance of the budget in ensuring that systems and structures are aligned to attain the vision, specifically putting a focus on teaching and learning.

The fourth finding that resulted from this research question is that it is essential that the finance officer be directly involved in the alignment of resources. Nine superintendents in this study thought that the business administrator must have a clear understanding of the initiatives identified in the district and work closely with the planning team in order to build capacity to successfully implement the initiatives of the implementation plan.

Professional development emerged as the fifth finding in order to build capacity to implement a 21st century vision. All thirteen superintendents in this study responded that providing professional development expanded building capacity for 21st century learning. When discussing professional development eleven out of the thirteen superintendents discussed professional learning communities.

The sixth finding that resulted from the data was to establish professional learning communities to build capacity for a 21st century vision. It was indicated that professional learning communities play a central role in building district capacity for 21st century learning by improving teaching and learning.

Research Question 3

What leadership actions did superintendents take to develop, nurture and sustain the culture necessary to support 21st century teaching and learning?

The third research question addressed the different ways that superintendents develop, nurture and sustain the culture necessary to support 21st century teaching and learning. Superintendents were asked two interview questions to answer this research question. The superintendent responses indicated that superintendents' actions were the result of collaborative processes and procedures with stakeholders. There were four findings that resulted from this research question regarding superintendents and how they develop, nurture and sustain the culture necessary to support 21st century learning. The four findings are:

- Identify 21st century skills.

- Imbed 21st century skills in the culture of the district.

- Assess and measure 21st century skills.

- Create a supportive culture.

Eleven out of thirteen superintendents indicated that identifying the specific 21st century skills in their districts was the first step to supporting 21st century teaching and learning. Superintendent F discussed identifying 21st century skills and creating rubrics:

> We chose, as the first skill, to concentrate on what we call complex thinker; instead of critical thinker, complex thinker. And it is six of one and a half-dozen of the other. But we've identified complex thinking as OK, we're not going to imbed all six of these skills at once. Let's do it sort of one at a time and let's concentrate on complex thinking through our professional learning communities. We were doing things like systems thinking models with our teachers. So we had teams of teachers develop a rubric...and I'll

send you a copy...of how we measure and assess students in their journey of how they acquire complex thinking skills. And how teachers can plan their assessments and plan their lessons around complex thinking. So the development of rubrics; and we're well on our way to developing all six rubrics (personal communication, February 22, 2012).

The second finding that was a result of this research question was that 21st century skills identified by the district should be imbedded in the culture of the district. Five superintendents stated that it is important to imbed 21st century skills into the culture and climate of the district and five superintendents explained embedding skills through professional learning communities. Their examples included integrating 21st century skills into teacher evaluations, grading practices, schedule design, classroom design and standards-based report cards. Two superintendents spoke about the challenges of state and federal regulations while Superintendent D spoke to the need to align their work on 21st century learning with the Common Core and the environment of the District:

> We became very much aware of the fact that we had to be mindful that these five areas of the five action teams, along with the Common Core and all it would bring from Race to the Top, could not be seen as silos, because that would be very dangerous. It would be like well, I'm working on this and I don't have time for that. So we very purposely...the action team leaders, with Jane's leadership, had a very in-depth discussion of how we could connect this work so that people could understand it in relationship to how it was integrated and interconnected and interdependent. So while we had those five areas that we have been developing for the last three years, what they saw, the interdependence and the overlap, was now the three connecting pieces and themes. And those three pieces…so we're looking at the Common Core with imbedding the 21st century skills and what that

looks like across all the curriculum areas. And what it looks like both in determining

our...the curriculum documents, but also what does it look like in the areas of instruction,

and what does it look like in developing assessments that will be formative assessments

for the teacher teams and those areas (personal communication, February 21, 2012).

Ten superintendents referred to teacher leaders as integral to the process of imbedding the

21st century skills into the district. The superintendent reported that curriculum guides, rubrics

and having indicators and outcomes for these skills were also important for knowing what to

teach and how to assess what is being learned. Six out of eleven superintendents discussed

benchmarking, indicators and outcomes. Superintendent C referred to the skills being imbedded

in the work of implementing the 21st century vision. She also spoke about identifying 21st

century indicators and outcomes for students, as well as the challenge the district has confronted

in creating assessments. An excerpt of the interview follows:

> Working with the teaching and learning department; every curriculum that's written
>
> down there and that would be every grade level in our elementary buildings, in an
>
> integrated model that happens to....my thinking skills and outcomes and indicators are
>
> part of those curriculums. And then later...and we have at our middle school an on-going
>
> work at the junior high and high school integrating those units. And even the ones that we
>
> don't create at the central office level, teachers are expected at the buildings to imbed
>
> thinking skills and habits of mind. So any place you go in this system, you walk into the
>
> classroom, one of the requirements now is to have your key content posted. And along
>
> with key content you'll see on a whiteboard or somewhere in the room that the focus is
>
> on the thinking skill or habit of mind in that classroom for that days lesson. So things are
>
> embedded into our work. A relative to assessment, we assess the thinking skills and

habits of mind. We have not been as successful. I mentioned earlier, that our teaching and

learning department people are working with Sue Brown to begin to develop that piece,

and to develop some tools to begin looking at correcting data on our outcomes and

indicators. And how do you do that? They're so global. There hasn't been much work on

that so we are excited about the opportunity to work with her on that because she's been

doing that work in other places (personal communication, February 21, 2012).

The interview data related to this research question also supported a third finding, that

assessments and measures must be developed to know if students are mastering the skills

identified. Seven, or slightly more than half, of the superintendents who participated in this study

identified assessments for 21st century skills as important in order to be able to assess how

effective the districts are in implementing 21st century learning. Six superintendents discussed

the importance of rubrics to clarify standards and assess student performance. Two

superintendents discussed the Program for International Student Assessment (PISA) when

discussing measures to assess 21st century learning. Two different superintendents discussed the

Career Work Readiness Assessment (CWRA). All thirteen districts reported that they had

developed or were in the process of developing rubrics to assess 21st century learning.

Superintendent A talked about assessments for measuring 21st century skills and the

struggle to find measures that actually assess the skills. He spoke about teachers in his district

creating rubrics to assess the skills. In the following excerpt he also shared his enthusiasm about

the College Work Readiness Assessment, which assesses high school students on 21st century

skills:

I think some of this also has to do with the types of assessments that you're developing;

and I'll give you an example. Next year, at the high school, we're going to pilot what's

called the College Work Readiness Assessment (CWRA). And it really is...it's an assessment that you...you don't need to give every student, but you give a sample of students in a grade. And it's the application of 21st century skills, how...how you would apply those skills in a setting. And so next year we're going to administer it to one hundred high school students. So we can see...a random sample of high school students...so that we can see, you know, see where the gaps are, where is it that we're really falling down in those areas [21st century skills]. But the high school has done a nice job in the project-based learning and the high school rubric and each department has identified particular skills, 21st century skills, that they are going to focus on for their department. And so they're...they're going to imbed those into...so they work as a department to figure out how they're going to do that. And that...that's done also at the other levels; middle schools and elementary. As I said, at the elementary, we've now imbedded those skills into the report card (personal communication, March 29, 2012).

Superintendent E discussed the need to measure 21st century skills by having district benchmarks to compare the district over time, and how it led his district to be included in the PISA or Program of International Student Assessment, an international assessment that focuses on reading math and science literacy as well 21st century skills. Superintendent E explained:

We also looked at assessments. What assessments could we find that would reinforce what we are committing ourselves and would allow us to benchmark ourselves against others and against ourselves over time? I mean it's nice if everybody walks around and says we teach beyond whatever, NYS Regents, we teach beyond AP. I mean every high performing district in an affluent suburb of the United States talks about how they go beyond. Well, how do you know? And that was what led us to, along with a couple of

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other districts, to talk our way into the 2006 PISA, which is only done on a country basis (personal communication, March 2, 2012).

