The Role of District Leaders in Improving Achievement and Equity: How Leaders Reshape District Culture

Author: Zachary J. McLaughlin

Persistent link: http://hdl.handle.net/2345/bc-ir:106934

This work is posted on eScholarship@BC,
Boston College University Libraries.

BOSTON COLLEGE

Lynch School of Education

Department of Educational Administration and Higher Education Professional School Administrators

Program

THE ROLE OF DISTRICT LEADERS IN IMPROVING ACHIEVEMENT AND EQUITY:

HOW LEADERS RESHAPE DISTRICT CULTURE

Dissertation in Practice by

Zachary J. McLaughlin

with Peter J. Botelho, Peter J. Cushing, Catherine L. Lawson, and Lindsa C. McIntyre

submitted in partial fulfillment of the requirements

for the degree of Doctor of Education

May 2016

The Role of District Leaders in Improving Achievement and Equity:

How Leaders Reshape District Culture

by

Zachary J. McLaughlin

Dissertation Chairperson: Dr. Vincent Cho

Dr. (Lisa) Leigh Patel & Dr. Maryellen Brunelle, Readers

Abstract

Rorrer, Skrla, and Scheurich (2008) proposed a theory that district leaders enact several essential roles when engaging in systemic reform that both improves achievement and equity. Their theory identified reshaping district culture as one of these essential functions in systemic reform. This case study explored how leaders in one Massachusetts public school district, which has demonstrated signs of improving achievement and equity, attempted to reshape district culture.

Drawing primarily upon semi-structured interviews, this study found that while these leaders reported using a variety of methods to assess the culture, the district has limited systems-level thinking about their culture. Similarly, these leaders each made their own choices amongst shaping strategies ranging from focusing on subgroup dynamics to empowering early followers. Recommendations include the development of additional training for leaders in the small group facilitation necessary to uncover shared underlying assumptions and the creation of a district-level common language concerning culture.

ACKNOWLEDGEMENT

I would like to thank my dissertation committee: Dr. Vincent Cho, Dr. Maryellen Brunelle and Dr. Leigh Patel. Your guidance throughout this process have helped push me to be a better thinker and writer. I also want to thank my PSAP cohort. Through this three-year journey, I learned so much from your experiences and insights. More importantly, I am walking away with a wonderful group of new friends and confidants. Thank you to my research team: Cathy Lawson, Peter Botelho, Peter Cushing, and Lindsa McIntrye. I could not have been grouped with a more selfless set of individuals. Throughout this work, each of you have helped to pull me across the finish line.

As career educators and life-long learners, my parents, John and Ann Marie McLaughlin, have always embodied a belief in the power of public education to transform our communities. Their powerful example set me on the path to help refine improve our public schools. This dissertation represents another step on the meaningful journey they set me upon. Finally, I want to thank the people who have had to sacrifice the most during this process, my daughter and wife. Mary, I look forward to catching up on the time and shared moments I have missed with you during the program. Liz, your unwavering support of me through the ups and downs of this process, and of life in general, is something that I will never take for granted. I am truly blessed to have you as my life partner.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE[1]

INTRODUCTION

Statement of Problem and Purpose

District leaders are charged with the formidable yet important task of improving achievement for all students. On one hand, federal and state high stakes accountability policies provide a sense of urgency to improve schools systemically. On the other hand, district leaders feel internal and societal pressures to reform in an effort to realize higher and more equitable educational outcomes.

Progress along these fronts has been uneven. Although nationwide achievement has increased across the board, the achievement gap remains pervasive (Chudowsky, Chudowsky & Kober, 2009). Low-income, Black and Latino students and students with disabilities (SWD) continue to experience inequitable learning opportunities, higher discipline rates, lower standardized test scores and higher dropout rates as compared to Asian and White students (Gregory, Skiba, & Noguera, 2010; Hardman & Dawson, 2008; Wallace, Goodkind, Wallace, & Bachman, 2008). Underachievement not only affects one's ability to be a productive member of a democratic society, but also threatens the overall ability of the United States to maintain a well-informed citizenry and compete in the global marketplace (Darling-Hammond, 2010; Koski & Reich, 2006).

In response to such issues, districts are often considered critical to sustainable, systemic change in achievement among all students (Honig, Copland, Rainey, Lorton, &

---

[1] This chapter was jointly written by the authors listed and reflects the team approach of this project: Peter J. Botelho, Peter J. Cushing, Catherine L. Lawson, Lindsa C. McIntyre, and Zachary J. McLaughlin

Newton, 2010; Leithwood, 2010; Rorrer, Skrla, & Scheurich, 2008). In these efforts to increase achievement and advance equity systemically, the functions of superintendents and their district leadership teams have evolved significantly (Rorrer, et al., 2008). District leaders have shifted from managerial and monitoring functions to taking on complex new roles as leaders of learning (Honig et al, 2010; McLaughlin & Talbert, 2003).

However, there is limited support from policy and research for district leaders regarding how to enact these important new roles (Leithwood, 2010; Weinbaum, Weiss, & Beaver, 2012). First, accountability policies call for districts to close the achievement gap, yet provide little practical guidance for district leaders. Instead of useful guidance, these policies rely on testing, sanctions and public shaming as the main instruments for improvement (Goertz, 2001; Mintrop, & Sunderman, 2009; Weinbaum, et al., 2012). Secondly, educational research on district efforts to improve achievement and equity fails to address the complexity of district reform and, as a result, is limited in its usefulness (Leithwood, 2010; Trujillo, 2013). For example, research primarily offers lists of characteristics of effective reform districts without being able to determine which particular characteristics actually result in achievement gains. Consequently, it is difficult to apply these general findings to very different contexts with a high likelihood of success (Leithwood, 2010). Additionally, although some of the research has strived to provide more specific and practical guidance for district leaders, these studies tend to be overly simplified and decontextualized (Trujillo, 2013). For example, they tend to concentrate simply on raising standardized test scores as an indicator of success. Furthermore, these studies largely ignore the social and political context within the district as well as the

historical, social and political realities surrounding the district, all which impact the district leaders' reform efforts. Consequently, district leaders risk responding to policy pressures and interpreting and applying research guidance in a manner that fails to meet the current complex needs of the particular districts in which they serve.

Thus lies the problem: district leaders are responsible for designing and implementing complex systemic change aimed at improving achievement for all and advancing equity, but with a dearth of useful guidance from policymakers and researchers. Accordingly, the main purpose of this project was to explore the work of district leaders in improving achievement and advancing equity system-wide. In doing so, we explored to what degree the actions of a district leadership team reflect an enactment of the four essential roles for district leaders in educational reform as conceived by Rorrer et al. (2008).

Rorrer et al. (2008) highlight four key dimensions of district leadership: providing instructional leadership; reorienting the organization; establishing policy coherence; and maintaining an equity focus. In order to address this purpose, the individual studies (Botehlo, 2016; Cushing, 2016; Lawson, 2016; McIntyre, 2016; McLaughlin, 2016) of this research team were organized according to this framework (See Table 1)

In the final dissertation in practice, each of these individual studies posed unique research questions, reviewed literature and methodologies unique to the individual study and reported findings and discussion related to the individual study.

