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UNIVERSITY OF CALIFORNIA SAN DIEGO
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Cultures of Innovation and the Role of the Leader

A dissertation submitted in partial satisfaction of the requirements

for the degree Doctor of Education

in

Educational Leadership

by

Andrée M. Grey

Committee in charge:

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2019

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Chair

University of California San Diego

2019

DEDICATION

“Rejoice with your family in the beautiful land of life.” —Albert Einstein

I dedicate this dissertation to my family! Together we rejoice in this accomplishment!

To my parents who have encouraged and supported this work every step of the way. Dad, you made this happen for me. I am forever grateful.

To my amazing husband, Brian. You have always believed in me. There is no spouse more giving or supportive than you. Your unwavering encouragement, interest and sacrifices to support me in this work made this dream a reality.

To my Maddy. My heart. This is for you. You are my greatest cheerleader! May you also always follow your dreams and know you can achieve anything.

TABLE OF CONTENTS

SIGNATURE PAGE	iii
DEDICATION.....	iv
TABLE OF CONTENTS.....	v
LIST OF FIGURES	viii
LIST OF TABLES.....	ix
ACKNOWLEDGEMENTS.....	x
VITA.....	xi
ABSTRACT OF THE DISSERTATION	xii
CHAPTER 1: INTRODUCTION.....	1
Background.....	1
Cultures of Innovation	4
Purpose of the Study.....	8
Research Questions.....	8
Conceptual Framework.....	8
Organization of the Dissertation	10
CHAPTER 2: LITERATURE REVIEW	11
Overview.....	11
Change Reform and Leadership.....	11
Moving to Cultures of Innovation.....	14
The Leader’s Role.....	15
The Role of the Central Office.....	17
Organizational learning.....	18

Collective efficacy.....	25
Conceptual Model.....	27
CHAPTER 3: METHODS.....	29
Introduction of Research Design.....	29
Conceptual Framework.....	29
Data Collection.....	30
Single Case Study Design.....	30
Data Analysis.....	35
Conclusion.....	38
CHAPTER 4: CASE STUDY FINDINGS.....	39
Organization of the Chapter.....	39
Statement of the Problem.....	39
Purpose of the Study.....	39
Introduction to Findings.....	40
Summary of Findings.....	61
CHAPTER 5: DISCUSSION AND CONCLUSIONS.....	63
Purpose of the Study.....	63
Research Questions.....	63
Supporting and Constraining Conditions Around Innovation.....	63
Theorizing Innovation.....	73
Implications for Leadership.....	75
Implications for Social Justice.....	79
Study Limitations.....	80

Conclusion of the Study.....	81
APPENDIX A.....	83
Interview Protocol.....	83
APPENDIX B.....	85
Informed Consent and Consent for Audio Recording	85
REFERENCES	88

LIST OF FIGURES

Figure 1. Conceptual Framework for Cultures of Innovation.....	9
Figure 2. Revised Conceptual Framework for Cultures of Innovation.....	75

LIST OF TABLES

Table 1. A table of positions interviewed	33
Table 2. A table of research questions, methods and rationale.....	35
Table 3. A table methods, analysis and processes to develop findings	37

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VITA

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ABSTRACT OF THE DISSERTATION

Cultures of Innovation and the Role of the Leader

by

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Doctor of Education in Educational Leadership

University of California San Diego, 2019

California State University, San Marcos, 2019

Professor Alan Daly, Chair

The role of the leader in any organization is critical, but there has never been a more pivotal time than now as 21st century leaders prepare students for the future. The intersection of school culture and change leadership has been studied extensively in the change reform model, however, a small but growing body of research is now focused on cultures of innovation in schools and districts. This dissertation presents research on the vital role of the central office which has been previously understudied. This dissertation synthesizes the literature surrounding cultures of innovation as well as the role of the central office leaders. This qualitative case study presents findings underscoring and explaining the role of culture and climate in an innovative district as well as the supporting and constraining conditions and their effects. Study findings confirmed the central office is strongly poised to support cultures of innovation by 1) supporting a flatter more networked central office, 2) creating and enacting a shared vision of innovation including systems for organizational learning and efficacy and 3) most importantly, establishing a climate of trust. The findings revealed specific leadership skills for supporting the culture and

climate which include building trusting relationships, enacting the vision and mission of innovation and building the capacity of other leaders. Implications for central office leaders are discussed.

Key terms: central office, change reform, culture of innovation, leadership

CHAPTER 1: INTRODUCTION

Background

Leaders in our current educational system benefit by seeing beyond today to create innovative school cultures for students. Previous generations have experienced a factory based educational system where content and change were delivered (Gordon & Patterson, 2008). In today's world outside education, innovative practices and iterative changes are commonplace. This work seeks to explore innovative cultures in the educational realm with a specific focus on the central office. Innovative cultures encompass a climate of trust, efficacy and organizational learning for the betterment of the students (Dibbon, 2003; Slegers et al., 2014; Kaniuka, 2012; Paxton, 2015; Senge, 1990; Stempfle, 2011; Zornada, 2006).

Schools and districts have been in a constant state of reform (Fullan, 2010; Wagner, 1998). At every turn, central office school leaders have been charged with leading the change, and the link between leadership, change and school cultures is well defined as being instrumental in establishing the climate (Awbrey, 2014; Spillane, Halverson, & Diamond, 2001). Therefore, it may be advantageous for practitioners, policymakers, and researchers to better understand cultures of innovation and the role of central office leaders.

Innovation is a term currently being used across business and educational settings that often is conceptually cloudy and requires clarity for more in depth study. Innovation is a complex construct (Damanpour & Schneider, 2006). The word innovation is derived from the Latin word *novus* or new and is defined by Miriam-Webster as a “new idea, method or device or the process of introducing something new.” As we consider cultures of innovation in education, this would translate to school and district climates that engage in perpetuating and iterating new ideas, climates that engage in the invention or creation of new methods and work to enrich the

school experience. The latter is more of a disruptive practice than the incremental change of the past systems (Gilley, Dixon, & Gilley, 1999).

To thoroughly consider this work, it is necessary to review the historical context for change reform, the current call for innovation and the ties between central office leadership and school cultures where innovation thrives. There have been a number of educational reforms in recent years. The educational system has experienced new and re-packaged programs promising to bring systemic change resulting in increasing student achievement, appropriately nicknamed *reforms du jour* (Grubb, 2010). The results of these reforms are subject to debate. Many of the same accountability measures came out with new names only to fail and have additional funds added to them to try and make them work before finally being abolished just in time for the next potential reform measure (Fullan, 2010; Wagner, 1998).

Historically, there are many examples of reforms that have set out improve our educational system. No Child Left Behind (NCLB) was said to be the reform measure that was going to equalize schools and provide equity and access for all. To many, NCLB failed to reach this goal (Dee, Jacob, & Schwartz, 2013), as students in underrepresented groups where sanctions were most likely needed gained less academically over the years than their peers in non-sanctioned schools. Race to the Top was seen as a way to increase alignment of the states with the national educational focus on college readiness, accountability systems and underperforming schools (Howell, 2009). This reform was created to incentivize excellence and create urgency for change reform where best practices could be rewarded (Howell, 2009). With one exception, every state grantee over-promised as experts determined what they put in their applications and were awarded would actually be completely improbable and impossible to complete or do (Weiss, 2013).

In recent history, educational initiatives implemented by the state and federal government have been passed down onto districts (Wagner, 1998). Although previous standards and high-stakes accountability measures showed little success, writers of the newest content standards, which outline what students need to know and be able to do, referred to as the Common Core State Standards (CCSS), set out to create new rigorous standards focused around meaningful learning (Loveless, 2015; Porter, McMaken, Hwang, & Yang, 2011). The United States Department of Education (USDE) indirectly supported large scale funding efforts of Common Core adoption by allocating resources for the incentives included in Race for the Top which included awards specific to Common Core (Porter et al., 2011). Common Core results have shown little improvement in student learning as after three years student achievement is flat with less than half of students (forty-eight percent) in California being proficient in English Language Arts and even fewer (thirty-seven percent) proficient in Math, and these reform measures have resulted in minimal incremental systemic changes (Dataquest, 2017; Mathis, 2010; Orr, 2009).

Creating innovative school experiences for students may better prepare them for the modern and future worlds (Paxton, 2015). Innovation in the private sector has been necessary for industries to remain competitive with increasing access to technology and new information, yet education where schools continue traditional practices such as telling and testing, has been slower to recognize the needs or merits of disruptive change (Daly & Chrispeels, 2005). Whereas, in the private sector, companies like Intuit, Google, Apple and Starbucks have all been celebrated and studied for their innovative practices (Power, 2017; Swisher, 2017). As we contrast the iterations of the products of companies like Intuit, Google and Apple with the iterations of education in last twenty years it seems that education has not evolved at the same

speed. All of the educational iterations known in the public sector such a No Child Left Behind, Race to the Top and Common Core are not truly novel iterations (Fullan, 2010; Grubb, 2010; Howell, 2009). Whether they were looking to incentivize high achieving districts or take over low performing schools, the results have not drastically improved student learning in the United States (Dataquest, 2017; Mathis, 2010; Orr, 2009).

Cultures of Innovation

This research sought to understand cultures of innovation and the role of the central office leader that have been underdeveloped in the literature (Honig, 2003, 2008). However, there are a few promising examples in the empirical literature addressing the topics relevant to this exploratory work of innovation, culture, and the intersection of the central office leaders' roles. The remainder of this section will briefly outline those areas.

Innovation and culture. Intentional structures for cultures of innovation and creativity are evident in Development and Research (D and R) networks in England where practitioners are at the genesis of sparking change and creating innovation (Harris, 2008). The concept of 'open innovation' begs for participation by all stakeholders for the creation of knowledge and practices. Evidence following the D and R networks suggests enhanced professional practice, greater commitment and energy at the school level for sharing and implementing new ideas, and improved teaching practice. This work relies on a negotiation model where there is reification and participation, both required for co-construction of new information. The alignment between the network and the communal task can generate new knowledge (Daly, & Finnigan, 2017). This space for innovation helps to build a community of support where collectively educators share, innovate, network and create new knowledge and practices (Harris, 2008; Orr, 2009). The learning culture environment with the highest levels of innovation tend to be rooted in creative

thinking, dynamic collaboration, and teacher empowerment (McCharen, Song, & Martens, 2011).

Central office leadership and culture. The role of the central office in innovative cultures is changing from a fiscal administrative body which was more “monolithic” in reforms to a learning organization (Honig, 2008). Leadership from and among senior management in the central office of a learning organization, although less pronounced in the research, has a critical role in the creation of cultures that supports organizational learning, trust, and collective efficacy (Kaniuka, 2012; Leithwood, et al., 1998; Sarros et al., 2008; Wagner, 1998). As the central office takes the lead in creating space for innovation and fostering collaborative processes, greater results are attained (Senge, 1993; Togneri & Anderson, 2003). Whether considering a functionalist view of leaders and culture (where leaders are the creators of culture), or an anthropologist’s view of leaders and culture (where leaders are a part of the culture), leaders benefit from being intentional in their work to promote and proliferate innovation in practices (Sarros, Cooper, & Santora, 2008). Reviewing the specific components of organizational learning, trust, and efficacy supports the exploration of the central office role fundamental to this study.

Organizational learning. Critical to change and innovation is the ability of an organization to foster a culture of the creation of collective shared knowledge or organizational learning (Kofman & Senge, 1995). Humans learn through a social process and the interactions between individuals and groups are critical in the development of cognition. This interdependence between people within the culture is utilized to share development of new information and/or structures (John-Steiner & Mahn, 1996). In order to grow practice, the culture and climate for organizational learning must include constant structures and opportunities for

individuals to collectively think reflectively and critically about their procedures, processes, and practices. Leaders influence organizational learning both directly and indirectly (Leithwood, et al., 1998). Furthermore, leaders support this by being and providing models of these practices (Leithwood, et. al.,1998). Senge (1990) notes that leaders act as stewards, designers, and teachers in a culture where there is constant expansion, inquiry, and improvement in models.

In their work, Argyris and Schon (1978) proposed the organizational learning model and terms of *single* and *double-loop* learning. *Single-loop* learning involves changes and learning that are routine and basic in nature. *Double-loop* learning involves the deep questioning of underlying beliefs and assumptions to create new knowledge that is central to organizational learning for innovation (Cousins, 2004; Leithwood et al., 1998; Fiol & Lyles, 1986).

Trust. Cultures supporting organizational learning must be trusting and safe. The literature indicates three important areas to support innovative culture including 1) trusting relationships, 2) psychologically safe spaces for innovation and 3) communication that supports trust (Adams & Miskell, 2016; Daly, Liou, & Brown, 2016; Forsyth, Adams, & Hoy, 2011; Honig, 2008, 2009; Jacob, Goddard, Kim, Miller, & Goddard, 2015; Johnson & Chrispeels, 2010).

Relationships that support trust breed innovation. Zhu and Engels (2014) found that collegial relationships were among the most influential within the dimensions of organizational culture. Further, social interactions among all levels of the organizations increase trust (Forsyth et al., 2011; Roby, 2011). Johnson and Chrispeels, in their 2010 study, confirm what others had previously noted in that trusting relationships are influential in reform (Daly & Chrispeels, 2005; Daly, Moolenaar, Bolivar, & Burke, 2010; Darling-hammond, 2004; Fullan & Miles, 1992).

Innovation itself suggests failing first, therefore safe spaces for failing help build trust. Seventy to eighty percent of innovations initially fail, so fostering safety in failing is critical (Glor, 2014) to building trusting relationships and positive organizational outcomes. Research points to the importance of ensuring learning cultures for teachers be safe environments for reviewing and sharing failures where teachers can vocalize and consider mistakes. If teachers are allowed to fail safely, there is space for innovation (Slegers et al., 2014; Stempfle, 2011).

Honest, transparent communication about the district vision for continuous learning with clear goals supports trust and innovation (Forsyth et al., 2011; Honig, 2008; Zhu & Engels, 2014). Communication across and within all levels of the system create opportunities for learning and trusting linkages (Johnson & Chrispeels, 2010).

Collective efficacy. Transforming practices requires leaders to support and promote risk-taking. People with high levels of self-efficacy are thought to be more active and persistent in handling dynamic situations such as innovation (Daly, 2017). Efficacious individuals are more likely to view situations as learning experiences and opportunities to demonstrate skills rather than threats (Vardaman, Amis, Dyson, Wright, & Van de Graaff Randolph, 2012). If the goals of educational entities are to innovate and disrupt, then leaders must be able to motivate and encourage stakeholders beyond current practices and reforms. Where there is considerable trust and loyalty in the professional community, collective efficacy can flourish (Aas & Brandmo, 2016).

Collective efficacy requires networks of individuals to have power and influence over their work which expands the ideas of self-efficacy. With high levels of collective efficacy teachers are more persistent, plan more, accept greater responsibility and are willing to overcome struggles at higher rates. These high levels support teacher satisfaction as well as the

organization as a whole (Fullan, 2010; Goddard, Hoy, & Hoy, 2000; Sarros et al., 2008). In reviewing the literature and research, the concepts of organizational learning, trust and collective efficacy are mostly explored individually. The intent of this research is to provide a model for how these are applied together, rather than in isolation and to specifically consider the role of the central office in these cultures of innovation.

Purpose of the Study

The purpose of this qualitative case study is to develop a deeper understanding of cultures of innovation by describing the culture and climate, how central office leaders in these cultures foster innovation. This case study contributes to the research around innovative practices by illustrating patterns of successful innovation and clearly articulate the specific components that support innovation within a district which is currently lacking in the research.

Research Questions

In order to better understand cultures of innovation and the central office and leader's role within the culture, following research questions were developed:

1. What are the supporting and constraining conditions around innovation in a successful district?
2. To what degree does central office leadership influence and support a culture of innovation?

Conceptual Framework

This research sought to understand the experiences, climate, and inner workings of a district of innovation to shed light on the how these are developed, created, and described. Central to this work are the components of a culture of innovation within the setting in which the work takes place or context. The conceptual framework shown below demonstrates, the three

main elements pulled from the literature review that make-up a culture of innovation that includes organizational learning, trust, and collective efficacy. Critical to innovation is central office leadership. The leader's role is multi-directional and influences the culture and climate that allows innovation to thrive. The arrow demonstrates how all of these areas are iterative and reflexive.