The fourth finding that resulted from the data from this research question was fostering a supportive culture as necessary to achieve the 21st century vision. The superintendents addressed fostering a supportive culture in a variety of ways. Superintendent D explained that the culture has to do with the values and beliefs of the district, which evolve through the strategic planning process. She stated that the evidence of those beliefs are in the Common Core, 21st century learning and what the district is doing with the implementation of Covey's *Habits of Highly Effective People*. Superintendent D stated that the culture of the district is one where the beliefs are connected to the actions they take and it is how the district prioritizes what is important. Four superintendents discussed the importance of having a supportive culture to achieve the district vision. Two superintendents discussed trust and being transparent or forthright as significant to building a culture of support to achieve the vision. Six superintendents discussed the provision of resources, in terms of time and materials for people to be able to do their jobs well. Four superintendents discussed technology integration support and giving people the tools they need to be successful. Superintendent D discussed learning as being central to all that the district does on multiple levels, be it sharing information, thinking, or engaging in dialogue. He discussed the importance of recognizing and sustaining levels of professional development as a focus for support. Superintendent F stated that strong support manifests itself in the relationships and focusing on the process. He said he was a former coach and that support was important by doing all of the things that good leaders do. As an example he talked about being visible and stated that, ultimately, his job was enriching peoples' lives. Superintendent M stated that she does everything she can to support people. She stated that once there is a vision, it is important to let

them run with it and find the resources to support them. She stressed that transparency was critically important to the process. A total of six superintendents mentioned giving staff the resources they need as a way to support them. Superintendent I explained it this way:

> And I'll tell you too, I give them whatever they want, too. I don't...when it's in line with what we need to do, I don't...I don't mince resources or words. If they're doing the work and they need something, they get it. It's as simple as that. I think that's important (personal communication, April 4, 2012).

One superintendent created a district leadership position to support administrators, teachers and staff for the 21st century learning initiative. Superintendent B explained that she intentionally created a position of Assistant Superintendent for 21st Century Learning to create the support needed to successfully implement the 21st century skills. She explained that she has invested in teacher leaders to support the staff in doing the work. Superintendent B explained the leadership position in observing practices, coaching, and continuing the assessment work:

> Well, the curriculum technology integrators, that position that I mentioned who support teachers and their development of technology, used to enhance student learning. The role of the 21st century learning superintendent. You know, so that deliberate leadership position at the district level that has primary responsibility for this. You know, it's just about redesigning the work and focusing on the essential when we talk about any of these. As far as building level curriculum leaders, these are co-facilitators of curriculum teams (personal communication, March 22, 2012).

Superintendent C referred to the leadership institutes and that need for balance between demand and support:

Well, that would be the institutes I referred to earlier. I know...and I would look at support...I think we created some demand also. I think it's important to think about that. You have to have...you need to be expecting something of your people so you have that opportunity for creative tension. I don't think people talk about that very much. People don't talk about the balance between demand and support that's necessary. But if you don't have that, that demand, you're not going to get anywhere, also, so we talk to our people about why would someone want to change? What are you going to create, and experience, for that person to suggest that changing would be important? How are you creating in your culture those opportunities for people to come together to at least crack the door open to consider a different way of doing the work? So we talk about those...I ask those kinds of questions (personal communication, February 21, 2012).

Summary of leadership actions superintendents take to develop, nurture and sustain the culture necessary to support 21st century teaching and learning. This research question resulted in four findings that indicate the support for 21st century learning is embedded in the culture of the districts.

Identifying 21st century skills was the first finding reported by superintendents in this study to build capacity for 21st century learning. All of the superintendents indicated that identifying 21st century skills was necessary to develop, nurture and support a culture for 21st century learning.

The second finding identified from the analysis of the findings from this research question was that it is important to imbed the 21st century skills in the culture of the district. Five superintendents reported that it was important to imbed the skills in the culture of the district.

The third finding identified from the data from this research question was that assessments and measures must be developed to know if students are mastering the skills identified. Seven, or more than half, of the superintendents who participated in this study identified assessments for 21st century skills as important in order to be able to assess how effective the districts are in implementing 21st century learning.

The fourth and final finding from this research question from the analysis of the data was that superintendents reported having a supportive culture is necessary to achieve the 21st century vision.

Research Question 4

What were the challenges and obstacles superintendents faced in implementing 21st century learning into their districts?

The final research question focused on the challenges and obstacles that superintendents faced when implementing 21st century learning in their districts. Two major findings resulted from this research question:

- Resistance to change.

- Funding and resources.

Although superintendents in this study reported many challenges and obstacles, the challenge most often reported was resistance to change. Twelve superintendents stated that changing people's mindsets or resistance to change was an issue. The superintendents consistently reported that their biggest challenge working with stakeholders was to change their beliefs about teaching and learning from the industrial model of education to a 21st century model. Superintendent H discussed resistance to change by a vocal minority as common during a

major change effort. Superintendent F stated that resistance to change comes from the very kids and families that you are trying to help the most:

> You would think that the protest would come from the top; the people who would say the elite classes are being watered down, blah, blah, blah, blah. There is some of that, but the real push back, ironically enough, comes from the kids…and the families more than the kids...but the very kids you are trying to help the most. Trying to bring your whole district up to the high levels of performance and narrow the gap between white and affluent and poor and/or minority (personal communication, February 21, 2012).

Superintendent F explained why he thought there was resistance from these students and families. He responded:

> A couple of things that are overlapped, I'll come at it in different ways. I think everybody talks about high expectations but in their heart they don't really believe they're possible; whether they are teachers or parents or students. Parents talk about wanting high expectations for their kids but when you make it real...whoa, wait a second. That's a little too much, that's a little too aggressive. I'll hop into a different sphere. I've been a fan of Outward Bound since it was formed in the United States. And by total coincidence I ran Outward...the only thing I've done since 1980 other than being a superintendent is to run Outward Bound for the United States. I was terrible at it because it was 99% fundraising. But the part that fascinated me about Outward Bound was how you take a bunch of kids or adults who don't know each other and have them go off and do a bunch of activities they have never done before and have high risk involved and fundamentally change their perception of what their own capacities are and what other people's capacities are in the space of two or three weeks. Something that school districts spend all their time on. And

it was fascinating to me. I was fascinated with this before I got involved, and it occurred

before I was asked to run Outward Bound and I've been fascinated since. It's a long

conversation, but the thing about Outward Bound is that it's not about rock climbing; it's

about your perceptions of what you are capable of doing or running rivers or doing

anything else. Your perceptions of yourself and your perceptions of others. The basic

problem going back to the issue of high expectations is that people talk about it but really

don't believe it. They don't really believe they are capable of taking and succeeding in an

AP course. That's the biggest hurdle. And people get to the stage and chicken out. It's too

hard. My kid can't do it. You're putting too much stress on my kid. That sort of thing

(personal communication, March 2, 2012).

Superintendent L explained his challenges with resistance to change as having veteran

teachers who believe in the "old way" of delivering instruction, which he described as standing

in front of a classroom and disseminating information to students.

Superintendent H explained resistance to change in his District:

The other is simply resistance to change. Anytime you try to implement change there are

going to be people who are going to be resistant to it. And while in most cases here, it's

probably a minority, very often the minority is a vocal minority. I would also say that the

greater resistance comes from the community that...and members of the community who

do not understand that we cannot continue to educate students the way that we, that

we...the way that they were educated. To give you a clear example, last night we did a

presentation with our school Board on 21st century learning, problem-based learning and

blended instruction. And the Board was very appreciative. We have three new school

board members. We had a reporter who did not write any notes throughout the entire

presentation and then at the end of the presentation told members of our staff that he

disagreed with everything that was said. He was a teacher in the 80's. He taught gifted

students and he lectured to them and they were engaged and they did well. And if it was

good enough for his students in the 80's it's good enough for our students today. His

article is going to be a negative article questioning these drastic changes in education.

When we talk about barriers to what we are doing we have a media that...some members

of the media don't understand the importance of change and unfortunately I think

community members are misinformed (personal communication, February 22, 2012).

Funding emerged as the second major challenge for six superintendents who participated

in this study. Superintendent L reported funding as a serious challenge, which also emerged as

the second major challenge for five other superintendents who participated in this study.

