Caught at a Crossroads: Secondary Principals’ Perceptions of Change Agentry within Two Paradigms of Education

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UNIVERSITY OF REDLANDS

Caught at a Crossroads:
Secondary Principals’ Perceptions of Change Agentry within Two Paradigms of Education

A dissertation submitted in partial satisfaction of the requirements for the degree of
Doctor of Education in Leadership for Educational Justice

By
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April, 2019

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Dedication

This dissertation is dedicated to my family.

To my wife [name], for your encouragement and support in all I do; you are truly a beautiful fountain of blessings. I thank God for the broken road that led me to you. Every day you make me want to be a better man. I am looking forward to the memories we will make in the years to come.

To my children [name], trust in the Lord with all your heart and lean not on your own understanding. In all your ways acknowledge him, and he shall direct your paths (Proverbs 3:5, 6; New King James). As you grow older and more amazing, may God continue to grant you strength and wisdom to live a life of purpose.

To my parents [name], who always encouraged me to keep on going. Your model of love and endurance has got me through more than you can imagine.
Acknowledgements

Even youths will become weak and tired, and young men will fall in exhaustion. But those who trust in the lord will find new strength. They will soar high on wings like eagles. They will run and not grow weary. They will walk and not faint. (Isaiah 40: 30, 31) New Living Translation

Thank you Lord, for renewing my strength over and over again, putting the right people in my path and for the calling you have given me.

To my beautiful wife, [Name], you are my rock. I love you with all my heart. Thank you for all your sacrifice . . . WE DID IT!

To my children, [Name], thank you for your patience. Your love and encouragement were the blessings I needed to continue to get through this. I am blessed to be your dad, and I love you both more than you can imagine.

To Dr. Phil Mirce, I know the last few years have been challenging, but you never gave up on me. I pray that God continues to fill your life with opportunities to spread your contagious passion amongst educational leaders. This dissertation was made possible by your countless hours of support. Thank you for your faith and encouragement!

To Dr. James Valadez, thank you for going the extra mile to provide an opportunity for me to finish this journey in my life. Thank you for being a blessing!

To my participants, thank you for openly sharing your educational struggles, experiences, and beliefs. I will always be grateful for you wisdom. This work would not have been possible without your help.
Secondary school principals increasingly face the challenge of working in the space between the existing, obsolete paradigm of education (standardized testing and accountability) and the paradigm that has yet to come into existence (i.e., a radically different way of thinking about education as a social system). Principals continue to be held accountable for increasing student achievement (based on continued use of assessment tools that are inadequate to prepare students for the realities of the 21st Century) while implementing a paradigm that does address realities for the 21st Century. Such a paradigm emphasizes cognitive development where thinking, through reciprocal processes of listening, speaking, reading, writing, and viewing have primacy (i.e., providing opportunities for young people to learn how to think rather than being told what to think as opposed to the emphasis in the traditional transmissive, standardized assessment and accountability paradigm). Thus, principals are caught at the crossroads between a paradigm based on an outdated understanding of achievement and a paradigm based on understanding equity, access, technology, and opportunity gaps caused by societal injustices traditionally advantaging Whites while disadvantaging African Americans, Hispanic Americans and Native Americans. The purpose of my study was to understand secondary principals’ perceptions regarding change agentry as it relates to those who viewed change agentry as paradigmatic (meaning a change in leadership, assessment, curriculum, and the definition of achievement) from those who seek piecemeal changes and do not recognize a need for a paradigmatic change.
All participants spoke of a paradigmatic change, but perceptions and beliefs shared by participants suggest it is not yet understood.
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Chapter One: Introduction

Background

The world has changed dramatically since the industrial era. The public school education system has not. The current paradigm of education has consisted of a set of unexamined assumptions or interconnected beliefs whose latest iteration arose during the industrial era. These beliefs have included: (1) a good student is compliant, accepts the official curriculum passively, and gets high-test scores; (2) a good teacher is someone who manages students to be obedient, transmits the official curriculum contained within subject-specific silos of static information, and demonstrates accountability by the number of students excelling on standardized tests; (3) there is a single source of curriculum (i.e., standardized content approved as official); (4) assessments are standardized criterion tests as well as true/false, multiple choice, and short answer; (5) the curriculum is transmitted primarily through the teacher through lecture and use of textbooks; (6) equality necessitates assimilating students to the dominant culture; (7) education is a preparation for life necessitating the use of external motivation such as rewards and punishments; and (8) the disparity in test scores between student subgroups based on race, social class, and sex constitutes the achievement gap (Mirci, 2019). This paradigm has served to socialize students to fit into a hierarchical society with most being prepared for industrialized jobs (Gatto, 2005; Kohn, 2000).

Standardized achievement tests and achievement gaps are social constructs that perpetuate the current system of education and deflect attention away from the opportunity gap caused by such ideologies as meritocracy, White supremacy, rugged individualism, etc.
Continuation of such paradigmatic thinking prevents the revolution in thought necessary to vision an education system reflecting neuroscience research and socio-cultural views of learning, impact of technology throughout society and the world, diminishment of natural resources in countries like the United States such that knowledge construction constitutes it’s new natural resource, the growing disparities between wealthy and poor countries, and the persistence of deep societal problems such as classism, racism, sexism, ableism/dis-ableism, linguicism, and religious intolerance comprising the realities necessitating a paradigm shift in education. A paradigm shift is needed that emphasizes critical thinking and creative thinking so students develop the confidence and competence to succeed in the 21st Century (Chapman, 1988; Trilling & Fadel, 2009).

The current educational system is entrenched in a paradigm that was designed for the industrial era. Freire (2000) referred to this paradigm as the “banking model” (p. 2). Within this paradigm, the role of the teacher was to deposit information into the minds of students. It was based on a theory of learning that viewed students as “blank slates” (Van Dyke, 2014, p. 1). Paul (1993) called this paradigm the didactic model where students have tended to be taught “. . . what to think, not how to think [that is, that students will learn how to think if they can only get into their head what to think]” (p. 37). This paradigm also has been called the transmissive model because the role of the teacher was to transmit information into the minds of students via lecture and textbooks. Standardized curriculum lacked a connection to differing cultures, languages, and knowledge bases of students. Standardized testing constituted the foundation for assessing student learning. Accountability was based on high-test scores. The public school system has remained stagnant in this paradigm and has yet to address fully the realities of the 21st Century.
An emerging paradigm known as problem-posing (Freire, 2000), or critical theory (Paul, 1993), is based on such learning theories as constructivism and cognitivism (Jarvis, 2006). These are consistent with the neuroscience research where learning occurs as a sense-making process that is dependent upon the background knowledge of students arising from their language and culture (Oakes & Lipton, 2007). Assessment, sometimes known as authentic assessment, involves project-based learning where students demonstrate their construction of knowledge. In other words, students can “explain in their own words, with examples, the meaning and significance of the knowledge” (Paul, 1993, p. 43). The curriculum includes not only the official curriculum but also the interests of the students and teachers as well as significant daily events (Parker, 1994).

In 2005, Daniel Pink stated that the demands on the workforce were changing for our students and still our educational system has yet to reflect the needs of current American markets.

We are moving from an economy and a society built on the logical, linear, computer-like capabilities of the information age to an economy and a society built on the inventive, empathic, big-picture capabilities of what’s rising in its place; the conceptual age. (Pink, 2005, p. 1)

A paradigm shift in education has been needed that reflects the “profoundly changing economies, markets, and industry structures” (Drucker, 2002, p. 3).

The world of work is increasingly made of teams working together to solve problems and create something new—Why do students mostly work alone and compete with others for teacher approval? Technology is more a part of our children’s lives each day—Why should they have to check their technology at the classroom door and compete for limited
school computer time? The world is full of engaging, real-world challenges, problems and questions—Why spend so much time on disconnected questions at the end of a textbook chapter? Doing projects on something one cares about comes naturally to all learners—Why are learning projects so scarce inside so many classrooms? Innovation and creativity are so important to the future success of our economy—Why do schools spend so little time on developing creativity and innovation skills? (Trilling & Fidel, 2009, p. xxvii)

Unfortunately, the federal legislation known as No Child Left Behind (2002) resulted in further entrenchment in the transmissive paradigm. The sole source of curriculum had so many content standards that they couldn’t possibly be taught at each grade level. Standardized assessments resulted in high-stakes tests. Accountability was based on these test scores and sanctions occurred for low-performing schools. These schools tended to serve highly diverse and impoverished students. These tests were “created in a different century for the needs of another era” and are “hopelessly outdated” (Wagner, 2008, p. 9).

If the goals of education revolve around “empowering us to contribute to work and society, exercise and develop our personal talents, fulfill our civic responsibilities, and carry our traditions and values forward” (Trilling & Fidal, 2009, p. 12), then principals must position themselves to promote a paradigm shift in education. They must do more than run the day-to-day operations of a school.

School principals are the most important individuals in every school and in each school district . . . . They are instructional and inspirational leaders, general managers, and caregivers to all that make up their entire learning communities. Their ability to lead effectively lies in their identity as people able to navigate a rocky and often unpredictable
road toward an unknown future and the expectation of progress and success (Santamaria & Santamaria, 2012, p. 72).

If principals do not rise to the challenge of promoting a paradigm shift in schools, students will not be prepared to address an “accumulation of social injustices and problems such as the elderly outnumbering youth resulting in competition of fiscal resources” (Marx, 2006, p. 3). Principals must develop an educational culture that supports the kind of teaching and learning that prepares students to succeed in a rapidly changing world.

My study focused on school principals as change agents and their perceptions of the educational demands of the 21st Century.

**Problem Statement**

A problem that has faced the education system is the need for principals to be change agents promoting systemic education reform to prepare schools for the unfolding realities of the 21st Century. Such realities will require attaining equitable fiscal, structural, and human resources and closing the digital gap between poor students and their more advantaged peers so that all students develop multi-literacy skills (Wagner, 2008). Trilling and Fidal (2009) categorized these skills into three major headings including: “learning and innovation skills, digital literacy skills, and career and life skills” (p. xxvi). The problem that secondary educational leaders have faced is twofold: (1) being held accountable for attaining high students’ test scores and pressured to close the achievement gap (given these have continued being commonly accepted as valid rather than remnants of the obsolete traditional transmissive paradigm’s factory model for the industrial era); (2) developing critical consciousness, understanding the need and skills to promote a systemic revolution in thought (i.e., shift in paradigmatic beliefs about the purpose of education; human learning and neuroscience research,
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project/produce/performance-based assessment, configuration and structure of schooling, standardization versus personalization, role of teacher, role of student, curriculum, technological and information literacies, and opportunity gaps that include technology, universal human rights, and wealth disparities). This has positioned principals to exert time and energy to the increasing problems that have arisen within the traditional transmissive paradigm because of it’s obsolesce and resistance to changing such entrenchment; while, investing time and energy required for the magnitude of change to meet the realities of the late 20th century and unfolding of the 21st Century. Principals are caught at a crossroads between a paradigm based on an outdated understanding of achievement and a paradigm based on understanding equity, technology, and opportunity gaps caused by societal injustices traditionally advantaging Whites, while disadvantaging African Americans, Hispanic Americans, and Native Americans. Paul (1995) further argued that such challenges further indicated the need for principals to be change agents within the constructs of the current paradigm, while also recognizing the present industrial paradigm is obsolete. Principals must recognize the need for a paradigm shift in education.

The world is swiftly changing and with each day the pace quickens. The pressure to respond intensifies. New global realities are rapidly working their way into the deepest structures of our lives: economic, social, environmental realities – realities with profound implications for teaching and learning, for business and politics, for human rights and human conflicts. These realities are becoming increasingly complex; and they all turn on the powerful dynamic of accelerating change. (Paul, 1995, p. 1)

Problems students will face as adults have included the outsourcing of jobs to other countries, disappearing factory/assembly-line jobs for people given robotization, increasing need for “knowledge workers” (Drucker, 2002, p. 22) and the changing nature of work requiring
people possessing technological literacy (including in service-oriented jobs). Thriving in an increasingly technological world requires students develop and ensue creative thinking given the exponential change occurring because of evolving technologies bringing about further innovations that is impacting the global arena (Trilling & Fidel, 2009; Wagner, 2008); while handling the demands of opposing roles of managing curriculum coverage and raising test-scores (given these define success in the current obsolete paradigm of education); and, at the same time principals have needed to advocate for an educational paradigm shift.

In order to be effective, principals have needed to be aware of trends regarding the future. These include: an increasingly diverse society and multiculturalism in schools; the impact of technology permeating all aspects of life and disparities in student access to technology resources; a shift from accountability based on high-stakes test and standardized curricula to an education system anchored in personalization; interpersonal communication that empowers students to understand others from diverse backgrounds; and resolving social injustices such as poverty, as well as recruiting and retaining qualified educators (Marx, 2006).

As more research becomes available to inform practices in educational leadership, principals also need to become more aware of the expanding literature on learning. This shift must be anchored in what is now known about learning. Jarvis (2006) stated that learning is,

The combination of processes whereby the whole person – body (genetic, physical and biological) and mind (knowledge, skills, attitudes, values, emotions, beliefs and senses): experiences a social situation, the perceived content of which is then transformed cognitively, emotively or practically (or through any combination) and integrated into the person’s individual biography resulting in a changed (or more experienced) person.

(p. 5)
Wiggins and McTighe (2005) argued that learning is a result of an experience and the depth of reflection that one encounters as a result of such experience. Jarvis (2006) further explained experiences as “constructs of our perception and awareness of the world” and that we “learn from our experience of the world and our experience of what we are taught” (p. 197). School principals have needed to provide instructional leadership that expands the ability of teachers to develop learning experiences for students that are consistent with what is now known about learning. Principals must examine research about learning and the brain; “this focus on recent brain research can improve the quality of our profession’s performance and its success in helping others learn” (Sousa, 2001, p. 3).

**Purpose of the Study**

The purpose of my study was to understand secondary principals’ perceptions regarding change agentry as it relates to functioning within the current paradigm of education shackled by such concept of achievement defined by standardized test scores while advocating for a paradigm shift that prepares students for the realities of the 21st Century and begins by closing the opportunity, technology and equity gaps.

My study examined the perceptions of nine secondary school administrators regarding change agentry within the existing factory paradigm of education, and identified their perceptions of the educational demands of the 21st Century necessitating a paradigm shift. The purpose of my study was to obtain principals’ insights on how change occurs and what changes are needed in education.

**Recruitment Criteria**

Participants were principals who met the following criteria: have served in low-socioeconomic schools within a district or school site that has over 85% of students on free and
reduced lunch, a minimum of 26% English language learners, and a 85% minority population. Participants also possessed a minimum of two years of experience serving as a principal in a secondary school setting, a clear administrative credential.

**Overarching Research Question**

My overarching research questions were used to focus and organize my work throughout the dissertation process: What, if any, are the realities of the 21st Century not being addressed by the current entrenched industrial paradigm of education? In what ways does the concept of achievement as defined by standardized testing, contribute to or detract from preparing students for the realities of the 21st Century? What are the perceptions of secondary school administrators regarding how to be effective leaders in creating and sustaining change within education?

Based on the overarching research questions and the purpose of this study, the following semi-structured questions were developed and will be used to solicit responses from the principals selected for this study:

1. Please describe the intellectual and socio-emotional skills that should characterize a high school graduate who would be successful within the workforce of the 21st Century?
2. In what way does the current education system contribute to or detract from such skill attainment?
3. If you could design the school of your dreams any way that you wanted with unlimited funding and no limits, what would your vision of education look like? Please include the structure, student enrollment size, and resources.
4. What would be the three most important curricular foci for the school you designed to address the 21st Century realities?
5. How would you determine attainment of the intellectual and social-emotional skills?

6. In what ways has continued use of standardized achievement tests with the notion of closing an achievement gap contribute to or hinder the school of your dreams becoming a reality?

7. What do you believe are the merits or limitations of standardized achievement tests on curriculum, instruction, and thinking?

8. What do you believe are the merits or limitations of standardized achievement tests on critical, creative, and analytical thinking?

9. How do you negotiate between a standardized curriculum determined by standardized achievement tests as opposed to a more personalized approach to education emphasizing critical, creative, and analytical thinking?

10. What is your perception of how change occurs within individuals?

11. As a change agent, how would you implement a thinking curriculum?

12. How would you address the current high-stakes standardized curriculum and assessment while advocating for the kind of systemic change needed to prepare students for the realities of the 21st Century?

13. How does the continued emphasis on standardized curricula, high-stakes standardized assessments and closing the achievement gap focus attention toward or away from societal inequities such as opportunity, digital, and access gaps?

14. Is there anything else you would like to share?

**Significance of the Study**

This study unveiled insights as to how secondary school administrators can advocate for a paradigm shift in education. Studying how principals promote educational change and their
perceptions of the educational demands of 21st Century realities yielded information regarding change agentry at the school-site level. This information may help in the development of opportunities for school leaders to increase their effectiveness so they develop the potential to create lasting paradigmatic change. This study may help individuals aspiring to become effective site administrators develop a deeper understanding of systemic leadership in systemic changes.

This study may also help educators and stakeholders to deconstruct the concept of achievement and the current emphasis on closing the *achievement gap*. Such awareness may help focus attention on the need for a paradigm shift anchored in neuroscience research understanding the learning, the need for performance-based assessments based on this understanding, and the development of a thinking curriculum that includes the realities of the 21st Century. Such a paradigm shift would necessitate awareness of and commitment to ending the opportunity, technology, and equity gaps perpetuated by the existing obsolete paradigm of education. Such a shift may create movement towards a socially just education system that every student deserves. My study may also help policymakers make better-informed decisions regarding educational policy and the future direction of educational systems.

**Scope of the Study**

I conducted a phenomenological study because this design enabled me to identify and analyze data that emerged from transcribed interviews. I chose nine secondary principals serving in public schools. A phenomenological approach was best suited for my study because I wanted to “reduce individual experiences with a phenomenon to a description of a universal essence” (Creswell, 2007, p. 58). A phenomenological study allowed me to focus on the perceptions and experiences of participants in order to “emphasize the individual’s subjective experience” and
“understand and describe an event from the point of view of the participant” (Mertens, 2010, p. 235). Therefore, I studied the lived experiences of site administrators who have been school site change agents for at least two consecutive years.

**Limitations of the Study**

Upon completion of interviews, limitations included one participant not being available to participate after the result of a career and living relocation. This prevented total saturation sampling.

**Assumptions about the Study**

All participants were honest in expressing their perceptions and beliefs regarding systemic change and educational leadership.

**Recruitment**

In developing this study, I intended to recruit participants that fit specific criteria. My criteria were:

1. All participants have served a minimum of two years in the role of school administrator.
2. All participants have served in low-socioeconomic schools within a district or school site that has over 85% of students on free and reduced lunch, a minimum of 26% English language learners, and a 85% minority population.
3. All participants also possessed a minimum of two years of experience serving as a principal in a secondary school setting, a clear administrative credential.

**Definitions of Terms**

The following were terms and definitions used in this study:
California Assessment of Student Performance and Progress (CAASPP): The current adopted high-stakes standardized assessment used in all public schools in California to measure annual proficiencies.

Change Agent: The individual in a position who is strategically attempting to develop a paradigmatic change.

Concerns-based Adoption Model (CBAM): A three-dimensional model developed by Shirley M. Hord, William L. Rutherford, Leslie Huling-Austin, and Gene E. Hall (cited in Mirci, 2007) that included (1) stages of concern, (2) innovation configurations, and (3) levels of use. Stages of concern have consisted of six stages that people encounter in working through a change. Innovation configurations have been defined as complete descriptions of what the innovation looks like in practice. Levels of use have consisted of a continuum ranging from non-use to complete-use. (Mirci, 2009)

Cooperative Learning: A term utilized to describe the dynamics of a group of learners in which all persons are interdependent on one another while working towards common goals (Lewin, 1935, 1997)

Creative Thinking: “Thinking outside the box . . . occasionally students will need to think laterally and rely on flashes of insight that go far beyond the traditional reasoning processes. Students must also learn to apply certain technologies in developing solutions to problems and to override those solutions when they fall outside an ethical framework” (Uchida, 1996, p. 17).

Critical Paradigm of Education: “A paradigm is a set of rules and regulations that does two things: it establishes and defines boundaries and 2) it tells you how to behave inside the boundaries in order to be successful” (Barker, 1992, p. 32).
Critical Thinking: The ability to take information and “sort it out, think about it, combine it, and consider its benefits and consequences” (Uchida, 1996, p. 17).

Education System: The education system incorporates the social, cultural, and political factors that impact the educational program of a district and its schools.

Educational Leader: For the purposes of this study, an Educational Leader is someone in a management position at a school site or district level.

Educational Paradigm Shift: A title used to describe a needed shift in education that creates a paradigm in which students must become productive contributors to society by developing their ability to “quickly learn the core content of a field of knowledge while also mastering a broad portfolio of essential learning, innovation, technology, and career skills needed for work and life” (Trilling & Fadel, 2009, p. 16).

Effective Leadership: A leader with the ability to motivate those they lead and encourage collaboration and constructive competition to build capacity.