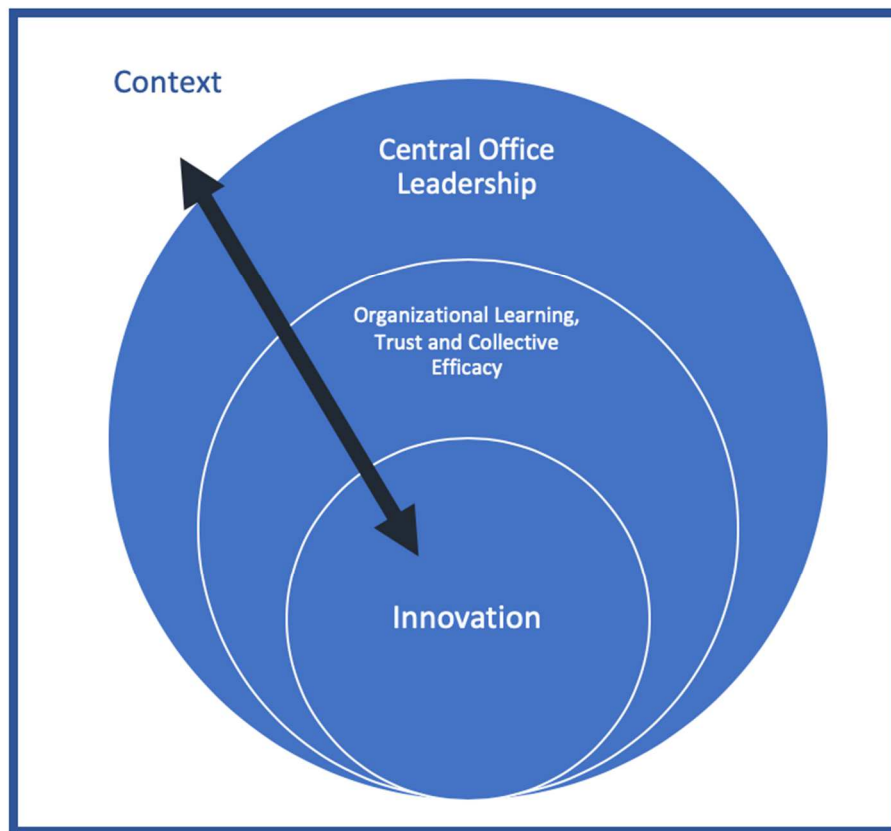


Figure 1. Conceptual Framework for Cultures of Innovation

In order to understand culture and climate of a given group of individuals within the organization being studied, this conceptual framework was employed. A qualitative study using a theoretical lens can guide the researcher provide a greater depth to interpretation and findings (Jones, 2006).

This research was designed as a qualitative case study. A qualitative approach is conducive to being able to describe and explore the context including social and human aspects in order to understand and answer the research questions (Stake, 1995). Qualitative research should bring about action and change of practice which is inherent to this study (Creswell, 2013).

Organization of the Dissertation

This dissertation is organized into five chapters. The first chapter provides an overview of the questions being asked, the importance and significance and a general context for the study. This introduction provides the necessary background to orient the reader. The second chapter is a synthesis of the literature as it relates to cultures of innovation and the role of the central office and leaders within them. Additionally, the literature review notes the areas lacking in the research and presents a conceptual framework and model used within the study. The third chapter presents a detailed review of the methodology utilized for the case study. The research design section outlines the means for reviewing documents, conducting interviews and processes related to data analysis. The fourth chapter outlines the findings obtained from the triangulation of data collected from the case study and the major themes found. The fifth chapter moves beyond the findings to theorize innovation and reviews the implications for leadership and future research.

CHAPTER 2: LITERATURE REVIEW

Overview

The educational system as a whole has operated under a primarily problem-solution framework since its existence as a means for addressing the need to improve (Fullan, 2009; Wagner, 1998). There is a limited but growing body of research around the intersection of change reform with cultures of innovation (Aguinis & Roth, 2005; De Brentani & Kleinschmidt, 2004; M. Fullan, 2001; Kanter, 1988; Zhu & Engels, 2014). The cultural and leadership implications from this research are significant to addressing innovative practices.

Change Reform and Leadership

It is evident that a system of constant improvement is necessary, yet the negative impact on school culture can be profound (Daly et al., 2010; Darling-hammond, 2004). Research notes the negative impacts on school cultures as these large-scale policies, practices and reforms are implemented. We can categorize these negative impacts in terms of 1) how sanctions impact schools, 2) how lack of addressing capacity by leaders impacts schools and finally 3) how the stress of reforms negates improvements (Daly & Chrispeels, 2005; Daly et al., 2010; Darling-hammond, 2004; Darling-hammond, Wilhoit, & Pittenger, 2014; Grubb, 2010).

Hierarchical structures which were used for more stable, less evolving conditions are no longer useful in a faster moving world, and can actually get in the way (Paxton, 2015). Most of these problem-solution reforms have started from local or state mandates with a “carrot and stick,” rewards and punishments approach, which is contrary to research on what motivates people to improve (Azzam, 2009; Magid, 2010). The incentives and punishments have unintended negative consequences on schools and school culture. Sanctions themselves create a failure-oriented educational context which establishes a negative narrow threat adding collective

stress to a school culture (Daly & Chrispeels, 2005). Even incentive-based policies negatively impact school culture as high-performing teachers shift to places where it is easier to address students' needs and there is a stable environment (Darling-hammond, 2004; Darling-Hammond, 2007). When competition and inequity are visible among schools and staffs there is a breaking down of systems of support and collaboration. This translates to poor conditions in the workplace where there is increased stress and distrust (Daly & Chrispeels, 2005). These conditions may be exacerbated in low-income/high-need schools, given the heightened sanctions these schools face under accountability policy (Darling-Hammond, 2004; Daly & Chrispeels, 2005).

The desire and pressure to act led schools to “adopt off-the-shelf programs that are of doubtful value and represent quick fixes in place of the longer-run process of enhancing teacher capacity and restructuring schools” (Grubb, 2009, p. 249). Cultures of stress created by sanction-based reforms undermine long-term sustainable capacity building which is necessary for organizations to maneuver through the chaos and uncertainty related to change (Daly & Chrispeels, 2005). Considering the problem-solution model for organizational change, there is an inherent negative slant as it originates from a deficit rather than a strength (Daly & Chrispeels, 2005; Rorrer & Skrla, 2005).

Reform efforts are tied directly to leadership and often fail due to ineffective leadership and/or the inability to change the culture of schools (Gano-Phillips et al., 2011; Schumacher, 2011). This is also supported in the research completed by Michael Fullan (2009) as he characterized four specific elements to increased transfer of reform efforts which included 1) leadership development, 2) transparency of results and practice, 3) capacity building for deep

instructional practice and 4) teacher quality. Each of these requires the leader to be the driver of the culture (Schumacher, 2011).

Considering previous efforts at change reform (Fullan, 2010), it is apparent that the top down based reforms eliminated variety and the norms of the organizations were to comply with the expectations, leaving minimal opportunities for innovation (Wagner, 1998). Change reform methods tend to limit the employees' ability to work in a self-directed manner and essentially restrict employees from pursuing ideas outside the scope of their current performance (Daly & Chrispeels, 2005). For example, high stakes testing and high levels of accountability may stifle a teacher's autonomy. Increasingly stronger accountability initiatives are bound to fail because of the lack of complex thinking surrounding these policies (Chapman, Chestnutt, Friel, Hall, & Lowden, 2016). In order for true change to occur, it is necessary to create different cultures, different rules and different views of leaders for the future (Paxton, 2015; Stempfle, 2011).

New cultures and leadership roles may benefit from becoming more entrepreneurial and innovative which is a shift from previous models of reform (Zhu & Engels, 2014). Leaders in change reform had a very prescribed role with change management. Leaders were primarily focused on setting school wide goals, supervising instruction and coordinating curriculum (Onorato, 2013). Leaders in change reform were expected to be policy mediators as they supported site personnel in implementation of the changes in policies required by various agencies (Honig, 2003; Rorrer & Skrla, 2005). This process limits innovation as members of the organization implement the same systems, strategies, curriculum and standards within narrow boundaries (Darling-hammond, 2004; M. Fullan, Bertani, & Quinn, 2004; Leong & Anderson, 2012; Onorato, 2013; Rorrer & Skrla, 2005).

Moving to Cultures of Innovation

There a wide array of research on the impact of culture on change management (Aguinis & Roth, 2005; M. Fullan, 2001; Morgan, 1986; Roby, 2011; Schein, 2004). Adamy and Heinecke (2005), “Every coworker in the school setting is affected positively or negatively by the culture in which they work.” As we consider innovation, it should be seen as a “re-culturing” (Fullan, 2001, p.44). Culture is complex and has many components and a ‘culture of innovation’ is also multi-faceted which can either support and enhance opportunities for creativity and innovation or it can act as a barrier (Zhu & Engels, 2014).

Cultures of schools and organizations have long been considered the lynchpin for success in change or improved practices (Adamy & Heinecke, 2005; Aguinis & Roth, 2005; Fullan, 2001). The culture of an organization can be defined as the ideologies, norms and patterns of behavior of the people within it (Fiol & Lyles, 1986). These socially defined ways of doing things outline how the organization operates and functions (Stein & Coburn, 2008).

As the paradigm shifts and leaders begin to change entire organizations, using research around successful cultures of innovation provides a framework and context to review the role of leaders in the central office. Given the challenges of the future, carefully considering the cultural components needed for increasing innovation is necessary (Ag et al., 2017; Slegers, Thoonen, Oort, & Peetsma, 2014; Leong et al., 2012).

Innovation at the core is the creation of new knowledge and a shift from previous reform efforts where knowledge is passed through the various levels in a hierarchical structure (Diamond & Spillane, 2016; Eisler, 2015). In systems of innovation, structures are deliberately created to allow for problem-solving, dialogue, research and design (Jassawalla & Sashittal, 2002). The complexity of innovation rests in both a change process and a social process (Suciu

& Petrescu-Prahova, 2011). As we move from change reform models to complex cultures of innovation it is important to make connections of effective practices in school climates that support disruption.

Organizations need to be flexible, adaptive, entrepreneurial and innovative due to the ever-changing environment and landscape for information and change (Damanpour & Schneider, 2006; Gkorezis, 2016; Sarros et al., 2008). Often failure stems from the inability of the organization to adapt and change when faced with evolving technologies or perspectives (Gilley et al., 1999). Organizations can build greater adaptability and flexibility by being intentional in the creation of diversity and varying perspectives which builds trust (Moolenaar, 2012; Stempfle, 2011). Practices that allow teachers and principals to engage in exemplary practices together tend to allow greater sustainability in change (Daly & Chrispeels, 2005; Darling-Hammond, 2004).

The Leader's Role

The central office role within cultures of innovation encompasses district leaders. Research has found when comparing the effects of organizational (structures of the system) and leader (attributes or skills of the leader) factors, the power of leader factor was greater than organizational structures in predicting innovation (Damanpour & Schneider, 2006). Therefore, clearly defining the role of the leader in innovative cultures is critical. Leadership research indicates that leaders influence outcomes by establishing culture, influencing climate and building capacity for change and innovation (Damanpour & Schneider, 2006; Gilley et al., 1999; Liou & Daly, 2016; Paxton, 2015; Sarros et al., 2008; Stempfle, 2011; Underdahl, 2016). Zhu and Engles (2014) write:

“A culture of innovation is enhanced by leadership that reinforces it. It is agile, nimble, constantly adapting and learning, and open to experimentation and diverse points of view. A culture of innovation indicates that an organization is willing to embrace new ideas, or tools and techniques that innovation requires.

Establishing clear, consistent innovation goals, encouraging collaboration internally and externally, and shifting reward and evaluation systems are also important to build a culture of innovation. “

The tie to visionary leadership in education has been well documented (Darling-hammond, 2004; Fullan, 2010; Mcdougall et al., 2007). As in any culture, a clearly articulated vision from the leader is strongly tied to successful change or innovation. When the leader is tied to innovation and communicates the vision there is likelihood of an adoptive culture of innovation (Damanpour & Schneider, 2006; Sarros et al., 2008). A clearly defined innovation-oriented vision calls for the unlearning of old habits and an organizational commitment to not just implementing change, but rather building capacity for innovation (Rikkerink, Verbeeten, Simons, & Ritzen, 2016; Suciuc & Petrescu-Prahova, 2011). In participative leadership where stakeholders are empowered there is a deliberate intention to remove old hierarchical behaviors and enter into a new dialogue together (Wagner, 1998). This includes the development of collective sense-making about the direction and approach across all levels of the organization (Moolenaar, 2012; Rikkerink et al., 2016; Stephenson, 2006).

Whether the school of thought is that the leader establishes the culture or the school of thought that asserts that leaders are part of the culture (Sarros et al., 2008), it is evident that leaders play a central role in supporting the creation of knowledge and driving change toward innovation (Jacob et al., 2015). They have the capacity to motivate beyond the expectation of the work or status quo (Gilley et al., 1999; Hogan & Coote, 2014; Kotter, 1998; Sarros et al., 2008). Being an innovator, the leader also draws from those around him/her to support the culture (Gilley et al., 1999; Underdahl, 2016).

The Role of the Central Office

Alignment in the central office and throughout the organization serves as an anchor for a culture and climate of innovation. It is no longer a top down message or initiative, rather an engagement that may be inspired by central office leadership but is co-constructed by members throughout the organization (Adams & Miskell, 2016; Honig, 2008; O’Day, 2002). In cultures of innovation, there is a redistribution of leadership that allows for greater alignment within the environment. The fostering of the collaboration, sharing of ideas, and encouragement of flexibility is central office supported (Eisler, 2015; Fiol & Lyles, 1986; Stein & Coburn, 2008; Togneri & Anderson, 2003). Peter Senge (1993) noted the diversity in leaders at all levels of the organization. He suggests a definition of leadership as “the spirit you bring to your work, the quality of your work, your ability to influence and be influenced and your capacity for continual learning (Senge, 1993 p.15).” His work asserts the importance of emphasizing leadership beyond senior management where leaders throughout the organization support learning (Senge, 1993).

In cultures of innovation, leadership is shared throughout the organization. Distributed leadership is not just grounded in the actions of leaders, but it is also about the interactions among the leaders and between leaders and followers (Diamond & Spillane, 2016; J. Spillane, 2015). Central office interactions, as well as the interactions between central office and schools are influential in the creation of learning, culture and climate (Daly et al., 2016; Daly, Liou, & Moolenaar, 2014; Honig, 2008). When the leadership is not only distributed but aligned to the common, shared vision a system wide organization structure is developed (Spillane, 2015; Spillane et al., 2001; Togneri & Anderson, 2003).

Central office leadership that is multi-directional supports innovation. Juxtaposing the traditional top down models of central office management, influence and support that permeates

the organization is more conducive to creativity and efficacy (Wagner, 1998). District-wide communities of practice, sharing of ideas and learning support more meaningful opportunities to nurture innovation (Stein & Coburn, 2008). The central office can learn best by being attentive to professional learning and ideation happening at all levels as this can influence organizational change and innovation (Gallucci, 2008; Orr, 2009).

The role of the central office leadership is a pivotal position and can hinder or support change and innovation (Adams & Miskell, 2016). The more centralized a district, the less likely the diffusion of the reform or innovative practice will take hold, which makes it more likely that current practices will continue and no significant changes will be implemented (Daly et al., 2017). Linkages within the system including those of the central office influence changes in either direction, as the central or organizational leadership must support and nurture innovations in all stages from pre-adoption to post adoption. Leaders benefit from increasing the ties of early and known innovators as this perpetuates and nurtures the high-profile reform practices (Daly et al., 2017).

In the sections that follow, the research outlines the following components of cultures of innovation for schools: 1) organizational learning, 2) trust and 3) collective efficacy (Dibbon, 2003; Slegers et al., 2014; Kaniuka, 2012; Paxton, 2015; Senge, 1990; Stempfle, 2011; Zornada, 2006). In this review, gaps in the literature are exploited which include the lack of research specifically surrounding the role of the central office and how the components mentioned intersect collectively.

Organizational learning.