Approximately one-half of superintendents who participated in this study stated that funding and

finding resources to implement a vision for 21st century learning was a challenge. Superintendent

H reported the budget as a challenge, especially during a major recession:

> Well, I would say that the overarching challenge was trying to negotiate the budget in the
>
> middle of one of the...probably the worst recession we've seen in a lifetime and the
>
> limited resources that we have to support teachers in the classroom. So that's a huge
>
> challenge (personal communication, February 22, 2012).

Like other superintendents who described funding as a challenge, Superintendent L

reported funding and having enough money, especially for professional development and other

initiatives he has going at one time. Superintendent L explained his challenges this way:

> What's another obstacle? Money – not enough money. Not enough money for
>
> professional development coaches. I'm a little worried that we're trying to do too many

things. Yes, that's the other thing; we're trying to do too many things. There are a lot of initiatives in our district because there were a lot of good ideas and we've got to start saying no to some of them. It's really hard to say no to them. What else is another obstacle? Our board support of that is awesome. We have an awesome school board. We just have some strong teachers who believe in the old way, you know? And it's...that's an obstacle (personal communication, February 12, 2012).

Other challenges and obstacles were also reported by individual superintendents. These challenges included NCLB, providing time and resources for professional development, capacity building and for Superintendent B, the move to a comprehensive report card model. Superintendent B spoke about her challenge to change the report card, but acknowledged the opportunity it brought her to have deeper conversations with constituents. She also noted that a challenge was to follow the regulations of NCLB due to the fact that the requirements of NCLB take time away from implementing the vision for 21st century learning. Superintendent L also reported NCLB as a challenge:

One of the big ones is...I mentioned earlier is, because we're in program improvement, we have to do certain things like have basing calendars, which shows that each student has an assigned textbook and so that was a...that's a big challenge because we're trying to do both. Teach 21st century and follow the rules of NCLB. How we're doing that is, for Math, English and K-8 we're doing what the heck their telling us to do. But in Social Studies and Science we're opting to just teach essential standards and the 4Cs. We're betting and betting that it's a curriculum safe plan (personal communication, February 22, 2012).

Superintendent H reported the media in educating the community can be a challenge, and made the point that if those representing the media are misinformed, or have their own bias against a change effort, it can be challenging to get media support for a change initiative.

Summary of challenges and obstacles for superintendents in implementing 21st century skills. The fourth research question addressed the challenges and obstacles that superintendents have dealt with in implementing 21st century learning.

Superintendents reported resistance to change was the most reported challenge of the many challenges and obstacles that superintendents face. Twelve superintendents stated that changing peoples' mindsets or resistance to change was a challenge.

Funding emerged as the second biggest challenge. Six superintendents who participated in this study reported funding as a challenge. Though the superintendents reported a variety of other challenges, resistance to change and funding for the 21st century learning initiative were the most reported challenges that superintendents faced.

Summary of Results

This study investigated the actions superintendents took to implement 21st century learning in their school districts. Four research questions were developed to provide structure to the study and guide a deeper understanding of how superintendents implement 21st century learning in their districts. Eleven interview questions were designed for this study that relate to each research question in order to obtain the depth of information needed for this study and to address each research question. This study identified eighteen findings that identify actions and challenges of superintendents who participated in this study as they implemented 21st century learning in their public school districts.

The first research question addressed how superintendents created and implemented a shared vision for 21st century learning among their districts and community. There are six findings from this research question about leadership actions with regard to vision:

1. Created a 21st century vision that is shared extensively with district and constituent groups.

2. Employed a formal process to create a vision and implementation plan.

3. Engaged in a strategic planning process to create a strategy to implement the vision.

4. Began the formal planning process with a guiding team.

5. Represented a broad cross-section of stakeholders on the guiding teams.

6. Created action teams to implement the initiatives identified in the implementation/ strategic plan.

The second research question addressed how superintendents in this study aligned and developed the components of their organizational systems and resources to build capacity for 21st century learning. The findings of this research question follow:

1. Aligned component systems of the districts to implement a vision for 21st century learning.

2. Implemented vehicles for communication and opportunities for collaboration to align systems components to build capacity for 21st century learning.

3. Aligned or realigned resources to identified systems components to build capacity to implement the district vision.

4. Involved the chief financial officer or budget administrator to develop capacity for 21st century learning.

5. Imbedded professional development in the culture of the district.

6. Created professional learning communities.

The third question addressed the leadership actions superintendents took to develop, nurture and sustain the culture necessary to support 21st century teaching and learning. This research question generated the following findings:

1. Identified 21st century skills.

2. Embedded 21st century skills in the culture of the district.

3. Assessed and measured 21st century skills.

4. Created a supportive culture.

The final question investigated the challenges and obstacles superintendents faced in implementing 21st century learning into their districts. Resistance to change and funding were most often identified as challenges. Funding emerged as the second most often challenge. Other reported challenges and obstacles were NCLB, professional development, capacity building and for one superintendent, the move to a comprehensive report card model.

A summary of the findings, conclusions and recommendations for further study will be reported in the following chapter.

CHAPTER V

Summary of Findings, Conclusions and Recommendations

This chapter includes a summary of the findings, conclusions, recommendations and considerations for further study. The findings that emerged from this study as a result of the analysis of the data are summarized in this chapter. The conclusions that are presented are based on these findings. The purpose of this qualitative study was to identify and examine the leadership actions public school superintendents in this study have taken to integrate 21st century learning in their school districts. The definition of 21st century skills used for this study is based on the definition from the Partnership for 21st Century Skills (P21) that was defined earlier in Chapter I of this study.

The study was guided by four research questions:

1. How did superintendents in this study create and implement a shared vision for 21st century learning among their districts and community?

2. How did superintendents align and develop the components of their organizational systems and resources to build capacity for 21st century learning?

3. What leadership actions did superintendents take to develop, nurture and sustain the culture necessary to support 21st century teaching and learning?

4. What were the challenges and obstacles superintendents faced in implementing 21st century learning into their districts?

This first section of this chapter will present the findings according to the research questions. The second section of this chapter will present conclusions drawn from the findings. The third section of this chapter will present recommendations based on the findings. Considerations for further research is the final section of this chapter.

Summary of Findings

Several key findings emerged from this study as a result of the analysis of the data. The first three research questions generated a total of sixteen findings that were identified from the responses of the superintendents. The final research question resulted in two findings about the challenges the superintendents in this study faced when implementing 21st century learning. A summary of the findings is aligned with each research question below.

Question 1: How did superintendents in this study create and implement a shared vision for 21st century learning among their districts and community?

This research question revealed six findings regarding the actions superintendents in this study have taken to create and implement a shared vision for 21st century learning in their school districts. It was established from the first research question that all superintendents in this study created a shared vision for 21st century learning, resulting in the first finding. Thirteen superintendents indicated that they created a shared vision for 21st century learning that was shared extensively with the district as well as community members. The superintendents described multiple approaches in which their visions were communicated, such as multi-media sources, public engagement sessions, faculty meetings, leadership meetings, posting the vision in all buildings, as well as constant dialogue and communication with stakeholders.

The second finding from this research question revealed that superintendents in this study utilized a formal planning process to create and implement a shared vision. Eleven superintendents in this study responded that they used a formal planning process to create and implement a shared vision.

A third finding that emerged from the responses of the superintendents was that nine of the superintendents who used a formal planning process indicated that the process was a strategic

planning process. Only two of the thirteen superintendents interviewed for this study did not

refer to a formal planning process to create and implement their vision. The two superintendents

who did not refer to a formal planning process reported that the vision was ingrained in the

culture of their districts. It could not be established, from the superintendent responses, whether

or not these two school districts went through a formal planning process to create and implement

a vision for 21st century learning.

The fourth finding from this research question found that the majority of superintendents

began the creation of the vision and implementation plan with a guiding team. Eleven of the

district superintendents who discussed a formal planning process stated that they began the

process for creating and implementing the vision with a guiding team. The guiding teams either

began with a broad cross-section of stakeholders or were later expanded to involve a broad cross-

section of stakeholders.

The fifth finding from this research question found that superintendents included a broad

cross-section of stakeholders in the creation of the vision and implementation plan. The

superintendents interviewed for this study reported that in some instances, as many as seventy or

eighty members participated on the planning teams.