Because you are immersed in the action, where ideas are being generated, you learn a great deal. And because what you and others learn is concrete, you and they gain confidence. Nonetheless, you double-check this all the time by establishing mechanisms that allow you to know your impact. (Fullan, 2011, p. 24)

Equity Gap: Gaps experienced by students surrounding three major areas: “Teacher quality equity, programmatic equity and achievement equity” (Marshall & Oliva, 2010, p. 265). In evaluating equity gaps, Poston (1992) suggested fifteen areas of analysis that included:

Administrative and supervisory practices, course offerings and access, financial and funding resources, individual difference considerations, materials and facilities, special program and services delivery, student management practices, class size practices,
demographic distribution, grouping practices and instruction, instructional time utilization, promotion and retention practices, staff development and training, support services provision, and teacher assignment and workload. (p. 236)

**Highly Diverse:** In this study, school sites with over 85% minority students will be considered highly diverse.

**Industrial Paradigm of Schooling:** The inherited education system driven by the industrial interests, still placing students in rows, with daily protocols, and the ringing of bells telling them when to start and stop; designed to prepare factory workers. (Pink, 2005)

**Information Literacy:** A set of acquired behaviors and abilities that demonstrate capacity to determine the extent of:

- information needed
- access the needed information effectively and efficiently
- evaluate information and its sources critically
- incorporate selected information into one’s knowledge base
- use information effectively to accomplish a specific purpose
- understand the economic, legal, and social issues surrounding the use of information and access and use information ethically and legally. (American Library Association, 2000)

**Learning:** “Processes whereby the whole body–body and mind; experiences a social situation, the perceived content of which is then transformed cognitively, emotively or partially and integrated into people’s individual biography resulting in a changed person” (Jarvis, 2006, p. 13).

**Low-socioeconomic Status:** Socioeconomic status is a criterion that identifies a subgroup by level of family income. Low socioeconomic status was used to describe students
who came from families that qualify for nutritional support (free or reduced-price school lunches).

**Opportunity Gap:** The ways in which race, ethnicity, socioeconomic status, English proficiency, community wealth, familial situations, or other factors contribute to or perpetuate lower, unequal or inequitable distribution of resources and opportunities.

**Organizational Change:** Changing the “shared values and beliefs” (Fullan, 2005, p. 57) that influence the daily behaviors of an organization.

**Paradigm Shifter:** “A change to a new game, a new set of rules” (Barker, 1992, p. 37)

**Phenomenology:** A qualitative research methodology utilizing interviews of peoples’ experience. The purpose of this methodology was to “describe the meaning of a lived experience for several individuals about the shared experience or phenomenon” (Creswell, 1998, p. 51).

**Purposeful Sampling:** “The researcher intentionally selects participants who can contribute an in-depth, information-rich understanding of the phenomenon under investigation” (Klenke, 2008, p. 10-11)

**Social Justice:**

A group is oppressed when one or more of the following conditions occurs to all or a large portion of its members: (1) the benefits of their work or energy go to others without those others reciprocally benefiting from them (exploitation); (2) they are excluded from participation in major social activities, which in our society means primarily a workplace (marginalization); (3) they live and work under the authority of others, and have little work autonomy and authority over others themselves (powerlessness); (4) as a group they are stereotyped at the same time that their experience and situation is invisible in the society in general, and they have little opportunity and little audience for the expression
of their experience and perspective on social events (cultural imperialism); (5) group members suffer random violence and harassment motivated by group hatred or fear.

(Gooden & Pettit, 1997, p. 262)

Social Reproduction: “a paradigm of class analysis argued to be capable of explaining persistent inequalities in educational stratification” (Tzanakis, 2011, p. 76).

Stakeholders: Students, adults, teachers, staff, principal, parents, and others who create the community of learners within a school. (Speck, 1999)

Systemic Change: “This sense of the term assumes that educational improvement must consider the whole range of school issues, from student assessment to boards of education to school finance” (Holzman, 1993, p. 18).

Systemic Leadership: A leadership model that attempts to impact daily systems by the development of leadership capacity in other individuals to continually improve and develop leadership and create systemic change. (The Institute of Systemic Leadership, 2018)

Technological Literacy: “Knowledge about what technology is, how it works, what purposes it can serve, and how it can be used efficiently and effectively to achieve specific goals.” (Burkhardt et al., 2003, p. 15)

Technology Gap: Technology gap refers to limited technology experience associated with schools attended by traditionally underserved minority students from low, socioeconomic status communities. Technology gaps have included the availability and access of technology, as well as the utilization and literacy development experienced by students.

Traditionally Underserved Students: Include students of color, first generation students, and low-income students whose educational achievements have been hindered by pipeline and deficit models.
Summary

This chapter introduced the need for the development of school site administrators to be systemic change agents. This chapter was the introduction into my study of how secondary school administrators understood and facilitated the need to close the achievement gap within the existing paradigm of education while also identifying their perceptions of the need for a paradigm shift in education. This chapter further clarified the problem statement, purpose of the study, overarching research question, semi-structured interview questions, and importance of the study. The second part of this chapter presented the scope, limitation, assumptions, and definition of terms concerning the study.

The second chapter is a review of the literature regarding education. The third chapter presents an outlined of the methodology and phases of the study, as well as the rationale for selecting a phenomenological approach to research. The fourth chapter consists of categories and properties that emerged from the analyzed transcribed interviews. The fifth contains a discussion of the significance of the study as well as implications for further research.
Chapter Two: Review of the Literature

The review of the literature revealed that there were two distinct bodies of information. One addressed how educators needed to exercise leadership within the confines of the existing but outdated transmissive/industrial paradigm. This body of literature dealt with ways to increase student achievement on standardized tests and ways to implement the common core curriculum. The second body of information dealt with the need to change the very paradigm of education itself to align with findings from neuroscience research regarding learning and the need to help students become knowledge workers in an increasingly technological world (Drucker, 2002).

Literature Regarding Paradigms in Education

The present transmissive/industrial paradigm of education originated during the industrial era, where the majority of people needed to be compliant workers in assembly lines or manual labor jobs. This need impacted the way poor and non-White students were socialized in schools. The definition of a good student was someone who accepted transmitted information via teacher lecture and textbooks with passivity and decorum. This industrial paradigm has had various names including the transmissive paradigm, banking model (Freire, 2000), and the didactic model (Paul & Elder, 2012).

Freire (1972) explained the banking model of education as an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits which the students patiently receive, memorize, and repeat . . . in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits. (p. 58)
Freire (1998) also stated,

The banking education maintains . . . the following attitudes and practices, which mirror oppressive society as a whole:

- The teacher teaches and the students are taught;
- The teacher knows everything and the student knows nothing;
- The teacher thinks and the students are thought about;
- The teacher talks and the student listens--meekly;
- The teacher disciplines and the students are disciplined;
- The teacher chooses and enforces his choice, and the students comply;
- The teacher acts and the students have the illusion of acting through the action of the teacher;
- The teacher chooses the program content, and the students (who were not consulted) adapt to it;
- The teacher confuses the authority of knowledge with his or her own professional authority, which she and he sets in opposition to the freedom of the students;
- The teacher is the Subject of the learning process, while the pupils are mere objects.

(p. 54)

Paul and Elder (2012) agreed with Freire (1998) in that the didactic model lacked for true cognitive development. Paul (1990 as cited in Jones & Idol, 1990) argued the didactic model was,

A theory of knowledge, learning, and literacy, ill-suited to the development of critical minds and literate persons. After a superficial exposure to reading, writing, and arithmetic, schooling is typically fragmented . . . into more or less technical domains each
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with a large vocabulary and an extensive content or propositional base. Students memorize [take in] and reiterate domain-specific details. Teachers lecture and drill. Active integration of the students’ daily non-academic experiences is rare. (p. 484)

Students are rarely encouraged to doubt what they hear in the classroom or read in their texts. Students’ personal points of view or philosophies of life are considered largely irrelevant to education. In most classrooms teachers talked and students listened. Dense and typically speedy coverage of content is usually followed by content-specific testing. Students are drilled in applying formulas, skills, and concepts, then tested on nearly identical items. Instructional practices fail to require students to use what they learn when appropriate. Practice is stripped of meaning and purpose (Paul, 1990 p. 20).” (Asumah, Johnston-Anumonwo, & Marah, 2002, p. 122)

Thus, we have inherited an entrenched education system driven by the interests of the owners of factories profiting from mass production. Darder, Baltodano, and Torres (2003) argued that education would be better off without ties to industry. Darder et al. (2003) quoted Aronowitz (2004):

The classroom should be a window on the world, not a hermetically sealed regime of the imposition of habitus, which is making the test of academic success equivalent to measuring the degree to which the student has been inculcated with the habit of subordination to school and pedagogic authority. (Darder et al., 2003, p. 121)

Oakes, Lipton, Anderson, and Stillman (2013) explained that this paradigm of education arose when “industrial employers needed workers trained with the necessary technical skills and socialized with the work habits and attitudes required to fit in at a factory” (Oakes et al., 2013, pp. 40-41). As the 21st Century unfolded, automation on the assembly line has replaced human
workers. Skills required for jobs in the 21st Century have changed to “non-routine analytical and interactive communication skills” (Kay & Greenhill, 2013, p. 3). School leaders are facing the dual responsibility of helping students succeed within the constraints of the entrenched industrial/transmissive paradigm where student success is defined narrowly on the basis of a single high-stakes standardized assessment (Marzano, Waters & McNulty, 2005).

Secretary’s Commission on Achieving Necessary Skills (SCANS)

In 1991, the U. S. Department of Labor released a report that reflected changes in the workplace and the need to change the education system to prepare students for the workplace. Three major conclusions were presented in the SCANS’ report:

1. All American high school students must develop a new set of competencies and foundation skills if they are to enjoy a productive, full, and satisfying life.
2. The qualities of high performance that today characterize our most competitive companies must become the standard for the vast majority of our companies, large and small, local and global.
3. The nation’s schools must be transformed into high performance organizations in their own right. (U. S. Department of Labor, 1991, p. vi)

The report also identified four competencies needed for companies to remain competitive in a global market:

1. Resources: The ability to allocate time, money, materials, space, and staff.
2. Interpersonal skills: The ability to work with others in groups or teams, teaches others, lead, serve customers, negotiate, and work well with culturally diverse backgrounds.
3. Information: The ability to understand social, organizational, and technological systems, monitor and correct performance, and design or improve systems.
Technology: The ability to select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot technologies. (U. S. Department of Labor, 1991)

In addition, three foundational skills were identified as being minimal skill requirements for all jobs and students who lacked proficiency in these areas would face the probability of being ineffective employee (U. S. Department of Labor, 1991).

1. Basic skills: The ability to read, write, understand mathematics, speak, and listen.
2. Thinking skills: The ability to think creatively, make decisions, solve problems, visualize, and understand how to learn, and reason.
3. Personal qualities: The ability to be responsible, self-manage; and possess a positive self-esteem and sociability.

The significance of the SCANS’ report was that it had revealed a different model of education was needed. Given the rapid societal changes, education reformers have needed to consider the trends taking place.


- For the first time in history, the old will outnumber the young.
- Majorities will become minorities, creating ongoing challenges for social cohesion.
- Social and intellectual capital will become economic drivers, intensifying competition for well-educated people.
- Technology will increase the speed of communication and the pace of advancement or decline.
● The millennial generation will insist on solutions to accumulated problems and injustices, while an emerging generation E will call for equilibrium.

● Standards and high-stakes tests will fuel a demand for personalization in an education system increasingly committed to lifelong human development.

● Release of human ingenuity will become a primary responsibility of education and society.

● Continuous improvement will replace quick fixes and defense of status quo.

● Scientific discoveries and societal realities will force widespread ethical choices.

● Common opportunities and threats will intensify a worldwide demand for planetary security.

● Polarization and narrowness will bend toward reasoned discussion, evidence, and consideration of varying points of view.

● International learning, including diplomatic skills will become biased, as nations vie for understanding and respect in an interdependent world.

● Greater numbers of people will seek personal meaning in their lives in response to an intense, high-tech, always-on, fast-moving society.

● Understanding will grow that sustained poverty is expensive, debilitating, and unsettling.

● Pressure will grow for society to prepare people for jobs and careers that may not currently exist.

● Competition will increase to attract and keep qualified educators. (Marx, 2006, pp. 6-7)
Marx (2006) argued “strategic plans, no matter how sophisticated, need to become living strategies or strategic visions” (p. 1). In order for effective changes to occur, the strategic plans need to include an ever-changing and growing pedagogy. Implications for leaders have included an emphasis for understanding, “there is no more status quo. Change is inevitable; progress is optional” (Marx, 2006, p. 1).

Almost 25 years have passed since the initial SCANS’ report (U. S. Department of Labor, 1991) was published. If the shift from perpetuation of status quo to improve-democracy recommendations had been implemented, a paradigmatic shift in school would have needed to take place. The SCANS’ report argued for a shift from the didactic model or banking model of the current system of education inherited from the industrial era where students are more or less taught what to think rather than how to think (Freire, 2000; Paul, 1993) to a critical model were students are taught to solve real-world problems so that they are prepared for the increasingly technological world that is unfolding (Littky, 2004).

**Literature Regarding Low Socioeconomic Status Students**

The current model of education has continued disadvantaging impoverished students as evidenced by their consistent underachievement (Trilling & Fadel, 2009). McLaren (1988) stated that this model was designed “to create individuals who operate in the interest of the state, whose social function is primarily to sustain and legitimate the status quo social order” (p. 1). The term socioeconomically disadvantaged, has continued to describe students “who are not only low income but who are also identified according to certain social background characteristics that are believed to operate in tandem with economic status to facilitate or impede social mobility” (Rodriguez & Fabionar, 2010, p. 5). Such characteristics include “income, wealth, and/or parental education and occupation” (Rodriguez & Fabionar, 2010, p. 65).
Scholars have argued that the achievement gap transcends socioeconomic status; however Ladson-Billings (2013a) argued that deficiencies of many subgroups were caused by historical socioeconomic disadvantages that have created an *educational deficit*. Ladson-Billings (2013a) Educational deficit theory described the phenomena of student groups who had similar socioeconomic status and underperformed when compared to their historically affluent peers.

The lower test scores, graduation rates, completion of post-secondary education, and career attainment deficits were caused by learning conditions and experiences produced by the past and current educational system (Rodriguez & Fabionar, 2010). Inequitable conditions that are afforded to students who are socioeconomically disadvantaged have needed to be addressed by school site principals in order to decrease the achievement gap between socioeconomically disadvantaged students and their more affluent peers. Linda Darling-Hammond and colleagues (2007) further argued, “Educational outcomes for students of color are much more a function of their unequal access to key educational resources, including skilled teachers and quality curriculum, than they are a function of race” (p. 320).

Skrla, McKenzie and Scheurich (2010) surfaced the inequitable factors that have created a perpetuating underclass throughout the educational system. The first major component identified by Skrla et al. (2010) was teacher equity. Socioeconomically disadvantaged students attend schools where teachers have higher mobility, and possess fewer graduate degrees than teachers in more affluent schools. Schools that serve majority socioeconomically-disadvantaged students were found to have less gifted and talented populations, and higher discipline ratios. The major social justice implication is not the performance of students, but the contributing factors that create the conditions for low student performance.
The low achievement of socioeconomically disadvantaged students has remained a social justice issue given the lack of equitable educational opportunities (Berliner, 2007; Marshall & Oliva, 2010). Howard (2010) argued that one of the most critical factors behind schooling disparities has been socioeconomic status. The education system that was once thought to be a means to a better life and a process aimed at creating equality in opportunities has been found to maintain the division between students who are socioeconomically disadvantaged and their more affluent peers (Howard, 2010; Marshall & Oliva, 2010; Skrla, McKenzie, & Scheurich, 2009). Socioeconomically disadvantaged students have attended schools that reflect their economic status. As Kozol (1991) asserted, this has resulted in a major social injustice by perpetuating disparities of educational opportunity between schools serving impoverished and traditionally underserved students (i.e., low socioeconomic status, racial minorities) and schools serving students advantaged by class and race. This contrasted to the experiences of White and more affluent students, where traditionally underserved, low-socioeconomic status, minority students attended schools characterized by dated resources, limited technology, scarce programs, and old, inadequate school facilities (Marshall & Oliva, 2010).

Berliner (2007) identified major characteristics of poverty that have impacted students on a daily basis outside of school;

- stresses on families: illness and accident, abandonment and divorce, heavy workloads necessitating long hours away from home by parents, and so forth . . . children’s health, and the social conditions of the neighborhood in which poor youth are raised. (p. 173).

In addition to the daily struggles that poverty has caused families, the education system has continued perpetuating a loss of opportunity for minority, socioeconomically disadvantaged students. Such inequities have prevented many of these students from achieving in life, further
diminishing the “dignity and respect” that should be afforded to all people (Sandel, 2009, p. 104).

Socioeconomically disadvantaged minority students have achieved below their more affluent White peers (Rodriguez & Rolle, 2007). Berliner (2007) shared data in which students who lived in poverty (identified by students receiving free or reduced lunch) severely underperformed peers at the fourth- and eighth-grade levels, as measured by performance on the Third International Mathematics and Science Study 2003 assessment. The data compared schools with less than 10% poverty, between 10% and 24.9%, 25% to 49.9%, 50% to 74.9%, and over 75% poverty and consistently demonstrated that the achievement of these students decreased with increasing populations of low socioeconomic-status students.

Some scholars have argued that the achievement gap transcends socioeconomic status; however, Ladson-Billings (2013a) argued that deficiencies of many subgroups have been the result of historical socioeconomic disadvantages that have created an educational deficit. The context of students being in poverty was not the only factor contributing to low test scores (Rodriguez & Fabionar, 2010). Negative learning conditions and experiences within the current educational system have contributed to student underperformance. Inequitable conditions afforded to socioeconomically disadvantaged students, have needed to be addressed in order to decrease the achievement gap between socioeconomically disadvantaged students and their more affluent peers (Ladson-Billings, 2006). Darling-Hammond (2007) argued, “educational outcomes for students of color are much more a function of their unequal access to key educational resources, including skilled teachers and quality curriculum, than they are a function of race” (p. 320).
Skrla et al. (2009) surfaced the inequitable factors that have perpetuated disadvantaged minority students throughout the educational system. The first major component identified by Skrla et al. was teacher equity. Socioeconomically disadvantaged minority students have attended schools where teacher quality has been problematic. These problems have included higher mobility, fewer graduate degrees, fewer years of service, and more non-certified teachers than schools that have served more affluent students. Schools compromised by a majority of socioeconomically disadvantaged minority students were found to have less gifted and talented populations and higher rates of discipline problems. The major social justice implication has not been limited to the performance of students, but has included the creation of conditions for low student performance.

The achievement gap for socioeconomically disadvantaged students has been analyzed both socially and politically. Howard (2010) reported that

Patterns of structural resource allocation and the social and political context of education and schooling in the United States shed vital light on both the reasons widespread inequities exist and how they are tied tightly to social, political, and economic factors that have a profound impact on schools. (p. 31)

Scholars have known that economics has contributed to the achievement gap. The education system has provided an enriched education for wealthy and elite, and has provided an inequitable education for socioeconomically disadvantaged groups (Anyon, 2009; Howard, 2010; Skrla et al., 2010; Rodriguez & Rolle, 2007; Tyack, 2001). Research has shown that students in more affluent communities have attended schools that have performed better than their disadvantaged peers (Howard, 2010). An in-depth study by Gloria Ladson-Billings (2013a) of education in the United States identified a historical pattern of racially and economically
segregated students. Such segregation denied disadvantaged students both access to and provisions of equitable education experiences (Howard, 2010; McGuinn, 2006; Tyack, 2001; Wagner, 2008).

Low socioeconomic status students often experience what Flores (2007) called the opportunity gap. This term should not to be confused with the term performance gap that is a measure of achieved performance. The opportunity gap has identified such opportunities that has been afforded to some but not others as they experience learning. Such opportunities have included prejudice or bias that denies students equal and equitable access to learning opportunities. Opportunity gaps have resulted in students of color tending to be disproportionately represented in low course levels as well as special-education programs; as well as having less access to highly qualified teachers, programs, and materials which has become associated with lower graduation rates, academic achievement, and college enrollment rates (Akiba, Letendre, & Schriner, 2007).

Scholars argued that poverty is associated with the opportunity gaps’ influence on student outcomes in various ways (Ladson-Billings, 2013a). Such opportunity gaps function as gatekeepers, such as “the overlap between what is contained in an achievement test and what is actually covered by a student’s textbooks and teachers in preparation for the test” (McPartland & Schneider, 1996, p. 67) as well as “course content, instructional strategies, teachers’ background, class size, students’ readiness (initial achievement levels), and the availability of physical resources (such as books and equipment)” (Elliott, 1998, p. 225).

As a result of the opportunity gap, an educational deficit has been established (Ladson-Billings, 2013a). The historical impact of no education for people of color, segregation, lack of sufficient facilities, supplies, and qualified adults in low-income minority schools has created a
social and cultural deficit that has continued to impact poor minority students both inside and outside school.

Disadvantaged students were more likely to experience conditions that result in lack of access, lack of focus, and lack of support. These conditions also included “illness and accident, abandonment and divorce, heavy workloads necessitating long hours away from home by parents,” as well as “the social conditions of the neighborhood in which poor youth are raised” (Berliner, 2007, p. 173). Outside of school, disadvantaged students were more likely to have encountered experiences of “violence, crime, drugs, and death on a regular basis” (Howard, 2010, p. 3). Such experiences have further influenced the “social, psychological, and emotional well-being that they bring to school” (Howard, 2010, p. 3).