Table 1.1

Individual Studies According to Dimensions of District Leadership

_____

Dimensions	Focus	Investigator
Instructional Leadership	Generating Will	Lawson
	Building Capacity	Cushing
Reorienting the Organization	District Culture	McLaughlin
Establishing Policy Coherence	Policy Coherence	Botelho
Maintaining an Equity Focus	Equity Focus	McIntyre

_____

Literature Review

The goal of narrowing achievement disparities across the nation has been a central focus of educational reform for decades. This review will briefly discuss issues relating to district leaders' work in narrowing achievement disparities and advancing equity. First, we describe student achievement and its importance. Second, we discuss the importance of equity, the relationship between inequity and achievement disparities, and how public school districts can inadvertently promote inequitable practices. Third, we discuss why district leaders are important actors in improving achievement and equity and how they are currently working to narrow disparities. Lastly, we will review the theoretical framework that informed this study.

The Importance of Student Achievement

Often measured by test scores, student achievement is viewed as a predictor of other educational attainments, including: grades, graduation rates, and college acceptance rates (Cassidy & Lynn, 1991; Skrla, Scheurich, Garcia & Nolly, 2004). Achievement can serve as a gateway or a barrier to social and occupational mobility (Brown, 2003; Cassidy & Lynn, 1991; Darling-Hammond, 2010; Skrla, et al., 2004). Some researchers have

illustrated the importance of achievement by examining the outcomes of students from disadvantaged demographic groups who have experienced persistently low achievement levels (Ewert, Sykes, & Petit, 2014; Ladson-Billings, 2006; Holmes, & Zajakova, 2014; Xia & Glennie, 2005). Many of these studies found that low achieving students are more likely than higher achieving students to drop out of high school, and are in turn more likely to attain unskilled, low-wage jobs, be unemployed, on welfare, and/or incarcerated (Brown, 2003; Ewert et al., 2014; Ladson-Billings, 2006; Penfield, 2010; Xia & Glennie, 2005).

Darling-Hammond (2010) extends the importance of achievement to a broader level. She claims that persistently low achievement jeopardizes our nation's position as a competitor in a globalized economy that is increasingly dependent on a professionally skilled workforce. Policy makers and scholars who share Darling-Hammond's concern have engaged in long-standing debates about why some student groups are consistently outperforming others and what can be done to remedy this problem (Brown, 2003; Darling-Hammond, 2010; NRC, 1997). At the forefront of these debates is the concept of equity (Noguera, 2007; Ready & Hawley, 2003).

The Importance of Equity

Equity is believed by some scholars to play an important role in supporting student achievement (Noguera, 2007). While educational equity is defined in many different ways (Espinosa, 2008), it generally involves the fair and just (Green, 1983; Gottfried & Johnson, 2014) distribution of educational resources in order to ensure learning opportunities that support *optimal* achievement outcomes for all students (Kahle, 1998; Kelly, 2012; Noguera, 2007; Springer, Houck, & Guthrie, 2007). To best

understand the role of equity in supporting achievement, it is first important to understand the relationship between inequity and disparities in achievement, commonly referred to as the achievement gap.

Achievement disparities as a reflection of inequity. A substantial amount of research on the achievement gap suggests that existing disparities between advantaged and disadvantaged students is a reflection of educational inequity (Dentith, Frattura, & Kaylor, 2013; Dunn, 1968; Oakes, Rogers, Lipton & Morrell, 2002; Steinberg & Quinn, 2015). The achievement gap first became apparent in the 1960s when public schools began to publish the results of achievement tests (Harris & Herrington, 2006; Ipka, 2003). Access to test scores provided scholars with a mechanism for discerning discrepancies in student achievement patterns among different demographic groups. Findings revealed a gap in performance between White, advantaged students and students from disadvantaged and different racial, ethnic and socioeconomic backgrounds (Brown, 2003).

At the same time, the release of the *Equality of Equal Opportunity Study* (Coleman, et al., 1966), known as the *Coleman Report*, highlighted the relationship between equity and achievement by exposing the existence of racial inequities regarding the educational opportunities afforded to students in public schools (Kober, 2001; Wong & Nicotera, 2004). Despite significant efforts to eliminate educational inequities (*Brown v. The Board of Education,* 1954; The Elementary and Secondary Education Act (ESEA), 1965), the achievement gap not only continues to persist but has also grown to include students with disabilities (SWD) and English Language Learners (ELL) (Brown, 2003, Chudowsky, et al., 2009).

For example, recent NAEP (National Assessment of Educational Progress) scores (NCES, 2013) indicate that students who performed at proficient or above on the eighth-grade mathematics test vary significantly by race (45% of white students; 21% of Hispanic students; 14% of Black students; 5% of ELL students), eligibility for free and reduced lunch (19% of eligible students; 48% of non-eligible students) and disability status (8% of disabled students; 49% non-disabled students).

The eighth-grade NAEP Reading test revealed similar trends in performances at or above proficient by race (46% of White students, 22% of Hispanic students, and 17% of Black students), eligibility for free and reduced lunch (19% eligible; 48% non-eligible) and disability status (9% of students with disabilities; 40% of students non-disabled students). Furthermore, Ingels and Dalton (2013) found that between 2009-2011 dropout rates for Black students (4.3%) were four times higher than Asian students (0.3%) and almost twice as high as White students (2.1%).

District practices that create inequity. There is some disagreement among scholars about whether achievement disparities are more strongly affected by educational inequity or inequities that exist outside of school (Carter & Welner, 2013; Coleman et al., 1966; Holmes & Zajakova, 2014). Nevertheless, there is common agreement that public school districts can perpetuate, sometimes unknowingly, disparities in student achievement by supporting inequitable practices (Kahle, 1998; Gregory, et al., 2010). The ways districts promote inequitable practices can be determined by the prevalence of opportunity gaps (Dentith et al., 2013; Hehir, Grindal & Eidelman, 2012) and outcome gaps (Ewert, et al, 2014; NCES, 2014) between different groups of students.

According to Noguera (2007), learning inequities create opportunity gaps that lead to low levels of achievement for certain students. Opportunity gaps span educational resources, school conditions, school curriculum and the level and intensity of instruction (Dentith et al., 2013; Dunn, 1968; Oakes et al., 2002; Steinberg & Quinn, 2015; Wang, 1998). Opportunity gaps can be seen by examining who has access to quality teachers, enrollment in honors, advanced placement and "gifted" classes and who does not (Albano & Rodriquez, 2013; Burris & Welner, 2005; Hehir et al., 2012; Jaafar, 2006; Lee, 2012; Welner, Burris, Wiley & Murphy, 2008). Isenberg et al. (2013) in the study, *Access to Effective Teaching for Disadvantaged Students,* found that free lunch students do not have the same level of access to effective teachers compared to non-free lunch students. Findings further suggested that inequitable access to quality teachers contributed two percentile points to the difference in student achievement scores between the two groups.