The final finding from the responses of the superintendents about this research question is

that action teams were created to implement the initiatives identified from the formal plan to

implement the vision. Once the vision and formal or strategic plan were created, the planning

teams then divided into smaller action teams or task forces in order to execute the initiatives

agreed upon.

Question 2: How did superintendents align and develop the components of their

organizational systems and resources to build capacity for 21st century learning?

The second research question asked how superintendents aligned and developed the components of their organizational systems to build capacity for 21st century learning. There were six predominant findings that resulted from the superintendent responses to this research question.

The first finding was that superintendents aligned the component systems of their districts to implement a vision for 21st century learning. The data revealed that aligning component systems of the district was fundamental to the work of building capacity to implement a 21st century vision and that alignment of the components was imbedded in the culture of the districts.

The second finding is that the superintendents created vehicles for communication and a culture of collaboration to build capacity for 21st century learning. Ten out of thirteen superintendents emphasized communication to align components of their districts and described it as important for changing practices that are sustainable. The superintendents also shared their insights about the need to communicate openly and transparently. The superintendents identified experiences about the importance of collaboration and having a common understanding, common language and common knowledge about the vision for 21st century learning for all constituent groups. Ten of the thirteen superintendents also described their districts as systems of collaborative cultures and stressed that aligning the components was integral to their work.

A third finding from this research question was that the realignment and reallocation of resources in aligning district components (teaching and learning, finance, personnel, operations, etc.) was necessary for a 21st century vision to be implemented successfully. Ten of the thirteen interviewed superintendents identified resource allocation and budgeting as a major area of importance for the successful implementation of a vision for 21st century learning.

A fourth finding from this research question was that the role of the business administrator/chief financial officer is essential to align or realign resources to the identified components of the school district to build capacity for 21st century learning. In response to this research question, ten superintendents noted that the role of the business administrator/chief financial officer is important. The superintendents in this study shared that the business administrator had a clear understanding of the initiatives identified and worked closely with the planning team in order to build capacity to successfully implement the goals of the implementation plan.

The fifth finding that resulted from this research question was that professional capacity (i.e., knowledge, skills and abilities) of administrators, teachers and other staff members was expanded through professional development. All thirteen superintendents in this study responded that professional capacity for 21st century learning was built through professional development. Seven out of the thirteen superintendents referred to professional learning communities, while four discussed collaborative work groups as a way that they imbedded professional development into the culture of the district.

The final finding developed from this research question was that superintendents created school districts that functioned as professional learning communities to build capacity for 21st century learning. Eleven of thirteen superintendents stated that professional learning communities played a significant role in building capacity of the school districts and that it was necessary to have professional learning communities to achieve a 21st century vision. Four out of thirteen superintendents discussed the role of modeling, as well as the use of systems technology support that is integrated into the culture of the districts, to build capacity for 21st century learning. Three of the thirteen superintendents discussed the role of data as an important

professional development tool. They also noted the role of the professional learning community in developing a common language and understanding regarding the focus of the district in terms of the district's vision.

Question 3: What leadership actions did superintendents take to develop, nurture and sustain the culture necessary to support 21st century teaching and learning?

The third research question addressed how superintendents develop, nurture and sustain the culture necessary to support 21st century learning. There were four findings that emerged from this research question. The first finding was that to develop, nurture and sustain a culture of support for 21st century learning the superintendents identified 21st century skills or outcomes that were specific to their districts. The superintendents described these skills and outcomes as central to everything they do. Eleven out of thirteen superintendents stated that it was essential to identify 21st century skills for their individual districts. The literature supports this finding. Kay (Bellanca & Brandt, 2010) wrote that the starting point for implementing a vision of 21st century learning is to identify the outcomes so that a supporting infrastructure can be built.

A second finding from superintendent responses from this research question was that imbedding 21st century skills into the culture of the district was important. Ten superintendents reported that they imbedded the 21st century skills into the culture of the district. Fullan (2007) argued that focusing on outcomes gives teachers a framework of what they are trying to accomplish and helps to develop sound action plans. The superintendents in this study indicated that teacher leaders were pivotal to the mission of imbedding the skills into the culture of the district.

A third finding that resulted from this research question was that assessments and measures must be developed to determine if students were mastering the 21st century skills

identified by each district. Reeves (Bellanca & Brandt, Ed., 2010) noted that the challenges of 21st century assessments can be daunting due to the fact that learning the skills is not sequential or linear. Assessments and measures must be developed to determine if students are mastering the skills identified. Seven, or more than half, of the superintendents in this study identified assessments for 21st century skills as important in order to be able to assess how effective districts are implementing 21st century learning.

The final finding generated from the data from this research question was that superintendents developed a culture of support where it is acceptable for members of the organization to take risks. All thirteen superintendents discussed the different ways they supported their teachers. Approximately half of the participants, or six of the superintendents, discussed providing teachers with the supports they needed in terms of resources, such as time and materials that were necessary to do their jobs well. Four superintendents discussed support in terms of technology integration in the district and classrooms. Two superintendents discussed being authentic and transparent by being honest and forthcoming, as well as listening to and acting on feedback. One superintendent discussed focusing on relationships with district and community stakeholders and being visible in order to build trust.

Question 4: What were the challenges and obstacles superintendents faced in implementing 21st century learning into their districts?

The final research question addressed the challenges and obstacles superintendents faced when implementing 21st century learning in their districts. The superintendents described two major challenges that they encountered. Twelve out of thirteen superintendents described resistance to change by teachers, staff, parents and the media as a significant issue.

Approximately half, or six, of the participants identified funding and having enough resources as a challenge.

Superintendents also described some individual challenges that some had encountered. Two participants mentioned No Child Left Behind (NCLB) as an obstacle in the sense that it detracted from the work of implementing 21st century learning. One superintendent identified moving to a comprehensive report card model as a big hurdle, although the superintendent elaborated that it gave her the opportunity to have deeper and more meaningful conversations about the issue of grading with constituents. Capacity building with the staff and professional development were also reported to be challenges in terms of providing time, resources and materials.

Conclusions

Grounded theory design explores a process and generates a theory of how a process occurs over time through identifying patterns, themes and common categories discovered (Creswell, 2011). This study explored the process of the actions taken by superintendents to implement 21st century learning in their school districts.

This section offers conclusions that were drawn from the findings from each research question regarding the actions superintendents in this study have taken to implement 21st century learning in their school districts. It was discovered that there were numerous similarities between the actions each participating superintendent took to implement 21st century learning in their school districts. This study found sixteen similar actions that superintendents in this study took to implement change in their districts to a 21st century learning environment. The most important information that superintendents in this study shared during their interviews were the specific actions they used to transform their districts from a traditional model of education to a 21st

century learning environment. The superintendents' responses indicated that the actions of the superintendents are interwoven with the organizational structure and imbedded in the culture to create effective learning environments for the future.

Conclusions regarding actions superintendents took to create and implement a shared vision for 21st century learning among their districts and communities.

Create a shared vision. All of the superintendents in this study reported that they developed, defined and implemented a shared vision for 21st century learning through a formal process. The evidence from this study indicates that superintendents who implemented 21st century learning in their school districts regularly reported creating a shared vision and implementation plan that involved a broad cross-section of stakeholders in the process. All of the superintendents participating in this study reported that their districts had a shared vision for 21st century learning. The literature regarding leaders and vision supports that a shared vision must be created if a major change effort is to be successful (Copeland, 2003; Covey, 2004; Fullan, 1993; Kotter 1996; Kotter & Cohen, 2002; Wagner et al., 2005; Ziegenfuss, 2010). Transforming a school district to a 21st century learning environment is a second order change that requires a leader with the skills to create a shared vision for the future (DuFour & Marzano, 2011; Waters, & Marzano, 2006; Ziegenfuss, 2010).