In order to adapt and progress, it is necessary for organizations to utilize systemwide learning structures. “A powerful learning culture forms an effective breeding ground for

continuous learning. (van Breda-Verduijn & Heijboer, 2016).” Highly successful school districts continuously seek to change, question and improve their practices (Adams & Miskell, 2016). Honig (2008) asserts in order for the central office to become supporters of teaching and learning they must operate as a learning organization themselves. Organizational learning is the process of interactions between and among members to create, revise and transfer knowledge (Eisler, 2015; Senge, 1993). Members of the organization consider background knowledge and evidence to question, reconsider and shift how they work (Fiol & Lyles, 1986; Honig, 2008). This continuous process of questioning, applying, and building on knowledge enables organization-wide learning. A culture of learning has a continual tension of between constancy and change which propels innovation (Fiol & Lyles, 1986). Van Breda-Verduijn and Heijboer (2016) define learning culture as: “a collective, dynamic system of basic assumptions, values and norms.”

A key component to organizational learning is the level of learning taking place. This essentially is the difference between surface and deep learning. Argyris and Schon (1978) originally labeled the ideas of *single* and *double-loop* learning which has now gone through many iterations. Single loop being the more shallow, surface level learning where basic procedures and routines are revised (Fiol & Lyles, 1986; Goh, Cousins, & Elliott, 2006). As we consider cultures of innovation, organization learning must be deep and transformative which is more aligned to *double-loop* learning. Double-loop learning is more consistent with changing the organization or culture in fundamental ways where there is a co-construction, evaluation and convergence of new learning (Goh et al., 2006).

Part of organizational learning is the creation of new shared knowledge which is a dynamic, complex and collective process. Leithwood, Leonard & Sharratt (1998) provide several

supportive factors and findings for deep *double-loop* organizational learning. First, as individuals become a part of the ‘collective mind’ they become embedded in the culture. Second, there is usually a stimulus that sparks the learning for example, a new implementation or internal or external forces requiring a new approach or problem-solving. The leader’s role is also considered as they are able to fuel and compel not only the change process, but are seen as a support of champion for deep work. Leaders can build capacity, articulate a vision of organizational learning and set high expectations to support learning cultures (Leithwood & Louis, 1998; Senge, 1990).

Johnson & Chrispeels (2010) used Lasky’s (2004) framework of linkages to explore linkages between the central office and schools in relation to accountability and organizational learning. The five linkages include (1) resource linkages; (2) structural linkages; (3) communication; (4) relational; and (5) ideological linkages (Lasky, 2004). Their findings note the importance of attending to the relationship linkages when supporting organizational learning and the importance of coordinated linkages. Creating a culture of learning is supported by positive relational linkages (Johnson & Chrispeels, 2010). The relational linkage is also a major factor in the work of Honig (2008) where it was found relationships, particularly central office relationships in terms of assistance, were fundamental as the district operates as a learning organization.

Diversity allows members of the organization to shift from deliverers of products or information, to creators of ideas and practices, resulting in a clear need to adapt which is central to organization learning (Paxton, 2015; Suci & Petrescu-Prahova, 2011). There is often discomfort that comes with change and with innovation, therefore, participants must be willing to navigate in chaos and have intrinsic desire to learn through change. Cognitive diversity is a

success factor in building innovative teams (Stempfle, 2011). Effective collaboration with diverse opinions and healthy conflict can be leveraged to create innovative results beyond one person (Hargadon & Sutton, 2016; Paxton, 2015; Stephenson, 2006). Uncertainty and ambiguity become prominent in cultures of innovation, especially when eliciting multiple viewpoints and experimenting with new ideas and structures. This willingness to maneuver chaos and challenge the status quo grows innovative practices (Suciu & Petrescu-Prahova, 2011). This can be particularly difficult in school systems where policies support standardization and public accountability is inherently tied to the standardization.

Creativity is the emergence of new ideas and innovation (Zornada, 2006) is relevant in organizational learning. Creativity is present where cultures of innovation are prospering (Dibbon, 2003). Teachers and leaders work from the premise of inquiry and experimentation. Discovery of methods and practices allows for new ideas and innovative potential. No longer considering all teaching actions or decisions as prescribed provides a creative space for the trying on of new practices and thinking differently about solutions to problems in our educational systems. When leaders allow creativity, they are acknowledging that it is acceptable not to have the answer which provides authenticity to members in the organization (Dibbon, 2003; Paxton, 2015; Stempfle, 2011).

It is helpful to distinguish between being creative and creativity of ideas. The idea of being creative is generally seen as something one person does or designs, whereas the creativity of ideas generally elicits a broader, more collective viewpoint relevant to organizational learning (Leong & Anderson, 2012). As we consider cultures of innovation, the larger network of multiple people with varying perspectives brings deeper and greater creativity of ideas of thinking necessary for innovation (Udall, 2014). There must be collective importance

surrounding curiosity and exploration as an intentional means to develop creativity of ideas, their promotion and application (Gkorezis, 2016; Leong & Anderson, 2012). As curiosity, creativity and questioning are promoted educators benefit from safe climates to explore new learning. For assumptions to be questioned building ties imbued with trust supports a strong culture for innovation to thrive.

Trust. Trust connects the learning and is directly tied to new learning and new outcomes (Adams & Miskell, 2016; Forsyth, Adams, & Hoy, 2011). Leaders can create learning spaces where there are high levels of trust supporting risk-taking in innovation. A more risk tolerant culture leads to greater opportunities for innovative strategies (Sparrow, 2014). Trust is a perception and can increase the commitment of members of the organization, whereas low levels of trust lessen the confidence of teachers within the school system (Adams & Miskell, 2016).

Adams (2016) notes, “System-wide reform carried out through a culture of trust is the difference between knowing characteristics that define effective districts and how to actually make schools better places to teach and learn. The latter moves school organizations forward while the former leaves behind many unfilled promises.” In order to clearly review trust in a culture of innovation, each of the following elements related to trust will be explored: 1) relationships 2) safe spaces for innovation and 3) communication that builds trust.

Trusting Relationships. A growing body of research has suggested the depth and spread of innovative practices is influenced by both the horizontal pattern of trusting relationships with leaders and teachers and the amount of vertical relationships between teachers and reform or innovative leaders such as coaches, principals or central office groups (Moolenaar, 2012; Vardaman et al., 2012). Interpersonal relationships in which leaders engage with others in sharing and exchanging innovative ideas is essential for change (Moolenaar, 2012). Social

relationships support safe environments in which teachers can engage in innovative practices and experiment with new instructional strategies without the fear of being ridiculed (Moolenaar, 2012). Increased connectedness creates more positive perceptions of the districtwide learning climate of trust, creating a direct and essential community of practice between the district and the school. There must be reciprocal interactions among all levels of the organization (Liou & Daly, 2016; Moolenaar, 2012; Rikkerink et al., 2016).

Strong teams build a sense of unity, support and trust within the organization. Leaders foster a collaborative approach within their teams that supports flexibility and a willingness to consider different ways of doing things to achieve innovative results beyond one person (Dzur, 2017; Maele, Forsyth, & Houtte, 2014; Paxton, 2015; Underdahl, 2016). Roby (2011) asserts trust building, managing change and strengthening relationships are paramount in establishing an innovative culture.

As expected mistrust can also be a saboteur to successful change and a positive climate, but can be mitigated with intentional ties. Johnson and Chrispeels (2010) found with their multi-year study of a central office and sites that although initial surveys and interviews revealed strong feelings of mistrust throughout the organization which included central office and administrators throughout the district, trust could be repaired. Using Lasky's (2004) work with linkages, close attention and study was placed on the communication and relational linkages which were seen as factors in the mistrust and trust. Johnson and Chrispeels (2010) note that trust can be restored if it is lost when repairs are made in relationships and communication.

Trust in safe spaces. Zhu and Engels (2014) in their study of innovative cultures suggests, "a higher level of risk tolerance within organizations is also important for adopting innovation." A risk tolerant space allows for members to be vulnerable which is central to

positive change and continuous improvement (Daly et al., 2016). Part of establishing psychological safety is the encouragement and protection when members ask tough questions related to teaching and learning. Trust is essential as teachers and other leaders place themselves in uncertain positions and must rely on a belief that central office leaders will be supportive (Adams & Miskell, 2016; Roby, 2011).

It is not only critical for the leader to be focused and set the tone, but they must also be actively engaged in the learning, change or innovation which is essential to the establishing a culture of trust. Participative leadership is considered necessary as a means of mediating stress associated with change and reform (Daly & Chrispeels, 2005). There is psychological safety when the leader works from the ‘inside out’ (Gkorezis, 2016; Moolenaar, 2012). Leaders model the behaviors they get and expect as they become symbols of the culture (Sarros et al., 2008; Underdahl, 2016). This can be daunting for leaders to allow themselves to be vulnerable, take risks and share failures. However, leaders influence the culture and environment by focusing on different ways of thinking themselves and expecting the same of agility of others (Gilley et al., 1999; Suciu & Petrescu-Prahova, 2011).

Trust and Communication. Communication plays an important role in a climate that is considering trusting. Forsyth, et al. (2011) and Adams & Miskell (2016) contend district administrators can build trust by “acting in ways that teachers perceive as benevolent, competent, open, reliable, and honest.” This is also true for communication that is open and consistent. There is a need for transparency in decision-making and how that is communicated throughout the organization. Openness includes tackling difficult issues related to change, culture and climate and initiating open dialogue (Adams & Miskell, 2016; Hoy & Tschannenn-Moran, 1999; Roby, 2011). Another factor in openness is the role of the central office to actively seek and

understand the experiences and viewpoints of stakeholders. In order to connect and build trust there must be an alignment within the organization to the vision. Consistent structures and efforts to gather and use information in the decision-making process is beneficial (Adams & Miskell, 2016; Michael Fullan, 2009; Roby, 2011) Each action and decision supports the perception of trust within the district. This includes central office personnel taking ownership of decisions and actions. Sites must have confidence in the central office's ability to coordinate, organize and set the vision of continuous improvement (Adams & Miskell, 2016; Honig, 2008, 2009). As districts establish trust and engage in organizational learning for continuous improvement there is a need for professionals to have the collective efficacy to act on their beliefs and plans.

Collective efficacy.

Innovation and creativity may actually be birthed from self-efficacy, and collective efficacy as professionals reflect on practices and take action. Collective efficacy is defined to be the instructional agency of an organization and the common belief that teachers are capable of affecting student learning (Adams & Jean-Marie, 2011). Bandura (2000) noted two components to collective efficacy: (a) an individual's belief about the group's capabilities and (b) individuals' beliefs in their own capabilities.

When there is greater depth in self-examination, exploration and co-creation of learning for continuous improvement in a school culture, there is greater likelihood of sustainability of that change. Additionally, the persistence needed when taking risks and trying new things to innovate is most likely to occur where there is collective efficacy. Cultures of innovation support collective and self-efficacy, and the ability to question one's own beliefs (Kaniuka, 2012). Encouraging teachers to question their own beliefs, facilitating opportunities for teachers to work together to solve problems and promoting shared decision making is important (Dibbon, 2003;

Slegers et al., 2014). This is essential to being able to foster cultures that truly engage in supporting and nurturing innovation in schools.

Organizations may consider new structures which foster efficacy and are supportive and collaborative. This collective inquiry essentially flattens the existing hierarchical systems of previous changes, and is necessary in innovation. Collaborative, iterative inquiry; and experimentation are linked to strategic improvement in schools (Chapman et al., 2016; Daly & Chrispeels, 2005). Additionally, employing ways to measure site and team progress supports sustainability of the change. As teachers benchmark their progress and collaborate as a team, they are more likely to continue to engage in and generalize the change (Suciu & Petrescu-Prahova, 2011; Weston & Bain, 2009). Chang (2011) found a significant positive correlation between a school's innovative climate and creative methodologies in teaching.

Rewarding innovation can yield positive results and builds trust (Kohli, 2012; Paxton, 2015). Celebrating and collaborating about attempts to change and think beyond the mistakes extends opportunities for strategic, purposeful improvement beyond the status quo (Paxton, 2015). One aspect to this idea is creating an open, permeable culture so that cross cutting innovations are not only celebrated but they are given the best opportunity to take root and be replicated (Kohli, 2012).

The ability to take ownership of change and act on change builds capacity of the organization. Capacity strengthens when barriers are removed experimentation and collective problem solving are the norm (Adams & Miskell, 2016) . When there is high self-efficacy it more likely that individuals and teams will be able to persevere when they are challenges as they tend to me more optimistic (Goddard et al., 2000; Ware & Kitsantas, 2007).

Continuous improvement of our educational system was considered in a historical context as a basis for this study. This particular work explored ways that we refine and improve our cultures and structures. The research presented acknowledged the need for change by reviewing the positive and negative impacts on school culture and how that supports or hinders improvement.

Considering the research about school and district cultures that nurture improvement we can begin to put together a conceptual framework for positive change that moves from change reform to cultures of innovation. There are several cultural aspects that lend themselves to building transformative and innovative change practices. Building strong, nurturing cultures is fundamental to improvement if we are to build capacity and momentum (Ag et al., 2017; Slegers et al., 2014; Leong et al., 2012). These cultures provide space for organizational learning, trust and collective efficacy.

The central office and leaders within them play a transformative role in this work as they must be stewards of innovation challenging systems, ideas and thoughts (Gilley et al., 1999). Site and district leaders must be participative leaders and work to co-construct learning and change *with* teachers and principals to further leverage best practices that are directly tied to a vision of innovation and constant change (Diamond & Spillane, 2016).

Conceptual Model.

Using the conceptual model and framework introduced in Chapter One as a lens and boundary, the research seeks to understand the culture of an innovative district. In Figure 1 below, the central office leadership is a critical link to the ways in which leaders support, model and align district beliefs to a culture of innovation. The three main components pulled from the

literature review that were hypothesized to make-up a culture of innovation includes organizational learning, trust and collective efficacy.

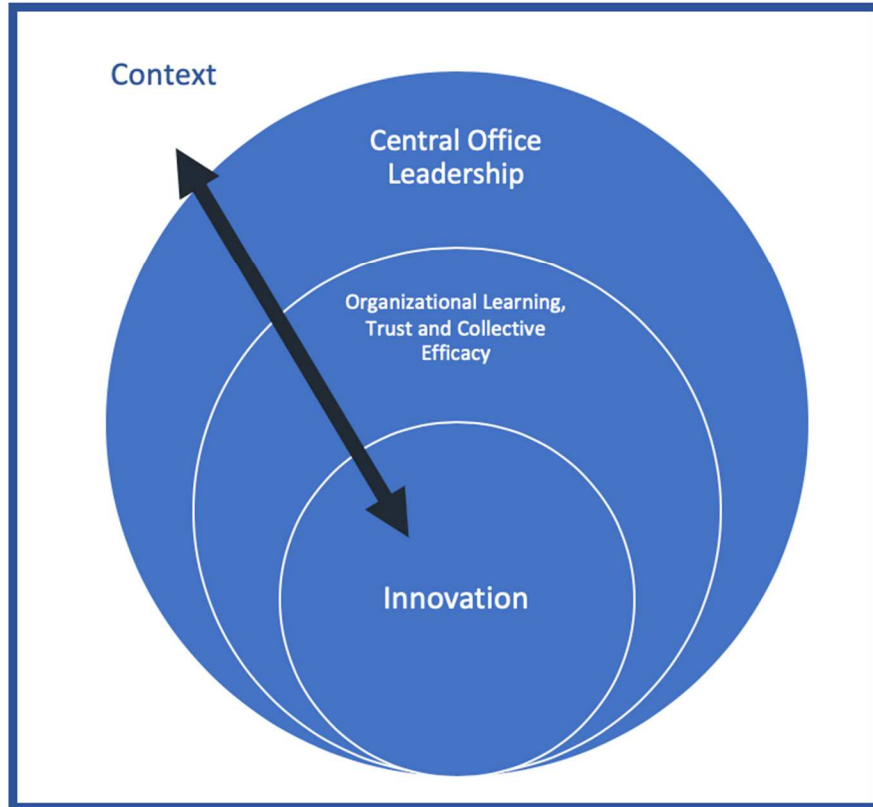


Figure 1. Conceptual Model for Cultures of Innovation

CHAPTER 3: METHODS

Introduction of Research Design.