One way to determine the presence of opportunity gaps is to look at whether or not various educational data is proportionately or disproportionately represented by different groups of students (Gregory et al., 2010; Noguera, 2007). Disproportionality occurs when data is underrepresented, or overrepresented by a certain student demographic relative to the overall student population (Gregory et al., 2010; Lee & Ransom 2011; Noguera, Hurtado & Fergus, 2012; Penfield, 2010). For example, minority children and children from economically challenged homes are disproportionately overrepresented in special education programs compared to other groups of students (Dunn, 1968; Holtzman & Messick, 1982; Kunjufu, 2007; Moreno & Gaytán, 2013; Piechura-Couture, 2013). Students with disabilities and minority students receive discipline at disproportionately higher rates when compared to White students (Noguera,

et al., 2012). Minority and Special Education students also have disproportionately higher dropout rates than White and Asian students (Darling-Hammond, 2010; NCES, 2014). On the other hand, rates of admission to undergraduate, graduate and professional programs are disproportionately underrepresented by Black, Hispanic and Special Education students compared to White and Asian students (Holme, Richards, Jimerson, & Cohen, 2010; Ladson-Billings, 2006, NCES, 2013).

Some scholars have illustrated the relationship between inequity and achievement disparities by examining outcome gaps, or group differences in measurable school outcomes such as graduation rates and test scores (Carter & Welner, 2013; Ladson-Billing, 2006). Ewert et al. (2014) examined demographic and educational attainment data of incarcerated populations across the country and found that the majority of inmates between the ages of twenty and thirty-four were high school dropouts, male and Black. By adjusting data to include incarcerated populations, Ewert et al. further concluded that conventional educational attainment data, which typically omits incarcerated individuals, creates an illusion of progress that "not only underestimate[s] the high school dropout rate but also underestimate[s] racial inequality in educational outcomes" (p.36). Despite the ways school districts reinforce achievement disparities, many district leaders are attempting to remedy the problem by instituting practices that will promote achievement and equity for all students.

The Importance of District Leaders in Improving Achievement and Equity

The belief that district leaders are important actors in promoting student achievement and narrowing disparities is a viewpoint that emerged in literature during the same time period as the standards-based reform (SBR) movement (McLaughlin &

Talbert, 2003). Prior to SBR, educational reform scholars viewed district leaders as either inconsequential or an impediment to student learning and school improvement (Firestone, 1989; Heller & Firestone, 1995; McLaughlin, 1990). District leaders functioned primarily as regulators and monitors of compliance (Firestone, 1989; Leithwood, Louis, Anderson, & Wahlstrom, 2004). Additionally, widespread views that principals and school-level factors had the greatest impact on student achievement caused many scholars to focus their energy on school-based reform (Leithwood, 1994; Ogawa, 1994), leaving a gap in educational research on district leadership (Honig, 2007).

In 1983 the National Commission on Excellence in Education released *A Nation at Risk* (NAR), which claimed, "the educational foundations of our society are being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people" (p.9). The release of NAR led to the enactment of standards-based reform legislation known as The Improving America's Schools Act (IASA) of 1994 and the publication of Goals 2000. IASA focused on high standards for disadvantaged children and Goals 2000 aimed at becoming "first in the world in science and math performance by 2000" (IASA, 1994, §102 (5) (a)). Standards-based reform legislation sought to improve student achievement by requiring districts to implement rigorous academic standards for *all* students tied to performance assessments, monitoring student achievement and holding schools accountable for student progress (IASA, 1994; Linn, 2008; NRC, 1997).

The Elementary and Secondary Education Act (ESEA), reauthorized in 2001 as the No Child Left Behind Act, brought standards-based reform and the role of district leaders in school improvement efforts, to a new level. Districts were required to report

student test scores by subgroup and were accountable for meeting student achievement targets through the use of sanctions and rewards. Standards-based legislation extended responsibility from the school to the school district, shifting the research lens from school-based reform to systemic reform, and from the role of principals to the role of district leaders in improving student achievement (Leithwood, 2010; McLaughlin & Talbert, 2003). As a result, research began to acknowledge district leaders as important actors in improving achievement and narrowing disparities across the system (McLaughlin & Talbert, 2003; Spillane & Thompson, 1997; Togneri & Anderson, 2003).

For example, McLaughlin and Talbert (2003) sought to determine what successful reform districts do to achieve systemic change across fifteen urban school districts in the San Francisco Bay area. Their findings suggested that districts leaders play an important role in creating systemic change and that a weak district leadership team limits schools' reform progress. Current research continues to echo the importance of district leadership in large-scale reform (Bird, Dunaway, Hancock, & Wang, 2013; Honig et al., 2010; Honig, Lorton, & Copland, 2009; Knapp, Copland, Honig, Plecki, & Portin, 2010).

Current leadership actions to improve achievement and narrow disparities. There are many ways district leaders are currently working to improve student achievement and narrow disparities. Some district leaders are focusing solely on increasing high stakes test scores (Srikantaiah, 2009), while others are engaging in complex large-scale efforts to improve teaching and learning (O'Dougherty & Ovando, 2010; Rorrer, et al., 2008) and advance equity (Wright & Harris, 2010). This work is described below.

Improving standardized test scores. Pressure from federal and state accountability policies have caused some district leaders to concentrate on improving student test scores without necessarily improving student learning opportunities (Booher-Jennings, 2005). Many district leaders are attempting to raise test scores by supporting the use of educational triage practices, narrowing the curriculum and teaching to the test (Berliner, 2011; Elmore, 2004; Jacob, 2005; McLaughlin, Artiles, & Pullin, 2001; Weinbaum, et al., 2012). Districts are also using gaming tactics such as retention, minimizing subgroups, and disproportionately identifying disadvantaged learners.

Jacob (2005) studied the impact of high stakes tests on the Chicago Public School System. Findings suggested that the district raised test scores by supporting increases in special education placements and preemptively retaining students. The district furthermore narrowed the curriculum by steering away from low stake subjects like science and social studies. Improvement strategies that narrowly focus on quickly increasing standardized test scores without also improving instruction in substantive ways can have unintended consequences. Districts can inadvertently reinforce educational inequity, further marginalize underperforming students by restricting opportunities to learn and lead to increases in student dropout rates (Darling-Hammond, 2010; Penfield, 2010). The next section will review how district leaders are working to increase achievement scores and improve educational outcomes for all students by focusing on more substantive improvements in teaching and learning.

Improving teaching and learning. A promising way to improve both student achievement and educational outcomes is to improve teaching and learning (Leithwood, et al., 2004; Louis, 2008). This section will discuss three common leadership moves the

literature suggests district leaders in underperforming districts are making to improve

teaching and learning. These moves include: evidenced-based decision making;

practicing and promoting instructional leadership; and advancing equity throughout the

school system.