Engage in a formal/strategic planning process. There was a preponderance of evidence from the interviews to suggest that the superintendents who implemented 21st century learning in their school districts engaged in a formal planning process to identify a plan or strategy to achieve the district's vision. This conclusion is based on several findings. Eleven superintendents discussed a formal planning process. Nine superintendents specifically addressed a strategic planning process resulting in a fourth conclusion. Although there was no real distinction made by

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the superintendents between a planning process and a strategic planning process, engaging in a strategic planning process was the most frequently reported way that superintendents engaged in planning for the facilitation of creating a shared vision as concluded by this researcher.

Five superintendents who reported using a strategic planning process used models of strategic planning that they adopted to move their vision forward. The models encompassed different approaches or processes for achieving a strategy to implement a 21st century vision (Center for Strategic Planning, 2001). Specific formal models of strategic planning included the Cambridge Model, the Baldridge Model and the Scenario Planning Model of strategic planning. One superintendent looked at several models of strategic planning before she and her leadership team decided on a hybrid model that was the best fit for her district.

Begin with a guiding team. One conclusion from this study that related to initiating a visioning process was establishing a guiding team to begin the process of creating a vision and implementation plan. The data from this study supports the idea that guiding teams are important to create a 21st century vision and plan for the implementation of the vision. Eleven superintendents in this study created a vision and implementation plan that began with a guiding team. The guiding teams expanded to involve a broad cross-section of stakeholders. Kotter (1996) maintains that it is critical to form a guiding coalition or team of people who have a high trust level to plan for the change effort. The data related to this finding support the idea that guiding teams are required to create a 21st century vision and plan for the implementation of the vision. The superintendents reported that it was their job to build capacity for the vision by bringing a group of people together, referred to as a guiding team, to acquire the knowledge necessary to facilitate the work of creating and implementing the 21st century vision.

Involve stakeholders in creating the vision and implementation plan. The findings indicated that superintendents had taken actions to implement the vision by the involvement of stakeholders in the process of creating a vision and a plan to implement the vision. All thirteen superintendents in this study included stakeholders in the process of creating a vision and implementation plan. The superintendents reported that involving stakeholders in the process of creating a vision and strategy to implement the vision generated support from the district and community for both the vision and the implementation plan. The constituents on the planning teams ranged from a broad cross-section of stakeholders to smaller groups that included school board members and district leadership teams. Successful implementation of the vision rests on assisting people to understand, and then commit to, the goals of an organization. Involving all stakeholders ensures that constituent groups will embrace the vision.

Create action teams to implement the vision. Eleven of the thirteen superintendents reported that they created action teams or task forces to implement the strategy/plan initiatives, resulting in the sixth and final conclusion. Action teams are necessary to ensure that the implementation plan is executed. The process for each of the eleven districts resulted in breaking into smaller teams to achieve the initiatives of the strategy/plan. In order for major transformational change to take place it is important to empower people to take action (Kotter, 1996). Breaking into smaller action teams to lie out a plan for the execution of the initiatives agreed upon, ensures they are implemented. The action teams guided the implementation of the initiatives identified in the implementation plan. One superintendent discussed in detail how the strategic planning team first identified initiatives to be implemented. The superintendent reported that action teams were formed to implement the initiatives by having members of the guiding team each lead an action team. Superintendents reported that the action team initiatives were

interrelated and there were very specific structures put in place for action teams to meet, report

out and communicate about their progress in order for the vision to be implemented successfully.

Conclusions regarding the actions superintendents took to align and develop the components of their organizational systems and resources to build capacity for 21st century learning.

Align component systems of the organization. The second research question addressed

the actions superintendents have taken to align and develop the components of their

organizational systems to build capacity for 21st century learning. The first conclusion from the

findings was that aligning component systems of a school district was an important action

superintendents took to build capacity for a 21st century vision. Evidence from the superintendent

responses indicated that if the current system cannot support a vision for 21st century learning,

then the system must be realigned to support the vision. Ten superintendents described the

alignment of the components as integral to the work of the districts to build capacity for a 21st

century vision. Ten of the thirteen superintendents reported that the alignment of system

components was imbedded in the culture of the districts. When the superintendents shared their

experiences, they referred to their districts as organizational systems and collaborative cultures,

where aligning district components were fundamental to their work. Superintendents reported

that systems and structures needed to align in order to sustain the transformation of the system to

a 21st century learning environment because it allows for support of the plan to implement the

vision. The responses from the superintendents indicated that the organizational components of a

district needed to be compatible in order to work together to achieve the 21st century vision.

Foster a culture of communication and collaboration. The evidence from this study

suggests that superintendents recognized the need and importance of communication in building

capacity for 21st century learning. The findings from this research question support the conclusion that communication and collaboration are the foundation to build capacity for a for 21st century vision. The superintendents reported that communication and collaboration regarding the goals of the district leads to a common understanding, common language and common knowledge about the vision for 21st century learning for all stakeholders. Ten out of thirteen superintendents emphasized the importance of communication and collaboration to align components of their districts. They described communication as being critical for implementing practices that are sustainable. The superintendents identified different levels and types of communication. For example, the responses of the superintendents described communication and its importance in interpersonal interaction, in groups, as well as within the organization and with the community. The superintendents also shared their insights about the need to communicate openly and transparently on a deeper level and, when necessary, to have difficult conversations. The superintendents agreed that all different levels of communication expand the capacity of the organization and contributes to district success. Fullan (2006) wrote that communication is important for an organization to be inclusive and it fosters a highly collaborative culture to build capacity, which leads to sustainability.

Align budget/resources to component systems. Superintendents in this study aligned budget and resources to component systems to build capacity for a 21st century vision. Ten superintendents in this study reported that the budget, in terms of realigning and reallocating resources for the district vision, was important. The responses of the superintendents resulted in the conclusion that an action superintendents had taken was to align resources to the various district components to support the 21st century vision. When aligning resources, the superintendents reported that it must be purposeful in the sense that they are deliberate about

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assessing expenditures and how they are connected to the strategic plan. The alignment of resources must also be reassessed and monitored on a continual basis. Clay, et al., (2011) support this conclusion, maintaining that if priorities and initiatives are not aligned to the strategic plan it causes the members of the organization to be uncertain about the direction of the district.

Involve finance/business administrator in planning. The role of the business administrator is fundamental in aligning component systems to build capacity for a 21st century learning environment. The superintendents in this study reported that it was important for budget administrators or financial officers to be involved in planning meetings to create and implement a vision for 21st century learning. Ten superintendents in this study reported that it was important to ensure that business administrators and chief financial officers have an integral role in the transformation to a 21st century learning paradigm. The superintendents reported that budget administrators ensured that the component systems effectively understood the importance of designating resources to align with the implementation plan, beginning at grade levels and department levels, to see how they could be more efficient in their use of resources. The literature on system alignment supports this notion. Business administrators in districts are tacticians who act as planners and resource allocation specialists in order to achieve the goals set out in the strategic plan (Clay, et al., 2011). They are an integral part of a culture that shares and blends expertise to achieve the vision (Clay, et al., 2011). An action superintendents have taken in this study is to include business/finance administrators in planning for the transformation to 21st century learning.

Imbed professional development. A conclusion from this study was that superintendents imbedded professional development in the culture of their districts to expand the capacity of the school to implement a vision for 21st century school districts. Kay (Bellanca & Brandt, 2010a)

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writes that effectiveness in delivering 21st century professional development is "far and away the most important part of the work" (p. xxv). Imbedding professional development in the culture of the district is an essential and important action superintendents in this study took to implement a vision for 21st century learning.

All thirteen superintendents in this study responded that professional capacity for 21st century learning was expanded through professional development. Eleven out of the thirteen superintendents discussed professional learning communities and collaborative work groups as playing a key role in how teachers engage in professional dialogue to deepen their understanding of 21st century learning, how they will implement the skills, as well as how they will prioritize the work. Superintendents also discussed data as an important professional development tool, as well as having a common language and understanding about the focus of the district and the district's vision. Superintendents in this study reported that fostering teacher leadership to imbed professional development into the culture of the district was important. The superintendents highlighted the necessity for principals to incorporate effective professional development, and the importance of aligning the professional development of the administrators with the professional development of the teachers. Including building administrators as participants in professional development activities was reported as necessary so the administrators could model and support the teachers in taking risks.