In order to truly gain an in depth understanding of a district culture, a single affirmative case was studied. A case study allows an in-depth holistic understanding of a complex culture and social phenomena (Yin, 2018). I sought to describe the culture (the supports and challenges surrounding a culture and climate of innovation), so therefore being immersed in day to day workings of the case study was essential. A case study allows the best avenue for explaining a contemporary circumstance (Yin, 2018).

Additionally, for a true picture of the case study, multiple sources of information were used in the inquiry such as documents, records and semi-structured interviews (Yin, 2009). Ethnographic procedures were employed to review documents and observations within the culture of the selected school district which helped to develop a more complex view. This allowed for a more complete description of the culture (Creswell, 2013).

Conceptual Framework

The theoretical framework supporting and determining boundaries for this research was necessary to provide focus and anchor the review of data. As expounded in the review of the literature, the conceptual model in Figure 1 helped to categorize and triangulate the data. The three areas included were organizational learning, trust, and efficacy. Central to these are the roles of the central office and the leaders within them. The leader's role is multi-directional and influences culture and climate.

Data Collection

The data collection process in this qualitative study was grounded by my conceptual framework and incorporated a single case study design. At the crux of the data collection process were the research questions noted below.

Research questions. Considering my conceptual framework, the research questions were fundamental to helping better understand cultures of innovation and the central office leader's role within the culture.

1. What are the supporting and constraining conditions around innovation in a successful district?
2. To what degree does central office leadership influence and support a culture of innovation?

Single Case Study Design

A case study is an empirical method for reviewing a real-world, contemporary organization or phenomena. By definition a case study is an exploration of a bounded system (Creswell, 2008). For the purposes of this study, the case represented a critical case or single experiment. There are five rationales for single case study research, these include critical, unusual, common, revelatory and longitudinal (Yin, 2018). The single case study provided a critical test for the cultures of innovation conceptual framework. The research questions being studied here begged for an unusual case. Pockets of innovation are plentiful, cultures of innovation are unusual and therefore required depth in study. The single case here is also a revelatory case as there was a significant opportunity to analyze the workings, interactions, systems with a district that is uniquely positioned given the accessibility of the researcher (Yin, 2018).

A case study allowed me to compile a wide range of data, artifacts and evidence to synthesize for a deeper understanding in relation to the research questions compared to a single method. No single source of evidence has more validity rather, the triangulation of the sources strengthened and supported findings. High quality case studies reveal an array of source types.

Case study selection. One instrumental, affirmative case study (Stake, 1995) of a single district was used in order to gather an in-depth view of the culture both internally and externally. As we consider the potential for supporting organizational change, a strength-based methodology of a single, illustrative case can have a lasting impact (Godwin & Neville, 2008). Godwin & Neville (2008) describe moving from problem-solution model to one where the emphasis is placed on what is already working in a district to move others toward innovation. Analyzing a positive district example can provide insights to other districts as to how cultures of innovation are created and sustained.

The district of this case study was sought out specifically for this research and is considered in academic circles to be innovative as determined by my conceptual framework. It is one of only 102 districts in the nation to be entered into the League of Innovative Schools, a national coalition of forward-thinking school district organized by Digital Promise, a non-profit organization with a mission to accelerate innovation in education. The single high school within the district has been named a Gold Medal School by US News and World Report three times, was named to Newsweek's Top Public High Schools in America list, and ranked among the top two percent of high schools in California according to Niche. Business Week named the location "the best place to raise your children" multiple times due to the nationally renowned school district. The district had a 100% graduation rate in the most recent school year. Finally, the district is host to a highly regarded, successful, yearly Innovation Summit that draws educators

from across the country. In order to remain objective and provide validity, the district is one that I was unfamiliar with, personally, before this study. It is a K-12 district so that the findings can be utilized by a wide range of leaders and districts. Case studies allow for “teaching cases” where other districts can learn and replicate practices (Yin, 2018).

Document review. Documentation plays a critical role in case study research. Initially, artifacts were collected and reviewed before the interviews to help in structuring the questions most relevant to the information being sought. Social media postings, as well as district archival documents, web pages and publications were reviewed to gain familiarity with the district and acted as a launch point. The various data can best be reviewed when it is coordinated into a meaningful structure, therefore a spreadsheet was used to reduce the data down to the most common elements (Miles, 1994). The data was also uploaded into the web-based system of dedoose.com for coding and storage. It was important to increase validity of results by incorporating multiple data points and cross-referencing these for themes and content (Noor, 2008). The data and interview responses provided multiple points by which to triangulate the data which augmented and corroborated findings.

Observations. In the researcher role, I was also a participant observer. Part of this work included writing field notes in regular systematic ways of what was observed and learned in the interpretative process (Emerson, 2011). Observational protocols were employed for observations during management meetings, leadership meetings and site visits in order to log contextual pieces relevant to creating an entire description (Creswell, 2013). Interviews, contextual documentation and observations helped to put together the whole story. During the observation sessions, note-taking provided data to support and validate information learned in the interviews.

Memos completed provided reflections, thoughts, descriptions and hunches to follow up on during follow-up interviews (Miles, 1994).

Field notes. During my observations of the case study district, I recorded field notes of observations, interactions, and conversations. This was done at times in writing and at times via voice to text software. These were done within a day or two of observations which allowed me to memorialize thoughts, impressions, findings and patterns (Emerson, 2011). The notes were also subject to coding in all phases of the research.

Participant Selection. Within the district, multiple layers of participants were studied in order to provide a more detailed view of the culture and its members and how they interact. Significant to this study, is the role of various leaders within the culture and the central office. Therefore, it was essential to have the following participants have an active role in providing data in various forms: Superintendent, Central Office Leaders and others as determined by interviews, observations or recommendations. Table 1 shows the positions interviewed.

Table 1. A table of positions interviewed

Number of Participants	Position Title
1	Superintendent
1	Assistant Superintendent of Human Resources
1	Assistant Superintendent Educational Services
1	Chief Business Officer
1	Chief Technology Officer
1	Chief Strategy and Innovation Officer
2	Directors of Curriculum, Instruction and Accountability
1	Coordinator of Instructional Integration
1	Principal
1	Chief Communications Officer
1	Coordinator of Personalized Learning and Principal

Interviews. A semi-structured interview was conducted with participants and a sample of the protocol for the interviews can be found in Appendix A. The interview protocol was

important in supporting reliability and validity of results. An interview protocol is developed (Emerson, 2011) to allow the greatest congruency to the research questions. Utilizing the interview protocol, note-taking was done in two columns (Kvale, 2007). One for observations and one for thoughts, insights and interpretations. These provided additional evidence of support to validate findings and ideas. Interviews were audiotaped (with the exception of two participants who declined audiotaping) and were transcribed verbatim for thorough data collection. The interviews were immediately transcribed using a service provider, rev.com. The transcripts were reviewed by listening to the audio and reading the transcription. Corrections were done where necessary.

The particular protocol and interview questions were previously piloted in a local district for revision of questions, clarity and alignment to research questions. These began as short guided conversational interviews. Precautions were taken to protect the privacy of interview participants. The human research subjects included up to 15 central office administrators or managers. An “informed consent agreement” was reviewed and signed prior to interviews and is noted in Appendix B (Kvale, 2007).

I tried to best mitigate risks associated with human subjects and interviews including fatigue, stress, and confidentiality. This was done by scheduling at the best time of day for the participant and all interviews were completed at the office of the case study district. They were reminded that participation was voluntary and they had the option to withdraw at any time. Procedures were then utilized to maintain confidentiality which included using pseudonyms on the transcripts and data. Additionally, files were securely kept in a locked location. Data stored on the computer was coded with unique names and was password protected. The laptop

containing data is password protected and the file on the laptop with names and codes also was password protected.

During the interviews, my intent was to understand the various perspectives and stories as they relate to culture and climate creation, district systems, sustainability and primary roles of individuals that may have fostered this climate. Observing not only what people said, but how they exist and acted within the space was critical to the data collection.

Table 2. A table of research questions, methods and rationale

Research Question	Method	Rationale
1. What are the supporting and constraining conditions around innovation in a successful district?	<ul style="list-style-type: none"> • Participant observations • Semi-structured Interviews • Artifacts and documents 	<ul style="list-style-type: none"> • Multiple sources support the development of a detailed analysis • Ethnographic notes provided data to interpret patterns across the culture • Data provided descriptions for the case study to make sense of the culture and the interactions within
2. To what degree does central office leadership influence and support culture and climate in an innovative district?	<ul style="list-style-type: none"> • Artifacts • Document review • Semi-structured interviews 	<ul style="list-style-type: none"> • Data provided descriptions for the case study to make sense of the leader's role in the culture

Data Analysis

Data was collected in a variety of ways from a variety of sources. First, documents were used to build context and general understanding of the underpinnings of the district, its vision and mission, central office structure and current initiatives. Field notes and memos were used to capture data related to the research questions. Observations also provided data related to the

research questions and were used to initially establish a relationship with central office leaders prior to the interviews. Transcripts, data excerpts, memos, observation and field notes were all uploaded into a web-based software program, dedoose.com

Data analysis in this qualitative case study was done in several phases. Using an analytic strategy from the onset ensured the most thorough review of this case. A pre-initial phase was in reality taking place during observations and interviews as I viewed and listened to the exchanges, interactions and spoken words as a socio-culturalist. The actual initial phase explored all the data collected as it was related to the research questions. This included regular, thorough and intentional hand open coding for the first trawl explained further in the following paragraphs.

The process of analyzing the data began with reading and rereading in its entirety all the data collected. Coding was done in various stages all by hand and in close proximity to the time of the interview. First, descriptors were added to the transcribed data sets, this included the source, titles and participant information. Next, open coding (Glaser and Strauss, 1967) was done to bring about all possible themes, patterns and concepts. Analytical coding followed where categories were created and codes combined and reduced (Richards, 2009). Interviews were then listened to an additional time with note-taking by hand to allow for a holistic approach. This grounded theory approach involved the two essential processes for analysis- unitizing and categorizing (Rudestam and Newton, 2015). I utilized and repeated this process numerous times until clear theories and patterns emerged. An additional process of axial coding for relationships was critical in establishing new themes found to be most relevant for the findings.

Analysis of the data took on many forms as reviewing data is an iterative process (Yin, 2009). Data was reviewed by codes and themes, but also across the same questions and across positions. Utilizing the analytics in dedoose.com such as code co-occurrence, code-descriptor

relationship and the code cloud generator, I was able to “play” with data (Yin, Miles and Huberman 1994). Considering my data alongside my conceptual framework and research questions, an explanation building process was used. In each situation, findings were matched across data sources as to triangulate and deepen arguments. First, initial explanations were used, and data was compared to the explanation. Through the iterative process a refined set of ideas developed, including the consideration of alternate explanations (Yin, 2009). The chart below captures the process.

Table 3. A table methods, analysis and processes to develop findings

Case Study	Data Analysis	Developing Findings
<ul style="list-style-type: none"> • Instrumental case study • Emphasis on innovative district • Positive example for replication • Teaching case • Document review • 5 observations • 12 Interviews 	<ul style="list-style-type: none"> • Transcripts, memos and notes • Analytic strategy • Open Coding • Dedoose.com • Reread by questions • Patterns and themes developed • Axial coding • Reduced categories • Compiled themes 	<ul style="list-style-type: none"> • Data alongside my conceptual framework and research questions • An explanation building process • Findings were matched across sources • Initial explanations were used and data was compared • Iterative process to refine

Positionality. As an individual who is employed in a central office leadership role in a local district, I am deeply interested in learning and contributing to the discussion of cultures of innovation. This positionality supports and also limits my work as a researcher and participant observer. My understanding and connection to the work allows me to contextualize innovation, systems and cultures which potentially deepens the study. Likewise, this may also cause potential biases within the study. Most importantly, to mitigate my positionality I studied a district that was outside my own district and county. In order to best minimize the potential concerns, multiple data points were used. The protocols used are included in the Appendices.

Conclusion

As leaders look to create cultures of innovation to improve the context of teaching and learning for their organizations, the role of the central office in influencing the culture and climate should be ruminated. This work explores innovative cultures in the educational realm by considering a climate of trust, collective efficacy and organizational learning for continuous improvement using an illustrative case study. In doing so, the intended result of this work will allow districts critical insights into methods, strategies and evidence of the central office's role. Finally, adding to the limited research will support increased collective knowledge surrounding cultures of innovation, the central office and their intersection.

CHAPTER 4: CASE STUDY FINDINGS

Organization of the Chapter

In this chapter the findings of the case study will be presented. The orientation of the chapter begins with a review of the statement of the problem and purpose of the study, this is followed by a synopsis of the findings. Each salient theme from the data is then presented individually and the chapter is closed with a summary of the results.

Statement of the Problem

In order to better understand the culture and climate of a district of innovation, the research sought to explain how these are developed, created and described. Necessary to this work are the components of a culture of innovation. The conceptual framework used to ground the study included the three main elements including organizational learning, trust and collective efficacy with a specific lens around central office leadership. The leader's role is vital in influencing the culture and climate which supports innovation and the research sought to examine this through the lens of the central office.

Purpose of the Study

This case study will contribute to the research around innovative practices by illustrating patterns of successful innovation and clearly articulate the specific components that support innovation within a district that is currently lacking in the research. Using a single, instrumental case study allows for an in-depth view (Stake, 1995) of the culture. Additionally, the use of an affirmative case supports a strength-based approach in analyzing a positive district example that can offer insights to other districts.

Introduction to Findings

In reviewing the data collected from numerous observations, varied extant sources and twelve central office leader interviews, many interesting and relevant themes evolved. Several were related to the original conceptual framework posed such as organizational learning, trust, and collective efficacy. However, most notable were the broader themes that seem to encompass the case study's culture of innovation and the leader's role. Through the triangulation of the data, six key themes resulted including: 1) moving toward a culture of "yes" 2) opening up the space for innovation 3) surfacing and supporting organizational and individual vulnerability 4) the evolution of systems and structures supporting organization learning 5) the ebb and flow of trust and 6) empowering and growing efficacy in an innovative culture. Each of these themes will be thoroughly reviewed using the data collected.

In adding context, it is important to note when the culture began to shift. In the document review and interview process, a historical timeline evolved for innovation in the case study district. Particularly, there was a shift when the current Superintendent was promoted into the position. He spoke to staff about the need for a kind "of reset." In this capacity, he began to create urgency around the need to move beyond current scores which were good but could be better. He engaged stakeholders in starting to question possibilities that would lead to increased graduation rates, student learning and lessening the equity and opportunity gaps. Leader 5 described it as, "We kind of all said, you know, 'One for all, all for one. Here we go. Let's tear off the band-aid.'"

Moving to a culture of yes. A compelling theme across all interviews surrounds the idea of moving to a culture of yes. When new ideas are brought to leaders or leaders themselves are developing ideas, there is a consistent response of yes. This is in contrast to a previous system

noted by participants that was weighted down with rules and stipulations for new ideas or programs. Within this larger theme, three major elements surrounding a culture of yes were surfaced including engaging in “why not”, the removal of barriers and building leaders’ capacity.

A mindset of “why not” instead of “why.” A mindset of “why not” is an intentional strategy to sustain and “institutionalize” a culture of yes. This mindset shift from questioning change to explicitly questioning “why not” change was a powerful subtheme. Fittingly, the case study district publicized theme for a previous year was “Why not?” There are many examples in the data set that show the actual reality of how this lives within the district. The idea of a shift in mindset was illustrated by Leader 6 who shared he was told his job was to “do whatever you need to do to move this organization forward.”

One example presented from the technology department surrounded the purchase of Chromebooks. By itself, a purchase for technology might not seem to be an unusual case. However, the context here demonstrates a high degree of yes lives in the central office as a district technology leader shared a situation where he had received a call from a vendor letting him know about a limited time offer to receive a twenty percent discount on Chromebooks they had planned to purchase later that year. The vendor doubted the district could actually take advantage of this as there was only two days left in the purchasing window. Leader 7 shared:

“So, I walked down the hallway to [superintendent’s] office and I said we can save 200,000 dollars but I need to have a PO by Friday... He said, you need to go down the hall and see [Chief Business Officer]... less than an hour later we faxed a PO, signed PO to the vendor and saved 200,000 dollars.”

Leader 5 further deepened the idea of ‘why not’ in a culture of yes. He noted that members of the cabinet team were discussing drones before they were really popular and at the

end of the hallway conversation he went back to his office and ordered a drone on the district credit card. This was because part of the conversation with the superintendent was not why do we need it, but rather why not get it to explore the possibilities.