Ladson Billings (2006) challenged social justice leaders to view the achievement gap and opportunity gap as evidence of an educational deficit. Understanding this challenge has necessitated analyzing the historical circumstances that have allowed such inequities to exist. Furthermore, Howard (2010) and Berliner (2007) argued that social reproduction for socioeconomic disadvantaged students did not occur by accident and has continued being reinforced by different types of social and economic structures whereby advantaged students have continued benefiting from them while disadvantaged students have not.

Federal and state programs have attempted to address disparities within education in the United States. However, these reforms have remained situated within the existing paradigm. Thus, the emphasis has continued to focus on closing the achievement gap as measured by a single, high-stakes standardized assessment. This emphasis has resulted in incremental change attempts rather than a paradigmatic change regarding the very conception of schooling itself.
Judicial decisions and policies, consequently, have developed within the context of the existing paradigm.

**Literature Regarding Judicial Decisions and Policies**

From the time public education was established with the enactment of the Fourteenth Amendment in 1868, education was only available to advantaged White children because they did not have to work (Tyack, 2001). Thus, the establishment of the public education system began in a state of disparity for disadvantaged minority students as compared to their more affluent peers. In 1946, a court case, known as *Mendez v. Westminster* (Strum, 2010), allowed school integration so that more students could develop their educational and citizenship potentials. Although the court case resulted in a policy of integration, this did not become reality.

Even though school equality was identified as a political social issue for the United States, inequities continued given perpetuation of a permanent underclass (Chapman, 1988). By the time school equality was identified as a political social issue for the United States, poverty remained a serious problem. School segregation contributed to the disparity between students attending all White schools and students attending non-White schools.

In 1954, *Brown v. Board of Education* ruled that separate was inherently not equal and promoted the development of cross-town bussing in an effort to desegregate schools. Even though the policy of segregated schools ended, this did not change school cultures. Thus, integration neither undid the years of deficiency experienced by economically disadvantaged minority students, nor did it create equitable conditions. Students from varying social classes rarely attended school together. Even when they did integrate, disparities such as hunger impeded the learning of impoverished students.
The disparities between neighborhoods of upper class, middle class, and lower class were not just prominent in their communities but were also mirrored in the schools. At that time, schools were still funded by local property taxes. This meant that schools in wealthier neighborhoods received more tax money than schools in poorer neighborhoods.

In 1965, the *Elementary and Secondary Education Act* (ESEA) was signed into law by President Lyndon B. Johnson. This act posited that full educational opportunity should be a national priority. To this end, Johnson recognized that societal changes needed to occur and the *War on Poverty* began. ESEA went into effect only three months after it was signed. The law allocated large resources to meet the needs of educationally deprived children with focused compensatory programs for the poor. Even with additional resources, the increased concentration of impoverished communities has exhibited a need much greater than the resources allocated.

In recognition of the special educational needs of low-income families and the impact that concentration of low-income families have on the ability of local educational agencies to support adequate education programs, the congress hereby declares it to be the policy of the United States to provide financial assistance . . . to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means which contribute to meeting the special educational needs of educationally deprived children. (Elementary and Secondary School Act, 1965, Section 201)

In addition to ESEA, in 1966 Congress established a breakfast program, noting that students who were fed were able to focus and perform better in school.
The Fourteenth Amendment to the constitution was used during the *Serrano v. Priest* case in 1971 to argue that it was unconstitutional for “school revenues per pupil to be linked to local property wealth” (Townley & Schmieder-Ramirez, 2008, p. 17). The outcome of this case, focused attention on the way disparities between schools within districts, as well as between districts, perpetuated cyclic reproduction of social class such that traditionally-underserved students suffered from the opportunity gap between their more advantaged peers and themselves (Howard, 2010). Thus, in spite of focused attention on inequities, resources and experiences for students still varied according to social class stratification.

In 2001, President George W. Bush reauthorized ESEA. This was a bipartisan initiative called *No Child Left Behind* (NCLB, 2002). This legislation mandated that all students were to be proficient as measured by a single standardized assessment in grades three through eight by the year 2014. One of the provisions in this law was that schools were to attain growth targets for subgroups of students and schools failing were subject to sanctions. Sanctions included replacing the principal, transferring teachers out of the low-performing school and reconstituting it, providing parents with the choice to transfer their children from the school to another school, and school closure (Ravitch, 2010). Schools that faced the sanctions, unsurprisingly, were those within impoverished communities serving diverse student populations.

ESEA was again revised in November of 2015 and was retitled as the *Every Student Succeeds Act* (ESSA). This act mandated that the same standardized assessments be used in grades three, eight, and 11 across the nation for purposes of comparison. The idea behind this decision was that *best practices* for increasing student achievement would be identified and disseminated to underperforming schools. Thus, school improvement continued to be anchored in defining student success through the use of a single standardized assessment. This merely
perpetuated the existing paradigm rather than rethinking the very purpose of education (i.e., the need for a critical thinking curriculum, development of subject-specific literacies, incorporation of information literacies, development of performance-based authentic assessments, inclusion of technology in every classroom, and the reallocation of funding to close the opportunity gap). In other words, student success remained limited to a narrow view of assessment and an unwieldy amount of curriculum content to be covered. ESSA intended to create equity but, hampered by the confines of the existing paradigm, it was not possible (Berliner, 2005).

Berliner (2007) stated that any “attempt to fix inner city schools without fixing the city in which they are embedded is like trying to clear the air on one side of the screen door” (p. 184). Socioeconomically disadvantaged students, those whose families have faced oppression, have continued to experience inadequate health care, violent neighborhoods, unstable living conditions that often include homelessness, and inadequate school facilities. Such students have suffered because “vision, dental, hearing, asthmatic, and other ailments go untreated” (Howard, 2010, p. 3). These impacts have hindered student learning and the continued use of standardized tests and a mono-cultural curriculum have resulted in many of these students dropping out of school. Legislators at the local, state, and federal levels have tended to blame schools in impoverished areas rather than solving the serious societal injustices such that impoverished students have continued to experience “disproportionate occurrences of violence, crime, drugs, and death . . . on a regular basis” (Howard, 2010, p. 3). This disgrace raised the following question: What evidence exists that the United States cares about and is committed to the needs of all students? Until legislators and other stakeholders have faced this question, the social, intellectual, emotional, and physical health of disadvantaged students remains compromised
In order to eradicate such conditions, legislation has needed to be enacted that addresses the societal inequalities that have continued (Berliner, 2007).

Social justice has demanded a new war on poverty beginning with “increases in minimum wages, earning a livable wage, the provision of health insurance, subsidized housing in middle class neighborhoods, and so forth” (Berliner, 2007, p. 173). Berliner (2007) called for a “push for higher qualifications for the teachers of poor students” as well as “stop buying from companies that do not provide decent wages and health insurance to their workers” (p. 182).

**Literature Regarding Social Justice Leadership in Education**

Terrell and Lindsey (2009) defined leadership in education as establishing goals and policies to attain social justice in this country. Such leaders have needed to exercise leadership in new, different, and innovative ways (Marzano et al., 2005; Santamaria & Santamaria, 2012; Shields, 2013). Such leaders have needed to work with teachers and other stakeholders to ensure impoverished students not only have their basic survival needs met but have also those that contribute to self-actualization (Maslow, 1943). Characteristics of such leaders have included the ability to “shift their perspectives by deliberately attempting to see situations through the eyes of others with alternative points of view” (Santamaria & Santamaria, 2012, p. 10), work to share and “redistribute power via collaboration based on the particular needs of the community” (Santamaria & Santamaria, 2012, p. 4). As well as “engage followers to a higher level of need according to Maslow’s (1943) hierarchy of needs” (Santamaria & Santamaria, 2012, p. 3). In further evaluating various leadership styles, this review utilized transformative leadership as a dominant lens for creating change within a school.

Transformational leadership was first introduced in 1978 by James MacGregor Burns who defined this style as one that resulted in sustainable systemic change. Burns (1978) stated
that leaders who increased motivation, morale and performance actually empowered others to be leaders as well. Thus, transformative leaders have not only changed the organizational system but also the life of stakeholders. Furthermore, Burns (1978) argued that instilling moral behaviors and values to achieve such goals resulted in transformational leaders able to change the culture of an organizational.

Transformative leadership in education has been a promising way to create equitable change in our current educational paradigm (Emery & Barker, 2007). If the purpose of education still maintains a definition that has included “raising the critical consciousness of students” (Shields, 2013, p. 2), leadership with qualities that continue to equip educational systems and school sites to create equal opportunity for all students to expand and increase their critical consciousness is needed (Shields, 2013). Educational inequalities exist, and the rich have had an overarching advantage that is not self-evident for students of low socioeconomic status. These educational inequalities fuel cyclic reproduction and play a major contributing factor to the “rich . . . getting richer and the poor poorer” (Shields, 2013, p. 3). In order to begin to address such issues in education, leaders have needed to be able to increase student achievement within the current paradigm of education, while also advocating for a change in paradigms.

The old system of when things were seen as “predominantly clear, certain, stable, and predictable” no longer exist in the 21st Century as the world adapts to new realities of society (Shields, 2013, p. 4). New leadership styles in education must emerge, styles that are able to be highly strategic in developing school sites within the current education paradigm, as well as advocate for a shift in educational paradigm that effectively develop students that “are adequately prepared . . . to take their places as well-informed, caring, and engaged citizens”
(Shields, 2013, p. 5). The transformative leadership that has been needed in the face of educational obstacles that currently exist must be able to address; “material realities, disparities, and unfulfilled promises of the world in which our students live” (Shields, 2013, p. 5).

Transformative leaders in education are those who have had highly developed instructional practices as well as familiarity in navigating through curriculum content (Cambron-McCabe & McCarthy, 2005) in order to effectively understand and develop changed educational practices. Teachers can “no longer assign a single textbook as a resource for a course, and teach its material in a linear fashion, having students dutifully read page after page to complete the exercises at the end of each chapter” (Shields, 2013, p. 7). Transformative leaders have needed to further ensure that teachers continuously reflect “on how the rapidly changing world of communication can enhance and/or inhibit meaningful learning” (Shields, 2013, p. 7).

Leadership strategies have needed to change, as well as the current educational goals and visions that were designed to address the needs and view of a historical world. Educational systems and leadership have not evolved with the 21st Century. There continues to be a misalignment with cognition development. Existing strategies, goals, and visions work in multiple-choice test scores, but not true educational development needed for the 21st Century. In order to focus on developing 21st-century skills such changes should focus on developing learning experiences that target skill development such as those shared in the Secretary’s Commission on Achieving Necessary Skills (SCANS; U. S. Department of Labor, 1991) report. Such skills have included:

- Oral and written communication skills;
- Critical thinking, reasoning, and problem solving skills;
- Self-discipline;
- Skill in the use of computers and other technologies;
- Job success skills;
- Adaptability and flexibility;
- Conflict resolution and negotiation skills;
- Being able to
conduct research and interpret and apply data; knowledge of other languages—being multilingual; comprehensive reading and understanding skills. (Uchida, 1996, p. 16)

Transformative leaders have needed to transform themselves, and work to transform the teaching culture. Then and only then, can the experiences of students develop their content knowledge as well as the cognitive abilities (Shields, 2013).

“Leadership roles in education are shifting in response to rapid educational change” (Santamaria & Santamaria, 2012, p. 2). As school leaders have to face the realities of the 21st Century characterized by technological innovation, massive migrations and a global economy, with the goal of equipping youth to become effective contributors in a rapidly changing world. There is a call for a progressive leadership style that identifies and challenges inequities in education, as well as creates systematic change in the way educational experiences influence students (Shapiro & Stefkovich, 2001).

Transformative leaders are cognizant that all persons have biases and in some way contribute to inequalities if they do not continually self-reflect and work to overcome behaviors that add to social injustices. In doing so, transformative leaders have used a distributive power philosophy (Marshall & Oliva, 2006), which allows for other members of the team to question “the dimension of deep examination of personal assumptions, values, and beliefs” (Brown, 2004, p. 89). Distributive power demonstrated the humility needed for critical transformative leaders to create lasting change. School visions that have been co-created by stakeholders, and the process by which it is achieved, is experienced by various members has resulted in lasting change (Deutschman, 2007). Transformative leaders must be knowledgeable of the ways in which common power practices of a top down organization not only “favor some groups to the
detriment of others” (Furman, 2012, p. 195), but also rarely created lasting change (Deutschman, 2007).

Gooden and Dantley (2012) found that throughout the educational system there exists a “host of fundamental discriminatory practices that must be challenged and transformed” (p. 238). The injustices that have persisted for socioeconomically disadvantaged students, uncover a need for social justice leaders to be capable of working with stakeholders in bringing about the transformation of the system. While working in the present system and preparing socioeconomically disadvantaged students for a transformed world, principals have needed to be aware of trends regarding the future including: conveying interpersonal communication that empowers students to understand others from diverse backgrounds and resolve social injustices relating to poverty (Marx, 2006). In order to address social injustices, educational leaders have needed to develop their critical transformative leadership skills.

Transformative leaders possessed similarities in their leadership that include the emphasis on the development of relationships among all stakeholders in the educational community, decentralization of power or shared power among colleagues, and hold a vision with core ideologies that drive their work (Fullan, 2011). Transformative leaders have impacted the larger world by understanding that organizations and systems are a function relationship within groups and communication abilities. Therefore, such leaders “build strong relationships, examine inequities, and acknowledge differences in lived experiences” (Shields, 2004, p. 129) are transformative.

The focus of educational improvement has continued to be based on a single standardized assessment (Simpson, LaCava, Sampson & Graner, 2004). Desegregation of data has revealed achievement gaps between traditionally underserved students and their more advantaged peers.
As a result, administrators have struggled to implement necessary changes to address inequities given the current, outdated-educational paradigm. Leaders seem less concerned with the demands of equity, justice, and social citizenship than with test scores regardless of the decreased funding (Wagner, 2008). Leaders, who do not understand the two different paradigms, are less concerned about the paradigm shift that would include social justice; and therefore, they are part of the problem because they are buying in totally to the obsolete paradigm.

The opportunity gaps have increased from a decade ago and have continued to exist because the current educational system has taken students who have less to begin with and systematically given them less in schools (Anyon, 2005; Ladson-Billings, 2006). While policy makers have attempted to transform the education system by using the same thinking that created it (i.e., demanding that the achievement gap be closed), they have not acknowledged the social injustices within schools and the larger society that have perpetuated the opportunity gaps (Anyon, 2005; Howard, 2010; Rodriguez & Rolle, 2007). In order to address such issues, transformative leadership has remained a need in preparing educational administrators to become effective change agents (Santamaria & Santamaria, 2012; Shields, 2013). In order to address social justice issues in education, principals who have developed as transformative leaders have needed to be advocates for a change in the current paradigm (Santamaria & Santamaria, 2012).

The goals of education have revolved around “empowering citizens to contribute to work and society, exercise and develop our personal talents, fulfill our civic responsibilities, and carry our traditions and values forward” (Trilling & Fadel, 2009, p. 12). While these goals have been espoused, the system has replicated itself so that the majority of socioeconomic disadvantaged students have fit into jobs serving the power elite, rarely developing their personal talents.
Educational leaders have needed to expand their responsibilities from being managers of the daily operations to being transformative change agents. Brown (2004) argued that “transformative leaders enter and remain in education not to carry on business as usual but to work for social change and social justice” (p. 96). As change agents, there has remained a need to create school cultures that address not only the future demands for students in the workforce but also the social constructs that have created inequities for socioeconomically disadvantaged students which have included opportunity, technology, and access gaps (Oaks, Ormseth, Bell, & Camp, 1990). In the standardization and accountability *No Child Left Behind* legislation, schools “put all of our children further behind in acquiring the new survival skills for learning, work, and citizenship” (Wagner, 2008, p. 9). Equity has been left on the backburner and school test scores became the educational focus. To promote equity, school principals must become “instructional and inspirational leaders, general managers, and caregivers to all that make up their entire learning communities (Santamaria & Santamaria, 2012, p. 72).

Systemic leadership has required the ability of school leaders to create learning organizations (Squires, Huitt, & Segars, 1989). Hargreaves, Halász, and Pont (2007), Browne-Ferrigno and Allen (2006), and Crow and Slater (1996) identified three leadership areas for systemic leadership. The three leadership areas described were; classroom level leadership, school level leadership, and community level leadership (Browne-Ferrigno & Allen, 2006; Crow & Slater, 1996; Hargreaves et al, 2007). At each of these levels, a systemic leader has needed to create a “vision for success, focus on teaching and learning, involvement of all stakeholders, and demonstration of ethical behavior” (Browne-Ferrigno & Allen, 2006, p. 7). In targeting these areas, the educational leader must “pervade the school system, empowering people in each classroom, school, and community” (Crow & Slater, 1996, p. 23). These areas have required the
following three specific responsibilities; articulating the purpose, balancing organizational extremes, and socializing individuals for democracy. In the traditional transmissive paradigm, the role of the leader was to solve people’s problems; in advocating for a paradigm shift, the change agent is to help leaders develop the capacity for people to be problem solvers (Fullan, M. G., 1993).

Practices common among systemic leaders have included the organization and development of cooperative working teams that have been empowered to address issues that hinder the achievement of the overall vision (Crow & Slater, 1996). Not only has this remained a major component but Crow & Slater (1996) argued “building such a community is a necessity of the highest order” (p. 25). The work of a systemic leader has continued to revolve around creating a community with the emphasis on continuous individual and organizational learning (Senge, 1990, Senge et al., 2000). The intended goal has remained: developing a culture of learning and problem solving inclusive of all stakeholders (Leithwood & Louis, 2012). Once an educational community has developed the capacity to be a problem-solving organization, the result has been increased student outcomes (Salins, Zarins, & Mulford, 1998).

One of the major traits of systemic leaders has remained decentralization of power in that “there is shared management and supervision as well as evaluation and development of education planning” (Hargreaves et al., 2007, p. 5). When a systemic leader has enabled others to develop their capacities to lead, learn, and problem solve, the leader has promoted a more efficient organizational system by creating a culture of ever-increasing capacity to problem solve. As a systemic leader enables others to develop and exercise their capacities to lead, learn, and problem solve, they allow “school groups to articulate purposes that balance individual growth and community” (Crow & Slater, 1996, p. 25) making the systems more efficient.
If the purpose of education has maintained a definition that has included “raising the critical consciousness of students” (Shields, 2013, p. 2), this has required that site administrators promote their own critical consciousness and promote the development of critical consciousness of site teachers and other stakeholders. Critical consciousness is the “approach to leadership grounded in Freire’s (1970) fourfold call for critical awareness or conscientization, followed by critical reflection, critical analysis, and finally for activism or critical action against the injustices of which one has become aware” (Shields, 2013, p. 11). Transformative leaders have asked themselves, and have taught their staff to reflect on various questions including: “Why do we do what we do? How do we do it? What are we doing?” (Sinek, 2009, p. 39).

Leaders have needed to provide learning experiences for all stakeholders. These included:

1. Observing teachers and holding conferences with them about instruction processes that emphasized individual achievement while also engendering a sense of community responsibility.

2. Helping teachers reflect in action on the instructional organization of their classrooms and working with them to identify ways in which the manner in which instruction is organized . . . this includes rethinking the kind of assignments given and student evaluation in terms of how they contribute to individual growth and community.

3. Emphasizing community responsibilities as well as individual achievement whenever talking with students’ parents.

4. Working with teacher and parent groups in developing ways to monitor, evaluate, and report student progress that emphasizes community responsibilities as well as individual achievement.
5. Providing teachers with opportunities to attend conferences, visit classrooms, and discover readings that emphasize individual growth in and through the community.

(Crow & Slater, 1996, pp. 25-26)

There has remained a lack of qualified candidates who understand social justice context and demands, including common expectations on top of being an expert on teaching and learning as well as having characteristics to bringing about lasting and ongoing change (Lynch, 2012). Following, the role of school vision, power distribution, and relationships are discussed as plausible solutions to changing school cultures in order to create lasting change for social justice.

Kose (2009) found that a transformative leader must be a social justice leaders in order to effect change. In doing so, a transformative leader has needed to communicate a transformative vision and work with the school community to establish concrete goals that will be developed and reflected on over time until they are reached (Kose, 2009). Shields (2013) and Sinek (2009) also emphasized the need for goal identification and development of plans to obtain the goals.

Scholars on effective transformational leadership have stated that distributive power contributed to attainment of change initiatives (Brafman & Beckstrom, 2006; Santamaria & Santamaria, 2012; Shields, 2013). A metaphor of a starfish was used to describe a functioning distributive power organization. According to this metaphor, each leg of the starfish represented circles of team members working towards the same goal but in their own ways and at their own pace (Brafman & Beckstrom, 2006). When one leg (group, leader, or movement) was lost, there was usually the development of another group to take its place. This type of distributive-power organization continually developed a stronger system to the achievement of the organizational goals. Like the starfish metaphor, social justice leaders have needed to take a starfish approach
to addressing equity for socioeconomically disadvantaged students in order to continually address the various faucets that create the inequitable conditions.

In order to create a starfish-like organization, critical transformative leadership in education has attempted to develop an organization that empowers all individuals to address issues, and continually develop towards the goals of equitable opportunities for all students. In shared-leadership schools, “distributed political power and had very little centralization” (Brafman & Beckstrom, 2006, p. 19) has worked to create lasting change. Therefore, critical transformative leaders have needed to work to distribute power in order to address inequitable conditions for socioeconomic disadvantaged students so that such structures last.