Establish professional learning communities. The responses from superintendents in this study revealed that professional learning communities were important to build district capacity for 21st century learning at all levels of the organization. When specifically asked what role professional learning communities played in building capacity for 21st century learning, the superintendents reported that professional learning communities played a significant role by

improving teaching and learning. The superintendents described how professional learning communities allowed district administrators, teachers and staff the ability to communicate about teaching and learning as it applies to a 21st century vision in meaningful ways.

Seven out of the thirteen superintendents stated that they subscribed to the DuFour model of professional learning communities. Using data in professional learning communities as a focus to improve instruction was identified as important. Superintendents reported that professional learning communities were used to assess student work, create rubrics for 21st century skills as well as to create common formative assessments. The superintendents reported that professional learning communities were a venue to discuss student work and instructional practices. Superintendents reported that professional learning communities were necessary to shift the district from a central office driven system to one that fosters collaboration.

Conclusions regarding the actions superintendents took to develop, nurture and sustain the culture necessary to support 21st century teaching and learning.

Identify 21st century skills. It is a conclusion from this study that an action superintendents took to develop, nurture and sustain the culture for a 21st century learning environment was to identify 21st century skills. Eleven superintendents stated that the first step to developing, nurturing and sustaining the culture necessary to support 21st century teaching and learning was to identify the 21st century skills specific to their individual districts. The superintendents reported imbedding the skills in the curriculum, integrating the skills into teacher evaluations, grading practices, schedule design and standards-based report cards. The superintendents reported that they imbedded the skills through professional development and aligned the skills with the Common Core Standards.

Cultivate an environment of support. The superintendents who participated in this study indicated that it was important to foster a culture of support for all members of the organization in order to implement 21st century learning. This finding led to the conclusion that superintendents, who are undertaking the task of implementing 21st century learning in their districts, foster a culture of support for all members of the organization. The superintendents described creating a supportive culture for implementing 21st century learning and gave examples of a variety of ways they supported teachers and leaders in their districts so they understand everything that the district does to implement 21st century learning is integrated, interconnected and interdependent.

An example one superintendent gave was the connectedness between the Common Core, 21st century skills and the culture and climate of the district. Superintendents discussed teacher leaders as integral to creating a culture of support because they were viewed as non-threatening and supported teachers in the process of imbedding the identified 21st century skills. The superintendents pointed out the necessity of also supporting teachers in terms of resources such as time, materials and technology integration. Superintendents stated that trust and being transparent was significant for creating a culture of support. One superintendent reported learning as central to all that the district does on multiple levels, be it sharing information, thinking or engaging in dialogue. He stated that support for people implementing 21st century learning manifests itself in relationships, as well as the focus of district stakeholders on the process of implementing the vision.

Measure and assess 21st century skills. It is a conclusion from the findings of this study that assessments and measures must be administered to know if students are mastering the 21st century skills identified by the districts. Seven, or more than half, of the superintendents who

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participated in this study identified assessments for 21st century skills as important in order to be able to assess how effective the districts were in implementing 21st century learning. Superintendents also discussed the importance of using rubrics to clarify standards and assess performance. Two superintendents noted the Program for International Student Assessment (PISA) when discussing measures to assess 21st century learning. Two different superintendents discussed using the Career Work Readiness Assessment (CWRA). All thirteen districts reported that they had developed, or were in the process of developing, rubrics to assess 21st century learning. Curriculum guides, rubrics and having indicators and outcomes for these skills were stated as being important for knowing what to teach and how to assess what is being learned.

Conclusions regarding the challenges and obstacles superintendents faced in implementing 21st century learning into their districts.

One conclusion from this study was that resistance to change emerged as a challenge for superintendents when implementing a vision for 21st century learning. The superintendents in this study reported that the biggest challenge they have is to work with stakeholders to change their beliefs about teaching and learning from the traditional model of education to a 21st century model.

Funding emerged as the second challenge most identified by the superintendents who participated in this study. Six superintendents, or approximately one-half of superintendents, who participated in this study stated that funding and finding resources to implement the vision were a challenge. Resources are essential in building the capacity of leaders and staff to become a 21st century learning environment. In the current economic climate superintendents are continually expected to do more with less. State and federal accountability measures imposed on districts were cited by superintendents in this study as competing demands that take time and money

away from implementing a vision for 21st century learning. Superintendents implementing a vision for 21st century learning must meet these demands by effectively incorporating them into their district initiatives. Fusing the regulations with a vision for 21st century learning is the leadership challenge of the superintendent.

Recommendations

This research study was conducted to examine the actions superintendents have taken to engage in the process of transforming their school districts from a traditional model of education to a model of education that is grounded in 21st century learning as it is defined for this study. From this study, several recommendations can be made to superintendents who elect to implement 21st century learning in their school districts on a system-wide scale. The recommendations are based on the findings of this study. It should be noted that this study did not evaluate the effectiveness of these actions.

Leaders are change agents and superintendents are key to the process of changing to a new paradigm for learning. Superintendents are in central leadership positions to make the changes necessary, in public schools, to a 21st century learning environment (Kowalski & Björk, 2005; McCarthy, 2011a; Schwarz & Kay, 2006b; Wagner et al., 2005; Wesch, n.d.). Implementing a vision for 21st century learning is a transformational change that reaches deeply into a school district and a community. Superintendents who lead the transformation of a school district to a 21st century learning environment change the essential framework of the organization. Making the change to a 21st century learning environment requires that superintendents take action. Taking action means performing a task that is specific to achieving a goal. To redesign the school districts for 21st century learning, this study recommends specific actions for superintendents to take to change their districts to 21st century learning districts.

The recommendations detail specific actions for implementation of 21st century learning in their school districts. The framework includes creating and implementing a shared vision for 21st century learning, building capacity for 21st century learning, developing a culture for 21st century learning and challenges superintendents face when implementing 21st century learning in their school districts.

Creating and implementing a shared vision for 21st century learning.

Superintendents who participated in this study revealed that they had all put processes and procedures in place to develop a shared vision for 21st century learning that was also shared with constituent groups. It is recommended that superintendents who implement 21st century learning in their schools should put processes and procedures in place to create a shared vision for 21st century learning to guide decision-making. The literature on organizational change supports the notion that vision is essential for the success of any change effort in a learning organization (Armstrong, 1982; Fullan, 1993; McCarthy, 2011a; Murphy, 2002; Schlechty, 2009a; Senge, 1994; Senge et al., 2000).

Given the findings and conclusions of this study, it is recommended that superintendents should initiate and establish a strategic planning process for their school districts to create a strategy for achieving the 21st century vision. The evidence from this study indicates that the superintendents who implemented 21st century learning in their school districts engaged in a formal planning process to identify a plan or strategy to achieve the district's vision. Although there was no real distinction made by the superintendents between those who used a planning process and those who used a strategic planning process, engaging in a strategic planning process was the most frequently reported approach that superintendents had taken to engage in planning for the facilitation of a shared 21st century vision as concluded by this researcher. It is essential to

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have a strategic planning process that focuses on strategy development to implement a vision in a planned and intentional way (Curtis & City, 2009).

It is also recommended that superintendents should form guiding teams to facilitate the work of creating and implementing a shared vision for 21st century learning. Superintendents in this study put processes and procedures in place to create a shared vision and formal or strategic plan to implement 21st century learning that began with a guiding team. The guiding teams expanded to involve a broad cross-section of stakeholders. The data from this study support the idea that superintendents form guiding teams to create a 21st century vision and plan for the implementation of the vision.

Involving a broad cross-section of stakeholders in the process of creating a vision and implementation plan was reported as integral to the success of the 21st century vision. It is recommended that superintendents should involve a broad cross-section of stakeholders in the process of creating a shared 21st century vision and implementation plan. Superintendents in this study reported that to successfully implement a 21st century vision they involved stakeholders from all constituent groups. The superintendents reported that involving stakeholders generated support from the district and community for both the vision and the implementation plan.