This organizational narrative was further developed by Leader 2 who coordinated the work with an advertiser just two days after the drone purchase. The advertiser wanted to do a Super bowl commercial and they were looking for a district that had excellent facilities and a great band. He expanded,

“We had to do it at the speed of light to get that done, so instead of going through all this red tape that a normal district may have to go through, I can walk down to [superintendent’s] office and say, ‘It’s a great opportunity. We’ll make sure we do everything right, but we need to green light it soon. We’ll do all this.’ And so he goes, ‘Absolutely do what you need to do.’”

This concept of engaging in the mindset of “why not,” instead of “why,” is important because it communicates the expectation and permission to innovate. As the district asks “why not” there is a need to consider the obstacles within the district that could potentially get in the way of innovation.

Removal of barriers for a culture of yes. In considering the culture of yes, a connection can be made to the evidence of removal of barriers that could potentially get in the way of innovation. In the example of the purchase of the Chromebooks, Leader 7 said,

“If we sat back and thought of the traditional barriers that would keep us from doing something like that we never could have done that and to this day that vendor will tell me we were the only ones who took advantage of a 20 percent discount of the hundreds of districts that were spending the same kind of money.”

The lack of red tape is mentioned by several leaders including a cabinet member who said, “I went to [superintendent] and said, ‘Can we do this?’ And there wasn’t three weeks of

paperwork, or we need these forms. [It was] ‘Yeah. Go ahead, do it and we’ll figure it out as we go.’” Removing barriers also incorporates the idea that individuals themselves can be barriers or the red tape. Leader 9 shared that in the beginning there was clear communication to leaders that if you were not a part of the mindset of yes, this might not be the right position or district for you. He explained, “I think it was that we took on this perspective that we would never say no to somebody and or to a group. And that we wouldn’t let the people who worked for us be obstructionists.” The purposeful removal of barriers makes innovation more accessible.

Building leaders’ capacity for yes. Leaders must feel equipped to address the shifting mindset that comes with a culture of yes. The findings show an intentional commitment to building the capacity of leaders in the ability to perpetuate a culture of yes. Leader 8 noted there is constant messaging, “You can. You are welcome to things differently.” Leader 6 expanded on how this has been communicated. He said, “We had to train ourselves and our admin team, don’t have a knee jerk reaction. Even, and especially if it’s something that’s presumably a bad idea or you might view it as a bad idea. Go through the process. Talk about it. Explore it.”

Several other respondents discussed how they have personally grappled with this shift. For example, Leader 3 discussed how it was initially uncomfortable as it was a shift from traditional expectations. It was noted by Leader 4 there is “freedom and flexibility to make it happen.” This intentionality of building the capacity of all leaders in the organization is further illustrated as a Leader 3 shared “to not say no” was one of the biggest lessons they have learned.

A structure for supporting leader’s capacity is an annual leadership experience held in June. Discussing the themes and work to be done in the space, Leader 5 shared the dialogue and questioning done as part of the multiple day event surrounding the theme, “what if.” He described the thought process as, “Hey why do we put these restraints on ourselves? And the

idea was, ‘If it’s not illegal and it doesn’t hurt kids, why not? Let’s do it.’” The leaders made a list of all the things they wish for the year if there were no restraints with every department participating. At the end of the year, they came back to the list and most of the list had been accomplished.

Leader 3 noted, “There are times where I have no idea what they’re going to try,” when talking about teachers. She further developed the idea when sharing an example of how they respond to a new novel idea which demonstrates the capacity for saying “yes” and “why not.” They said, “‘Talk to me about this. What are you thinking?’ and they shared it with me, and I still couldn’t visualize it. I was still like, “Okay, let’s go for it.”” Leader 9 shared how he built capacity in others, “I taught my people to either say, ‘yes’ or “Fascinating, let me look into it.” He noted that he believes his own modeling is critical in supporting others in this mindset. “I try to understand the context of that request. Because, usually somebody’s trying to innovate change or iterate. There’s a reason for that, right?” In this way, the district strategically and purposefully equipped leaders with how to respond to and support a culture of yes.

The theme of moving to a culture of yes is reflected within the data by opening possibilities by asking why not and saying yes to innovative ideas, removing barriers that get in the way of progress and ensuring all leaders have mindset of yes. Each of these concepts help create a culture that is receptive and ripe for innovation.

Opening up of the space for innovation. One theme that evolved centered around the idea of opening up of the space for innovation. Specifically, the idea that innovation is not top down rather structures within the organization open the space for all to create. This is illustrated with examples of the district opening the space for teachers to innovate, the educational community through the Innovation Summit and the space it opened for intentional partnerships.

In addition, the findings demonstrated a connection to the opening of the space was the intentional co-support that takes place, suggesting that innovation is not done in isolation nor are you expected to carry out the process alone.

Opening space for teachers. Across leaders' responses and extant data, there were several examples of this theme which some alluded to as "flat organization" or one that is not solely based on hierarchy. Leader 8 explained, "Trust them. Give them space to try things on and do things differently." Noted in an organizational narrative is "letting people try things, [it] has been a big thing." This was further developed by Leader 2, "Our leadership is just willing to take those risks, encouraging others to do it."

A rich example from the data is the district's working groups. Initially teacher work groups started during the district's roll out of one to one devices. The purpose was to allow teachers to propose what they wanted/needed for staff development. This evolved into seven half days of learning groups where teachers can self-select a topic to study or a problem to solve. "It was about giving the power back to the organization and engagement around things they are interested in (Leader 6)." The only requirements for a work group's ideas is that they need to be "inclusive, feasible and lawful." They are in charge of their own learning, whether it's learning through a video or learning different ways. They have complete choice over what they're doing, other than a sign in sheet, there is no other accountability measures, no form to fill out, no minutes to be taken and no administrators in the meetings. This opening of space for teachers has resulted in many district innovations currently in place including novel programs, procedures, and strategies.

Opening space for the educational community. Beyond opening the space for teachers within the district is the idea of opening the space for innovation for the larger education

community through the Innovation Summit. The mission of the Innovation Summit on the website and publications is stated as, “We believe that the education ecosystem should evolve in an open and accessible way. Lessons and content should be shared freely. Silos should be minimized as we grow and explore together.” This structure is a unique opportunity for the district to open the space and challenge assumptions. In the opening keynote, the Superintendent shared the purpose and noted that in the district of study, “You can crawl, you can walk or you can run but you're not allowed to stand still anymore.” Each consecutive year, attendance has grown and currently people attend from across the state and beyond. By opening the space to the larger educational community there is an opportunity to showcase learning and bring people with divergent ideas together to re-create and re-imagine education.

Opening the space for partnerships. In the theme of opening the space the concept of opening the space to outside partners developed. The district’s intentional partnerships allows for “opportunities to co-create and learn together.” In the community presentation surrounding new partnerships with a major university and private sector technology-based platform provider, Leader 11 explained, “We want to find people not products and services always. ...People that share our vision and our purpose and our values ...willing to co-create with us is the real question... and have the courage to ask the right questions with everyone that's involved in our school community.” Through these partnerships the district is able to access data around teaching learning, culture and climate. This data is intended to be used to set the path for future learning and district goals. The partnerships foster the openness of beyond the district walls for innovation. Supporting the work beyond the ideas and data is critical.

Co-support for innovative practices. With the openness of the space, there is a need for support. “As a [leader] I feel like I instill, hopefully, conversation in people, ideas through that

conversation, and then support, resource, money, time, collaboration to help them get to where they want to go,” shared Leader 5.

Furthering illustrating co-support for implementing innovations, is how the results of the working groups are realized. A music group consisting of a vertical team of educators was interested in providing student choice for elementary music instruction. They presented a suggested revamping of the way music instruction would be done. The first iteration was highly cost prohibitive. Rather than a flat no, the ‘culture of yes’ mindset of the district responded with support for the concept, but asked the group to keep iterating with some additional considerations for costs. After multiple iterations the group was able to see their ideas implemented and a highly innovative practice is now in place.

The theme of opening the space supports the district’s innovative culture and climate. The district’s intentional opening of the space for teachers allows all members of the organization the ability to innovate, but in addition it has opened the space for educators and researchers across the state to co-construct new practices and novel ideas. Leaders within the district have worked to come along side to nurture and further the ideas.

Surfacing and supporting organizational and individual vulnerability. The theme of vulnerability was both explicitly and implicitly found in the data sets and was an interesting part of the narrative surrounding the culture of innovation. Vulnerability is about exposing yourself despite the risks. In this sense, you have no control over the outcome. An example of the organization’s vulnerability is how it has responded to mistakes or missteps. In innovation, there will be failures or opportunities for learning. Leaning into the latter supports a healthy climate in the organization. The case study district lists “learning from failures” as one of its core values.

Within this theme the key features for organizational vulnerability to grow are transparency and integrity.

Transparency in vulnerability. Transparency requires candidness and a directness when considering mistakes or issues of improvement. One organization narrative surfaced around the opening of a lab school and was told by multiple people from multiple perspectives making it an optimal example for how the district has embraced transparency in vulnerability. This was further supported in alternate data sources such as news articles, video series and district publications. The district had an opportunity to partner with a growing private sector organization supporting personalized learning through a technology-based platform. As part of this partnership, research would be done on the effectiveness and the results shared as part of a global learning project. In order to duplicate a similar setting to the organization's model, a lab school would need to be created and the timeline for this to happen was only a couple of months. For some districts, this may have not seemed feasible, but referring back to the "culture of yes" and the removal of barriers, the district proceeded with the opening of a lab school mid-year.

"That was just a major miss," said the superintendent. Although all said it was a worthy project, all district leaders acknowledged some critical flaws with the roll out of the program. Most respondents particularly noted the dissention or angst shared from principals, specifically they were not adequately included in the planning, communication and implementation. Several leaders postulated at the cause, Leader 10 shared the following:

"We realized, we were trying to shield our principals from adding to their plate because they had their own sites, but at the end of the day what we learned was that, by not bringing them in the fold, they felt disconnected from it, they didn't feel a part of it. When people were asking them about it they didn't know how to answer questions and that wasn't helpful for anybody."

Leader 2 said, “It's great to encourage agility, moving fast. You also have to be a little careful in the processes that are kind of tried and true that you've used over the years that you don't speed those up too fast.” The leader reported that many people believed the speed of the opening of the lab school and personalized learning was too fast. He reflected on his own learning, “It's just kind of knowing your own internal audience, and external, as far as their speed limitations.” Demonstrating his own vulnerability and transparency the superintendent said, “What I failed to recognize and understand in this, I don't know if this is everywhere but really in [our district], and probably everywhere is that, the principals are the face and the mouthpiece for the district.” By sharing with transparency a misstep, the district exposed and embraced the vulnerability. A parallel need for trust to repair is the need for integrity.

Integrity in vulnerability. Integrity in actions includes righting wrongs and having moral uprightness which was reflected in the data. With acknowledgement and transparency of mistakes made, the central office sought “to bring those out in the open so we could make adjustments.” Part of the strategic plan to address the issue, with integrity was to acknowledge and correct.

The plan to correct wrongs included significant amounts of face to face interaction with all stakeholders. Leader 9, “We conducted our listening tour around the platform initiative, which was causing huge consternation around the district. I would always emphasize with them, ‘I'm not here to necessarily solve your problems, but we're here to be with you in your time of distress, your time of need.’ And so, our theme kind of became 'be with.’” The superintendent described the consequences and actions taken upon realizing the missteps, “It cost me an entire second semester last year, all I was doing was putting out fires. I was speaking at every PTA

meeting, every rotary meeting, just trying to re-message what people created in their mind and that void of not knowing anything, they created bad concepts.”

This was further developed by Leader 11,

“I've learned now whether it impacts [a principal's] school or not, they are the voice. And, and if they don't understand the why, and they don't have an elevator pitch, three minutes of here's what it is, and they don't have to be the total expert but if they're not confident in the why, in, in explaining that to a parent then I'm, I'm done.”

Integrity stems from following through on your promises and putting into action lessons learned. This has been further illustrated in actions since the lab school in examples of other initiatives. In order to foster more transparent and thorough communication, a principal representative is now a member of cabinet. Additionally, each new major initiative starts with proposed plan and a structure to “poke holes” in it by all stakeholders. A site administrator interviewed, gave multiple examples as to how shifts have been made this year as part of the learning that happened last year surrounding the problems of the lab school implementation. Additionally, a set of checks and balances was demonstrated as various leaders shared how they are posing the question constantly, “How have we included principals?” The superintendent noted he recently saw another leader intentionally slowing down an implementation plan surrounding Universal Design for Learning to bring more principals into the co-construction and he said, “So, my heart went ‘we've learned. We're learning.’” Exposing the vulnerability resulted in important learning.

The willingness of a district to expose vulnerability supports innovation and is necessary in risk-taking. As a district embraces vulnerability they are able to demonstrate transparency and integrity which is especially critical with mistakes. Vulnerability is important as districts challenge current practices. The findings and experiences within the district suggests

vulnerability being an essential condition both at the individual and district level. The district supports individuals being vulnerable while at the same time demonstrating organizational vulnerability.

Evolution of systems and structures for organizational learning. A specific pattern in the data showed a theme of the evolution of systems and structures that have been put in place to support organizational learning. Organizational learning is a collective belief and structures for challenging assumptions. This is essential in innovation as the organization looks to do things differently and new structures are a shift from a hierarchical approach where new ideas and mandates stemmed from the top. “We put a lot of effort into our culture. That first year our theme was ‘what if.’ We really wanted to push people to ask those big deep questions and stop doing things just because we’ve always done it that way,” Leader 11 lamented. From the data, three specific structures and systems evolved in the district: leadership collaboration meetings, working groups, and an advisory group.

Leadership Collaboration Meeting. A system that allows district leaders to work from the premise of inquiry and experimentation is their annual summer collaborative meeting. Different than what other districts might title a retreat, the notion of “charge” is coined in the case study district as part of the evolution of the structure. “It's really a time to get together as a group and plan for the following year, but also talk about things that are inspiring us, are motivating us. ...it really is a "charge," because you want to leave feeling charged up and ready to go.” As noted in a previous section on the mindset of “why not” there was a broad question posed, “What could you do if there were no restraints?” As leaders from a cross section of the district considered all possibilities there were able to shift from tasks to the creativity of ideas. “Once people are charged up just give them what they need and get out of the way,” Leader 5 noted.

Leader 1 shared the experience of the “charge” as a place to develop ideas and take time for the deep work of thinking beyond current practices. An example stemmed from a question posed to the group about, “How can we make school more engaging or in other words how can we inspire kids?” As Leader 3 began collaborating and brainstorming with colleagues, a math camp concept developed. "What if we tried something like, kids don't go to school, they go to camp for the day?" This was a blending of ideas from data that said students needed more support in math along with the idea that students love summer camp. The time and space and permission to ruminate in the “what if” and the “why not” allowed for a novel program.

Part of the continuous learning process includes the ability of all site leaders to attend Board Site Visits based on topics of interests. The agendas are shared and based on a particular leader’s interest in learning, they attend as they see fit. Over twenty people attended the visit where the music program and math camp were highlighted. The leadership collaboration meetings are a structure that has evolved to support organizational learning.

Working Groups. The vertical and self-selected working groups are another district system for research and design to challenge assumptions. These seven half days are specifically designed around proposed ideas that come directly from teachers within the organization. Originally sixty-four courses were identified for selection by teachers. Specific district outcomes from these working groups include small to large systemic innovations. For example, Google Certification for teachers was a powerful force that came directly from the working groups as they decided how they wanted to proceed to best use technology and innovation to improve their practice. A larger innovation described earlier was the elementary music overhaul. In that working group vertical teams sought to disrupt the space of music as a one size fits all approach in elementary. A successful launch this year includes three distinct choices for all upper

elementary students with orchestra, band and traditional music being offered. Providing the openness of the space paired with the system for organizational learning, the working groups are a structure that has developed to challenge assumptions and the status quo.