DuFour, DuFour, Eaker, and Many (2006) emphasized communities of practice, also known as professional learning communities, representing a context in which systemic leaders have implemented staff development and cultural change. Such communities have tended to reflect distributed leadership (Harris, 2009). This type of leadership was defined as a process in which “school leaders promote and sustain conditions that are successful for schooling and interaction with others” by both “delegated and shared leadership” (Lynch, 2012, pp. 36-37). Systemic leaders have utilized distributed leadership to promote the following:

- Leading others to lead themselves; develop capacity in others; develop leadership as a social process (increasing communities of practice and the learning capacity);
- reexamining the power structures of organizations; and reevaluating communication in the current environment of e-commerce and advanced information technology (Lynch, 2012, p. 52)

In addition to power distribution, another major characteristic of transformational leadership included relationships and the ability to allow and deliberately construct courageous
conversations in order for social-justice issues concerning socioeconomically disadvantaged students to be resolved (Cambron-McCabe & McCarthy, 2005; Gooden & Dantley, 2012; Lencioni, 2002). In order to create lasting change, principals have needed to be highly strategic in every aspect of their work so that all decisions and resources work to support and establish the overall vision (Lencioni, 2012). Lencioni (2002) identified five key elements of lasting change by building a team. The five elements were identified as “trust, conflict, commitment, accountability, and results” (Lencioni, 2002, p. 188). The meanings of each of the five elements of change echoed throughout the literature in educational leadership.

Trust was found to be the most essential component of a functional team and has needed continual development as people work to attain a goal (Lencioni, 2002; Uchida, 1996). Lencioni (2002) described ‘trust,’ as a process of building relationships and creating vulnerability. Shields (2004) also emphasized the need for relationships focused on people understanding themselves and the world around them through relationship building based on trust.

The second major component identified by Lencioni (2002) was conflict. Conflict was found to be positive when the results were ‘courageous conversations’ (Furman, 2012; Santamaria & Santamaria, 2012; Shields, 2004, 2013). Gooden and Dantley (2012) identified the ability to engage in ‘courageous conversation’ as an attribute of having a prophetic voice. A prophetic voice is defined as “one that dares to rail against the regnant sensibilities or consciousness that facilitated the forming of the foundation for public and private practices in education” (Gooden & Dantley, 2012, p. 241). Specifically, a prophetic voice has been needed in order to highlight and address the necessary changes to create a more equitable education experience for socioeconomically disadvantaged students (Scott, 2002). Leaders have needed to create an environment that has empowered members of a team to engage in ‘courageous
conversation’ that has a focus on a topic, behavior, or strategy and not on a person so that the conversations can become a passionate discussion of change without leading to the attack among team members (Lencioni, 2012). When conflict has been discussed within the context of trust, team members have often been able to contribute and debate ideas in the pursuit of the best possible idea or answer. Shared understanding led to commitment.

Commitment was identified as the third function of a team. Lencioni (2002) stated that shared commitment is essential to developing the fourth characteristic of a functioning team, mutual accountability.

The fourth characteristic of a functional team identified by Lencioni (2002) was ‘mutual accountability.’ Mutual accountability was explained as the focus on each team member holding each other accountable to commitments declared by the team. According to Lencioni (2002), the last characteristic of a functioning team was ‘attention to results.’ Effective leaders have needed to make results transparent so that an environment that continuously challenges the members of the educational community to reflect upon, create conflict about, and commit to the decisions made by the team to make the school system more equitable (Lencioni, 2012; Santamaria & Santamaria, 2012). Furman (2012) further developed the idea of attention to results, and argued that “Change leaders need to focus on a small number of quantitative and qualitative measures of impact and use these as a core part or the strategy of moving even further” (p. 131).

When all five components of a team have been utilized to focus on goals of social justice for socioeconomically disadvantaged students, a culture is continually developed to address social justice issues. Deutschman (2007) further argued that creating real change revolves around specific behaviors. When a group has become a team committed to addressing a specific behavior, its goals were more likely to become the reality (Lencioni, 2012).
In order to create lasting change, systemic leaders intentionally provided learning opportunities that develop the capacity of others to take leadership roles to further sustain the change process. When this goal was not pursued, the community’s ability to sustain leadership was hindered (Fullan, 2005; Hargreaves & Fink, 2003). As “a central component in nearly every modern proposal for improving education” (Guskey, 2003, p. 381), high-quality professional development has been a major strategy used by systemic leaders to initiate and sustain the change process (Cranton, 1994; Fullan, 2011, 2005). This process has included articulation amongst all stakeholders to operate and base decision making on a shared vision (Williams, 2003).

**Leadership responsibilities and student achievement.** In addition to the above traits of systemic leaders, Marzano et al. (2005) identified 21 responsibilities of educational leaders. They argued that each responsibility had a correlation with observed student performance. The following chart includes the 21 responsibilities of an effective principal.
Table 1

21 Responsibilities of an Effective Principal

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Explanation: The extent to which the principal...</th>
<th>Average correlation (r) with student academic achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Affirmation</td>
<td>Recognizes and celebrates accomplishments and acknowledges failures</td>
<td>0.19</td>
</tr>
<tr>
<td>2. Change Agent</td>
<td>Is willing to challenge and actively challenges the status quo.</td>
<td>0.25</td>
</tr>
<tr>
<td>3. Contingent Rewards</td>
<td>Recognizes and rewards individual accomplishments</td>
<td>0.24</td>
</tr>
<tr>
<td>4. Communication</td>
<td>Established strong lines of communication with and among teachers and students</td>
<td>0.23</td>
</tr>
<tr>
<td>5. Culture</td>
<td>Fosters shared beliefs and a sense of community and cooperation</td>
<td>0.25</td>
</tr>
<tr>
<td>6. Discipline</td>
<td>Protects teachers from issues and influences that would detract from their teaching time or focus</td>
<td>0.27</td>
</tr>
<tr>
<td>7. Flexibility</td>
<td>Adapts his or her leadership behavior to the need of the current situation and is comfortable with dissent</td>
<td>0.28</td>
</tr>
<tr>
<td>8. Focus</td>
<td>Establishes clear goals and keeps those goals in the forefront of the school’s attention</td>
<td>0.24</td>
</tr>
<tr>
<td>9. Ideals/Beliefs</td>
<td>Communicates and operates from strong ideals and beliefs about schooling</td>
<td>0.22</td>
</tr>
<tr>
<td>10. Input</td>
<td>Involves teachers in the design and implementation of important decisions and policies</td>
<td>0.25</td>
</tr>
<tr>
<td>11. Intellectual Stimulation</td>
<td>Ensures faculty and staff are aware of the most current theories and practices and makes the discussion of these regular aspects of the school’s culture</td>
<td>0.24</td>
</tr>
</tbody>
</table>
Table 1 (Cont’d.)

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Explanation: The extent to which the principal . . .</th>
<th>Average correlation (r) with student academic achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Involvement in curriculum, instruction, and assessment</td>
<td>Is directly involved in the design and implementation of curriculum, instruction, and assessment practices</td>
<td>0.20</td>
</tr>
<tr>
<td>13. Knowledge of curriculum, instruction, and assessment</td>
<td>Is knowledgeable about current curriculum, instruction, and assessment practices</td>
<td>0.25</td>
</tr>
<tr>
<td>14. Monitoring/Evaluating</td>
<td>Monitors the effectiveness of school practices and their impact on student learning</td>
<td>0.27</td>
</tr>
<tr>
<td>15. Optimizer</td>
<td>Inspires and leads new and challenging innovations</td>
<td>0.20</td>
</tr>
<tr>
<td>16. Order</td>
<td>Establishes a set of standard operating procedures and routines</td>
<td>0.25</td>
</tr>
<tr>
<td>17. Outreach</td>
<td>Is an advocate and spokesperson for the school to all stakeholders</td>
<td>0.27</td>
</tr>
<tr>
<td>18. Relationships</td>
<td>Demonstrates an awareness of the personal aspects of teachers and staff.</td>
<td>0.18</td>
</tr>
<tr>
<td>19. Resources</td>
<td>Provides teachers with materials and professional development necessary for the successful execution of their jobs</td>
<td>0.25</td>
</tr>
<tr>
<td>20. Situational awareness</td>
<td>Is aware of the details and undercurrents in the running of the school and uses this information to address current and potential problems</td>
<td>0.33</td>
</tr>
<tr>
<td>21. Visibility</td>
<td>Has quality contact and interactions with teachers and students</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Source: Adapted from Marzano, Waters & McNulty, 2005, pp. 42-43
The remainder of this review will focus on creating lasting change while combating inequitable circumstances that continually make socioeconomic students an underclass (Santamaria & Santamaria, 2012; Shields, 2013). The focus on transformative leadership will discuss strategies that address issues of justice surrounding education for socioeconomic disadvantaged students and equity; and calls for educational leaders to adopt a transformative framework in their leadership practice so that educational justice becomes a cultural behavior in the educational community of which they work with.

**Literature Regarding General Change Strategies**

An area of development for real change revolves around empowering leaders to implement change strategies that create lasting change when the leader has been replaced or moved. Below is a review of literature related to general change strategies.

Benne and Chin (1985) identified three general change strategies including; Normative Re-educative, Power Coercive, and Rational Empirical.

**Normative re-educative.** This change strategy was based on an understanding that change impacts a person’s very identity.

At the personal level, men are guided by internalized meanings, habits and values. Changes in patterns of action or practice are, therefore, changes, not alone in the rational of informational equipment of men, but at the personal level, in habits and values as well and, at the sociocultural level, changes are alterations in normative structures in institutionalized roles and relationships, as well as cognitive and perceptual orientations. (Benne & Chin, 1985, p. 31)

This strategy has remained the most desirable one for promoting sustainable change because of its emphasis on reeducating people. “Models that utilize this strategy emphasize that
the implementation of innovations takes time as people deal with a paradigm shift involving their practices, attitudes, and beliefs” (Mirici, 1990, p. 33).

**Power coercive.** Use of the power coercive strategy has involved the leader or change agent in using power to coerce change. The power coercive strategy has been based on an assumption that the persons undergoing the change rationalize the need for change with the power or authority of the leader driving the change (Mirici, 1990). Benne and Chin (1985) defined power coercive as a change strategy:

Based on the application of power in some form, political or otherwise. The influence process involved is basically that of compliance of those with less power to the plans, directions, and leadership of those with greater power. Often the power to be applied is legitimate power or authority. Thus the strategy may involve getting the authority of law or administrative policy behind the change to be effected. (pp. 23-24)

**Empirical rational.** Benne and Chin (1985) also described a strategy of change they called empirical rational. This strategy has been based on two major assumptions. First that people will implement the change because they are rational beings, and second, they will readily accept and implement change after they realize the rationality of it (Mirici, 1990).

A change is proposed by some person or group which knows of a situation that is desirable, effective, and in line with the self-interest of the person, group, organization, or community which will be affected by the change. Because the person is assumed to be rational and moved by self-interest, it is assumed that he will adopt the proposed change if it can be rationally justified and if it can be shown by the proposer that he will gain by the change. (Benne & Chin, 1985, p. 23)
This change strategy has tended to work when the people impacted by the change are already oriented to accepting the change, when the change is not significant enough to upset people’s sense of efficacy. “As a single strategy of change, the approach is inadequate, especially in situations where the innovation threatens traditional attitudes and values” (Mirci, 1990, p. 31).

Kurt Lewin (1951) argued that sustainable change required an engagement process in which members of an organization were re-educated. In order to re-educate members of an organization and create lasting change, Lewin developed a three-stage model: unfreezing, moving, and refreezing. In education, some “leaders don’t have a clue as to how to change organizational cultures and actually sabotage the work of re-culturing the organization by operating in ways that maintain the very system needing to be transformed” (Mirci, 2007, p. 33).

Unfreezing has required that leaders view the organization systemically (Fullan, 2005). Systemic change has necessitated moving a system out of maintenance mode and into what is known as goal attainment mode (Parsons, 1951). Thus to create lasting change in schools, has required a shift in the organizational culture within the current paradigm of education while at the same time advocating for a changed paradigm (Zmuda, Kuklis, & Kline, 2004). Cultural dimensions have continued to include “norms, values, shared beliefs and paradigms of what is right and what is wrong, what is legitimate and what is not, and how things are done” (Bennis, 1989, p. 30).

Unfreezing of the culture has required changing the balance between two forces: the driving forces that promote change and the restraining forces that operate to maintain the current system. Lewin (1951) postulated that every developed system needs to be a balance of the two forces such that equilibrium occurs. When the two forces existed in equilibrium, the result was
no change. During the unfreezing phase, the force that has initiated change must be strong enough to overcome the force that opposes change. When the force promoting change has shifted the organizational culture, unfreezing of organizational norms has occurred (Lewin, 1951). Lewin’s re-educative model has emphasized that change is person centered.

Administrators are expected to make transformative changes in the curriculum, instruction, and culture of schools often without possessing any knowledge regarding the “human side” of change. Since they lack this knowledge at a deep level, they are unable to fulfill the responsibility of being change agents. (Mirci, 2007, p. 32)

Being effective change agents has meant that leaders create second order change. Evans (1996) defined second order changes as “requiring people to not only do old things slightly differently but also to change their beliefs and perceptions in contrast to first order change that attempts to improve the efficiency or effectiveness of what we are already doing” (p 5).

The moving phase has remained characterized as a time of providing intense professional development. During this phase, leaders have needed to deal with those impacted by the change. Thus leaders have needed to deal with resistance and discomfort from people expected to make the change as they may begin to “doubt their abilities, especially their abilities to adapt to the new requirements” (Evans, 1996, p. 32). Furthermore, “since self-patterns are sustained by norms and relationships in the groups to which a person belongs or aspires to belong, effective reeducation of a person requires changes in his environment, society and culture as well” (Benne, 1985, p. 273).

Lewin (1951) called the final step to lasting systemic change refreezing. This has occurred when the systemic goal has been attained. Lewin used the term maintenance mode to indicate equilibrium had occurred.
Havelock’s models of change. In 1971, Havelock (as cited in McGovern, 1995) identified three models of organizational innovation including “research development and diffusion (RD and D), . . . problem-solving approach, . . . and social interaction” (McGovern, 1995, p. 5, 6). RD and D has remained a model of change based on people being ready for the change because the change rationally makes sense to them. This has reflected the rational, empirical-change strategy of Benne and Chinn (1985).

Individually each model has lacked the cohesion necessary to be effective on its own but when all three models are combined they comprise a more effective fourth model (Mirci, 1990). Combining the three models into a fourth model has all the advantages of each model built into one. Doing so has allowed the change agent to focus on changing the identity and therefore behaviors of the intended social group, while creating a consistent system of expectation that is understood and believed to be good for all stakeholders. In combining the normative re-educative, power coercive, and rational empirical models, a fourth model is developed and has shown to have a greater impact than any one individual approach.

Concerns Based Adoption Model: CBAM. “The Concerns Based Adoption Model was developed to represent the highly complex process entailed when educational institutions become involved in adopting innovations” (Hall, 1974, p. 5). The Concerns-Based Adoption Model proposed by Hall, Wallace, and Dossett (1973) outlined three dimensions of change that the founding researchers believed change agents needed to understand to facilitate the change process. As a “powerful tool for diagnosing the implementation effort’s progress” (Ellsworth, 2000, p. 43), the Concerns Based Adoption Model has identified the following three key areas; “Stages of Concern, Levels of Use and Innovation Configurations” (Hall & Hord, 2006, p. xi).
Developers of the model defined the first dimension as *Stages of Concern* (Christou, Eliophotou-Menon & Philippou, 2014). The value of this dimension has been its focus on the concerns, people impacted by the intended change encounter during the change process. The researchers identified six stages of concern that people move through during the change process. These stages included “Awareness, Informational, Personal Management, Consequences, Collaboration, and Refocusing” (Christou, Eliophotou-Menon & Philippou, 2014, p. 160). The six stages of concern were grouped into three dimensions. Awareness referred to a stage in which people were aware of, but felt unaffected by the change. In education, this stage usually has focused on what the new curriculum, framework, and unit development will entail. Second, during the ‘information stage’ a focus on how standards worked, new curriculum looked, and how the unit development worked occurred. The third, *personal stage* referred to a need to understand the personal effect on an individual. Such questions about How the change affected individuals personally? have been discovered at this phase. During the fourth and fifth, ‘management and consequence’ stages, teachers have asked if the content breadth and depth is manageable for the amount of time that has been allowed. During collaboration, teachers would compare methods of demonstrating the change as they collaborate with colleagues. During the sixth stage, ‘refocusing’ the change occurred and teachers asked if there was something better than current practices.

The second dimension has been called the Level of Use. The Level of Use dimension has consisted of a continuum spanning non-use to full-use of the innovation. Levels of Use adopts an interview protocol to assess the degree to which teachers have used the innovation. Such information has provided the change agents an informed ability to address and strategize increasing the level of innovation.
The third dimension has been called **Innovation Configurations**. Innovation Configuration refers to the various forms of an innovation that are adopted by the different teachers. Explicitly spelling out what the new practice looks like when it is operational in the classroom. Together the three diagnostic pieces (innovation configuration, levels of use, and stages of concern) help provide further insight to the behaviors, attitudes and beliefs, and ideal innovation. The specific information regarding implementation can be insightful on further professional development or timeline adjustments that may be needed.

The Concerns Based Adoption Model protocol has allowed for monitoring the change process in terms of its impact on people and the degree to which they use the innovation accurately (Hord, Rutherford, Huling-Austin, & Hall, 1998). Dirksen and Tharp (1997) stated, “Components of the CBAM [Concerns Based Adoption Model] can be used to bring about systemic change in education by evaluating progress in the change process” (p. 1067). The Concerns Based Adoption Model protocol is a unique innovation strategy in that it is designed to evaluate the use and impact of an innovation on the community, needed support systems, collaboration, and continuous development of the innovation.

**Barriers to Change**

Waddell and Sohal (1998) stated “resistance to change has long been recognized as a critically important factor that can influence the success or otherwise of an organizational change effort” (p. 543). Resistance has been characterized as the factors that work to maintain the status quo (Zaltman, 1977). This has often introduced delays, increased costs, and created instabilities during the change process (Ansoff & McDonnell, 1988). Resistance to change would be expected during what Lewin (1951) called the moving phase. Given the barriers to change,
school leaders have needed to be aware of the normative re-educative strategy of change as well as teacher concerns identified in the CBAM model (Bennis, Benne, & Chin, 1969; Evans 1996).

Bela Banathy (1991) identified three reasons why goals for education reform have failed to result in paradigmatic change:

1. A piecemeal or incremental non-systems approach to change.
2. A failure to integrate solution ideas in a systemic manner.
3. Staying within the boundaries of the existing system. (p. 11)

Another barrier to change in educational settings has included promoting personnel within a district to leadership positions; when these people lack knowledge of change agentry, they may be obstacles to change. This has occurred when people in leadership positions have not felt responsible for implementing changes in practices, relationships, and cultures (Bolivar & Moreno, 2006).

Another barrier to change is when the change itself becomes problematic. An example of this is the No Child Left Behind Act of 2001 (NCLB, 2002). NCLB attempted to “close the achievement gap for disadvantaged students” (U. S. Department of Education, 2005). The reason this act became a barrier to change was because it was based on the obsolete paradigm giving credibility to the understanding of achievement and the achievement gap. When achievement is understood as the passing of the standardized test, it limits curriculum to being ‘containers’ of information. The change was problematic because it merely increased curricula content and creation of an accountability system based on a single standardized test with scores disaggregated by racial and socioeconomic subgroups. NCLB was not a paradigmatic change, but, rather, it was a reform based on passed solutions that didn’t solve the problem of a system not focused on the realities of the 21st Century. The Act failed to address systemic problems
regarding equity (e.g., school funding, poverty, racism). It failed to address why traditionally underserved students have tended not to succeed in school (Ravitch, 2010). Rather than addressing such issues as poverty and institutionalized racism and classism in schools, this legislation resulted in a curriculum that included so much content that it could not be covered during the regular school year (Ravitch, 2010). This resulted in teachers facing a curriculum that was a mile wide and an inch deep.

The problem was that emphasis on social construction of achievement and achievement gap deflected attention from persisting social problems (i.e., inadequate housing, lack of prenatal care and health care, non-nutritious food, and lack of a living wage for people in the lowest social class – the working poor), that have perpetuated the opportunity gap (i.e., inequities in human, fiscal, facility, institutional, and technological resources between public schools). Neither neuroscience research nor socio-cultural understandings of human learning were reflected in the reform resulting in curriculum coverage emphasizing the remembering of information, test-taking strategies, and identifying and targeting those students – bubble kids – with increased support to raise test scores (by bubbling in more correct answers), reduction of time in academic subjects not tested and increased time for those subjects tested, creation of interim assessments in school districts following the multiple-choice format of the end-of-year standardized test, and sanctions for the poorest schools not meeting artificial ‘growth’ targets by racial subgroups blaming teachers as being of poor quality. The performance standards were tied to the result of an overused standardized assessment. Pressure for achievement on this assessment drove a focus on schools that did not meet certain growth targets. As a result, these schools faced sanctions. Under NCLB, sanctions included being listed as an underachieving school, providing options for students to attend an achieving school, providing students
supplemental education support with external services, and ultimately converting to a charter, private management, or being taken over by the state (Ravitch, 2010). Often these schools were ones serving student populations that were traditionally underserved and found in impoverished communities. Instead of changing school cultures to create a learning environment that increased the capacity of traditionally underserved students to overcome obstacles of their success, *No Child Left Behind* (2002) was not a paradigmatic change in schooling (Fullan, 2006; Hopkins & Higham, 2007).