An additional recommendation is that superintendents who implement a vision for 21st century learning should form action teams to implement the 21st century vision. Superintendents in this study formed action teams to ensure the implementation plan was effectively executed. Eleven districts reported that it was important to form action teams to achieve the initiatives of the strategy or plan. The superintendents reported that forming smaller action teams to execute the initiatives agreed upon ensured that they were implemented with fidelity to the plan. The action teams guided the implementation of the initiatives identified in the strategic plan.

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Building capacity and aligning components for the 21st century school district.

From the findings and conclusions in this research study, aligning component systems of a school district is an important action superintendents should take to build capacity for a 21st century vision. Aligning the different components of a school district requires constant attention in order for the vision to be realized. Teaching and learning, business and finance, human resources and information technology are all different components of the organization that should be aligned. The alignment of the different components builds capacity for successful implementation of the 21st century vision. When the superintendents shared their experiences they referred to their districts as organizational systems as collaborative cultures, where aligning district components was fundamental to their work. Superintendents reported that systems and structures need to be aligned in order to sustain the transformation of the school system to a 21st century learning environment.

From the preponderance of evidence from this study, it is recommended that superintendents should involve the business administrator or financial officer in all planning to create and implement a vision for 21st century learning. In school districts, the business administrator plays a central role in aligning component systems to build capacity for a 21st century learning environment. Superintendents in this study reported that it was important to ensure that business administrators and chief financial officers have an integral role in the transformation to a 21st century learning paradigm. Role expertise is a requirement in aligning district components and essential for successfully accomplishing what is necessary to achieve the vision (Clay, et al., 2011). Superintendents in this study reported that they worked closely with business administrators to align budget and resources to component systems to build capacity for a 21st century vision. Resources were assessed and distributed to the various components

according to the initiatives defined by the district plan. The alignment of resources was assessed and monitored on a continual basis in order for the initiatives to be successfully carried out. The budget administrator or chief financial officer played a critical role in aligning resources to various components of the districts to support the 21st century vision.

It is recommended that superintendents should establish professional learning communities as an action superintendents take in order to build district capacity for 21st century learning at all levels of the organization. The superintendents described how professional learning communities allowed district administrators, teachers and staff the ability to communicate about teaching and learning as it applies to a 21st century vision by developing a common language and understanding regarding the focus of the district. Professional learning communities provide support to teachers and staff and are a vehicle for imbedding professional development. Fostering a culture of support for members of the organization to implement 21st century learning was reported as essential by superintendents implementing a 21st century vision in their districts. Superintendents in this study reported that professional learning communities created a supportive culture and fostered an understanding that the beliefs and values of the district were integrated, interconnected and interdependent with the strategic plan and everything the district does. The superintendents discussed the importance of professional learning communities in supporting teachers in terms of resources such as time, materials and technology integration. One superintendent reported learning as central to all that the district does on multiple levels, be it sharing information, thinking or engaging in dialogue, and that the support for people doing the work manifests itself in relationships fostered in professional earning communities. Professional learning communities were reported to focus the district stakeholders on the process of implementing the vision.

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Building a Culture for 21st Century Learning.

A final recommendation from the findings and conclusions of this study is that superintendents should put procedures and processes in place to identify, assess and measure 21st century skills. Superintendents in this study reported that in order to develop, nurture and sustain the culture necessary to support 21st century teaching and learning, it was important to identify the specific 21st century skills for their individual districts. The superintendents reported imbedding the skills into the curriculum, integrating the skills into teacher evaluations, grading practices, schedule design, and standards-based report cards as central to developing the culture necessary to grow, nurture and sustain a 21st century learning environment. Superintendents also identified the importance of assessing students' knowledge and understanding of 21st century skills in order evaluate the districts in creating 21st century learning environments. The superintendents reported that creating rubrics clarifies standards and assists in assessing performance. Assessments such as the Program for International Student Assessment (PISA) and the Career Work Readiness Assessment (CWRA) were identified by superintendents as assessments that their districts administered to measure 21st century skills as well as gauge whether or not their districts are ensuring students were college and career ready.

Considerations for Further Study

This research was limited to considering actions that thirteen superintendents have taken to implement 21st century learning from a small sample of superintendents who represent a specific population. This study is not large enough to generalize to a broader population. Further research could replicate this study in order to triangulate the results. In addition, this research focused on answering specific research questions utilizing the answers of superintendents as a

unit of analysis. A replica of this study could be undertaken with a different population, such as principals, teachers, or both, in the same districts in order to further validate the results.

Future research could also focus on looking at the dimensions of 21st century learning and the impact implementing a 21st century paradigm for learning has on school climate. In today's climate of high stakes school reform, state and federal mandates put untold pressure on school leaders. Several studies on school climate have documented that school climate has an impact on student achievement and social emotional health (Taberman, 2004). Does implementing a 21st century paradigm for learning have a positive impact on the climate of a school district?

Despite an increase in school districts implementing 21st century learning, very little research has actually been conducted on the topic of superintendents who are implementing 21st century learning in their school districts. Leaders who are implementing 21st century learning have challenged the traditional paradigm of education. In this current climate of high stakes reform, is there something inherently different about the superintendents who lead districts that are implementing 21st century learning than there is about superintendents who are leading school districts that are not implementing 21st century learning as defined by this study?

It was clear from the findings in this research study that the business administrator played a central role in the process of aligning component systems to build capacity for a 21st century learning environment. Business administrators and chief financial officers have an integral role to play in the transformation to a 21st century learning paradigm. Further study on the role of the business administrator in changing the paradigm of a district from a traditional paradigm to a 21st century paradigm may be warranted.

Lastly, school district superintendents who participated in this study reported that in order to develop, nurture and sustain the culture necessary to support 21st century teaching and

learning, it was important to identify the specific 21st century skills for their individual districts. The superintendents reported imbedding the skills in the curriculum, integrating the skills into teacher evaluations, grading practices, schedule design and standards-based report cards as central to developing the culture necessary to develop, nurture and sustain a 21st century learning environment. Do school districts who implement 21st century learning in their districts system-wide in a planned and intentional way fare better than schools districts who are not implementing 21st century learning as defined by this study?

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Appendix A

Definition of 21st Century Learning

According to the Partnership for 21st Century Skills (2009), twenty-first century learning encompasses "skills, knowledge and expertise students must master to succeed in work and life; it is a blend of content knowledge, specific skills, expertise and literacies" (p.1). Twenty-first century learning is also "the development of core academic subject knowledge and understanding among all students", as well as skills that allow students to "think critically and communicate effectively life and career skills" such as flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, leadership and responsibility (Partnership for 21st Century Skills, 2009, p. 1). These skills can be embedded into the curriculum and integrated into instructional practices by infusing technology and the learning tools critical to fostering them.

Most recently the P21 framework developed by the Partnership for 21st Century Skills has condensed the framework to state it is the infusion of the 3Rs: reading, writing and arithmetic, with the 4Cs which are: critical thinking and problem solving, communication, collaboration, and creativity and innovation (The Partnership for 21st Century Skills, n.d).

Appendix B

Research and Interview Questions

1. How did superintendents in this study create and implement a shared vision for 21st century learning among their districts and community?	1. Is there a vision for 21st century learning and to what extent is it shared within the district and with constituent groups? 2. As superintendent, what did you do to facilitate the process of creating a shared vision? 3. How did you communicate the vision with the school community, BOE, internal faculty and staff, and the external community? 4. As superintendent, what steps did you take to plan for implementation of the shared vision? 5. How was/is the shared vision being implemented?
2. How did superintendents align and develop the components of their organizational systems and resources to build capacity for 21st century learning?	1. What key actions did you take, if any, to align the component systems (teaching & learning, finance, personnel, operations,) of your district to work together to support 21st century learning? 2. How did you build professional capacity (knowledge, skills and abilities) among administration, teachers and other staff members? 3. What role did Professional Learning Communities play in building capacity for 21st century learning, if any?