Advisory Group. Through the data, the importance of the creation of the guiding coalition advisory group was revealed. The advisory group or guiding coalition is another district structure supporting inquiry and continuous learning within the organization and provides an inclusive environment for decision making. “The power of that [guiding coalition] is that as people requested further programs to iterate, they would consider those requests and they would make decisions on them, and then they became the new norms of operation,” explained Leader 9. The advisory group meets multiple times per year and consists of teachers, board members, central office administrators and the superintendent. In this capacity, the guiding coalition structure supports organization learning. Trust becomes an important foundation for this work.

The ebb and flow of trust. How trust impacts a culture of innovation developed as a critical theme in the data. Specifically, the findings explain how trust is leveraged and related to communication, relationships, and risk-taking. “We often talk about deposits and withdrawals when we talk about trust,” noted Leader 6. As the leader’s quote notes, there are times when trust is increased and times where due to missteps it is lessened. In addition, an interesting finding surfaced exploring the significance in communicating trust to leaders within the organization.

Two-way communication mechanisms build trust. Communication becomes an important vehicle to keep trust and regain trust. Leader 7 noted, “I think trust is the hardest thing to build and the easiest thing to lose. I think we walk that line every day. I think there are examples where our trust has been extremely beneficial to us and I think there's examples where our trust

probably has led us down some wrong paths.” Therefore, it is beneficial for a district to consider methods of communication that allow it to leverage trust.

Feedback is essential to a trusting relationship. “It’s a difficult thing for a school district to get to a point where you are comfortable or not always comfortable but willing to step into that vulnerability and ask the right questions and be courageous enough to listen to the feedback, “Leader 9. Several examples of open and transparent communication tools are in place within the case study. As mentioned in the previous section regarding agency and efficacy there is a strong social media communication commitment. The video series discussed presents key issues and has been a critical way to provide information to all stakeholders. Based on publication dates and topics it appears some have been done in reaction to events in order to remedy questions or concerns, while others are proactive prior to new initiatives or changes in practices.

An innovative two-way communication tool used is a new online platform according to extant data sources. The district was an early adopter of a tool called, Thought Exchange. This in itself might be considered risky by traditional districts as it puts unedited thoughts by people in an online forum to comment, expand on and criticize. However, leadership determined it was a risk worth taking in order to truly gather important input, to determine baseline data, and compare feedback over time. Leader 11 shared, “It is in their own words and everyone’s going to see that. Wow, I mean that’s a hard pill to swallow, but we all know that conversations happening anyway in the parking lot. It’s at the water cooler right... we can feel we have problems, but let’s identify the problems.”

Part of recovering from a misstep is the importance of being transparent about an issue and making amends to be able move forward. After the lab school concerns were voiced, Leader 10 shared, “From a management perspective because we had to regain trust with certain people,

we had to figure out what does healthy conflict look like, how do we hold each other accountable, all that work has been really important for us as a team and I feel that we are healthier on this side of it.” In reflecting on the transparent work the central office did to communicate openly about the missteps discussed in the organizational vulnerability section, Leader 7 summarized, “[we knew] all of it was going to come back together and it would wind up being okay. I think that's when I talk about a fine line between, between having the trust and not having the trust. You know just knowing that we're pretty good at getting it back when we, when we do veer from it a little bit.”

As part of transparent communication there is intentional mining for conflict and bringing it out in the open. Leader 11, “A healthy process is in place as conflict exists in every organization. ...Every family has conflict, human beings we just, that exists. It's how you deal with that conflict that sets the healthy organizations apart from the unhealthy organizations and what this did was it put a process in place for us to deal with conflict in a healthy way,” This was further expanded upon by several leaders who discussed intentional work as a management team using the work of Lencioni’s *5 Dysfunctions of a Team*. The intentional ways it was brought to the forefront allows for the confidence and trust that comes with transparency. Leader 3 added, “I always feel comfortable sharing my thoughts. I know I am never going to get my hand slapped for that.” Trust is gained when there is open two-way communication. Relationships support communication and trust.

Relationships matter in trusting organizations. Consistent in the findings is the importance of relationships in and across the district, particularly within the central office. “The people, the support, the mission. It's really not where you work, it's who you work with that is important,” noted Leader 7. Not surprising, each section and goal of the district’s Local Control

and Accountability Plan (LCAP) starts with “Through a collaborative and engaging process...” This demonstrates a district value in collaborative relationships.

“It is encouraged by upper management to pick up the phone and call people and clarify things,” noted Leader 4. Leader 3 added to this with an example of a situation they faced at the site. With numerous exchanges with a parent, a situation had escalated. The leader noted they didn’t want to call the central office, but they knew there would be support and no judgment in calling. The immediate response from the central office leader on the receiving end was that they would personally be at the site alongside the principal to meet with parent. The site leader noted this reaction was consistent with what principals expect and get in terms of support.

In observations, I noted in memos a pattern of central office leaders knowing staff, their stories and even students’ names. In one case several students, called the district office administrators by name. Face time was specifically highlighted in interviews by leaders as being a core value. They described being able to meet with or speak with any level of management. “I think the power of being able to have face time. I mean just the fact that I can go to [Superintendent] and I can see him and I know that's true with ... everyone. There's easy accessibility to people.” This was further developed by Leader 10 who said it this way, “A piece of the cultural health is the ability to be able to walk in and talk to anybody.”

The importance of face to face interactions is highlighted when current district leaders first entered their positions after the previous superintendent left and the current superintendent began “daily check-ins”. These face to face daily meetings with executive cabinet members proved important and worth replicating. Leader 9, “[The Superintendent] started with a structure where we had daily check-ins. It provided sort of a stream of consciousness approach for talking

about ideas ...That is still in play. I think so much of the innovation came out of this, leading to where we are today. It happened essentially every morning.”

The importance of relationships is captured in the essentialness of collaboration within the district. Leader 8 shared:

“This place is just the antithesis of an [unhealthy, competitive organization] there's a ton of collaboration, you are expected to collaborate inter-departmentally, cross departmentally, at every level of the organization and to me, from my perspective, I think that when you have a culture that thrives on that, you have wiser outcomes because the decisions aren't made in isolation.”

There is acknowledgement that essential to collaboration and relationships is the importance of various strengths and skills brought to the table by all leaders. Leader 4, “I'm a very logistical person, so I was more like let's put it down on paper, let's organize it, let's structure it. [Another leader is] really good about like visioning and asking questions to get people to think about, what are some possible outcomes, and also keeping us on task with things. [Another leader] has a very strong knowledge base.”

With trust there is a safe space for risk-taking. All levels of the organization reported the safety and ability to take risks as noted in the areas related to efficacy and a “culture of yes.” Leader 3, “We're so lucky, I can take all kinds of risks at our school. And I know that if I fail, no one's going to ream me.” Leader 4 described it as a “shift in mindset and knowing that learning from failure is being able to take a risk so that you can grow.” This is illustrated by the reaction of a site leader:

“You know, the idea that at one point you might have looked at somebody and thought that's nuts, why would you even think that's a good idea? To now looking at it and saying maybe that could work. I think over time it's changed my perspective as a leader and listening to people's ideas and supporting those ideas.”

Leaders have shared their own work to support others in risk-taking. “We've had teachers say, ‘I tried this, and it was horrible. It didn't work.’ And then people can celebrate that.” This was further supported by Leader 6, “So I think really giving that autonomy back to the teachers along with the supports the risk-taking has been instrumental.” He shared an example around flexible furniture. “If I still have my old hat on, like oh man, is this even safe? But you know, teachers are hacking the bottoms off their tables and putting tennis balls on the bottom of it.” As leaders communicate and support a safe space for risk-taking there is increased trust.

Communicating trust in leaders. A salient finding stemmed from an organizational narrative surrounding leaders being explicitly told they are trusted and how that impacts their job satisfaction and confidence. Leader 4 shared hearing, “‘I trust you. You know, I trust what you're doing.’ And I think that's so powerful, especially for your leader to tell you that they trust you.” This was further described by Leader 7 when they said, “[The Superintendent’s] immediate trust in my instincts knowing that we needed to find a way to get that done versus him asking a thousand questions about why would we do this now you know when our practice is to wait is a great example.”

“What we have here is very fragile and you have to kind of be able to run sometimes and rest others... You've got to get a feel for how the organization's doing,” said Leader 9.

Considering the culture and climate, a district must be highly in-tuned with how to leverage trust so that they can best navigate the chaos and messiness that comes with constant change and innovation. Trust allows for individuals to have the ability to act on changes and is essential for a climate of innovation.

Empowering and growing efficacy. The importance of growing agency and action was a salient theme in the data as individuals are empowered to make decisions around learning.

There is a belief that members of the organization can act on ideas, beliefs and innovation. In reviewing the findings from the case study, two specific ways of addressing empowerment and growing efficacy were 1) the messaging of innovation and 2) the celebration of innovation or efficacious acts within and outside the district.

Messaging of innovation. Being empowered to act certainly ties to the ‘culture of yes’ previously reported, but specific to this section is how that permission is explicitly given for risk-taking through messaging. Educators at all levels must know they can evoke change and act on ideas. Leader 10:

“We just started messaging to people at every level, start to take risks. We, as an executive team, we had explicit conversations that we weren't going to be an organization that says no. We're going to default to yes and if we can't make it work, we can't make it work. But that was very explicit and that really, in my opinion, got the ball rolling from a more, kind of innovative mindset for everybody where people were okay with taking risks.”

This is also evident in messaging about what teachers can do in their classrooms. Three specific examples of messaging around the power to make decisions surround the use of technology applications, working groups and the teacher coaching program. Leader 7, “We intentionally tried to come up with whatever the simplest way for people to get permission to use things in their classroom.” It is described that the district threw out work flow charts about the steps needed for certain classroom improvements. For example, the use of technology applications previously had to go through forms and committees, the change made was “as long as it is legal and good for kids you may use it. “

An indicator of the understanding of the message to act on ideas or concepts is one shared about a technology program found in a second-grade classroom. Leader 7 shared in a walk-through of a site he saw a second-grade student using a math program unfamiliar to him. He asked the teacher, “Where did you find that program?” The leader noted he was amazed to learn

the student had found it and it was working well for her and other students in the classroom. By the end of the week, “we had hundreds of students on it, because a second grader had found it.”

The coaching model used also communicates permission to try on new practices. As described on the coaches’ website, “[Coaching program] gives you, the teacher, the opportunity to take your already stellar teaching skills to the next level. What if you knew you had someone to brainstorm with, observe student reactions and reflect with you on a lesson? Would you take more risks? Implement a new program? Push students to try something new?” The coaching program is a voluntary and teacher-driven program that provides a year-long partnership working in learning cycles of planning, implementing and reflecting.

Celebration of innovation. The celebration of innovations or efficacy is prolific in the data within the case study. An intentional decision to not only open up social media within the district but to train and coach teachers in the use allows for virtual sharing of new innovations throughout the day therefore, messaging and encouraging efficacy. At a time when many districts limit and filter social media, the case study uses it to support teachers. Leader 2, “It was a huge risk. And social media, I think, has been awesome for our district.” It highlights collaboration, new strategies, and allows the district to brand themselves. The district twitter account boasts over three thousand followers. The district has also put out videos to staff and parents about how to have greater access to Facebook Live feeds as a way to keep current on innovative practices and events happening within the district.

The Innovation Summit described earlier, with over one hundred sessions created and attended by teachers within the district, is a wide community forum to celebrate and bring attention to the ability to act on new innovations to improve learning and impact students. It actually was started as a planned training for the district from Google, however, when Google

had to cancel the district quickly seized the opportunity to create a novel approach to learning with the initial Innovation Summit. Leadership recognized they already had teachers planning on attending and so many teachers had innovative practices to share, “why not” make it a teacher collaboration and showcase event for best practices. The Superintendent noted on the district YouTube channel, “I feel like our Innovation Summit is like our final exam for the year it's like we work hard all year and then we get to display everything we've learned.” According to extant data reviewed, the last summit had over 850 people from over 100 school districts across California and beyond.

A district structure to share innovations is the district’s YouTube channel with an ongoing series of episodes cataloguing advancements. The website notes it is a “digital web series, or vlog, to help communicate and explain different educational topics of interest within the district.” This was launched in January of 2017 by the district’s communication department. The videos are sent to the community, shared with parents and are a way to document risk-taking among the district. Topics include many of the items reviewed or shared orally by interviewees for this research such as collaboration days, personalized learning, ThoughtExchange, university partnerships and the lab school.

Empowering and growing efficacy was a salient theme in the data as individuals are encouraged to make and act on decision to support innovation. There is a clear messaging of innovation and public celebration of efficacy.

Summary of Findings

The findings in the case study represent major themes surrounding cultures of innovation and the leader’s role. Progressing beyond the conceptual framework that originally grounded the research, broader themes developed from the triangulation of the data. The moving from a

culture of barriers to a culture of yes provides a context for innovative work to be nurtured. Along with the removal of barriers there was evidence of a mindset of “why not” going beyond the permission of innovation to an urgency of innovation. Additionally, a theme noted that traditional structures have changed to a more open space inclusive of innovation across district and beyond. The opening up of the space for innovation “flattens” the district hierarchy engaging teachers, leaders, the community and partners in the re-imagining of programs, strategies and practices. With re-imagining, iterating and risk-taking comes vulnerability. The theme of surfacing and supporting vulnerability with transparency and integrity demonstrated how the central office responds to missteps and failure necessary with innovation. The findings denoted this ebb and flow of trust that acts as a support or hindrance as it is tested with innovation and failure. Two-way communication, relationships, and a safe space for risk-taking foster impact trust within the district. With any innovation, there must be an intentional challenging of the current state. The intentional evolution of structures and systems that support the challenging of assumptions for organization learning provides opportunities for collective learning to happen. The data showed that as assumptions are challenged, empowering agency and efficacy allows educators to act, change practices and push on the status quo. This is done with intentional and explicit messaging and public celebration of innovation.

CHAPTER 5: DISCUSSION AND CONCLUSIONS

This chapter presents an overview of the summary of findings and a discussion in a broader context and its relation to existing research. It begins with re-orienting the reader to the purpose of the study and research questions. An in-depth discussion of the results is followed by an updated theory of cultures of innovation. The chapter concludes with a review of the implications for leadership and social justice, limitations of the research and possibilities for future research, and a brief concluding summary.

Purpose of the Study

This qualitative case study sought to develop a deeper understanding of cultures of innovation by describing the culture and climate, and how central office leaders in these cultures foster innovation. This case study will contribute to the research around innovative practices and the shifts in the leader's role.

Research Questions

In order to better understand cultures of innovation and the central office and leader's role within the culture, I posed the following research questions:

1. What are the supporting and constraining conditions around innovation in a successful district?
2. To what degree does central office leadership influence and support a culture of innovation?

Supporting and Constraining Conditions Around Innovation

The single, case study revealed new knowledge surrounding the supporting and constraining conditions surrounding innovation and the leader's role. The overarching themes that stemmed from the work surround the shifts necessary for creating and fostering cultures of

innovation in a school district. Each of the themes indicated there is a sense of movement from previous mindsets, structures and beliefs to more flexible and agile systems. There were three overall encompassing ideas that help to answer the research questions surrounding what are the supporting and constraining conditions that support a culture of innovation and the leader's role. These include what and how things must shift, the change from external catalyst to internal catalyst for innovation, and finally the supporting condition of networked leadership.

Shifts in the Roles of the Central Office, Leader and Mindset. The first major overall finding is how multiple shifts were present in the case study culture of innovation. These can be grouped into a shift in the role of the central office, shift in the role of leaders, and a shift in mindset within the various levels of the organization.

Shift in the role of the central office. The role of the central office in the case study revealed a shift from a structure of an administrative managerial body to one of facilitation of innovation. Central office leaders noted a more hierarchical organizational operation in the past that required information, initiatives and ideas to move from the positions at the highest level of the organization to levels further down the organization where the changes finally occurred. As the district shifted away from this structure, to a structure where the emphasis is facilitating ideas and information to be initiated from across the district regardless of position or title, a supporting condition for innovation evolved. Less documented in other research, but clearly displayed in the findings in this case study are the specific actions the central office can implement to shift the role from distributor of changes to a promoter for others to change as in the double loop learning noted in the review of the literature.