Evidenced-based decision making. The literature on large-scale reform suggests

there are many ways district leaders are using evidence to improve achievement. Some

are using evidence to set strategic goals and motivate change (O'Dougherty & Ovando,

2010; Wright & Harris, 2010), while others are using it to inform instructional practice

(Skrla, Scheurich, Johnson, & Koschoreck, 2001; Togneri & Anderson, 2003). For

example, O'Dougherty and Ovando (2010) found that district leaders in an urban

California school district making progress towards narrowing achievement disparities

used data to expose the problem of underachievement. As a result, the leadership team

was able to create a sense of urgency and gain stakeholders' support for reform.

While it is widely understood that the use of data can lead to improved practice,

most scholars agree that data provides only the opportunity to inform leadership decisions

(Coburn, Toure, & Yamashita, 2009; Farley-Ripple & Cho, 2014; Wayman, Jimerson, &

Cho, 2012). District leaders must know how to make deep and meaningful contextual

connections with data if they are to effectively inform educational practice in a way that

leads to improvement. This point is illustrated by Finnigan, Daly and Che (2013), who

found that district leaders in a consistently underperforming school district did not appear

to see the benefit of using evidence, narrowly defined evidence as student test scores and

based improvement decisions on primarily affective information.

Wayman et al. (2012) provides guidance to district leaders by identifying four factors that can build, or limit, a district's capacity for effectively using data to improve student achievement: (a) how data is used, (b) attitudes toward data, (c) principal leadership for data use, and (d) the use of computer data systems. Accordingly, Wayman et al. suggests that districts can work towards becoming a data-informed district by focusing on developing common understandings throughout the system, engaging in professional learning and by investing in computer data systems.

Practicing and promoting instructional leadership. The achievement gap is considered a complex problem of learning that requires educators to make substantive changes to their instructional practice (Gallucci, 2008; Knapp et al., 2010). Many scholars of the NCLB reform era posit that district leaders are most likely to support student learning by acting as instructional leaders (Burch & Spillane, 2004; Honig, 2007; 2012; Leithwood et al., 2004).

There are many ways district leaders are attempting to transform their roles from monitors of compliance to instructional leaders. District leaders are establishing learning-focused partnerships with principals and schools (Burch & Spillane, 2004; Honig et al., 2010; Knapp et. al, 2010). Central office administrators are cultivating the exchange of information across and between multiple levels of the organization by spanning boundaries and acting as brokers of information (Burch & Spillane, 2004). They are promoting a culture of high expectations and continuous learning (Honig, 2012; Leithwood, 2010), while reorganizing and re-culturing central office to support teaching and learning at all levels of the organization (Honig et al., 2010; Knapp et al., 2010). Additionally, district leaders are using evidence as a medium for leadership (Honig et al.,

2010; Knapp et al., 2010). Honig et al. (2010) subsequently found that district administrators are investing in instructional leadership by allocating resources to sustain instructional improvement efforts, supporting ongoing professional learning and responding to operational needs.

Another way effective reform district leaders are executing their role as instructional leaders is to build professional capacity by creating a coherent instructional guidance system while providing ongoing professional learning opportunities for both administrators and teachers (Bryk, Sebring, Allensworth, Easton, & Luppescu, 2010; Skrla, McKenzie, Scheurich, & Dickerson, 2011). Nevertheless, despite the wealth of research on the impact effective instructional leadership can have on improving student achievement outcomes (Leithwood, et al., 2004), the problem of inequitable access to quality instruction must be addressed if achievement disparities are to be narrowed (Isenberg et al., 2013; Kahle, 1998).

Advancing equity throughout the school system. Education is often referred to as the Great Equalizer (Scutari, 2008) and some scholars suggest that public school districts can improve achievement by attending to equity (Hewson, Butler, Kahle, Scantlebury, & Davies, 2001; Rorrer et al, 2008; Theoharis & Brooks, 2012; Turner, 2014). Datnow (2005) contends that the advancement of equity requires systems that support good learning (parent support, equitable OTL, multicultural education strategies); district level involvement; efforts to also build the community's capacity; and linkages between districts and the state.

Studies on effective reform districts illustrate a variety of strategies district leaders are using to advance equity (Leithwood, 2010; Rorrer et al., 2008). By

acknowledging past inequities explicitly, reform-focused leaders are providing opportunities and empowering administrators and teachers to apply potential solutions (O'Doherty & Ovando, 2010; Turner, 2014). Leaders are also attempting to advance equity by developing and clearly communicating a vision of all children graduating proficient and college ready (Bryk et al., 2010; McLaughlin & Talbert, 2003; Wright & Harris, 2010).

Wright and Harris (2010) found that eight superintendents in small, culturally diverse districts experienced a 10% reduction in the achievement gap by promoting cultural proficiency throughout the district. Strategies enacted by these superintendents included: developing a culture of high expectations and promoting individualized instruction; interpreting and communicating achievement data through a cultural lens; and implementing targeted professional development and mechanisms for evaluating progress towards goals.

District leaders are furthermore attempting to advance equity by creating socially just and culturally proficient learning communities (O'Doherty & Ovando, 2010; Scanlan, 2013; Skrla, et al., 2001; Theoharis, 2007; Wright & Harris, 2010). Leaders who maintain a lens toward social justice can provide the opportunity for all children to perform at uniformly high academic levels by creating a safe and secure school environment for children, regardless of their race and family background (Skrla et al., 2001). For example, the Organization for Economic Co-operation and Development (OECD) (2012) studied the educational experiences of 900 at-risk first grade students from diverse backgrounds who displayed multiple challenges in behavior, attention, academic and social development throughout kindergarten. Findings indicated that after

being placed in a first-grade classroom characterized by strong instructional and emotional support systems, the students' "achievement scores and student-teacher relationships [were] commensurate with their low-risk peers" (p.125). Conversely, at risk students placed in less equitable classroom environments had lower achievement and noticeably more conflict with their teachers.

A Theory of District Leaders Improving Achievement and Advancing Equity as Institutional Actors

Previous scholarly work includes a lack of developed theory and is based largely on district effectiveness, which poses oversimplified measures of effectiveness and makes weak causal claims (Leithwood, 2010; Trujillo, 2013). Rorrer et al. (2008) addresses these limitations by proposing a theory of districts as institutional actors in systemic reform. In this view, district leaders affect the organization by assuming four central roles: providing instructional leadership; reorienting the organization; establishing policy coherence; and maintaining an equity focus. The individual studies of this research team were organized according to this framework (See Table 1.2) and responded to limitations in the literature by applying Rorrer et al.'s theory to a specific district in Massachusetts that was attempting to improve achievement and advance equity.

A synthesis of these individual inquiries will not only illustrate how leaders are currently working to improve achievement and advance equity, but it will also provide a an example of how Rorrer et al.'s (2008) theory can be applied to the complex work of systemic reform.