	According to the Center for Comprehensive School Reform and Improvement, Professional Learning Communities "shift the focus of school reform from restructuring to re-culturing (Louis, 2006). A PLC is an on-going process used to establish a school-wide culture that develops teacher leadership explicitly focused on building and sustaining school improvement efforts. Generally, PLCs are composed of teachers, although administrators and support staff routinely participate (Bolam, McMahon, Stoll, Thomas, & Wallace, 2005; Huffman, 2000). In some schools, PLCs are extended to community members and students, as appropriate (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006; Stoll & Louis, 2007). Through participation in PLCs, teachers enhance their leadership capacity while they work as members of ongoing, high-performing, collaborative teams that focus on improving student learning (Rentfro, 2007)." (Learning Point Associates, 2009, n.p.)
3. What leadership actions did superintendents take to develop, nurture and sustain the culture necessary to support 21st century teaching and learning?	1. As superintendent, what actions did/do you take to imbed 21st century learning skills into curriculum and assessment? 2. What did/do you do to support teachers in the classroom, district level administrators, principals, building-level curriculum leaders?
4. What were the challenges and obstacles superintendents faced in implementing 21st century learning into their districts?	1. What challenges and obstacles did you face when implementing 21st century learning into your district?

Appendix C

Cover Letter to Participants

Dear Superintendent:

I am a currently a doctoral candidate in the Educational Leadership Program at Sage Colleges in Albany, New York. I am conducting research on the actions that public school superintendents take to implement the characteristics of 21st century learning into their districts under the guidance of Dr. Robert Bradley, Chair of the Educational Leadership Program. The title of my dissertation is: What is the Role of the Superintendent in Redefining Schools in Order for Students to Learn the Skills Necessary to be Successful in the 21st Century?

The purpose of this study is to explore the actions public school superintendents take to integrate into their districts the key characteristics of 21st century schools. The study will seek to identify the leadership actions that superintendent's use in implementing change in their districts to 21st century learning. The research is limited to twelve to fifteen school districts that have the key characteristics of 21st century learning as defined by the Partnership for 21st Century Skills (see definition attached).

You have been identified as a Superintendent whose district is in the process of implementing or who has implemented 21st century learning into your district as a planned and intentional process. As a result of your experiences of leading a school district toward this end, I am inviting you to voluntarily participate in this research study. Methods of inquiry will include interviews with the superintendents of twelve to fifteen school districts identified as having these characteristics. A document review of strategic plans, vision statements, mission statements as well as board meeting minutes, committee meeting minutes, and other records that participants deem important to this study, will be collected and analyzed along with the interviews. The data collected will be utilized to determine the common actions of superintendents in implementing the characteristics of model 21st century teaching and learning. Sharing your knowledge and the actions you have taken for your district to be a model for 21st century learning will be a valuable contribution to the field of educational leadership.

This study will be conducted with confidentially. Pseudonyms will be developed to protect the districts and the participants for the purpose of reporting the results. Interviews will be conducted and scheduled for a time that is mutually convenient and will take approximately 45 minutes to one hour. Every effort will be made to complete them in person but they may be done remotely via Skype or by telephone if needed. The interviews will be audio recorded. Once the interviews have been transcribed, they will be returned to the participants for verification and accuracy. The data will be kept on a password- protected computer until this study is completed. The audio recordings will be maintained until the research has been concluded and then all data will be destroyed. Should the interview take place in person observational notes will be taken by this researcher.

Please review the attached informed consent document. If you have any questions regarding the nature or scope of this study, as well as your participation, please feel free to contact me at (315) 447-3298, (315) 435-4450 or (315) 476-7714. I can also be reached by e-mail at I appreciate your consideration and I am looking forward to meeting and interviewing you to gain a better understanding of the actions superintendents take to make their districts 21st century learning environments.

Sincerely,

Sarah Stack Feinberg

Informed Consent Agreement

Name of Participant: _____ _____

You are being invited to participate in a doctoral study entitled: *What is the Role of the Superintendent in Redefining Schools in Order for Students to Learn the Skills Necessary to be Successful in the 21st Century?*

This research is being conducted by Sarah Stack Feinberg, a doctoral candidate at The Sage Colleges, Albany, New York, under the guidance of Dr. Robert Bradley, Chair of the Educational Leadership Program. The project is funded solely by the researcher.

Purpose of the Study

The purpose of this qualitative study is to explore the leadership actions public school superintendents take to integrate into their districts the key characteristics of 21st century schools. The study will seek to identify the leadership actions that superintendents use to implement change in their districts to 21st century learning. The research will be delimited to twelve to fifteen school districts that have the key characteristics of a 21st century learning environment as defined by the Partnership for 21st Century Skills.

Explanation of Procedures

This study will take place from January, 2011 through August, 2012. The data collected will be primarily through interviews conducted in person at a convenient time for the participant. The interviews will be audio recorded. Should in- person interviews not be convenient or possible they will be conducted either remotely by Skype or via telephone. Participants may elect not to answer any questions and may terminate the interview at any time. When in-person interviews are conducted observational field notes will be taken. The audio recordings will be transcribed and given to the participants of the study to be verified for accuracy and to ensure that the responses are clear.

The names of the participants, as well as the districts selected for this study will be confidential. Pseudonyms will be developed for both the participants, as well as the districts, to use when reporting the results of the study. The participants, as well as the selected districts, will be known only to the student researcher. All interviews will be transcribed and maintained on a password-protected computer. Once the transcribed interviews have been verified for accuracy, by the participants, the audio tapes will be maintained until the research has been concluded and then all data will be destroyed.

The benefits for your participation in this research is your ability to contribute to the field of research in educational leadership and the actions superintendents take to develop 21st century

schools. There are minimal risks for participation in this study. The information from this research will be kept confidential. Every effort will be made to prevent anyone from outside the project access to identifying participant responses. However, due to the interview nature of this study it is considered a "minimal risk" study. Risks involve sharing information with the researcher in a confidential but not anonymous setting.

Consent

In the event that I am harmed by participation in this study, I understand that compensation and/or medical treatment is not available from The Sage Colleges. However, compensation and/or medical costs might be recovered by legal action.

Participation is voluntary. I understand that I may, at any time during the course of this study, and during the interview, revoke my consent and withdraw from the study without any penalty. I have been given an opportunity to read and keep a copy of this Agreement. I have also been given the opportunity to ask questions concerning the study. Any such questions have been answered to my full and complete satisfaction.

I, _____, having full capacity to consent, do hereby volunteer to participate in this research study and give permission to the researcher to record me during the course of the interview.

Signed: _____
        (Research participant)

This research has received the approval of The Sage Colleges Institutional Review Board, which functions to insure the protection of the rights of human participants. If you, as a participant, have any complaints about this study, please contact:

     Dr. Esther Haskvitz, Dean
     Sage Graduate Schools
     School of Health Sciences
     65 First Street
     Troy, New York 12180
     (518) 244-2264
     haskve@sage.edu

Appendix E

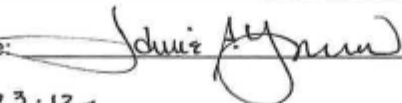## Transcriptionist Confidentiality Agreement

Confidentiality Agreement
Transcriptionist

I, Jamie S. Mroczko, transcriptionist, agree to maintain full confidentiality regarding any and all audio recordings and documentation received from Sarah Stack Feinberg related to her doctoral study on *The Role of the Superintendent in Redefining Schools in Order for Students to Learn the Skills Necessary to be Successful in the 21st Century*. Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of the audio-taped interviews or associated documents.

2. Not to make copies of any audiotapes or computerized files on the transcribed interview texts, unless specifically requested to do so by Sarah Stack Feinberg.

3. To store all study-related audio recordings and study related materials in a safe and secure location as long as they are in my possession.

4. To return all audio and study related documents from the study in a complete and timely manner.

5. To delete all electronic files containing study-related documents from my computer hard-drive and any back up devices when the transcripts are completed and returned.

I am aware that I can be held legally liable for any breach of this confidentiality agreement and for any harm incurred to individuals if I disclose identifiable information contained in the audio and/or files to which I have access.

Transcriber's name: ___JAMIE S. MROCZKO_____

Transcriber's signature: ___Jamie A. Mroczko___

Date: ___2·23·12___

Appendix F

National Institutes of Health (NIH) Certificate of Completion

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Sarah Feinberg** successfully completed the NIH Web-based training course Protecting Human Research Participants".

Date of completion: 06/04/2011

Certification Number: 694691