The findings from the case study demonstrated the concept of “flatness” in an organization starting with the central office. A “flat organization” is an organization that is not

solely built on a hierarchy, rather there is opportunity for all stakeholders to take risks, question practices and implement changes to solve problems and improve systems. This seemed essential in the innovative culture as there was an intentional shift in power. No longer did ideas and innovation come from the top or executive cabinet, rather there were systems in place to allow the co-construction of ideas and initiatives such as the working groups and guiding coalitions (Adams & Miskell, 2016; Honig, 2008; O'Day, 2002). As the power shifts, as in the case study district, barriers are removed and efficacy can result (Kaniuka, 2012). The examples in the findings of the opening of the space for innovation demonstrate a tearing down of the walls between departments and school sites puts all stakeholders in the arena to support change.

This shift was further demonstrated in how the practices also shifted in the case study district. The central office began to focus less on the processes or the “red-tape” of the past and focused more on their institutional why. For example, they focused on the moving to a culture of yes and removing barriers which facilitates and encourages innovation. As the organization is flattened, the shift from rigid structures to an openness of structures occurred. This requires the role of the leader to shift as well.

Shift in the role of the leaders. The findings in this case would suggest the role of the leader in a central office position shifts from being the expert of content to managing the innovative culture and climate. Past structures established central office leaders as the gatekeeper of the knowledge meaning the leader would learn the new skill or instructional practice and then be charged with delivering this practice to others in trickle down effect. Knowledge or skills moved from the state, to the central office curriculum department, to principals and then to teachers. Central office leaders would determine direction and pedagogy and work to systematically implement the strategy (Honig, 2003; Rorrer & Skrla, 2005).

The findings in this case would suggest that in order to develop cultures of innovation central office leaders should consider more strongly supporting organizational learning (ability of the organization to question assumptions and status quo decision making), trust (supporting open communication with strong, positive relationships) and collective efficacy (the ability to act on ideas and beliefs) for innovation (Kaniuka, 2012; Leithwood, et al.,1998; Sarros et al., 2008; Wagner, 1998). Similar to a curator, the leader brings together the ideas, people and conditions to generate innovation. In the case study, this was evidenced by the leaders facilitating the creation of structures or systems such as the work groups and the guiding coalition to question assumptions and act the beliefs. The leader's role in the findings demonstrates the importance of nurturing the conditions for these systems with trust being the most salient.

In the case study, the theme of trust had a strong axial relationship with every other theme. Trust revealed in the literature includes the components of 1) trusting relationships (strong horizontal and vertical interpersonal relationships), 2) psychologically safe (risk-tolerant and supportive of risk-taking) spaces for innovation and 3) communication that is open, reliable and transparent, (Adams & Miskell, 2016; Daly, Liou, & Brown, 2016; Forsyth, Adams, & Hoy, 2011; Honig, 2008, 2009; Jacob, Goddard, Kim, Miller, & Goddard, 2015; Johnson & Chrispeels, 2010). As evidenced in the case study, the concepts of moving to culture of yes, vulnerability, efficacy and opening the space, all support, build or require trust. Trust in the case study surfaced as a foundation in order to build an innovative culture. Therefore, the role of the leader in the case study revealed the need to manage and nurture trust.

As demonstrated in the case study, trust is gained when there is a sense of safety with risk-taking and there are relationships across departments and between district office and school personnel (Honig, 2003; Rorrer & Skrla, 2005). The trust is diminished with failure and

missteps. The example of the “major miss” of the Lab School was explored in the research. However, the leader’s role in the case study as manager of the trust propelled actions to recoup and regain trust by acting with integrity and transparency (Johnson and Chrispeels, 2010). The leader pushes and pulls on trust as conditions and tensions associated with innovation are surfaced. In the broadest sense the shift necessary for innovation becomes one of mindset.

Shift in the role of the mindset. The shift in mindset encompasses the beliefs around the purpose of the school system and the roles of educators within the system. Ideologies are an important aspect of culture. The mindset moves from expectations of educators believing their role is continue the same institutional practices and structures as the ideal to one where there is a mindset of constant change and iteration for improvement. Many terms have been coined that represent this mindset from “edupreneur” to “start-up mentality” to “innovator’s mindset”. In each of these, there is a paradigm shift that happens where educators no longer see their role as having answers or giving answers, rather the mindset is inclusive of all stakeholders engaging in questioning. With this mindset there is unrelenting questioning to solve problems, questioning to challenge assumptions and questioning to create new knowledge. This empowerment supports innovative spaces for learning and growing (Jassawalla & Sashittal, 2002).

This shift in mindset was demonstrated in the findings in the movement toward a culture of ‘yes’ where district administrators shared a belief that getting out the way to allow new ideas to flourish was essential to the culture. A decentralized or opening of the space belief in the findings further develops the idea of shift in mindset. Thematic questions like “What if” and “Why not?” for the year support and communicate the mindset of challenging assumptions in the case study.

An integral shift in mindset is one of efficacy throughout the district. It is not enough to question the status-quo, one must believe they can act on the idea (Bandura, 2000). As people within the organization recognize a power to take control and act of ideas, self-efficacy and trust increases. The mindset of a shift in beliefs and values is supported with the communication of an expectation to change, act and iterate within the findings. As educators within the organization share their innovations and their own beliefs about their roles, shifts in mindset occur.

The shifts take place at various levels within the organization. Interestingly, we find that they are not all in the forefront at all times. At times the focus is on the shift in the leader, as capacity building within that group is necessary, or at another time the shift in mindset might be in the center. This becomes a strategic and intentional decision point for leaders. The central office leader must know when to focus on one or the other as they look to constantly leverage the right force. The leader might consider as in the case study what the current need is or what barrier might be getting in the way to leverage the necessary shift. The leaders in the case study added the work group structure to level the organization at one time, and then at another time worked to build the capacity of the leaders to build the culture of yes. In this way, the shifts vary as to what is currently in the forefront. These shifts are evidenced in the broader context of external and internal catalyst points for innovation.

Internal and External Catalysts. The findings presented demonstrated a prevalence of internal innovation versus externally based innovation in a thriving culture. Traditional structures bring in programs and ideas from the outside often to address a need or fix a problem (Wagner, 1998). Paradoxically, in these structures the district is “seeking an innovation.” Considering the historical lens where district’s replicated educational initiatives passed down from outside entities, this was an external catalyst (Wagner, 1998). Based on the evidence revealed in this

case study research, districts seeking innovative cultures should strongly consider moving away from external catalyst in order to pursue an environment where there is organizational learning and an efficacious mindset which when in tandem allows individuals and groups within the organization to solve problems and act on solutions. This is illustrated with internal conditions, visioning and organizational narratives.

Internal conditions. As the central office role shifts, the role of the central office moves into creating conditions that allow innovation and experimentation to occur at all levels within the organization. Evidence from the case study revealed an intentional moving away from implementing processes from the outside, resulting in an agility and flexibility. The work groups and guiding coalitions become catalysts allowing creative solutions from within (Zhu and Engles, 2014).

Results indicated there were numerous examples of innovative practices stemming from teacher workgroups, leaders at the June charge, and central office administrators. Each catalyst points to an internal structure and ability to innovate. The genesis of sparking innovation is spread across the organization (Harris, 2008). The sharing and communicating of innovation described in the previous chapter also demonstrates how these internal catalysts are pervasive and act as stimulus for additional iterations or innovations.

Visioning. The vision of the district to innovate acts as not only a grounding structure for everyone in the district, but also communicates the permission to be efficacious at all levels internally. This is evidenced in the findings as we see innovation and non-standardized practices celebrated using tools like social media, Innovation Summits, working groups, and the June charge. These structures are consistent with double-loop learning as the organization is engaged in fundamental ways to co-construct, evaluate and converge of new learning (Goh et al., 2006).

In this data set from the case study there was not evidence of the district seeking external innovations, it was however apparent that innovation does move from the inside out in the case study. This is in contrast to previous reform models of outside/external to inside the district (Tyack and Cuban, 1995). The case study was intentional in moving their innovations and work beyond the individual, the group, the department and district as they established a free state innovative summit and sought out partnerships with universities and an integrative technology company. This not only speaks to the lack of an emphasis on hierarchy or proprietorship of the organization, but also communicates a collaborative educational community larger than a school, a department or even a siloed district. The focus and intention of the district was on co-constructing new ideals around teaching and learning. This appears to be revelatory as we consider culturizing innovation.

Organizational Narratives. Additionally, the case study district moves innovation from the inside out or internal to external with the way organizational narratives are used. Organizational narratives are the shared stories that communicate the values, beliefs and vision of the organization. These are often specific narratives that are told and retold to others. Others inside and outside the organization can relate to the story and understand relevance. This messaging supports the movement of innovation from internal to external as successes and information spread beyond the district.

In the findings, the specific stories and shared experiences explained by multiple leaders implies these stories are meaningful and resonate across the central office and district. Capturing the district story and telling the story of the district in the case study was explicit and intentional in the culture. The district employs people to tell the district story. Organizational narratives play two important roles in this work, first they unite leaders with a common belief and as they are

shared externally, the district values and beliefs move beyond district boundaries. In the case study district specific narratives surrounded experiences such as attainment of drones, computers, the missteps of the Lab school, and the connection to district themes like “what if” and “why not.” Each of these tied directly to the district values for innovation and risk-taking. As districts move innovation from the inside out, networked leadership supports innovation.

Networked leadership. In several strands noted in the findings, the discussion of the lack of hierarchy was explored. With the single dimension of the organization it is equally noted that leaders work together and in tandem (Diamond & Spillane, 2016; J. Spillane, 2015). The findings demonstrated strong ties and trust within and across leaders of the organization. In considering the idea of networked leadership, three major areas surfaced including ties within a shared belief system, systems to connect leaders intentionally and the connections to leaders beyond the district space.

Shared beliefs. In traditional structures with siloed departments, innovation and change can stall or lose traction. As the central office re-imagines the role of leaders there is an urgent need for a common and shared vision. This is both a spoken vision and a modeled vision in the actions and structures within the organization. In previous systems or traditional models central office leader’s visions and beliefs centered around “common” practices with an emphasis on duplicating district-imposed initiatives. The shifts in visioning includes a purposeful shift to communicating and modeling innovation. As evidenced by the results of the case study district there was a shift in vision as always improving and changing which included adding “inquiry” and “learning from failure” to their district mission.

As the organization created new structures for exploration and experimentation, the vision was enacted. Leaders are tied together by this vision and how they create interactions that

enact this. Additionally noted was the leadership networking that takes place due to a culture of rituals and traditions around innovation. These rituals and traditions support leaders feeling trusted and establishes a sense of belonging. The identity of the district and common language helps to grow and constantly nurture the culture. The organizational narratives discussed previously help to indoctrinate new people into the values and beliefs within the district expanding leadership capacity within.

Systems to connect to leaders support innovation. Learning is a social process and the interactions between leaders is critical in the development of innovation as they engage in sense-making (Moolenaar, 2012; Rikkerink et al., 2016; Stephenson, 2006). In the findings, there was evidence of systems within the organization and systems outside the organization to connect leaders.

In the case study district, there were structures like cabinet meetings, daily check-ins, a June Charge, and Board site visits to supporting the networking of leaders to deepen ties and build trust. The interdependence between people allows for the sharing in the development of new information (John-Steiner & Mahn, 1996). These systems provide both collegial and collaborative opportunities to network and build relational ties to one another, constructs critical for a climate of trust and innovation. For example within the June Charge or during Board site visits, leaders provide feedback, co-construct innovation together and present problems of practice collectively. Reciprocal interactions among all levels of the organization and beyond support the positive perceptions of the district culture and are essential in a community of learners (Liou & Daly, 2016; Moolenaar, 2012; Rikkerink et al., 2016). Connecting to innovative practices via one on one relationships strengthens individual leaders social capital and

collectively enhances district human capital. The intentionality in creating these structures within the organization supports the culture and climate as leaders engage with one another.

In the same way, connections of leaders and their networks beyond the district support cultures of innovation (Daly et al., 2016; Daly, Liou, & Moolenaar, 2014; Honig, 2008). The high number of partnerships extending beyond the district and variance in types of partnerships connects leaders to alternate viewpoints, opens the learning space and allows for innovation to move internally to externally. The case study had examples of shared organizational narratives around outside leaders and partnerships, and shared experiences with partner leaders. These experiences include school visits in other districts, technology partners and working directly with business leaders. As leaders connect to external partners, the network and relational ties strengthen both internally and externally supporting a culture of innovation.

In summary, the supporting and constraining conditions that support a culture of innovation include what and how things must shift, the change from external catalyst to internal catalyst for innovation, and finally the relevance and significance of networked leadership.

Theorizing Innovation

In considering the findings and discussion, it is apparent central office leadership is a critical link to the ways in which leaders support, model and align district beliefs to a culture of innovation. The specific role of the central office leader and the role of trust plays in an innovative culture and climate were significant.

The original conceptual framework proposed in Figure 1 provided an anchor to ground the research and served the project well. However, the research provided new revelations that have adjusted my thinking. The theoretical framework that I proposed included trust, efficacy

and organizational learning noted in Figure 1 and postulated the importance of central office leadership.

Using the concentric circles, I viewed the elements of organizational learning, trust and collective efficacy as one layer with innovation at the center and the central office as the outer most circle. The model included the leader's role as multi-directional and an influencer of culture and climate allowing innovation to thrive. The arrow demonstrated how all of the areas were viewed as iterative and reflexive. The findings and research did support elements of this framework, as all of these elements were present and iterative. However, most revelatory was the concept of trust which differed from the conceptual framework originally proposed. Although the conceptual model included trust as an element, the actual importance and significance of trust was unexpected. What actually came from the research was trust was a footing for the other two elements of organizational learning and collective efficacy, rather than three independent ideas.

After completing research, it emerged that trust is a foundation and absent of that it is unlikely all of the other things would be in place. In my model using the literature, I theorized three important elements of trust: 1) trusting relationships, 2) psychologically safe spaces for innovation and 3) communication that supports trust (Adams & Miskell, 2016; Daly, Liou, & Brown, 2016; Forsyth, Adams, & Hoy, 2011; Honig, 2008, 2009; Jacob, Goddard, Kim, Miller, & Goddard, 2015; Johnson & Chrispeels, 2010). Each of these elements were apparent in the findings.

In an axial relationship map, I was able to tie each theme, each element and code to trust within the culture. The findings suggests trust is the great enabler. In order for cultures of innovation to thrive, the emphasis and support of central office leadership in paying attention to trust is critical. The elements of trust including relationships, communication and safe spaces are

intentionally fostered within successful districts of innovation. One aspect of trust not addressed in the original model or literature review was the presence of vulnerability.

In considering a new conceptual framework, the following Figure 2 seems to more accurately capture the evidence from the research case study. This adds trust as a concentric circle surrounding organizational learning and collective efficacy. The larger the circle the greater the influence as these are layered on top of one another.

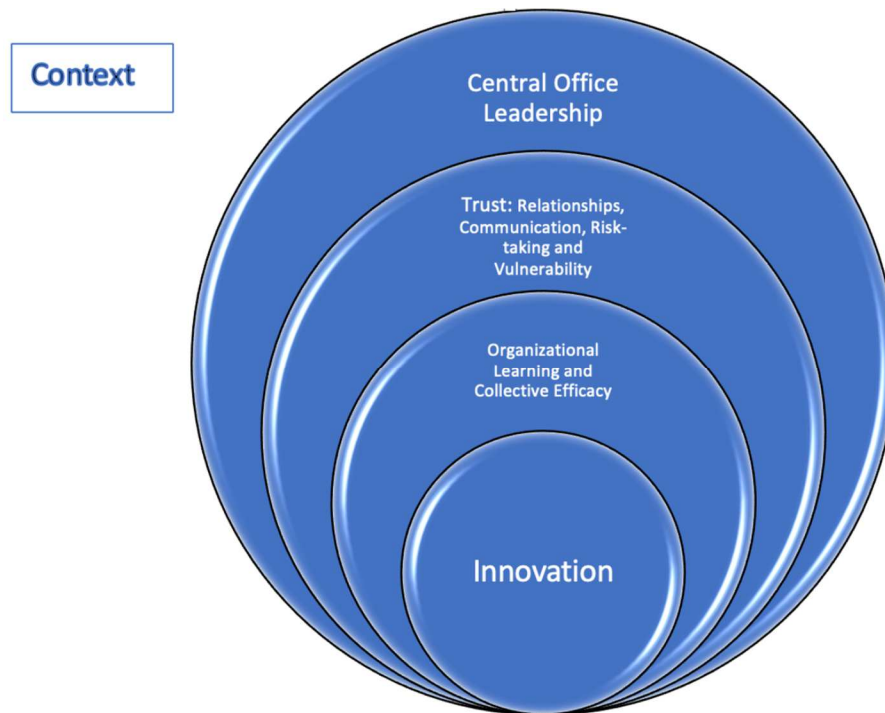


Figure 2. Revised Conceptual Framework for Cultures of Innovation

Implications for Leadership

The role of educational leader and central office is evolving. Managers of the past who were skilled at creating systems of implementation of various reforms will no longer be successful as innovative schools and practices emerge (Mcdougall et al., 2007). Just as certain businesses and products are antiquated, leadership skills and styles of the past school system model may be obsolete. Using the results of the research it is clear that there are significant

implications for leadership. These will be addressed first as the implications for the central office and second as the implications for leaders.