**Summary**

In order to continue to work towards equity in education for socioeconomically disadvantaged and minority students, there continues to be a need for paradigmatic change, as well as a need for leaders to be competent change agents well versed in educational change strategies. While constrained by outdated but operative assumptions underlying the current paradigm, educational leaders have faced limitations in terms of time and resources needed to initiate a paradigm shift via legislation, policies, and funding formulas for equitable opportunities; implementation of learner-centered pedagogy consistent with socio-cultural learning, and neuroscience research; a curriculum focused on cognitive growth and how to think rather than ‘absorption’ of information excluding interests of the students and teachers; project/performance-based assessments; and an accountability system focused on ending opportunity gaps based on racism, classism, sexism, ableism/de-ableism, and any other forms of institutionalized discrimination.

Bringing about a paradigm shift has faced obstacles such as a lack of understanding the shift in thinking needed to bring this about and the need to focus on the day-to-day operations of managing schools. In order to see a reformed educational paradigm, legislative and educational
leaders have needed to work side by side to overcome the inequities that have continued to prevent a paradigm shift. As long as reform attempts are constrained by piece-meal and simplistic approaches to increase standardized test scores; a paradigmatic change such as the learner-centered, pragmatist progressivism of John Dewey that has reflected relevant curriculum to promote cognitive growth based on student interest and democratic living will continue to be antagonistic toward the standardized, high-stakes accountability paradigm (Chapman, 1988; Gatto, 2005; Kohn, 2000; Rodriguez & Rolle, 2007; Uchida, 1996).

A paradigm shift has been needed to develop an educational system in which achievement is aligned to what is now known about human learning, anchored in a learner-centered and thinking curriculum relevant to the realities of the 21st Century, assessed via project/problem-based student multimodal demonstrations of learning, and where accountability builds on closing the opportunity gap that began with the Civil Rights movement but was abandoned when efficiency ‘scientific’ curriculum centered progressivism and achievement tests crushed the learner-centered pragmatism progressivism that has reflected relevant curriculum to promote cognitive growth based on student interest and democratic living (Bellanca & Brandt, 2010; Drucker, 2002; Trilling & Fadel, 2009).
Chapter Three: Methodology

The equity, technology, and opportunity gaps have grown wider between advantaged students and traditionally disadvantaged students. These gaps not only constitute a social justice issue in terms of education’s responsibility to ensure diverse students succeed academically but also in terms of the future prosperity of this country and the world. Today’s school site administrators need to be proficient in educational leadership such that they can lead changes to support the development of a new paradigm. My review of the literature focused on the research regarding change agentry, educational leadership, the disconnect between the current standardized paradigm, and the needs of the 21st Century as well as understanding the context faced by impoverished, traditionally-underserved students. This review was necessary in pursuing my research regarding what school site administrators have done to bring about a paradigm reflective of pragmatist progressivism to promote cognitive growth based on student interest and democratic living in order to support the learning of traditionally-underserved minority students.

Qualitative research attempts to grasp a complete picture of “how people make sense out of their lives” (Fraenkel & Wallen, 2006, p. 431). Use of a phenomenological framework focuses on the reality as perceived by a participant or participants who experienced the phenomena, identifies categories of meaning, and provides rich descriptions of the categories. In utilizing a phenomenological framework, my roles were to describe the experiences and identify the categories that emerged. Data were collected by conducting semi-structured interviews that were audio-recorded and transcribed for accuracy and then analyzed in terms of emerging categories and their properties. I then sought to identify and describe the properties of those categories to provide thick description of the phenomenon.
Phases of the Study

The structure of my study consisted of a four-phase model identified by Kirk and Miller (1986). The first phase was invention or research design, the second was data collection or discovery, the third was analysis or interpretation, and the fourth phase explanation denoting a phase of communication (Kirk & Miller, 1986, p. 60).

Phase 1: Invention or Research Design

I chose a phenomenological research design. My rationale for selecting a qualitative research design was informed by Merten’s (2010) definition and purpose of a qualitative study. My research design worked to “provide an in-depth description of a specific . . . practice” (Mertens, 2010, p. 225).

My research process and focus questions allowed me to collect data regarding the perceptions of the principals’ experiences in implementing the change process regarding curriculum and instruction. I analyzed field notes and transcribed interviews to make sense of conversations and audio-recordings so I could “make sense of, or to interpret, phenomena in terms of the meanings people bring to them” (Mertens, 2010, p. 225). This allowed me to develop an understanding of the perceptions of school site administrators regarding their experiences of educational leadership and systemic change in schools with highly diverse and low-socioeconomic status student populations. Interviews and field notes were used to provide data for analyzing and identifying categories and properties based on participants’ perceptions.

My problem statement and purpose grounded my study. First, this led to the formation of overarching research questions. Second, the research model and theoretical orientation were identified. Third, I identified the sampling strategies and gatekeepers. The semi-structured
interview questions were then developed to reflect the components of the overarching questions, and considerations for ethical research were established.

**Restatement of problem.** A problem that secondary educational leaders have faced is two fold: (1) Being held accountable for attaining high-students test scores and pressured to *close* the *achievement gap* (given these have continued being commonly accepted as valid rather than remnants of the obsolete traditional transmissive paradigm’s *factory model* for the industrial era); (2) developing critical consciousness, understanding the need and skills to promote a systemic “revolution in thought” (i.e., shift in paradigmatic beliefs about the purpose of education; human learning and neuroscience research, project/produce/performance-based assessment, configuration and structure of schooling, standardization versus personalization, role of teacher, role of student, curriculum, technological and information literacies, and opportunity gaps that include technology, universal human rights, and wealth disparities). This has positioned principals to exert time and energy to the increasing problems that have arisen within the traditional transmissive paradigm because of its obsolesce and resistance to changing such entrenchment, while, investing time and energy required for the magnitude of change to meet the realities of the late 20th Century and unfolding of the 21st Century. Principals are caught at a crossroads between a paradigm based on an outdated understanding of achievement and a paradigm based on understanding equity, technology, and opportunity gaps caused by societal injustices traditionally advantaging Whites, while disadvantaging African Americans, Hispanic Americans, and Native Americans. Paul (1995) further argued that such challenges further indicated the need for principals to be change agents within the constructs of the current paradigm, while also recognizing the present industrial paradigm is obsolete. Principals must recognize the need for a paradigm shift in education.
The world is swiftly changing and with each day the pace quickens. The pressure to respond intensifies. New global realities are rapidly working their way into the deepest structures of our lives: economic, social, environmental realities – realities with profound implications for teaching and learning, for business and politics, for human rights and human conflicts. These realities are becoming increasingly complex; and they all turn on the powerful dynamic of accelerating change. (Paul, 1995, p. 1)

In order to be effective, principals have needed to be aware of trends regarding the future. These include: an increasingly diverse society and multiculturalism in schools, the impact of technology permeating all aspects of life and disparities in student access to technology resources, a shift from accountability based on high-stakes tests and standardized curricula to an education system anchored in personalization, interpersonal communication that empowers students to understand others from diverse backgrounds, resolving social injustices such as poverty, as well as recruiting and retaining qualified educators (Marx, 2006).

As more research becomes available to inform practices in educational leadership, principals also need to become more aware of the expanding literature on learning. This shift must be anchored in what is now known about learning. Jarvis (2006) stated that learning is,

The combination of processes whereby the whole person – body (genetic, physical, and biological) and mind (knowledge, skills, attitudes, values, emotions, beliefs, and senses) – experiences a social situation, the perceived content of which is then transformed cognitively, emotively, or practically (or through any combination) and integrated into the person’s individual biography resulting in a changed (or more experienced) person. (p. 5)
Wiggins and McTighe (2005) argued that learning is a result of an experience and the depth of reflection that one encounters as a result of such experience. Jarvis (2006) further explained experiences as “constructs of our perception and awareness of the world” and that we “learn from our experience of the world and our experience of what we are taught” (p. 197). School principals have needed to provide instructional leadership that expands the ability of teachers to develop learning experiences for students that are consistent with what is now known about learning.

**Overarching research questions.** My overarching research questions were used to focus and organize my work throughout the dissertation process: What, if any, are the realities of the 21st Century not being addressed by the current entrenched industrial paradigm of education? In what ways does the concept of achievement as defined by standardized testing, contribute to or detract from preparing students for the realities of the 21st Century? What are the perceptions of secondary school administrators regarding how to be effective leaders in creating and sustaining change within education?

**Semi-structured interview questions.** Based on the overarching research questions and the purpose of this study, the following semi structured questions were developed and used to solicit responses from the principals selected for this study:

1. Please describe the intellectual and social-emotional skills that should characterize a high school graduate who would be successful within the workforce of the 21st Century.

2. In what way does the current education system contribute to or detract from such skill attainment?
3. If you could design the school of your dreams any way that you wanted with unlimited funding and no limits, what would your vision of education look like? Please include the structure, student enrollment size, and resources.

4. What would be the three most important curricular foci for the school you designed to address 21st Century realities?

5. How would you determine attainment of the intellectual and social-emotional skills?

6. In what ways has continued use of standardized achievement tests with the notion of closing an achievement gap, contribute to or hinder the school of your dreams becoming a reality?

7. What do you believe are the merits or limitations of standardized achievement tests on curriculum, instruction, and thinking?

8. What do you believe are the merits or limitations of standardized achievement tests on creative, analytical, and creative thinking?

9. How do you negotiate between a standardized curriculum determined by standardized achievement tests as opposed to a more personalized approach to education emphasizing critical, creative, and analytical thinking?

10. What is your perception of how change occurs within individuals?

11. As a change agent, how would you implement a thinking curriculum?

12. How would you address the current high-stakes standardized curriculum and assessment while advocating for the kind of systemic change needed to prepare students for the realities of the 21st Century?
13. How does continued emphasis on standardized curricula, high-stakes standardized assessments and closing the achievement gap focus attention toward or away from societal inequities such as opportunity, digital, and access gaps?

14. Is there anything else you would like to share?

**Importance of the study.** The importance of my study was to understand secondary principals’ perceptions regarding change agentry as it relates to functioning within the current paradigm of education shackled by such concept of achievement defined by standardized test scores while advocating for a paradigm shift that prepares students of the realities of the 21st Century and begins by closing the opportunity, technology, and equity gaps.

Doing so may help educators and stakeholders to deconstruct the concept of achievement and the current emphasis on closing the *achievement gap*. Such awareness may help focus attention on the need for a paradigm shift anchored in neuroscience research understanding of learning, the need for performance-based assessments, and the development of a thinking curriculum that includes the realities of the 21st Century. Such a paradigm shift would necessitate awareness of and the commitment to ending the opportunity, technology, and equity gaps perpetuated by the existing obsolete paradigm of education. Such a shift may create movement towards a socially just education system that every student deserves.

**Setting.** Settings were determined by geographic proximity as well as accessibility via the gatekeeper. Interviews were performed when and where the participant felt most comfortable. All interviews took place after school hours in the office at the principals’ school.

In order to access the participants, I contacted the appropriate gatekeepers for participant study approval in order to make sure the meetings were authorized by the school gatekeepers. Prior to requesting access I received approval to proceed with the study from the Internal Review
Board and my dissertation committee by meeting with the chair and committee members to defend my proposal.

**Recruitment.** In developing this study, I intended to recruit participants that fit the following criteria:

1. All participants have served a minimum of two years in the role of school administrator.
2. All participants experienced the phenomena while serving in a low socioeconomic-status (85% free/reduced lunch eligibility) and high minority (85% non-Caucasian) school during the last 5 years.
3. All participants have a clear administrative credential.

**Sampling.** I used saturation sampling. I invited all secondary administrators that fit the criteria. As a result, five middle school and five high school principals serving in a single, urban unified school district in southern California were invited to participate in the study. The student population served by the district consists of 85% low-socioeconomic status (free/reduced lunch eligibility) and 85% minority (non-Caucasian) students. In addition to the above stated criteria, selected participants had “experienced the phenomenon being studied, and share the researcher’s interest in understanding its nature and meanings” (Gall, Gall, & Borg, 2007, p. 496). In utilizing saturation sampling, I was able to assure that “all cases meet [met] some criterion” and increase “quality assurance” (Creswell, 2007, p. 127). I invited five middle school principals, and five high school principals who met the criteria.

**Initial interview questions.** Creswell (2008) affirmed that the purpose of a phenomenological study is to “generate a general explanation that explains a process, action, or interaction among people . . . to construct predictive statements about the experiences of
individuals” (p. 61). Therefore, transcribed interviews of audio recordings were reviewed for patterns and trends, which comprised the data collected for this study.

**Ethics in educational research.** Studies involving human participants must gain approval from the Internal Review Board prior to implementation of the research. The University of Redlands requires all doctoral students to successfully complete collaborative institutional training in order to assure investigators are well versed in research guidelines that involve human subjects. I submitted and gained approval to proceed from the Institutional Review Board at the University of Redlands.

**Initial contact, meeting, and informed consent.** Initial contact consisted of a personal invitation to possible participants via phone. I reviewed the purpose of the study, and shared that interviews would likely last about one hour. I then arranged to meet with each participant to review the informed consent form. The University of Redlands’ informed consent form consisted of the following:

1. Description of participants
2. Procedures for recruitment of participants
3. Methodology and research objectives
4. Informed consent
5. Debriefing procedure
6. Procedures for ensuring confidentiality of data
7. Analysis of risk/benefit ratio

At that time, I answered any questions, and obtained signatures of administrators willing to participate. Upon gaining signatures for informed consent, I scheduled a date, time, and location for conducting the interview.
Beneficence and potential risks. In this study, potential risks would result in the breach of anonymity. Procedures for assuring anonymity of findings were reviewed with all participants. All participants were given a coded identification to minimize chances of associating data to participants. No identification information has resulted in breach if anonymity.

Benefits gained by participants included reflecting on their practices and experience which may result in positive adjustments to their leadership practices. Participants may have reflected on what extent they are or are not creating changes in the level of education they are involved. In addition, the community within the school district may have benefited from the study by providing better insight to leadership experiences and the paradigm changes that have been needed to better serve low-socioeconomic minority students. Furthermore, by focusing on the experiences of the principal, this study helped add to the literature regarding perceptions of principals working in a dual paradigm of education.

Presentation of self. During the last 12 years I have been employed in an urban school district in southern California. I have filled many roles during this time. I began teaching by working with seventh- and eighth-grade minority and low-socioeconomic students who experienced a series of teachers that resigned over the course of five months based on a belief that the students were incorrigible. I strove to create a culturally-sensitive classroom and succeeded in promoting the academic growth of these students. At the end of the school year, I transferred to a high school of approximately 3000 students with a 90% low-socioeconomic status population, and 90% minority population. At this school, I had the opportunity to work as an English language development strategist, where I was responsible for developing a newcomer academy for English language learners. I continued to serve in this position while also being
promoted to an assistant principal the following year at the same high school. In my capacity as assistant principal, I continued to work as a language development strategist. Since then I have served as assistant principal in two other schools. In all the schools where I worked, the student body was primarily comprised of minority students from low-socioeconomic backgrounds.

During the last two years, I have served as a principal in a kinder to fifth grade school. These experiences led me to want to help traditionally marginalized and underserved students. Because a principal is supposed to be an educational leader and change agent, I wanted to focus my study in these two areas. Such experiences have led me to believe that a principal needs to understand the paradigmatic change needed to attain a socially-just education system while still working with the existing system to close the opportunity gap.

**Phase 2: Discovery/Data Collection**

After participants signed the informed consent form, the interviews were scheduled. Before interviews, I again reviewed the interview procedures, use of data, and confidentiality for their participation.

During the interview, an audio recording device was utilized to capture the conversation. Codes were assigned to identify each participant on the audio recording; names were not noted in the transcription. A transcription service was utilized to transcribe the interviews immediately after the interview was completed. The transcription service was only provided the code names and the actual participant names were locked in a filing cabinet at home, and was kept separate from all research materials.

**Role of the Researcher.** The phenomenological study relied on interviews of individuals in order to “understand the meaning of experiences of individuals about these phenomena” (Creswell, 2007, p. 94); the role of the researcher was observer participant. Gall et
al. (2007) described the observer-participant as a researcher who “acts primarily as an observer, entering the setting only to gather data and interacting only casually” (p. 277). Because data was collected primarily by interviews, I interacted with participants in this capacity.

**Phase 3: Interpretation/Understanding**

Utilizing the transcriptions of the interviews allowed me to use reflective analysis in identifying categories and properties. In review of the transcriptions, I followed the reflective analysis methods identified by Gall et al. (2007):

The researcher carefully examines and then re-examines all the data that have been collected. As this process continues, certain features of the phenomenon are likely to become salient. The research then should develop and understanding of these features by themselves and in relations to each other. (p. 473)

Descriptive coding was utilized to identify categories of meaning and their descriptive properties. Excerpts from participant interview transcriptions were utilized to describe each identified property.

**Phase 4: Explanation/Communicating a Message**

In a phenomenological study, the overall purpose is to “seek the individual’s perceptions and meaning of a phenomenon or experience” (Mertens, 2010, p. 235). While phase three identified specific categories and their properties, phase four was designed to seek insight into the phenomenon by relating it to research literature that already existed as well as making recommendations for further study. This phase of research will reflect the advice given by Wolcott, H. F. (1990).

Give serious thought to dropping the idea that your final chapter must lead to a conclusion or that the account must build toward a dramatic climax . . .. In reporting
qualitative work, avoid the term conclusion. I do not want to work toward a grand flourishment that might tempt me beyond the boundaries of the material I have been presenting or detract from the power of an individual case. (p. 55)

Therefore, during this phase I connected the findings to research and developed the discussion of the study’s significance and an opportunity to suggest further research.

**Ethical considerations.** The researcher and dissertation chair have successfully completed the CITI training offered by the University of Redlands, Institutional Review Board (IRB). All requirements regarding ethical considerations have been evaluated and approved by the University of Redlands IRB. In order to protect participant confidentiality, the names of the district and participants have been assigned a code. All participants volunteered to participate in the study. All transcribed interviews were locked in a secure location, access to which was limited to the primary researcher, and code names were used for the participants. Transcriptions and audio recordings will be destroyed in 2021.

**Summary**

In this chapter, I indicated that my qualitative research took the form of a phenomenological study. I also described how I used phenomenology as my theoretical orientation. I described the organization of my study by identifying the following four phases: (1) invention or research design; elaborated on the problem statement; overarching questions; semi-structured interview questions; importance of the study, setting, sampling, ethics, informed consent, risk, and presentation of self; (2) discover or data collection; (3) interpretation or understanding; and (4) explanation and a common message. The next chapter is a report of findings.
Chapter Four: Findings

Principals, especially those serving impoverished minority students, are held accountable for increasing standardized achievement test scores by 5% annually. If this growth target is not met, the school faces sanctions. Thus, principals, especially those working in schools serving impoverished minority youth, feel the impact of accountability in the form of a single standardized test. Some principals understand the severe limitations of this current accountability system: reliance on a single standardized test is problematic because it upholds and reinforces an obsolete paradigm of education. In fact, continued dependency on standardized tests and a standardized curriculum perpetuates a definition of achievement as attaining high-test scores. When achievement is defined narrowly and accountability rests solely on a standardized test score, paradigmatic change is almost impossible to attain. In fact, the standardization of curriculum, assessment, achievement, and accountability reinforces the obsolete paradigm. When analyzed systemically, such standardization determines the role of the teacher, the role of the students, the nature of knowledge, and the primacy of behaviorism as the theory of learning. Alternative paradigms, ones that are more in alignment with neuroscience research and 21st Century skills, are resisted.

The current obsolete but entrenched system of education needs to be examined paradigmatically because beliefs are interconnected and interdependent. These beliefs are a set of unexamined assumptions and have included: (1) a good student is compliant, accepts the official curriculum passively, and gets high-test scores; (2) a good teacher is someone who manages students to be obedient, transmits the official curriculum contained within subject-specific silos of static information, and demonstrates accountability by the number of students excelling on standardized tests; (3) there is a single source of standardized curriculum (i.e.,
standards-based content approved as official); (4) assessments are standardized criterion tests as well as true/false, multiple choice, and short answer; (5) the curriculum is transmitted primarily through the teacher through lecture and use of textbooks; (6) equality necessitates assimilating students to the dominant culture; (7) education is a preparation for life necessitating the use of external motivation such as rewards and punishments, and (8) the disparity in test scores between student subgroups, based on race, social class, and sex constitutes the achievement gap. As a result, participants argued that the current standardized assessment paradigm and continued emphasis on closing an achievement gap, continues to create a reproductive effect that does not foster thinking and socializes the student to fit into a hierarchical society with most being prepared for industrialized jobs (Critical, creative, analytical) skills (Gatto, 2005; Kohn, 2000).