Table 1.2

Framework of Individual Studies

Individual Study	Role	Research Questions
Lawson, 2016	Instructional Leadership: Generating Will	1. How do district leaders build will? 2. How do district leaders then sustain will?
Cushing, 2016	Instructional Leadership: Building Capacity	1. What actions do leaders take to build capacity in the district to improve student learning? 2. How do district leaders prioritize their efforts to build capacity toward advancing equity?
McLaughlin, 2016	Reorienting the Organization: District Culture	1. How do district leaders work to understand culture? 2. How do district leaders work to shape culture?
Botelho, 2016	Establishing Policy Coherence: Mediating Policy	1. What policies are districts likely to enact? 2. How do district leaders make sense of policy challenges that exist in light of local needs and context? 3. In what ways do district leaders work to mediate these policies in order to best serve the goals of the district?
McIntyre, 2016	Maintaining a Focus on Equity	1. What is equity to district leaders? 2. How do district leaders foreground equity for other educators?

CHAPTER TWO[2]

RESEARCH DESIGN AND METHODOLOGY

In conducting this research project, team members shared common procedures for collecting and analyzing data. All team members contributed to the work of data collection, but worked independently when analyzing data for individual studies. Procedures that were unique to particular independent studies are reported in those chapters respectively. The sections below describe the overall study design, procedures for data collection, procedures for data analysis and study limitations.

Study Design

To explore the work of district leaders in improving achievement and advancing equity system wide, this study utilized a qualitative methodology. Understanding that this work is complex and multifaceted, this type of open-ended question is best answered by an approach that does not see a finite set of variables (Creswell, 2013). This study ultimately looked to answer a series of "how" questions concerning the actions of district leaders. To give a holistic answer to these questions, the study methodology needed to be open to multiple data sources and needed to be adaptable to possible new interpretations of data (Stake, 2005).

Specifically, the research team used a case study approach. Case studies have origins in the work of sociologists and anthropologists (Creswell, 2013). These researchers used case study approaches to try to understand the interactions of people within specific contexts. Merriam (2009) defines case study as "an in-depth description and analysis of a bounded system." The bounded system makes up the case to be studied.

---

[2] This chapter was jointly written by the authors listed and reflects the team approach of this project: Peter J. Botelho, Peter J. Cushing, Catherine L. Lawson, Lindsa C. McIntyre, and Zachary J. McLaughlin

Rather trying to understand "leadership" in general, a case study narrowly focuses on subjects like "leadership in XYZ High School." A single school district delineated the boundaries of our study.

Our study created a "thick description" of one school district that is improving achievement and advancing equity system-wide (Geertz, 1973). This description sifted through layers of details to come to a fuller understanding of the district in its unique context. During this investigative process, researchers paid careful attention to the details of environment as they tried to interpret the meaning of the data they collect. Successful districts, and their leadership teams, are by their nature constantly planning and adjusting their approach based on their staffs, their students and their community. Bounding our study by a single district allowed the research to explore the complex interchange of variables and actors that may be impossible to fully isolate from one another (Yin, 2013).
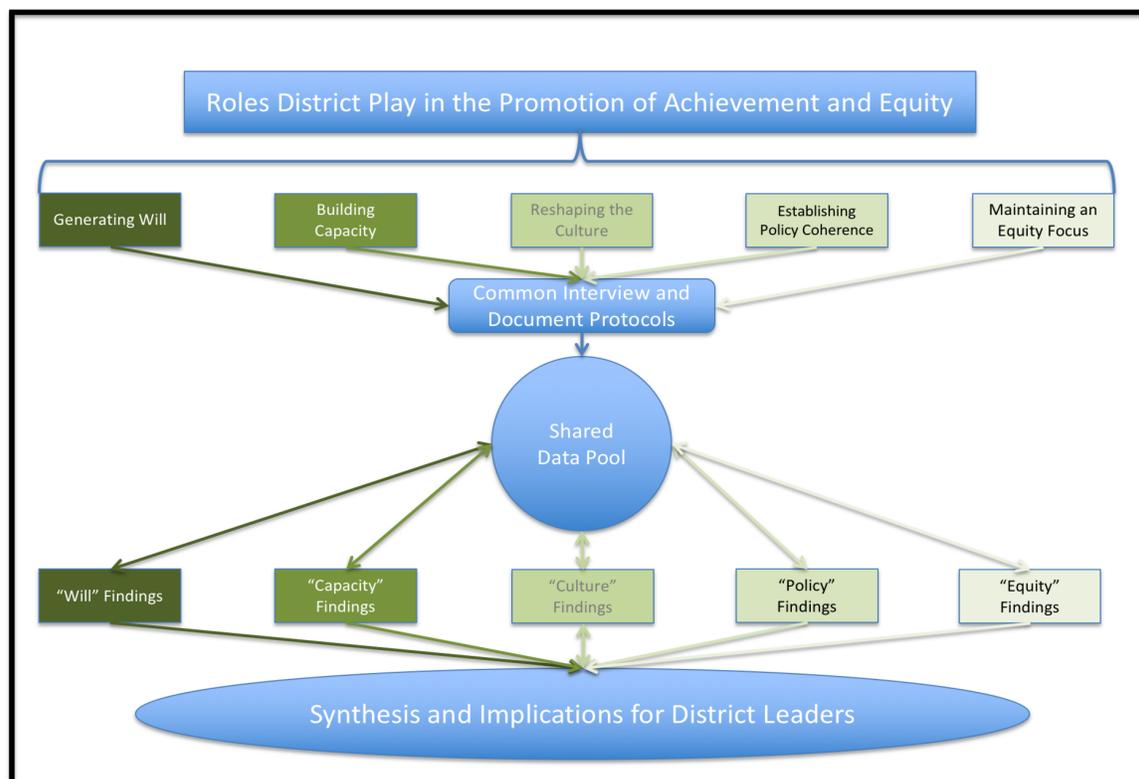
Figure 2.1 Overall study methodological map

Guided by our theoretical framework, this project examined the selected district's efforts to increase student achievement and equity. The work of the district was examined through district leaders that, for our purposes, include the superintendent, mid-level central office administrators and principals. The roles of these leaders were examined through a variety of perspectives (See Figure 2.1).

Site Selection

A study site was selected based on three criteria: a diverse student body, a visible district-wide effort to narrow the achievement gap and a mid-sized student population. To examine the work of district leaders improving achievement and equity system-wide, our district had to have a student body with a large enough population of students from groups that have traditionally demonstrated lower levels of achievement than their peers in order to able to determine if the achievement gap has been narrowed. As such, we used a district with two or more subgroups identifiable on NCLB reporting. The district had shown positive gains in the achievement scores of these groups and a reduction in the achievement gap between these groups and their more affluent, White and/or Asian peers.

Making progress with these groups was not enough. This study sought to understand a district whose improvement appeared to be by design rather than chance. Therefore, the next step in our selection process was to further cull from the districts with a diverse student body by identifying which of those districts publicly recognized improving achievement and equity as a district-wide effort. The site needed to have a district vision, mission, and, or improvement plan that speaks to the desire to accomplish these two goals.