Central Office. The role of the central office is the most influential position as it supports change and innovation (Adams & Miskell, 2016). The central office is best poised to support cultures of innovation by 1) creating a district office without the hierarchical structures of the past, 2) creating and enacting a shared vision of innovation including systems for organizational learning and efficacy and 3) most importantly establishing a climate of trust.

Lack of hierarchical structures. In considering the structure of the central office both perceived and actual, it is necessary to rethink how it operates. It is not simply removing an organizational flow chart. Rather district office positions are still in place but how innovation is managed and messaged shifts. It is no longer top down, although it may be inspired by the central office, it is co-constructed by members throughout the organization (Adams & Miskell, 2016; Honig, 2008; O'Day, 2002). Therefore, the role of the central office is to establish systems and practices that allow this “flatness” and the co-construction of innovative practices across the organization and beginning from the inside out. This structure also removes barriers to innovation as there is no longer the red-tape often associated with positionality. Removing obstacles both in terms of practices and people allows the flow and momentum for innovative ideas to take hold.

Vision for innovation. The central office influence in sharing in creating a vision of innovation and ensuring that actions match this vision is an accelerator to innovation (van Breda-Verduijn & Heijboer, 2016). Messaging of a common vision helps set the expectation and the permission to do things differently. The vision and mission should clearly articulate innovation in teaching and learning (Adams & Miskell, 2016; Honig, 2008, 2009). The central

office is one of the prime story tellers of organizational narratives so how those stories embody innovation supports the replication and culture of innovative practices.

The actions must directly align to the vision of innovation which includes the idea of being a culture of yes. Using systems that allow for the organization to challenge assumptions and ruminate in the possibilities expands learning and capacity for all. Additionally, as innovative ideas and practices are considered the district model must ensure the efficacy of educators to move on and enact them (Adams & Jean-Marie, 2011).

Climate of trust. The role of the central office in managing the levels of trust cannot be over stated. As we consider the vulnerability of all stakeholders as educators in the organization take risks, experience failure and are charged with creating solutions to district wide challenges the high levels of trust needed requires attention. Within the organization, trust must be fostered and supported by the central office (Adams & Miskell, 2016; Roby, 2011). This happens through open, transparent communication at all times (Forsyth, et al. 2011). Most specifically in times of conflict or concern. This ebb and flow of trust is carefully managed by the central office.

Leaders. Using the research presented, the role of the leader is to establish and manage the culture and climate to build capacity for innovation (Damanpour & Schneider, 2006; Gilley et al., 1999; Liou & Daly, 2016; Paxton, 2015; Sarros et al., 2008; Stempfle, 2011; Underdahl, 2016). The specific skills revealed within this research supporting culture and climate include building trusting relationships, enacting the vision and mission and building the capacity of other leaders.

Building trusting relationships. The single most important charge for a leader in managing culture and climate is to build trusting relationships. Relationships across leaders within the central office, within the site administrators and staff members in all positions are

necessary for capacity building and continuous improvement (Moolenaar, 2012; Vardaman et al., 2012). For the greatest gains, deep connections vertically and horizontally exist within the organization. In considering the aspects of organizational cultures, collegial relationships are the most influential as the social aspect of learning is supported, (Zhu and Engels, 2014).

Trusting relationships support an environment of creativity and risk-taking necessary for innovation. As teachers and leaders are provided autonomy and know they are trusted, they are able to move beyond the status quo (Moolenaar, 2012). These relationships are also leveraged and strengthened in times of need or celebration. Both are a means of unifying the district culture.

Enacting the district vision. The alignment of the leader's words and actions with the district vision and mission for innovation serves as a model for others to follow (Sarros et al., 2008; Underdahl, 2016). As leader's themselves innovate, take risks, fail, challenge assumptions, question, or engage in organizational learning the vision is enacted. The example of district expectations and the participative nature of leaders supports and mediates the stress of change and reform (Daly & Chrispeels, 2005). In a sense the leader becomes a steward of innovation or beacon of how innovation can take place (Gilley et al., 1999).

As the leader enacts the district vision, they must take care to ensure each decision or response given is aligned to innovation (Leithwood & Louis, 1998; Senge, 1990). This includes being willing to see ideas of other fail because of a culture of yes and a belief that others can and should take action. The leader must also allow the space for others to lead in a distributive model and engage in co-constructing learning and change with others (Diamond & Spillane, 2016). The result is a building of capacity of leaders.

Building capacity of others. The central office leader is a model for what is expected of all leadership. What principals see as the direction, expectation from the central office they will mirror. As central office leaders share space and learning, as they share vulnerabilities, organizational narratives and prioritize relationships, principals are able replicate the practices. This is how a culture of innovation is built.

The building of capacity of leaders comes from the open discussions about what it looks like to innovate and the consistent communication about the vision and mission. In a high trust culture, the leader builds capacity by communicating their trust in the individual in words and actions (Moolenaar, 2012). The organizational narratives help to support capacity building as leaders learn this how things are done within the culture. This indoctrination provides specific expectations for leaders within the organization. This includes the space to engage in learning and act of learning. It also comes from knowing the central office leader will respond in the same way the site leader would be expected to respond.

Given the pivotal role of the central office and leader's role in establishing and managing a culture and climate of innovation, it is essential that districts carefully review and consider the leadership implications.

Implications for Social Justice

There is an achievement gap and an innovative equity gap, meaning often schools with greatest needs to change and do things differently are the least innovative. There are different challenges faced given the context of many low-income/high-need schools, however, consideration of the role of the leader and the role of central office role in supporting innovation can provide direction.

Leaders have the opportunity to understand how to implement cultures of innovation in order to create more equitable learning environments for teachers and students. This includes developing cultures and district climates built on the concepts of trust, organizational learning and efficacy. This begins with forming trusting relationships within the school and district settings. As we consider the equity lens and importance of bringing discrepancies in achievement to the forefront, the need for trust strengthens. Based on the research results, creating conditions for risk-taking should be considered essential as educators try new and innovative ways to address the diversity of learners. Challenging assumptions and the status quo decision making is relevant and ordain to the narrowing of the achievement and equity gap as educators question why practices continue that are not supportive of all students.

Finally, cultures that allow educators efficacy in practices that improve learning should be fostered and supported. In order for every school and every class to ensure all students have access to innovative practices and teachers that challenge the status quo, supportive cultures and leaders of innovation should be considered in district visions for the future (Darling-hammond, 2004; Michael Fullan, 2010; Mcdougall et al., 2007).

Study Limitations

Based on the desire to study a single district in a comprehensive format, this qualitative case study provided the best match for desired outcomes. Qualitative research and single case study research both have limitations. Case studies have historically been considered less desirable and rigorous by some in the field (Yin, 2018). This makes careful systematic procedures necessary to best address methods limitations which was addressed in this case study. Qualitative research in this study was reliant upon individuals being open and transparent regarding the cultures of innovation and directly affected the findings shared.

Additionally, a single case study could be viewed or doubted in terms of transferability of the information and data as well as the replication of the systems studied as it is extremely contextualized. Finally, the case study, a single district, was studied during a limited amount of time and therefore the scope of interviews, documents and participants was narrow. These factors limited the breadth of the research and eventual findings and which can reduce generalizability. However, the intention of the research was to explore a single critical example. With all case studies with similar depth, there are limitations due to the specific context of the district studied and the replicability. The applicability of leadership findings are however relevant across settings.

Moving forward, research seeking to increase the breadth of types of affirmative districts and leadership examples in cultures of innovation would deepen the educational conversation on this topic. The limitations of studying the central office specifically added to an understudied context, but future research to correlate and expound on the central office connection to site beliefs about their influence on cultures of innovation would provide greater insights for educational leaders.

Conclusion of the Study

The significance of the role of the leader and the central office in supporting a culture of innovation is critical. Leaders have the audacious opportunity to shape and create cultures that allow innovation to thrive and re-imagine the school experience. As leaders consider actions to support cultures of innovation, the findings from this research call out for leaders to attend to trust in the organization with intentionality and persistence. The foundation of trust cannot be understated as it is connected to every other aspect of culture and climate and therefore is central and vital to innovation. It is apparent that leaders may want to consider how trust is being

developed and leveraged through collegial relationships, transparent communication, and a safe space for risk-taking. Trust acts as a cornerstone for managing the culture and climate as it is strengthened or weakened depending on decisions within the organization. It helps to encourage, shape and repair district relationships all critical for innovation.

From dismantling of the organizational charts of the past, to the encouragement of innovation moving from the inside out, to a culture of ‘yes’, ‘why not’ and ‘what if’, the central office is uniquely situated to drive and commandeer innovation. This questioning of structures and beliefs becomes the model as leaders reflect on all practices and challenge assumptions related to the status quo. The leader’s boldness in explicitly and implicitly communicating and modeling a vision of questioning and creating revolutionary practices becomes a driver of district culture. Leaders exhibit what they expect and this reciprocity develops a new norm or culture of beliefs surrounding innovation.

Finally, there is a need for leaders and organizations to be vulnerable as they question practices, make mistakes and forge relationships within the district and beyond. Innovation is supported as leaders expose their vulnerability knowing there will be risks and there is no control of the outcome. We cannot shift, change or re-imagine without being vulnerable. Leaders embodying vulnerability can authentically build the trust needed to maneuver the vast shifts and disruption needed to cultivate innovation.

APPENDIX A

Interview Protocol

Interviewees: 15 Central Office Management Personnel- Superintendent, 3 Assistant Superintendents, 1 Chief Innovation Officer, 2 Directors, 2 Coordinators, 2 Teachers on Special Assignment and 1 or more principals

Context: K-12 Unified School District

Length: approximately 60 minutes per person

Type: Semi-structured

Process for collecting data: Audio-taping with transcribing verbatim and hand-written notes

Introduction to the interview: I am Andrée Grey and I am Assistant Superintendent of Educational Services for Encinitas Union School District and a Doctoral Candidate with the Joint Doctoral Program at UCSD and CSUSM. The purpose of this study is to gain a deeper understanding of cultures of innovation by describing the culture and climate, how leaders in these cultures foster the innovation and how this case can provide greater insight to other schools and districts.

I am interviewing you as well as approximately 14 other individuals in order to understand the culture and climate in your district and how it supports innovation. The location of the study and all participants will be made anonymous in the writing of the report and all data collected, including this interview, will be maintained in a locked file and in password protected computer files. This interview will take approximately 30 minutes. You will have an opportunity to review all the information gathered through this review to assess if the information has been noted correctly.

[Have the interviewee read and sign the consent form]

[Turn on and test recording device]

Proposed Questions

I would like to start by learning a little bit about you and your role.

1. Tell me about what led you to this district and describe your role in the district.

This district has a reputation for innovation and I am interested in learning about how innovation is fostered in the district.

2. Describe an innovation within the district the process for implementation.

3. Describe your role within that innovation development and implementation.
4. How would you describe the culture and climate in this district? Give specific examples.
5. How would you describe your role in developing or influencing the culture of innovation?
6. What do you believe has supported innovation in your district? Give specific examples.
7. What are some lessons learned in supporting innovation?
8. What do you believe has hindered innovation? Give specific examples.
9. In what ways have you noticed other district leaders fostering a culture of innovation? Can you give some specific examples that you have experienced?
10. How do you see the idea of collective learning or the district learning together?
11. I define trust as trusting relationship across the district, transparent communication and the ability for educators take risks and be vulnerable. What are some examples where you see trust in your district?
12. To what degree do you individuals and groups having the permission or ability to act on their ideas in the district when they are trying something new and innovative? Do you have some examples to share?
13. What is next on the horizon for this district?
14. Who else do you believe I should talk to in the district to better understand the supports that foster a culture of innovation?

APPENDIX B

Informed Consent and Consent for Audio Recording

UNIVERSITY OF CALIFORNIA, SAN DIEGO

CALIFORNIA STATE UNIVERSITY, SAN MARCOS

CULTURES OF INNOVATION AND THE ROLE OF THE LEADER

Andrée Grey, a doctoral candidate with University of California, San Diego and California State University San Marcos is conducting a research study as a primary researcher to find out more about cultures of innovation. You have been asked to participate in this study because you are a member of the central office in the district case study. There will be approximately 15 participants being interviewed as part of this study.

The purpose of this qualitative case study will be to develop a deeper understanding of cultures of innovation by describing the culture and climate, how leaders in these cultures foster the innovation and how this case can provide greater insight to other schools and districts.

If you agree to this study, you will be involved in a semi-structured conversational interview individually. This will be audio-taped with your permissions and transcribed verbatim.

While every effort is made to reduce risk, there exists a possibility of a loss of confidentiality given the small size of this study and limited number of participants there exists a possibility of a loss of confidentiality in this study and feelings of discomfort. In addition, there may be some unknown risks that are currently unforeseeable. You will be informed of any significant risks should they arise in the course of the study.

While the district has approved the study, no individual is required to do so and there will be no impact on the job of non-participants. There is absolutely no requirement for participation of any central office or school level leader. The interviews will be as short, guided conversational interviews of less than one hour, however, they could result in prolonged, multiple interviews of a participant should the need arise. No one session will exceed one hour.

Procedures and safeguards have been put in place to minimize risks to participants. Interviews will be restricted to no more than one hour. You may end the interview at any time for any reason. Your interview data will be kept confidential, available only to the researcher for analysis purposes. The audio tapes will be destroyed following final analysis no later than one year after the conclusion of the study. Pseudonyms for participants including the interviewees, positions and district will be used to minimize the risk of identification. You will be given the opportunity to review the verbatim transcribed interview. You may choose to eliminate any comments or references. The recording may be stopped at any time when requested by the participant. The entire audiotape or portions of it will be erased upon request by the participant.

There may or may not be any direct benefit to you from participating this study. The researcher, however, may learn more about cultures of innovation and society and public education may benefit from this knowledge. Additionally, improved practices and discussion could result from central office participation.

Participation in research is entirely voluntary. You may refuse to participate or withdraw or refuse to answer specific questions in an interview. An alternative to participation in this study would be to not participate and you may share this with the PI at any time. There is no consequence or loss of benefit to which you are entitled. If at any time either party wishes to terminate the participation, verbal or written communication will suffice as a reasonable notice of withdrawal. Again, no loss of benefits will be incurred.

You will be told if any important new information is found during the course of this study that may affect your wanting to continue. The PI may remove you from the study without your consent if the PI feels it is in your best interest or the best interest of the study.

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

There is no compensation for being a part of this study. There are no costs associated with the study with the exception of your work time used to participate in the interview process.

This study has been approved by the University of California San Diego and California State University San Marcos Institutional Review Board (IRB). You will be given a copy of this form to keep for your records. Andree Grey has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach Andrée Grey at 951-514-9765 or the researcher's advisor/professor, Dr. Alan Daly, ajdaly@ucsd.edu, (858) 822-6422. You may call the Human Research Protections Program Office at 858-246-HRPP (858-246-4777) to inquire about your rights as a research subject or to report research-related problems.

Your Signature and Consent

You have received a copy of this consent document.

You agree to participate.

Subject's signature

Date

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

1. The audio recording can be studied by the research team for use in the research project. _____ Initials
2. The audio recording can be used for scientific publications. _____ Initials
3. The audio recording can be reviewed at meetings of educators interested in the study of Cultures of Innovation and the Role of the Leader. _____ Initials

You have the right to request that the recording be stopped or erased in full or in part at any time.

You have read the above description and give your consent for the use of audio recording as indicated above.

Subject's signature

Date

Witness signature

Date

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