All participants in my study described the current system of education as being obsolete for 21st Century learning. They recognized that the problem ultimately is situated in differing and competing definitions based on various paradigmatic beliefs. Consider the following: the current paradigm has been called by different names such as transmissive, traditional, essentialist, teacher-centered, banking model, didactic model, conservative model, and factory model. In contrast, an alternative paradigm that arose to challenge the transmissive one is known by the following titles: trans-active, pragmatic, learner-centered, problem-posing critical pedagogy model, cognitive model, liberal model, cultural-proficiency model, and post-factory model. An example of using the same word to describe two conflicting realities, are the words achievement and accountability. In the transmissive paradigm, achievement is equated to standardized-test scores and accountability is attaining high-standardized test scores. In contrast, “achievement” within the trans-active paradigm is equated to student demonstrations of learning
Accountability is more holistic than that in the transmissive paradigm:

Accountability means informing parents and the public about how well a school is educating its students and about the quality of the social and learning environment. Too often, accountability has been reduced to standardized tests that measure a limited range of academic skills, thereby narrowing curriculum and teaching. This approach has been used to attack rather than help educators, parents and students. (Fair Test, n.d.a, Accountability, para. 1)

Known as **authentic accountability**, this is described systemically:

1. Federal, state and local governments must work together to provide a fair opportunity for all children to learn a rich curriculum in a supportive yet challenging environment. Governments have generally failed to meet this fundamental accountability requirement because they have not ensured adequate, equitable funding and because they have primarily emphasized test scores.

2. Accountability systems must use multiple forms of evidence of student learning. If we want to know how well students are doing, we need to look at a range of real student work. If we want students to learn more or better, we have to provide teachers and students with useful feedback based on high-quality classroom assessments that encompass a variety of ways to demonstrate knowledge and that fit with how children really learn.

3. Accountability systems must focus on helping teachers and schools ensure educational success for all students. They must also ensure that schools are safe, healthy, supportive and challenging environments. This means providing data useful for improvement...
efforts, as well as ample time and resources to enable teachers to learn more, share knowledge and get better at what they do.

4. Accountability systems must involve those most directly affected and closest to the classroom. Therefore, the primary accountability mechanisms must be local. They must involve educators, parents, students and the local community; and they must use participatory processes such as local school councils, annual reports and meetings to review school progress.

5. The primary responsibility of state governments is to provide tools and support for schools and teachers to improve while ensuring that equity and civil rights are maintained. Intervention should take place only when localities have been given resources and support and still fail to improve, or when there are uncorrected civil rights violations. (Fair Test, n.d.b, The core elements of a better accountability system include)

The differences between the two paradigms is evident in the meaning of terms used with dramatically different and conflicting meanings. In the trans-active paradigm, learning is more than the remembering of information; it is the construction of knowledge (in alignment with what is now known about learning, as anchored in constructivism, socio-cognitivism, and socio-cultural learning experiences). Authentic assessment and authentic accountability have continued being ignored and disregarded by policymakers stuck in the traditional transmissive paradigm.

Principals (i.e., those who understand competing philosophical education paradigm) have found themselves working in two different worlds, the traditional transmissive paradigm and the other in the trans-active paradigm. This has resulted in having to work within the current but outdated notions of assessment as high-stakes standardized assessments and standardized
accountability in the form of high-test scores within the Euro-American-Centric Worldview while also striving to implement authentic assessments and accountability. Thus, principals face a conundrum: the transmissive paradigm views the purpose of education as perpetuating the status quo of political, social, financial, and cultural power relations in a highly-stratified capitalistic society and the trans-active paradigm’s vision of education as being the reform of society to infuse democracy into it. This pursuit was advocated by John Dewey (1935) and resulted in him being called a *communist*. The idea of reforming society included questioning unbridled capitalism and the corporate power around the globe.

The magnitude of paradigmatic differences is evident in the role of the student: in the transmissive paradigm students are expected to accept the transmitted information passively (i.e., being told what to think as outlined in the standardized curriculum to pass tests) from a single sourced curriculum (i.e., discipline specific *facts* based on a positivist epistemology); and, in the trans-active paradigm being expected to engage in inquiry using critical and creative thinking in a multi-source curriculum – interests of the students, interests of teachers, current world events and societal problems, and discipline-specific concepts based on a constructivist epistemology. This paradigm emphasizes cognitive development that promotes *thinking* as the way students interact with curriculum, and the world around them. The differences between the two paradigms reveal that education is political: the transmissive paradigm’s emphasis on education as preparing students to *fit* into society to meet the demands of the workforce and the trans-active paradigm as democratic life in the classroom and the pursuit of cognitive and social development.
Overview of Categories that Emerged from the Data

A major finding was that principals differed in their understanding of the type of change required. Participants recognized that changes were needed. The description of the magnitude of changes shared participants resulted in two categories, paradigmatic change and piecemeal change. Principals sharing beliefs about paradigmatic changes needed, spoke about the current education system as being obsolete, necessitating reform of basic assumptions about learning, curriculum, instruction, assessment, accountability, the role of the teacher, and the role of the student. Analysis of data from transcribed interviews resulted in the emergence of categories and their descriptive properties.

The first category was the magnitude of change needed (i.e., piecemeal versus paradigmatic change). Three of eight principals described a piecemeal or incremental conception of change. This view of change perpetuates thinking that is bounded by the assumptions of the transmissive paradigm. Five of eight principals spoke about a paradigmatic change that necessitates thinking beyond the confines of the transmissive paradigm.

The second category was perceptions about leadership (management vs. leadership). The third category was the perceptions about assessments (standardized vs. problem/project based). The fourth category was perceptions about curriculum (standardized content-centered vs. personalized student-centered). The fifth category was perceptions about achievement (achievement gap vs. opportunity, access and technology gap).

Category 1: Differences in Magnitude of Change (Piecemeal vs. Paradigmatic Change)

Thematic perceptions from all participants included the belief that the current educational paradigm is very linear, systematic, and still resembles the inherited assembly line model of education. The paradigm promotes success for only one kind of student, and works to assimilate
students to the dominant culture, which has resulted in socializing students into a hierarchical society. In this study, every participant indicated that the current paradigm of education with the standardized assessment and defined achievement (growth on the annual standardized assessment) has resulted in an educational experience that does not promote the development of the essential skills (referenced by participants as the four C’s Critical thinking, Collaboration, Creative thinking, and Communication) that students are believed to need for the 21st Century. Participants further elaborated that a need for change is essential, in order to prepare students for the 21st Century. However, perceptions of experiences resulted in two distinct properties: (1) piecemeal change (changes within the current paradigm believed to address 21st Century skills), and (2) paradigmatic change (complete paradigm change resulting in new beliefs about the role of the student, the role of the teacher, curriculum, assessments, and definition of achievement).

**Property 1: Piecemeal Change**

This property arose from the analysis of transcribed interviews with perceptions of experiences that indicated the principals recognized major problems existed in the education system; they did not believe that the type of change required was paradigmatic. Belief in piecemeal change revealed that their thinking was bounded by the transmissive paradigm (i.e., adding multiple assessments while continuing to give priority to the single high-stakes standardized assessments at the end of the year for third through fifth grades and eighth grade and 11th grade), use of teaching practices for student retention (i.e., the remembering of information), continued use of scripted lessons using *common core*, and addition of free-response questions on the standardized tests that fail to include critical and creative thinking. Such findings came from participants who did not suggest a change in the single source of curriculum,
continued use of high-stakes standardized testing redefine the purpose of assessment, and change perceptions of achievement. These principals were locked into *standardized thinking*. In contrast, those principals who asserted the need for paradigmatic change reflected a belief that education would shift from standardization to personalization (Marx, 2006).

When participants shared their perceptions of experiences, they communicated a belief that the current paradigm of education with standardized assessments and the current definition of achievement (defined by growth on the annual standardized assessment), has resulted in an educational experience that has not promoted the development of 21st Century skills (Critical thinking, Collaboration, Creative thinking, and Communication) that students need; three participants expanded further on their beliefs about changes within the current paradigm of education that reflected a piecemeal approach. Mr. Amber, principal of Empedocies High School said,

*We are still about the end results and standardized testing. So that sometimes kills the very thing we’re trying to teach, like critical thinking and creativity. We are trying to deal with that by redesigning the way we not only teach but assess students.*

The notion of redesigning the way we teach and assess students at a school level, suggests a plausible solution within the existing paradigm of education. These respondents revealed a belief that remedies could occur within the transmissive paradigm (e.g., increasing the number of assessments while continuing to define accountability based on continued use of a single end-of-the-year standardized tests, increasing teacher capacity to transmit information more effectively) and did not include a need for a student-centered curriculum.
Mr. Pink, principal of Pythagoras High School shared:

There’s still a mindset that it’s that score, it’s that number that defines us. I’m glad to see that we’re moving to a different model and different indicators. Not just the old API, AYP, we have multiple indicators including suspension rates, attendance rates, A-G completion, pathway sequence completion. It’s more of an inclusive, more of a holistic approach to assessments.

This indicated a belief that by expanding the current educational paradigm parameters to multiple marks of data would result in the needed changes to prepare students for the 21st Century. This strategy attempts to expand the current paradigm of education to look at multiple measures of achievement, however, it continues to define achievement based on a standardized notion of learning that is curriculum centered and continues to be one size fits all.

Mr. Brown, principal of Aristotle High School shared a statement indicating a difference between current practices and the current reauthorization of common core standards. He went on to say, “We basically conveyor-belt education. Everybody’s put on the conveyor belt at the appropriate age and they end at the appropriate age. We do not truly design education around this common core idea of thinking, application, synthesis.”

This participant believed that implementing the common core standards while continuing the use of a single high-stakes standardized test represented a disconnect (i.e., that what is being taught is not what is being assessed).

**Property 2: Paradigm Change**

This property arose from perceptions of experiences indicating beliefs that the current education paradigm requires a paradigmatic overhaul; such that sources of curriculum, the purpose of assessments, and perceptions about achievement become redefined. Thematic
perceptions from five participants included the belief that the current educational paradigm is very linear, systematic, and still resembles the inherited assembly-line model of education. Five of the nine participants shared a belief that the current educational system promotes success for only one kind of student, works to assimilate students to the dominant culture, and socializes students into a hierarchical society.

Mr. Orange, principal of Democritus High School stated,

The entire system is broken and we do more harm to our kids than we do good. Our system separates students out, from the ones that do well from the ones that don’t do well. Our students who don’t get the skills in a certain time frame are automatically looked at as not good. It makes students feel not as confident, and I think schools are designed for only one type of student to succeed. But I think every kid should make it through. Every kid should feel like they can take on the world and they can be confident and do well in their job. I don’t find that true of our system.

Other participants shared similar perceptions regarding the purpose of the current paradigm and the need for a complete educational paradigm overhaul. Yet Mr. Olive, principal of Parmenides High School, described the current education system as:

The current educational system teaches them [students] facts. Things like that in order to say they [students] are successful. It [current paradigm of education] doesn’t really judge what a kid is thinking. It judges more, what they know or what they actually have been exposed to and can regurgitate as compared to how they can synthesize those facts that they learned.

Other perceptions of experiences shared by participants contributed further to the idea that the current public education system is outdated and requires a complete paradigm change to
prepare students for the 21st Century. Such statements included describing the current educational system as: an “agrarian system” (Mr. Brown & Mr. White), and focused on “top to bottom, A-G, and grades” (Mr. Gold). Participants argued that the current education paradigm narrowly defines achievement as “the score or number (on standardized tests)” and, as a result, “judges’ exposure and regurgitation, not if a kid can think” (Mr. Olive). The public education experience is believed to be “still about the end results of standardized testing and kills the very thing we are trying to teach, like critical thinking and creativity” to prepare students for the 21st Century according to Mr. Amber.

Category 2: Perceptions of Leadership (Manager vs. Leader)

Analysis of interviews revealed different perceptions of the role of principals. Those who saw their role primarily as being a manager described it in terms of handling day-to-day operations of the school and overseeing the work of school personnel using language related to staff discipline, contracts, recruitment, and resource allocations. In contrast, those who viewed the role as one of leadership; shared their beliefs in fostering a learning community; coaching for continuous improvement in teaching and learning; nurturing teachers to become reflective practitioners; developing self-efficacy; immersing teachers in professional development characterized by experiential learning such as digital storytelling, cognitive coaching, and literacy protocols; self-efficacy; and, promoting shared decision-making aligned to the school’s mission. There was a difference in focus: managers sought to maintain the current system and emphasized efficiency of school operations. Leaders concentrated on paradigmatic change using the normative re-educative strategy (i.e., addressing the values, beliefs, and practices of teachers based on and social cognitive earning theories) (Bennis, Benne, & Chin, 1969).
Property 1: Manager

The role of manager was one of system maintenance. This involved a piecemeal or incremental change effort situated within the current entrenched and obsolete paradigm. Thus, their thinking was oriented towards perpetuating the status-quo. The change strategy was rational-empirical. As defined by Bennis, Benne, and Chin (1985), this change strategy is rooted in the assumption that people are rational human beings and change occurs by providing rational reasons for implementing a change. Seven of the eight participants viewed change narrowly: raising test scores because this is what defined success within the traditional transmissive paradigm.

The first indicator of a management orientation was the inability to fire teachers who did not attain high-test scores from their students. In other words, low-test scores represented failure because of a deficit within bad teachers. Thus, the needed change of getting high-test scores was due to the inability to dismiss incompetent or ineffective teachers (i.e., those who didn’t produce high-test scores) once tenure was granted to them. Mr. Amber shared:

A school district needs to be as creative as possible, and our teacher tenure is one of the biggest barriers to change in schools. You cannot change instruction, until you change the instructors. We have to change how we hire, release, and do professional development. The older you are the harder it is to change. The longer you have been doing something; it becomes more difficult [to change].

A second indicator of the participants’ evidence, the role of manager was the assertion of the need to use a power-coercive change strategy. The use of this strategy is ineffective in attaining sustainable change and principals’ use of disciplinary measures to force individual teacher change would be counter-productive to paradigmatic change. This is because a power-
coercive change strategy does not attend to the values, attitudes, and beliefs of the teachers.

Mr. White, principal of Plato High School, shared the following experience and belief in the power-coercive strategy,

> When . . . nobody is bothering them in evaluations or otherwise, then they’re going to continue going the way they are going. So, it’s either by prodding or creating a desire to change. No matter the amount of prodding, and regardless of how that is done, that’s resisted more until there’s actual disciplinary action or constant: I’m meeting with Mr. R every week and every week I’m talking, and every week your union representative is there and every week until you start doing things differently.

The comment of Mr. White illustrates a power-coercive strategy for change: the change agent is using power to coerce change. Such a strategy assumes that those undergoing the change do so because of the power or authority of the leader driving the change (Mirci, 1991). Benne and Chin (1985) defined the power coercive strategy as: “The application of power in some form, political or otherwise. The influence process involved is basically that of compliance of those with less power to the plans, directions, and leadership of those with greater power” (pp. 23-24).

A third indicator of the management orientation was the inconsistency in using terminology. An example was the assertion that a thinking-curriculum was not in place; but, simultaneously sharing the assumption that such a curriculum was in place. In other words, participants would use terminology related to a paradigmatic change while not accurately understanding the meaning of terminology such as thinking curriculum. Another participant, focused on piece-meal incremental change rather than paradigmatic change, shared the
perception that teachers would change their practices if they could understand a better strategy resulting in higher test scores. Raising higher end-of-the year test scores included a process:

We begin to measure what we’re actually trying to achieve and attain in the area of the thinking curriculum. And leave the creative doors for teachers open for them to try things that may fail. Once we begin to experiment, we have to go into a data inquiry cycle. Then utilize a keep, fix, stop, start model. (Mr. Brown)

Mr. Brown’s statement reflected the belief that the current paradigm of education promoted a thinking curriculum. This change strategy has tended to work when people impacted by the change are already oriented to accepting the change if the change is not significant enough to upset people’s sense of efficacy (Benne & Chin, 1985). Such strategy is also reflective of what Kurt Lewin (1951) identified as a three stage model of “unfreezing, moving, and refreezing” (p. 34). Another participant shared a similar belief, in which change occurs through the empirical rational method. Mr. Gold, principal of Socrates High School stated,

Hearing from peers, seeing it successful somewhere else . . . Give them perspectives of pros and cons and give them historical references. Get them to understand why, give them the options to successfully fail. Give a second or third chance of what they would do again if they were able to make the decision.

Mr. Red, principal of Thales High School, supported this practice in sharing a belief that change occurs, “Through relief of fear, and the antidote to fear is knowledge.” The idea of the empirical rational model of change occurs as information helps to rationalize a need. Mr. Pink and Mr. Olive also indicated the use of the empirical rational strategy.

One of the ways you can get people to change is by being innovative and showing them that just because we’ve done it this way, we don’t have to continue to do it the same way.
But maybe coming with different ways and showing them that there’s other ways to do it. 
(Mr. Pink)

Have to have a reason why they change . . . They have to understand why they are doing this . . . You just continue to have conversations with people but you have to listen to them too. Question why? Do they need more information? Need some time? More education? What is it? (Mr. Olive)

**Property 2: Leader**

Of the eight participants, one shared perceptions about experiences that resulted in the discovery of leadership practices that are aligned with systemic change literature in that paradigmatic changes within education can result when a strategy challenges the current paradigm of education and develops new behaviors, assumptions, and beliefs that make up a new paradigm (Evans, 1996). This participant noted a process that aligned with *The Human Side of School Change*” (Evans, 1996) in that:

Strategic approaches to innovation place great emphasis on building followership—an active, engaged, self-managing commitment to change among those who must implement it. Followership first requires a strong initiative by a leader to articulate a clear sense of purpose—or to lead her staff in the development of one. The strategic-systemic paradigm thus begins with a top-down approach. But it is also a bottom-up model, or, more accurately, a ‘widen-out’ model, for it takes the principle of participation seriously. It’s emphasis on flexible, developmental planning and the building of shared meaning demands that leaders listen actively to staff, modify their initial goals to reflect staff experience, and aim toward building innovation that is truly collaborative wherever
possible. To change schools, therefore, requires much more than ‘restructuring’ them; it requires re-conceptualizing the entire enterprise of reform from the strategic-systemic perspective. (p. 18)

Mr. Orange shared the following beliefs regarding a paradigmatic change process that would promote a paradigm in which a school creates a personalized student-centered learning experience. The first step of creating change was to identify the behaviors that need to exist in the new paradigm. In which Mr. Orange, principal of Democritus High School argued, “Change first occurs through behaviors; you change behaviors before you change mindset.” Mr. Orange elaborated on his beliefs about the process of changing behaviors,

> Behaviors have to be modeled. There has to be a theory of gradual release and the people changing need to participate in [a process] where that person is not alone, but they’re participating with someone else in a group or a team that is working on these behaviors.

Research has indicated that practices among systemic leaders have included the organization and development of cooperative working teams (DuFour et al., 2006), and suggested, “building such a community is a necessity of the highest order” (Crow & Slater, 1996, p. 25). Mr. Orange identified the behaviors as needing to be those that lead to learning; arguing that the core behaviors that should be practiced should include: “collaboration, 21st Century strategies, coaching/reflection/feedback, reading, and teaching to influence.” Such learning-focused behaviors have been identified in the research as the foundation for creating a learning organization (Squires et al., 1989).

Mr. Orange further argued it is the principal’s responsibility to “model [the behaviors] at the professional development” in which “I would lead” (Mr. Orange), as opposed to hiring a consultant to lead.
And if the individuals practice this behavior and they see end results, then you have a better chance of seeing a mindset change. Those core values drop into a school, small group of participants in which I would lead those PD’s (professional developments) knowing all the while you are helping others to lead those things until you have five or six groups on campus. Those behaviors are practiced throughout the school, day in and day out. I think that we’re looking at that [opportunities to practice behaviors including: quarterly off sites, monthly staff meetings, weekly team meetings, committee meetings] and those times in between held by instructional rounds. Meetings should follow the collaborative theory of Lencioni (2012), the change process outlined in *Change or Die*. Constantly looking for ways to develop as many leaders on campus as possible like admin. [administration] teams, department chairs, coaching teams, new teachers, creating lead teachers. Whoever else we created in those teams. (Mr. Orange)

Mr. Orange further stated that effective change would look like a constant increase in *practice of behaviors* would continue to develop and engage all stakeholders in every possible day-to-day experience of the school. Eventually, the behaviors can lead to new mindsets regarding the beliefs about education. This would then become evident in the beliefs about assessment, achievement, and the roles of teachers and students.

Mr. Orange believed that such a change process would be effective in creating what Marshall and Oliva (2006) called a distributive power philosophy, which further allows for members of the team to question “the dimension of deep examination of personal assumptions, values, and beliefs” (Brown, 2004, p. 89). The effects of such a decentralization of power would result in a culture in which all members are encouraged and enabled to develop their capacities to lead, learn, and problem solve (Hargreaves et al., 2007). Scholars have argued that distributive
power has contributed to the attainment of change initiatives (Brafman & Beckstrom, 2006; Santamaria & Santamaria, 2012; Shields, 2013).

Mr. Orange also shared a belief, that even if the school or district becomes focused on preparing students for the 21st Century by breaking current paradigm norms and rules, there still exists a problem that does not allow for the change to impact the larger paradigm of education (i.e., district, state, national).

The problem is that while teachers do their best to emphasize creative, critical, and analytical thinking; once you get the test and you are graded by the test, by the community, or the public, you start to rely on whatever that test says and that’s what you need to teach to. I think as long as you have those tests and people are measured by those tests, it takes away [creative thinking, critical thinking, and analytical thinking skills].