The final step in our selection process was to narrow our focus to mid-sized districts in our state of study (5,000-15,000 students). Due to the heavy emphasis on large urban districts in recent district-level research, the research community has missed the opportunity to obtain rich data from a more manageable site. In particular, studying a comparatively smaller district provided an opportunity to study the district more deeply and examine a higher percentage of district leaders.

Unlike the large urban districts more commonly studied, districts of this size typically have fewer bureaucratic layers separating instructional decision makers and the teachers implementing those decisions; nevertheless, these districts are large enough to have multiple member central office leadership teams. These teams allowed the study to view district leadership collectively through the eyes of several different categories of professionals. Given the manageability of targeted participant groups, the study was able to include a high percentage of staff members who constitute key leadership groups. This strategic choice increased the possibility that the findings could inform theory and guide future research. Furthermore, together with a variety of other theoretically guided studies, this study contributes to literature that can provide district leaders with more relevant and useful guidance as they engage in complex systemic reform efforts.

Contextual background of Wyoma School District. Wyoma is a historically significant suburb of Boston with deeply rooted economic tensions. Wyoma began as a maritime community. Textile factories supplanted this economy in the late 19th century. These factories employed scores of immigrant workers who starkly contrasted the generations of American aristocrats who built estates and lavish summer homes here. These wealthy few attempted to divide the municipality along class lines, an action that

was narrowly defeated. Wyoma remains a disparate community even as innovative companies fill the once dormant factories with highly skilled workers.

During the first decade of this century, Wyoma Public Schools faced severe financial constraints as voters resoundingly rejected operational tax overrides that forced school closures and staffing cuts. Teachers were reduced in force by 18% between 2004 and 2012 while the student population decreased by under 6%. Student to teacher ratios increased by over 15%. Recent enrollment increases have not been matched with teacher hires: the student to teacher ratio is currently behind the state by over 10%. Wyoma voters have supported over $200 million of school construction throughout the past decade.

Data examined from the decennial census reveals stability in demographics and population growth. While Wyoma's population has grown by approximately 3% since 2010, the school district has seen enrollments grow by 6% over the same time period. Since 2001, the White enrollments decreased by 13% while Hispanic enrollments increased by 500%. Students who are Hispanic and Limited English Proficiency are 80% more likely to drop out of high school when compared to their white peers. Thirty percent of district students receive either free or reduced meals. These students are more than twice as likely to drop out of high school than their peers. Asian and African American enrollments have remained static with insignificant annual changes of under 3%.

Data Collection

Case study data included interviews and reviews of documents collected from July to October 2015.

Interviews. In order to understand the perspectives of district leaders, semi-structured interviews were conducted with participants from the district. Respondents included the superintendent, assistant superintendent, director of special education and pupil personnel services, finance director, principals and instructional coaches (see Table 2). Each participant was individually interviewed for 45-90 minutes.

The interview protocol explored respondent perceptions of district leaders improving achievement and advancing equity system-wide. Flowing from each unique conceptual framework, our protocol specifically studied the ways district leaders generate will, build capacity, reshape culture, establish coherent policy and maintain a focus on equity while pursuing those goals (See Appendix A).

In order to support question validity, cognitive interviews were employed to identify problems in the interview protocol and design stronger questions (Singleton & Straits, 2012). Specifically, think-aloud interviews and probing techniques were used to understand the way a respondent may process a particular question (Beatty & Willis, 2007).

Table 2.1

Interview Subjects

District Assigned Title	Sub-Group Pseudonym	Overarching Pseudonym
Superintendent of Schools		
Assistant Superintendent for Curriculum & Instruction		
Assistant Superintendent for Student Services	Central Office Leaders	
Finance Director		
Child Welfare & Community Support Director		District Leaders
3 Elementary Coaches		
5 Elementary Principals	School Level	
Middle School Principal	Leaders	
High School Principal		

Note: This table represents the leadership structure of Wyoma Public Schools.

These think-alouds were piloted with four central office leaders, principals and other school professionals from outside districts to gauge question effectiveness. This process involved asking the initial question, receiving an answer and asking a variety of follow up probes (Conrad & Blair, 2009). For example, the cognitive interview subject was asked one of our protocol questions, "In what ways has the vision for teaching and learning been used to generate buy-in from staff?" The subject answered the question, then the cognitive interview team asked the subject probing questions such as, "What did you think I meant by 'vision'?" and "I said that I was trying to understand 'generating will. What would be indications that will had occurred?" These reflections influenced the team's process concerning possible instrument adjustments.

Table 2.2

Respondent Characteristics

Job Category	Gender		Years in the District		Years in Current Role	
District Leaders	Female	4	1-3 years	1	1-3 years	2
	Male	1	4-5 years	1	4-5 years	2
			5-10 years	1	5-10 years	1
			More than 10 years		More than 10 years	0
Building Leaders	Female	8	1-3 years	2	1-3 years	4
	Male	2	4-5 years	3	4-5 years	4
			5-10 years	2	5-10 years	1
			More than 10 years	3	More than 10 years	1

Document review. The research team member also reviewed documents to triangulate interview answers. All team members used the district's most recent strategic plan. Individual team members used additional documents, as appropriate, to their investigation. These documents were selected to help shed light additional light on efforts to improve achievement and equity in the district.

Data Analysis

Dedoose software was used to code all data. As transcripts and documents were added to Dedoose, individual researchers did an initial wave of descriptive coding. This first cycle approach summarized the topic of passages with a short phrase (Saldaña, 2013). During this process, individual team members made passes starting from an *a priori* list (Miles et al., 2014) developed from their review of literature concerning their specific role. The goal of this first wave of coding was to chunk data into initial categories. The categories used in this initial stage of analysis consisted of the roles being examined by each researcher: generating will, building capacity, aligning structures, reshaping culture, policy coherence and equity focus.

Additional coding cycles were completed by all of the researchers; however, each team member made the choices of which coding techniques and how many cycles were needed individually (see chapter 3). Second (and further) cycles were designed to create a more narrowed thematic organization of the initial descriptive coding (Saldaña, 2013). While the first round of coding identified a variety of concepts to explore, additional cycles were for the purpose of coming to some more generalizable themes.

The study built trustworthiness by completing pair checks, developing analytic memos and focusing on reflectivity (Merriam, 2014). Team members reviewed each other's coding cycles. The research team also shared a single Google document as a repository for reflection on their ongoing process of understanding the case. This journaling included commentary on "reflexivity" which is the process of reflecting on the impact of their role as a human instrument in the research process (Lincoln & Guba, 2000).

CHAPTER 3[3]

HOW LEADERS RESHAPE DISTRICT CULTURE

Seemingly without fail, new district leaders discover a harsh truth concerning their attempt to pursue strategic goals for their organization. As Peter Drucker coined, "Culture eats strategy for breakfast" (as cited in McLeod, 2015). While many educational leaders have practical preparation for the development of strategic plans and goals, few receive tangible training or guidance in how to understand and shape the organizational culture that often determines the success or failure of their plans. This study focuses on two essential skills for district level leaders: *understanding* and *shaping district culture*.