(Mr. Orange)

This perspective is further supported in change research that demonstrates resistance often introduces increased costs and creates instabilities during the change process (Ansoff, 1988).

**Category 3: Perceptions of Assessment (Standardized vs. Project/Problem Based)**

Participants shared beliefs about assessments needed to assure that students are prepared for the 21st Century. Two properties arose: (1) Standardized and (2) Project/Problem based. Seven of the eight participants expanded on the need to utilize various authentic alternative assessments, while only one participant indicated a need to continue using standardized assessments.

**Property 1: Standardized**

As participants shared beliefs about necessary assessments to determine 21st Century skill attainment, only one of the eight participants stated; “use whatever the CAASPP or Smarter
Balanced consortium” (Mr. Brown) which is the current standardized paradigm accountability tool. All other participants shared a consistent belief that formal assessments like the CAASPP or Smarter Balanced consortium utilized in the current paradigm fail to assess the desired intellectual and emotional skills students need to be prepared for the 21st Century. All other participants shared their ideas about standardized assessments and linked them to negative impacts on curriculum (which will be described in more detail in the next category).

**Property 2: Project/Problem Based**

Project/problem-based performance of critical, creative, and analytical thinking were highlighted by seven of the eight participants. Each of the seven principals shared perceptions that there is a need for authentic alternative assessments that provides collaborative, real-world, and meaningful problem/project based-experiences that further support and develop communication skills, critical thinking skills, collaboration skills, and creative thinking skills. These seven participants all shared what they believed could be practices of an authentic alternative assessment. Such perceptions of experiences included bringing in business people to link learning (Mr. White), stakeholder- (student, teacher, parent) designed performance projects (Mr. Gold), situational performance assessments (Mr. Gold), multiple options for demonstrating skill development (Mr. Pink & Mr. Olive), and the development of product/project portfolios (Mr. Orange & Mr. Amber). Such supporting statements included:

- Having business people come in and interviewing kids and evaluating them. So not just the dry paper assessment but actual interactions with people who are doing the hiring and evaluating the student who may be working on projects in the community. (Mr. White)
- “Put students in situations where they deal with difficult situations, give them practice and help them when they are slipping” (Mr. Gold).
What if it was a problem or project based, it could be anything? If you chose to write a paper or if you decided to make a CAD [Computer Aided Design] model on it or three dimensional print on it in order to explain, to having a trial on something. So then we can really get the idea of is the kid learning? Problem or project based, it could be anything.

(Mr. Olive)

“Different ways of assessing, you would have tradition, oral, inventories and observations.”

(Mr. Amber).

They would be through project-portfolio driven presentations on things they had created to make an impact on their community or their school, and if they were so inclined the county or state. The social emotional would be some of the products designed in which they had to work on teams, work with adults, and maybe work with some younger children; as much diversity in working with teams to create their products, their projects.

(Mr. Orange)

These seven participants further argued that standardized assessments with the notion of closing an achievement gap have continued to deter education from a problem/project-based learning experience that emphasizes the development of communication, collaboration, cognitive and creative thinking skills. This finding is supported by Ravitch (2010) who argued that standardized assessment and the notion of closing an achievement gap has resulted in a curriculum that included so much content and reduced achievement to a single high-stakes exam and failed to address why traditionally underserved students have tended not to succeed in school.
Category 4: Perceptions of Curriculum

Perceptions of Curriculum was identified as a major category of beliefs about what would constitute the most important curricular foci to prepare students for the 21st Century. Mr. White and Mr. Amber shared beliefs about curriculum that reflected the Transmissive/Traditional/Essentialist/Banking/Didactic paradigm which resulted in the first property: (1) Standardized Content-Centered Curriculum. The other six principals (Mr. Brown, Mr. Gold, Mr. Pink, Mr. Red, Mr. Orange, & Mr. Olive) described a learner-centered, strengths based, project/problem-based curriculum more aligned to the Trans-active/Pragmatist/Progressivist/Critical paradigm of education which resulted in the second property: (2) Personalized Student-Centered Curriculum.

Property 1: Standardized Content-Centered Curriculum

This property emerged from participants’ beliefs that there was one source of curriculum: content standards determined by entities far removed from classrooms and teacher-proof textbooks that have deskill teachers. They accepted the unexamined assumption that the correct curriculum came from a single standardized source ushered in with the No Child Left Behind (2002) legislation. For example, prior to the standardized movement, there were four sources of curriculum: the official curriculum, the interests of the students, the interests of the students, and daily events.

Organizing instruction around the sequence of facts and skills, abstracted from the real world, often results in a meaningless and trivialized education for many students. Such a curriculum also lends itself to the most damaging kinds of homogeneous grouping for low achievers. And it frequently leads to positioning the most meaningful and interesting parts of the curriculum until the “basics” have been mastered first. (Parker, 1994)
The focus is narrowed to individual student academic achievement rather than intellectual, psychological, and social development (Parker, 1994). Participants’ expressed the belief that curriculum was primarily skills-based with subject matter content held in discrete silos with an atomistic orientation: “I would want curricular alignment and vertical articulation” (Mr. Amber). Other curriculum foci included: “science, technology, keyboarding, and coding” (Mr. White). In sharing beliefs and achievement expectations, only two (Mr. Amber & Mr. White) of the eight participants evidenced that their thinking was situated in the Transmissive/Essentialist content areas – referred to as independent content knowledge and achievement related to standardized, independent-content centered information and application.

Why is it, in spite of the fact that teaching by pouring in, learning by a passive absorption, are universally condemned, that they are still so entrenched in practice? That education is not an affair of “telling” and being told, but an active constructive process, is a principle almost as generally violated in practice as conceded in theory. (Dewey, 1916, p. 46)

Property 2: Personalized Student-Centered Curriculum

This property emerged from a belief inherent in the Trans-active/Pragmatist/Progressivist/Critical Paradigm: a curriculum that is learner centered and promotes cognitive growth through relevant experiential learning. Rather than a behavioristic orientation, the administrators understood learning as a social constructivist process. Six of the eight participants shared similar perceptions of experiences regarding standardized testing and the notion of closing an achievement gap; such that continued focus on standardized achievement has negatively impacted the development of a student centered, critical, creative, and analytical thinking curriculum. This belief is not new; John Dewey argued in 1916 that formal schooling is
atomistic (desperate *bits and pieces* or decontextualized discrete information separated from the student). He speaks of the need to balance formal education with the kind of informal education that is relevant and purposeful human learning. These principals further shared beliefs identifying a need for a student-centered, thinking curriculum such that learning experiences are a result of: student interest, strengths-based experiences, thematic, backwards mapping from industry, collaborative, performance/product-based learning experiences that foster a student’s passion for learning.

Principals shared the following beliefs about the need for a student centered, strengths-based, thematic, and project/problem-based curriculum approach.

If you are really good in auto mechanics [strengths based] and that’s what you would like to do (student centered). Well how many different ways can we look at that? In terms of being an entrepreneur and design your own shop. In being able to get your hands dirty, do research and design a presentation. But this is what your passion is. I think because we would be developing this whole idea of passion from kinder through 8th, kids would come to high school with their passion. (Mr. Orange)

Other statements indicating a need for a different paradigm curricular focus included: “Critical thinking or deep understanding between relationships, interaction, and communication” (Mr. Gold); which was also believed to increase student engagement as a result of “providing pathways and giving students an opportunity to be exposed to the pathways that they’re interested in” (Mr. Pink).

In addition to the curriculum experience, perceptions of experiences also indicated three categories concerning the curricular skills to develop, which included: the four C’s
(collaboration, creativity, critical thinking, and communication), STEM (Science, Technology, Engineering, and Math), and the ability to influence.

Multiple participants identified the four C’s as essential 21st Century skills. Participants also shared beliefs indicating the current practices surrounding curriculum, assessment, and accountability hinder the development of the four C’s. When asked about the intellectual skills that should characterize a graduating student preparing for the 21st Century workforce, six of eight participants immediately responded with the four C’s. Such statements included; “Well certainly the four C’s. Collaboration, creativity, critical thinking and communication. As well as “the ability to critically think, analyze, apply, predict, and synthesize information and communication” (Mr. Gold).

In addition to the four C’s, a focus on STEM (Science, Technology, Engineering, and Math) was a thematic belief in curriculum development centered around thematic, project/problem-based learning experiences. Such statements included: “CTE (Computers, Technology and Engineering) pathway” (Mr. Pink); “blended learning heavy into technology . . . Very hands on, very project based, student centered, teacher talking less” (Mr. Red); as well as, “it would be presentation media, something everybody goes through . . . And a problem-solving innovation in math and science curriculum. And Technology would have to be integrated in all three” (Mr. Orange).

Mr. Orange further expanded upon the essential skills required for success in the 21st Century as:

The skills I think students need intellectually; that is, they need to learn how to influence over being authoritarian. They need to be able to create and innovate, the need to be able to problem solve, they need to be able to work on a team and have strong collaborative
skills. Now, the idea of being able to read, what’s more important is they have a desire to read. Teaching them to read is not enough. The same with writing. Not just teaching them to write but have them leave with a desire to write. They also need to be able to negotiate, present, and speak with groups of people. They need to be able to speak with conviction and confidence. They need a variety of technological skills, including coding. They need to know how to inspire people, in addition to basic reading, writing, math, science, and social science concepts. Those are just tools and I would expect them to use those tools to do all the things they need to do in the things I just mentioned . . . Would there be grades in my school? No! There’s no such thing as grades, what for? There’s no such reason for it. It’s as good as you want your product to be. If you care about your product and it’s not one that’s teacher designed, it’s one that students have chosen and designed; then you’ll want to make it the best you can until you find that, you know what I’m not into this product any more. Time to move onto the next product. So, am I saying that my school would be product driven? Absolutely! And the products, the kind of criteria would include much research, writing, speaking to panels so there would be some accountability. And their products would have to have an impact on their community. In elementary, their products would be small, but in high school their products would be much larger. Would it include the basics, absolutely. But the basics would be tools to help them produce their products. Once they do, the idea has to be creating that desire to continue reading and there should never be any test for reading. To me, it really doesn’t matter if a student cannot read at a certain level. What’s important is that they want to continue reading. A person that can read but doesn’t, doesn’t have a huge advantage over a person who can’t read at all. A big piece of my vision is that no teachers are successful
until they have built a desire for reading in our kids, and the same goes for writing. Writing is a beautiful way to communicate and our students struggle. The way they overcome that is by caring about their writing. People who are writers are passionate about what they write about. That’s what I want for our kids, “passionate” about the work. (Mr. Orange)

Such skill-based curricula align with research regarding changes in the workplace and the needed changes in the education system; such as the SCANS report (U. S. Department of Labor, 1991) which further argued a different paradigm of education has been needed in order to develop basic skills (read, write, understand, speak, listen), thinking skills (creatively, problem solving, learning, and reasoning), and personal qualities (sociability, self-esteem, responsibility).

Category 5: Perceptions of Achievement (Standardized Achievement Gap vs. Opportunity, Access, and Technological Gap)

This category resulted from perceptions of experiences shared by participants concerning achievement. Of the eight participants, only Mr. Amber shared beliefs regarding the reality of an achievement gap as defined by standardized assessment, and the seven other participants shared a perception that the current achievement gap is a construct defined by the existence of a standardized assessment paradigm. These seven participants also shared beliefs about standardized assessments and the notion of closing an achievement gap, having resulted in attention removed from larger societal inequities such as opportunity, access, and technology gaps.
Property 1: Standardized Achievement Gap

This property arose from the perception of experience of one participant who believed the standardized assessment paradigm with the notion of closing an achievement gap has resulted in attention to societal inequities. Mr. Amber stated;

I don’t believe it [standardized assessments and the notion of closing an achievement gap] turns our attention away; I believe our systems of accountability are turning our systems towards inequalities. It’s putting a focus on how far we are away from meeting the needs of underserved students.

In contrast to the other participants, Mr. Amber shared a perception that standardized testing and closing the achievement gap has created a focus on “low-performing minority subgroups” (Mr. Amber).

Property 2: Opportunity, Access, and Technological Gap

This property arose because of shared perceptions of experiences indicating a belief that standardized assessments and the notion of closing an achievement gap has required assimilating students to the dominant culture of the test and still promotes the ideology that a good student is compliant, accepts the official curriculum passively, and gets high-test scores; which in turn continues to take attention away from societal inequities (opportunity, digital, and access gaps).

Of the eight principals, seven (Mr. White, Mr. Brown, Mr. Gold, Mr. Pink, Mr. Red, Mr. Olive, & Mr. Orange) shared this similar perception of how a continued emphasis on closing the achievement gap has blinded the larger society from addressing societal inequities and further hindered the provision of equitable experiences for students in schools. These principals indicated that the focus on standardized testing and the notion of an achievement gap is a developed reality of the high-stakes accountability testing system. Such beliefs included:
I think it focuses, it [standardized testing and the notion of closing an achievement gap] takes attention away, because we are so concerned about assessments or new curriculum; we’re still not addressing societal inequities. We are more focused on new textbooks and new pacing guides as opposed to actual student learning. (Mr. White)

The standardized paradigm will continue to be in juxtaposition to the societal inequities; opportunity, digital, and access gaps. We don’t ask our citizenry to resolve issues, we ask them to be compliant based on those standards. We continue to grow inequities of opportunity because we do not create opportunities for them to go to schools that speak to their specific skill-set, their specific passion. (Mr. Brown)

I think when they say closing the achievement gap, to what? Is it the gap to the top students, bottom students; what gap are they closing? What are the factors you are trying to close? If you look at top students and bottom students the gap is a cavern. If you look at equality and equity then that is something more realistic to be addressed from the beginning. Closing the achievement gap got in the way; that teaching to the test became big. (Mr. Gold)

Assessments and trying to close the achievement gap are big heavy anchors that really can keep, and has kept me from my dream school becoming a reality because that’s how we’re graded. Unfortunately, we spend a lot of time and resources focusing on that [improving test scores] and we tend to lose sight of the larger picture. . . . I would think if you have standardized assessments and high-stakes testing there’s going to be inequities. Because the standardized assessments are not equitable. They’re based on the quality of
one assessment for all students in a grade level. And that of itself is going to contribute to the achievement gap. (Mr. Pink)

Are we going to teach to the test or the kid? We close doors when we look at closing the gap. I believe there may not be gaps when we look at learning. What causes the gaps? We didn’t score a 97% or 87%, we scored a 50%. Does that mean we didn’t learn or we suck at tests? (Mr. Red)

So again, how are you measuring? What is the achievement gap? Let’s say that same kid who doesn’t have the parent support at home and who has never had a role model to be successful. Then we bring him here [to school] and say this is how you have to learn and what you have to do to be successful and if you don’t get these numbers you’re not going to be successful, and when they don’t make it they’re like ‘Wow, I wasn’t successful, I dislike school anyways.’ I think it totally takes away from social inequalities. And yet we do the same thing, we tell people they’re not successful because they can’t pass a test. Or they are successful because they can pass a test. (Mr. Olive)

Access gaps, absolutely! In places where scores are low there is a higher emphasis on standardized curricula and testing. In schools that are scoring really high, I think that there is more freedom. (Mr. Orange)

Beliefs regarding the impacts of standardized testing and the notion of closing an achievement gap are in alignment with social-justice literature related to critical race theory and cyclic reproduction; in that, the system continues to disadvantage low-socioeconomic students (Trilling & Fidal, 2009), “create individuals who operate in the interest of the state and function to sustain and legitimate the status quo social order” (McClairen, 1988, p. 1). The standardized
Two paradigms of education

Assessment and notion of closing an achievement gap continue to focus on test preparation instead of addressing the inequitable factors that have created a perpetuating underclass throughout the educational system, such that inequities have resulted in major gaps leading to consistent underachievement in life (Skrla et al., 2010). These participants also align with research indicating the education system that was once thought to be a means of a better life and a process aimed at creating equality in opportunities has been found to maintain the division between students who are socioeconomically disadvantaged and their more affluent peers (Howard, 2010; Marshall & Oliva, 2010; Skrla et al., 2009).

Summary

In this chapter, thematic perceptions of experiences and beliefs from all participants include the belief that the current educational paradigm is very linear, systematic, and still resembles the inherited assembly-line model of education. Where the paradigm promotes success for the type of students that fit the design and it also works to assimilate students to the dominant culture while socializing students into a hierarchical society. Every participant indicated that the current paradigm of education with the standardized assessment and definition of achievement (defined by growth on the annual standardized assessment) has resulted in an educational experience that does not promote the development of essential skills (critical thinking, collaboration, creative thinking, and communication) students need. Participants further elaborated on the changes necessary to address the need for different learning experiences. As a result, five categories emerged (perceptions of the magnitude of change, perceptions of leadership, perceptions of assessment, perceptions of curriculum, and perceptions of achievement). Each category had two distinct properties that either reflected the transmissive,
traditional, essentialist, teacher-centered, banking model, or the alternative paradigm that included the trans-active, pragmatic, learner centered, problem posting, and cognitive model.
Chapter Five: Conclusion

The purpose of this study was to understand secondary principals’ perceptions regarding change agentry as it relates to functioning within the current paradigm of education, shackled by such concepts of achievement defined by standardized-test scores, while advocating for a paradigm shift that prepares students for the realities of the 21st Century and begins by closing the opportunity, technology, and equity gaps. Principals are caught at the crossroads between a paradigm based on an outdated understanding of achievement and a paradigm based on the understanding that traditionally-marginalized, minority underachievement has resulted from equity, technology, and opportunity gaps caused by societal injustices traditionally advantaging Whites, while disadvantaging African Americans, Hispanic Americans, and Native Americans. In this study, secondary principals’ perceptions were analyzed to further understand the experiences of secondary school principals working in a dual paradigm of education. One paradigm is the high-stakes accountability standardized assessment paradigm and the other paradigm being the development of 21st Century skills. My study examined the perceptions of eight principals as they related to perceptions and beliefs regarding: magnitude of change (piecemeal vs. paradigmatic), leadership (manager vs. leader), assessment (standardized vs. project/problem based), curriculum (standardized content-centered vs. personalized student-centered), and achievement (standardized achievement gap vs. opportunity, access, and technology gaps).

In an effort to better understand this phenomenon, I conducted a phenomenological study that consisted of eight secondary administrators who served as a principal for a minimum of two consecutive years within the last five years in a school with 85% low-socioeconomic population (qualifying for free or reduced lunch) and 85% of students representing traditionally
disadvantaged minority (non-White) groups. Each participant also had a clear administrative services credential and experienced the phenomenon serving in the same urban district in southern California.

**Overarching Research Question**

The following overarching research questions were used to guide the study through all of its phases;

1. What, if any, are the realities of the 21st Century not being addressed by the current entrenched industrial paradigm of education?
2. In what ways does the concept of achievement as defined by standardized testing, contribute to or detract from preparing students for the realities of the 21st Century?
3. What are the perceptions of secondary school administrators regarding how to be effective leaders in creating and sustaining change within education?

**Semi-Structured Interview Questions**

Based on the overarching research questions and the purpose of this study, the following semi-structured questions were developed and used to solicit responses from the principals selected for this study;

1. Please describe the intellectual and social-emotional skills that should characterize a high school graduate who would be successful within the workforce of the 21st Century.
2. In what ways does the current education system contribute to or detract from such skill attainment?
3. If you could design the school of your dreams any way that you wanted with unlimited funding and no limits, what would your vision of education look like? Please include the structure, student enrollment size, and resources.
4. What would be the three most important curricular foci for the school you designed to address 21st Century realities?

5. How would you determine attainment of the intellectual and social-emotional skills?

6. In what ways has continued use of standardized achievement tests with the notion of closing an achievement gap, contribute to, or hinder the school of your dreams becoming a reality?

7. What do you believe are the merits or limitations of standardized achievement tests on curriculum, instruction, and thinking?

8. What do you believe are the merits or limitations of standardized achievement tests on creative, analytical, and critical thinking?

9. How do you negotiate between a standardized curriculum determined by standardized achievement tests as opposed to a more personalized approach to education emphasizing critical, creative, and analytical thinking?

10. What is your perception of how change occurs within individuals?

11. As a change agent, how would you implement a thinking curriculum?

12. How would you address the current high-stakes standardized curriculum and assessment while advocating for the kind of systemic change needed to prepare students for the realities of the 21st Century?

13. How does continued emphasis on standardized curricula, high-stakes standardized assessments, and closing the achievement gap focus attention toward, or away from, societal inequities such as opportunity, digital, and access gaps?

14. Is there anything else you would like to share?
This qualitative phenomenological study included analysis of transcribed interviews to reveal common themes that further described categories and properties.

**Summary of Findings**

Analysis of the data (transcribed interviews from eight principals) revealed five categories and 10 properties to describe the perceptions of experiences and beliefs that emerged during my phenomenological study. Major categories included perceptions and beliefs regarding (1) magnitude of change (piecemeal vs. paradigmatic), (2) leadership (manager vs. leader), (3) assessment (standardized vs. project/problem based), (4) curriculum (standardized content-centered vs. personalized student-centered), and (5) achievement (standardized achievement gap vs. opportunity, access, and technology gaps). These categories and properties are further discussed in Table 2.