District leaders run incredibly complex organizations. Even in small districts, district leadership teams face the daunting task of trying to mold a group of disparate staff into a cohesive team. Some of the tools available to district teams are reasonably simple to implement: strategic planning, policy development, and evaluation approaches; yet, the translation of a successful plan on paper is tightly tied to the unwritten values, expectations, beliefs, and norms that permeate the institution (Deal & Peterson, 1999; McLaughlin, 1992; Schein, 1984).

These underlying assumptions and the rituals, mythologies, personal relationships, and "set of folkways"--that both reflect and inculcate these assumptions to new members--make up a district's culture (Waller, 1932). This culture becomes an invisible force that determines how staff members will think about and respond to the inherent challenges of organizational reform. With the right culture in place, an

---

[3] Chapter 3 was authored by Zachary J. McLaughlin

institution can create a lasting efficiency and comparative advantage (Hongboontri & Keawkhong, 2014). Without it, strategy-based improvement efforts can be destined for failure (Cameron & Quinn, 2006).

Thus, there is a gap in the existing education reform literature. While it is generally true that little educational research focuses on the district leadership as a unit of study to understand effective reform efforts, it is particularly true that few empirical studies examine the importance of *district* culture (Elmore, 1993; Rorrer, Skrla & Scheurich, 2008; Smith & O'Day, 1991).

The purpose of this study is to explore the means by which a district leader can come to understand and shape district culture to both improve student achievement and advance equity. I explored the following research questions:

1. How do district leaders work to understand district culture?
2. How do district leaders work to shape district culture to align with the reform goals?

Literature Review

Early School Culture Research

For almost a hundred years (Waller, 1932), school researchers have been trying to understand what drives organizational behavior inside of schools. While a variety of constructs have been applied to this question, the field has generally drifted between psychological inquiry and anthropological approaches. The body of organizational culture research grew rapidly in the 1980s which led to the development of a large number of new instruments to examine different incarnations of school culture.

When searching for a starting point to school culture inquiry, many researchers point to Waller's (1932) examination of the sociology of the teaching profession. In this

work, Waller argued that schools have a culture of their own made up of unique rituals and "folkways." This work was slowly built upon as a few ethnographic studies explored schools as tribe-like groups. This cultural unity was later explored as strong obstacle to educational innovation (Sarason,

1971).

In comparison to these slow beginnings, the field exploded in the 1980s. Organizational culture became a hot topic for private industry and the resultant explosion of business-orientated research began to bleed into the educational field. Several influential industry studies began to use culture as an organizational attribute (Deal & Kennedy, 1983; Kennedy & Deal, 1982; Kottkamp, Provenzo, & Cohn, 1986). With the rapid expansion of organizational culture research, the field began to fray. In particular, two competing threads of understandings about how to measure culture emerged: organizational climate and organizational culture. To explore how leaders work to shape culture, a researcher must decide which concept best explains organizational behavior.

Organizational Climate v. Organizational Culture

During the 1980s, the field began to coalesce around a particular methodological approach to understanding an organization's culture. Rather than moving in the direction of anthropological study, researchers began to gravitate toward survey methodologies from psychology. This choice led to a plethora of survey instruments intending to understand school culture. While the number of instruments was considerable, so was the variety of conceptual underpinnings of each.

One comparison shows the variety of ways in which researchers were conceptualizing school culture. *The School Cultural Elements Questionnaire* (Cavanaugh & Dellar, 1997) believed that effective school culture revolved around teacher efficacy and collaboration. Meanwhile, *The School Values Inventory* (Pang, 1996) focused on teacher participation and achievement orientation as key components of effective culture.

School climate research can trace its roots back to organizational climate studies of the 1960s and 1970s (Forehand & Gilmer, 1964; Hellriegel & Slocum, 1974; Schneider & Bartlett, 1968). The characteristics of the knowledge gleaned from these studies was predetermined by the instrument. Most of these studies used perception-based surveys to come to a conclusion about a school's climate or its classrooms' climate (Moos & Trickeett, 1974). While these early definitions of school climate have been tweaked over time, the core linkage between climate and individual perception has remained. As Hoy (1990) explained, "School Climate is the relatively enduring quality of the school environment that is experienced by participants, affects their behavior, and is based on their collective perceptions of behavior in schools" (p. 152).

Recently multiple scholars have claimed that this entire trend toward survey instruments is built on a fallacy (Schoen & Teddlie, 2008; Van Houtte, 2005). They believe that the research community has mistakenly been using the concepts of "school climate" and "school culture" interchangeably (Ott, 1989; Schein, 2000). School climate represents the individual perceptions of the organization by organizational members (Denison, 1996). Meanwhile, school culture is the actual beliefs and assumptions of the organization's members. As a result, scholars may have merged two very different concepts.

In comparison to this climate approach, school culturalists believe that developing an understanding of the shared beliefs, meanings, and assumptions of staff will better reveal the reasons a school functions the way that it does (Glisson, 2000; Ouchi & Wilkins, 1985). While climate research can describe the concept of individual perception within a social system, organizational culture (shared meanings and assumptions) is the system within which it lives (Van Houtte, 2005).

Schein's Levels of Culture

 The individual perceptions of group members can impact district leadership to the extent that these perceptions actually shape the reality; however, at the organization's core it is the reality of daily operations and beliefs that truly drive behavior. As such, this study's design will be guided by a conceptual framework developed by organizational culture researcher Edgar Schein. Schein's (2010) core ideas define organizational culture, identify methods for understanding organizational culture, and lay an approach to managing cultural change. This framework creates a blueprint for organizational leaders who hope to change their organizations to meet challenging goals.

Schein (2010) sees organizational culture as a means to fulfill a human desire for stability and consistency. Entering the workplace on a daily basis would be overwhelming if every interaction and decision had to be considered and negotiated without some agreed upon mental shortcuts. These shortcuts are what create the foundation of Schein's definition of organizational culture:

> The culture of a group can now be defined as a pattern of shared basic
> assumptions learned by a group as it solved its problems of external adaptation

and internal integration, which has worked well enough to be considered valid

and, therefore, to be taught to new members as the correct way to perceive,

think, and feel in relation to those problems (p. 18).

This concept of culture as a response to previous organizational problems echoes

Hargreaves's(1995) contention that today's organizational response to a crisis becomes

tomorrow's auto-pilot responses. These in turn become part of the assumed beliefs of the

group.