Table 2

*Summary of Categories and Properties from Transcribed Interviews*

<table>
<thead>
<tr>
<th>Category</th>
<th>Current Industrial Paradigm Property:</th>
<th>21st Century Paradigm Property:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnitude of Change</td>
<td>Piecemeal change: Three (Mr. Amber, Mr. Pink, &amp; Mr. Brown) of eight principals shared beliefs of needed changes to increase student achievement that was bounded by the transmissive paradigm, use of teaching practices for student retention, continued use of scripted lessons reflecting standards, and revising and adding free response questions to the annual standardized assessment. Such changes either increased performance on the standardized assessment or modifications to the standardized assessment.</td>
<td>Paradigmatic change: Five (Mr. Orange, Mr. Olive, Mr. White, Mr. Gold, and Mr. Amber) of eight participants shared experiences of implementing changes to beliefs about sources of curriculum, the purpose of assessments, and perceptions about achievement. Such changes reflected individualization of education.</td>
</tr>
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</table>
Table 2 (Cont’d.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Current Industrial Paradigm Property:</th>
<th>21st Century Paradigm Property:</th>
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<tr>
<td>Leadership Experiences</td>
<td>Manager: Seven (Mr. white, Mr. brown, Mr. Gold, Mr. Pink, Mr. Red, Mr. Olive, &amp; Mr. Amber) of the eight participants shared leadership experiences (actions taken as a school principal) that reflected system maintenance within the current paradigm. Thus their actions were oriented towards maintaining the status-quo of the current obsolete industrial paradigm.</td>
<td>Leader: Only one of eight principals (Mr. Orange) shared leadership experiences (actions taken as a school principal) that aligned with systemic change literature that challenged the current paradigm of education and developed new behaviors, assumptions, and beliefs regarding the role of a student, teacher, curriculum, assessment, education, and social justice implications.</td>
</tr>
<tr>
<td>Assessment</td>
<td>Standardized: Only one principal shared beliefs about the positive impacts of standardized assessments and their ability to provide insight and support as students work to achieve grade-level standards.</td>
<td>Problem, project, and/or product based: Seven (Mr. White, Mr. Gold, Mr. Pink, Mr. Red, Mr. Olive, Mr. Orange, &amp; Mr. Amber) of the eight principals highlighted project, problem, or product based authentic assessment that provide collaborative, real-world and meaningful problem/project-based experiences that further develop communication skills, critical thinking skills, collaboration skills, and creativity.</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Standardized content-centered: Two (Mr. White &amp; Mr. Amber) of the eight principals accepted the unexamined assumption that the correct curriculum came from a single standardized source (i.e., Common Core Standards) used with revisions of ESEA legislation. Accepted curriculum focus that represented subject matter content held in discrete silos with an atomistic orientation that depended on the age of a student.</td>
<td>Personalized student-centered: Four (Mr. Gold, Mr. Pink, Mr. Red, &amp; Mr. Orange) of the eight principals shared beliefs that reflected the trans-active, pragmatist, progressivist, and critical paradigm, in that curriculum should be learner centered, and promote cognitive growth through relevant experiential learning.</td>
</tr>
<tr>
<td>Achievement factors</td>
<td>Standardized achievement gap: Only one (Mr. Amber) of eight principals share a perception of standardized assessment and the notion of closing</td>
<td>Opportunity, access, and technology gaps: Seven (Mr. White, Mr. Brown, Mr. Gold, Mr. Pink, Mr. Red, Mr. Olive, &amp; Mr. Orange) of the eight</td>
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</table>
Findings from the five categories added to the knowledge about,

- Realities of the 21st Century not being addressed by the current industrial paradigm of education.

- The impact of achievement defined by standardized testing on preparing students for the realities of the 21st Century.

- Perceptions of secondary school administrators regarding how to be effective leaders in creating and sustaining change within education.

Realities of the 21st Century, not being addressed by the current industrial paradigm of education, included a lack of 21st Century skills. Such skills included the ability to think creatively, critically, and analytically. These were shared as abilities that need to be continuously developed and used to solve real-world problems, collaborate with various peers, and influence those in power to act on such problems. Such an experience would help students learn how to think independently as opposed to learning what to think.

This study found that in order to address the realities of the 21st Century, a paradigmatic shift has needed to occur that includes redefining the roles of a good student, roles of a good
TWO PARADIGMS OF EDUCATION

teacher, definition of curriculum, purpose of assessments, purpose of education, and the social justice implications. The current industrial paradigm and redefined 21st Century paradigm needs are further illustrated in Table 3.

Table 3

*Current Industrial Paradigm versus 21st Century Paradigm Needs*

<table>
<thead>
<tr>
<th>The role of:</th>
<th>Current Industrial Paradigm</th>
<th>21st Century Paradigm Needs</th>
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<tbody>
<tr>
<td>Good Students</td>
<td>Good students are compliant, accepts the official curriculum passively, and gets high-test scores</td>
<td>Passionately engages in collaboration around real-world problems, works to influence change, and demonstrates increasing abilities to think creatively, critically, and analytically.</td>
</tr>
<tr>
<td>Good Teacher</td>
<td>Manages students to be obedient, transmits the official curriculum within subject-specific silos of static information, and demonstrates accountability by the percentage of students excelling on standardized tests.</td>
<td>Awakens and supports a passion for students to solve real-world problems, work on projects/products, continuously coaches through struggles, and individualizes learning experiences with the goal of fostering passionate creativity, critical thinking, collaboration, and communication.</td>
</tr>
<tr>
<td>Curriculum</td>
<td>There is a single source of standardized curriculum (i.e., standard-based content approved as official), transferred primarily through the teacher via lecture and use of textbooks.</td>
<td>Anything and everything that furthers creativity, critical thinking, communication, and collaboration skills (i.e., Project, problem, and product-based experiences becomes the ability to access knowledge, the world, resources, and historical, current, and future context).</td>
</tr>
<tr>
<td>Assessments</td>
<td>Standardized criterion tests as well as true/false, multiple choice and short answer responses to select content.</td>
<td>Project, problem, and product based learning experiences that have historical, current, and/or future implications that foster creativity, critical thinking, analytical thinking and attempt to influence and impact society.</td>
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</table>
Only one of eight principals shared a belief that standardized testing and high-stakes accountability of the current industrial paradigm of education has resulted in attention to societal inequities. Seven of the principals believed that the current paradigm of education with an obsolete definition of achievement has continued to result in an achievement gap that is defined by the outdated paradigm. They also argued that the current outdated paradigm draws attention away from societal inequities experienced by traditionally, underserved-minority students, and kills passion and creativity in education. Attention to the test has hindered the development of an individualized education that becomes something personalized for each student with real-world context and develops individual student passions and skills required for the 21st Century (i.e., critical thinking, creativity, communication, collaboration).
As a result, all eight principals described the current paradigm of education as outdated. In addition, seven of eight participants believed that the current standardized curriculum and assessment paradigm has yet to address 21st Century skills that have included critical thinking, creative thinking, collaboration, and communication. Leaders further shared discontent with the focus on standardized assessment achievement and a belief that there continues to exist disconnect between the current industrial educational paradigm and a focus on 21st Century skills. As Mr. White stated, “If something is standard, how creative can it be?”

In the industrial educational paradigm, it was found that accountability has required principals to continue to focus on achievement defined by standardized testing. Seven of eight principals indicated standardized testing has had only negative impacts on the definition of achievement, assessments, a thinking (critical, creative, and analytical) curriculum; and have resulted in neglecting societal inequalities (opportunity, digital, and access gaps).

In order to create paradigmatic change that prepares students for the 21st Century, practices and beliefs regarding assessments and achievement, curriculum, and leadership must be different. New ways of thinking about both achievement and assessment need to change from a single standardized test to authentic alternative assessments (i.e., project/problem-based performance assessments).

Lastly, in order to influence the needed changes, school leaders need ongoing paradigmatic leadership development. When asked about leadership experiences in creating change, seven participants shared experiences and beliefs that aligned with maintenance of the current, obsolete industrial education system, as opposed to only one participant who shared leadership practices that aligned with literature about paradigmatic change leadership. The misalignment between beliefs and practices revealed disconnect between what principals shared
as beliefs about a needed paradigmatic change in education, and the actions they take to create change and prepare students for the demands of the 21st Century. Such findings suggest that principals are caught a crossroads of education, working within the confines of an obsolete paradigm of education while having beliefs that there is a need for a new paradigm to exist in order to better prepare students for the 21st Century and address societal inequities that impact achievement of traditionally impoverished students.

**Discussion**

The current paradigm of education has consisted of a set of unexamined assumptions or interconnected beliefs that continue to include: (1) a *good* student is compliant, accepts the *official* curriculum passively, and gets high-test scores; (2) a *good* teacher is someone who manages students to be obedient, transmits the *official* curriculum contained within subject-specific silos of static information, and demonstrates accountability by the number of students excelling on standardized tests; (3) there is a single source of standardized curriculum (i.e., standards-based content *approved as official*); (4) assessments are standardized-criterion tests as well as true/false, multiple choice, and short answer; (5) the curriculum is transmitted primarily through the teacher through lecture and use of textbooks; (6) equality necessitates assimilating students to the dominant culture; (7) education is a preparation for life necessitating the use of external motivation such as rewards and punishments, and (8) the disparity in test scores between student subgroups, based on race, social class, and sex constitutes the *achievement gap*. This paradigm has served to socialize students to fit into a hierarchical society with most being prepared for industrialized jobs. As a result, participants argued that the current, standardized assessment paradigm and continued emphasis on closing an achievement gap continues to create
a reproductive effect that does not foster thinking (critical, creative, analytical) skills (Gatto, 2005; Kohn, 2000).

As participants shared perceptions of realities, it was evident that there is recognition that the current paradigm of education is not designed to prepare students for 21st Century realities, and that it detracts attention to societal inequities, such as opportunity, access, and technological gaps. As participants shared beliefs regarding 21st Century skills and the implications for assessments, curriculum, and the definition of achievement; participants demonstrated a disconnect in the magnitude of change needed, as well as the leadership abilities needed to develop a new paradigm. As school leaders are facing the dual responsibility of helping students succeed within the constraints of the entrenched industrial/transmissive paradigm where student success is narrowly defined by a single, high-stakes standardized assessment (Marzano et al., 2005). How can we expect systemic reform when we have leaders identifying the need of a new paradigm, but not completely understanding how to lead the way for a paradigmatic change? Rather, such leaders continue to implement piecemeal changes that further perpetuate the ideals of the inherited and entrenched education system driven by the interest of the owners of factories profiting from mass production (Darder et al., 2003). Darder et al. (2003) argued, when leaders believe,

the classroom should be a window on the world, not a hermetically sealed regime of the imposition of habitus, which is making the test of academic success equivalent to measuring the degree to which the student has been inculcated with the habit of subordination to school and pedagogic authority. (p. 121)

As we have further moved from a society that once “needed workers trained with the necessary technical skills and socialized with the work habits and attitudes required to fit in at a
factory” (Oakes et al, 2013, pp. 40-41) current realities require “non-routine analytical and
interactive communication skills” (Kay & Greenhill, 2013, p. 3).

The old system of when things were “certain, stable, and predictable” no longer exist in
the 21st Century as the world adapts to new realities of society (Shields, 2013, p. 4). As a result,
systemic leadership abilities that are highly strategic in developing schools and influencing the
wider paradigm of education must emerge. Such leadership is needed to be able to address
“material realities, disparities, and unfulfilled promises of the world in which our students live”
(Shields, 2013, p. 5). This study has recognized a call for a progressive leadership style that
identifies and challenges inequities in education as well as creates systemic change in the way
education experiences influence students (Shapiro & Stefkovich, 2001).

Such leaders need to understand the constructs of the current paradigm and develop a
learning organization (Squires et al., 1989, Senge, 1990; Senge et al., 2000) that enables
stakeholders to develop the capacity to be problem solvers rather than trying to be a leader who
can solve people’s problems (Fullan, M. G., 1993). Other practices shall include; the
organization and development of cooperative working teams (Crow & Slater, 1996; Leithwood
& Louis, 1998), decentralized autonomy (Brafman & Beckstrom, 2006; Hargreaves et al., 2007;
Harris, 2009; Lynch 2012), and the development of relationships amongst stakeholders that focus
on understanding themselves and the world around them (Furman, 2012; Gooden & Dantley,
2012; Lencioni, 2002; Shields, 2004; Santamaria & Santamaria, 2012; Uchida et al, 1996:).
Such practices in are alignment with the normative re-educative strategy which is based on an
understanding that change impacts a person’s very identity and perception of reality.

At the personal level, men are guided by internalized meanings, habits and values.

Changes in patterns of action or practice are, therefore, changes, not alone in the rationale
of informational equipment of men, but at the personal level, in habits and values as well and, at the sociocultural level, changes are alterations in normative structures in institutionalized role and relationships, as well as cognitive and perceptual orientations. (Benne & Chin, 1985, p. 31)

Unfortunately, there remains a lack of qualified change agents who understand social justice context and demands; including common expectation on top of being an expert on teaching and learning, while having characteristics to bring about lasting and ongoing change (Lynch, 2012). As a result, impoverished minority students have experienced a segregated educational experience that inadequately prepares them for the realities of the 21st Century.

Implications

Developing a better understanding about the perceptions of principals serving traditionally underserved students, while trying to meet the demands of a dual educational paradigm that is in misalignment, has yielded insights for educators, leaders and policy makers.

First, the current standardized obsolete paradigm fails to support skills that prepare students for the 21st Century that include creative, critical, and analytical thinking. Developing these skills continues to be secondary to preparing students to pass a test and receive a piece of paper upon completion of 12th grade. The current reality is, the public education system is in perfect alignment for the results we are currently getting (i.e., societal inequities including opportunity, technological, and access gaps). It is not a great equalizer in opportunities and experiences. Instead it acts as a segregation tool that penalizes those who experience gaps relating to opportunities, technology, and access; further resulting in social capital and cultural-capital deficits. The current obsolete paradigm separates students in schools serving traditionally disadvantaged communities by diverting resources and focus away from skills needed to be
successful in the 21st Century and instead works to increasing standardized test scores. For these students, the educational experience results in reduced opportunities, diminished technology literacy, absence of relevant cognitive development experiences, and content-centered test preparation. The system slowly removes some of the most important components of a cognitive education, including arts, sciences, and social sciences that lend themselves to project/product/problem-based learning experiences and foster a creative thinking, critical thinking, and analytical thinking and have been proven to result in a deeper passion for learning and influencing society.

The current paradigm has also diminished attention to societal inequities that create the social and cultural deficiencies that have resulted in an opportunity, technological, and access gap. Such students lacking social and cultural capital of the dominant American culture have become victims of cyclic reproduction and have continued to receive an education that teaches what to think, how to behave, and passive compliance. As students experience curriculum that is content-centered, taught in silos, disconnected from students passions and identity, students further dislike schooling and/or feel disconnected from educational institutions.

In addition, principals are tasked with doing the impossible. They are working in a dual paradigm that defines success by satisfying the outdated standardized assessment and accountability paradigm. In addition, principals are aware that in order to prepare students for success in the 21st Century, learning experiences require fostering creative, collaborative, critical, and analytical skills. Because the two paradigms are in contrast to one another, principals continue to struggle with this challenge and perceive it as a never-ending battle. A paradigm shift has been needed that is transformed from an ideology of success that includes standardized-achievement tests and a focus on closing an achievement gap resulting from the
ability to recall disconnected, content-centered curriculum, to a paradigm that includes personalized, thematic/interconnected project/problem/product-based learning experiences that promote creativity, critical thinking, analytical thinking, and developing individual passions.

Furthermore, there remains a need to develop systemic leadership in which paradigmatic deficiencies are identified and an improved paradigm can be developed that culminates in lasting and ongoing change.

**Recommendations for Further Study**

Based on the findings and conclusions, there are several recommendations for further study. First, the study could expand to more participants in multiple districts to see if there is a more global consensus of the findings. This could provide deeper insight into the challenges of the dual paradigms.

Next, given the recent increased development of private and charter schools, the study could be expanded to determine the impact that such schools have in preparing students for their future after K-12, and compare results to traditional, public school programs. This may add to the literature on whether or not a thinking-centered curriculum prepares more students to be prepared for the 21st Century and develop a passion for learning.

Finally, researchers may conduct case studies to identify the degree of problem, project, or product-based learning experiences and their impact on developing cognitive skills and student success after high school. Such a study would provide valuable insight into how our public school system can be strategically changed to better serve every student.
References


Together in Higher Education, 1(1), 1-12. Retrieved from https://repository.brynmawr.edu/cgi/viewcontent.cgi?article=1102&amp;context=tlthe


Appendix A: Informed Consent

Consent to Participate in a Research Study
(For use with adult subjects only)

What follows is a consent form that explains what will be happening if you choose to participate in this research study. The first section (Investigator Information) should have been completed by the investigator. If this section is incomplete, do not continue with the study. Do not participate if this study has not been assigned an IRB approval number. The information you need to provide begins on Page 2. Please read each section carefully.

Investigator Information (to be completed by Principle Investigator)

<table>
<thead>
<tr>
<th>IRB approval number:</th>
<th>2015-23-Redlands</th>
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</thead>
<tbody>
<tr>
<td>Title of project:</td>
<td>Principals as change agents for educational improvement</td>
</tr>
<tr>
<td>Name of principle investigator (PI):</td>
<td>Raymond Delgado</td>
</tr>
<tr>
<td>Email of PI:</td>
<td><a href="mailto:Raymond_Delgado@Redlands.edu">Raymond_Delgado@Redlands.edu</a></td>
</tr>
<tr>
<td>Telephone number of PI:</td>
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<tr>
<td>Department or major of PI:</td>
<td>Education</td>
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<td>Position held by PI:</td>
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<td>[X] student</td>
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*If PI is a student or staff, complete the remainder of Investigator Information, otherwise go to next page.*

| Name of faculty or administrator sponsor: | Dr. Philip Mirici |
| Email of sponsor: | Philip_Mirici@redlands.edu |
General information about research studies

You are being asked to participate in a research study. Whether you do is entirely up to you. You may refuse to participate, or you may stop participating at any time for any reason without any penalty.

Research studies are designed to gather new information. This new information might help someone in the future. You might not receive any obvious or direct benefit by participating in this study. In fact, there might be risks to being in a research study. If there are, this information and other information about this study are described below so that you can decide whether you want to participate in the study.

You will be given a copy of this consent form. You should ask the investigator(s) named above, or staff members who assist them, any questions you have about this study at any time.

Purpose of this study

The purpose of this phenomenological study is to explore the experiences and perspectives of secondary school administrators regarding systemic leadership and change agency in low SES and high minority schools.

You are being asked to participate in this study because you are a highly qualified secondary administrator who experienced change phenomena in working with low SES minority students.

Number of people participating in this study

If you decide to participate in this study, you will be one of approximately nine people who will participate in this study.

How long this will take (i.e., duration of participation)

If you choose to participate in this study, your involvement will take about 1-2 hours.
What will happen if you participate in this study

If you decide to participate in this study, we will discuss a date for me to come and interview you. He interview should only take about one to two hours. After the interview, I would like to follow up if necessary for further clarification and understanding of your experiences.

Possible benefits of participating in this study

As mentioned above, research studies are designed to gather new information. This new information might benefit someone in the future. You might also benefit by participating in this study by reflecting on your role and practices as a change agent.

Possible risks or discomforts related to participating in this study

It is possible that there are unknown risks or discomforts. Please report any problems immediately to the researcher.

Videotaping

You will not be videotaped.

Audiotaping

You will be audiotaped.

Protecting your privacy

During the audiotaping, I will fully secure the confidentiality of the participants’ identities. While I audiotape the interview, I will not ask for the participants name or any information about the participants, including the school they work for and the area they live in. If I do refer to the participants, I will use pseudonyms so that the identities are kept completely confidential throughout the duration of the study.

People who participate in this study will not be identified in any report or publication about this study. Although every effort will be made to keep the research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is unlikely to happen, but if disclosure is required, the investigator will take whatever steps are allowable by law to protect the privacy of your personal information. In some cases, your information in this research study could be reviewed by representatives of the University of Redlands, research sponsors, or government agencies for purposes such as quality control or safety.

What will happen if you experience any problems or discomforts during or after your participation

Anything you do, including participating in research, carries with it some chance that something problematic or unwanted may happen. This may include risk of personal injury. Despite all of the precautions, you might experience an unwanted reaction or injury related to participating in this study. Although the researcher may direct you to medical, psychological, or other services, any costs related to such problems are your or your insurance company’s responsibility. However, by signing this consent form, you are not giving up any of your legal rights.
Compensation for participating in this study

You will not receive anything for participating in this study.

Costs of participating in this study

With the possible exception of any time off from work you choose to take and transportation costs, there are no obvious costs for participating in this study.

Questions about this study

You may ask and have answered any question about the research. If you have questions or concerns, you should contact the Principle Investigator (PI) or faculty or administrator sponsor (if the PI is a student). The contact information is listed on page 1 of this consent form.

Questions or concerns about the investigators, staff members, and your participation in the study

This study was approved by the University of Redlands Institutional Review Board (IRB). This board tries to ensure that your rights and welfare are protected if you choose to participate in the study. If you have any questions about your role or how you were treated by the research personnel, you may contact the Chair of the IRB at francisco_silva@redlands.edu or by telephone at 909-748-8673.

Participant’s Agreement

I, ______________________________________, have read the information presented above. I have asked all questions I had at this time. I voluntarily agree to participate in this research study.

Signature of Research Participant

Date

To be completed by researcher:

Print Name of Person Obtaining Consent

Signature of Person Obtaining Consent

Date