Artifacts:

Architecture, Clothing,
Organizational Myths
and Stories, Rituals,
Ceremonies

**Espoused Beliefs
and Values:**

Ideals, Ideologies, and
Rationalization

**Underlying
Assumptions:**

Taken for Granted
Values and Beliefs
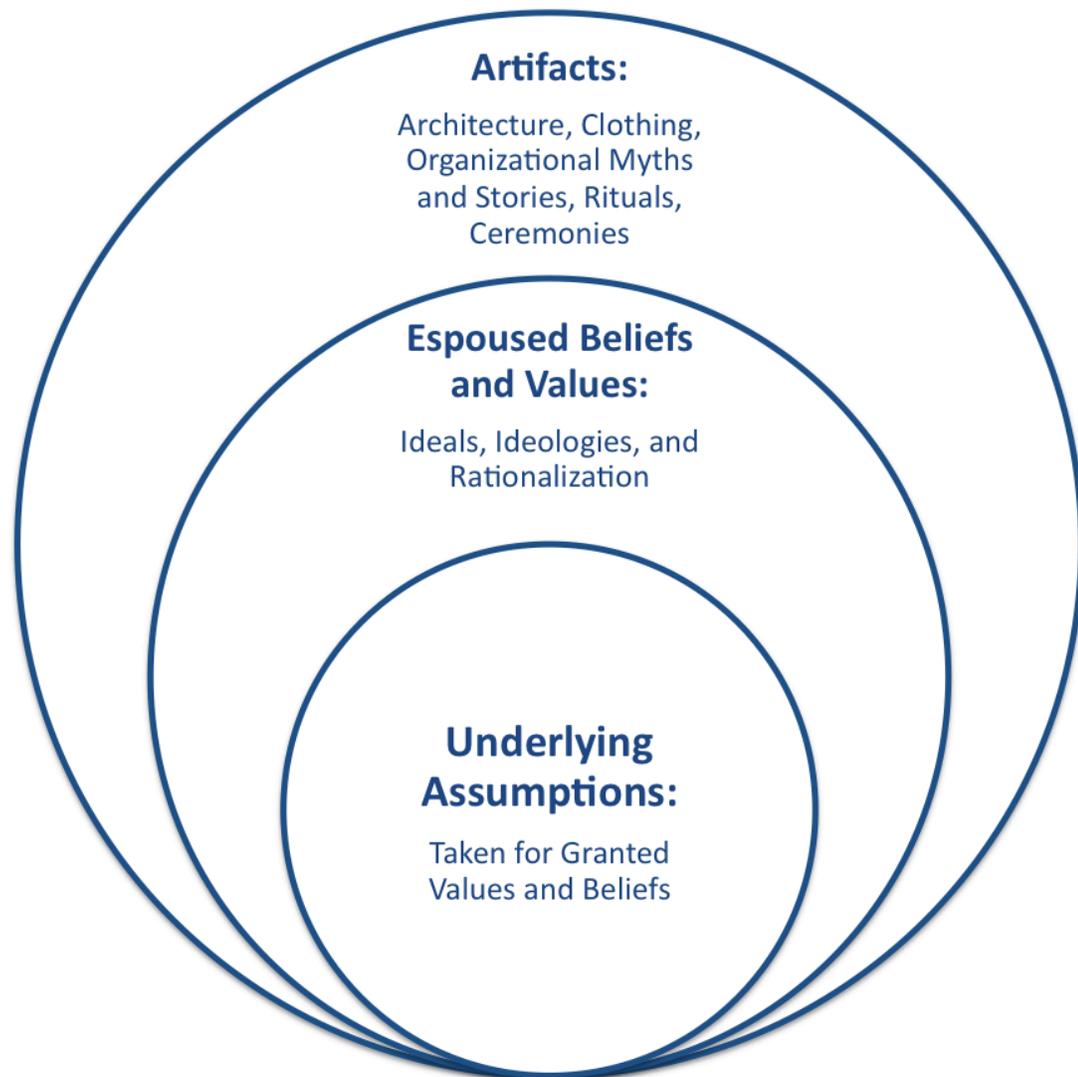
Figure 3.1. Layers of Organizational Culture (Schein, 2010)

Schein contends that there are three layers to an organization's culture. These layers move from the most visible to the most abstract (See Figure 3.1). At the first layer, a visitor to an organization can identify visible processes and structures occurring. These *artifacts* include rituals and ceremonies, styles of dress, organizational language, and manners of address. While these structures are easy to see, it may be difficult to understand why they are occurring. At the next layer, the organization holds its *espoused values and beliefs*. These stated ideals and aspirations represent the way an organization depicts its culture to members internally and to external visitors. These beliefs can often be found in mission statement and stated district philosophies.

Beneath these two layers lies what many culturists see as the true driver of organizational behavior: *underlying assumptions* (Hoy, 1990; Rousseau, 1990). These basic assumptions are belief structures so strongly entrenched that they are taken for granted truths within the organization. Once an idea has settled into this layer of culture, group members will see opposing ideas as ridiculous and inconceivable. As such, they become concepts that many members will protect at all costs even if that means "distorting, denying, projecting, or in other ways falsifying to ourselves what is going on around us" (Schein, 2010, p. 28).

Approaches to Understanding Organizational Culture

When trying to unwrap the underlying assumptions of an organization, outside researchers and consultants should rely on qualitative approaches that emphasize breath over depth (Hoy, 1990). To drill down to these assumptions, a researcher needs to observe both the artifacts and espoused values of the organization in context (Hamada,

1994; Heracleous 2001). Typically, these observations lead to the identification of inconsistencies between the stated goals of the organization and implementation. These gaps can then be explored through in-depth individual and group interviews (Hundelson, 2004).

As opposed to outside actors, insiders have additional risks and benefits they need to consider. On the risk side of the equation, leaders who begin a process to explore their organizational culture need to be sure to not look only at superficial characteristics. Effective analysis will move to the "deeper assumptions and patterns" of the organization (Schein, 2010, p. 188). To get to this level of analysis, leaders should focus on trying to understand their culture in relation to a new desired outcome rather than just generically understand the culture as a whole (Schein, 2009). In most cases, change processes only require small adjustments to be made. A leader should avoid trying to understand their culture as a whole as it is far too complex and multiple dimensional to do so. (Alvesson and Seveningsson, 2008).

Secondly, even if the initial analysis goes well, leaders also need to anticipate that members of the organization might not be ready to hear the feedback from the inquiry. On the positive side, insiders have had a long time to engage artifacts and espoused values within their context. In most cases, they will have already been considering their own role within the existing culture (Alvesson, 2003.)

In many cases, school boards place quick turnaround expectations on school leaders. With time of the essence, many leaders seek accelerated approaches to understanding the existing culture. In these cases, the anthropologically influenced culturalists argue that temptation of a quick survey should be avoided (Gilsson, 2000;

Schien, 2000). While survey instruments offer easy implementation and quick completion of analysis, they are ill-equipped to understand underlying assumptions (Ott, 1989). By their nature, surveys create several problems for researchers wanting to drill deep (Jung et al., 2009). First, leaders might not know what aspects of culture to target at the beginning of their inquiry. Second, survey questions do not provide an opportunity for deep inquiry. Third, without an opportunity to follow-up over time, it will be difficult to start to explore developing patterns. Finally, it can be hard to test what is shared via an instrument that engages individuals (Van Houtte, 2005).

Therefore, building from the observations they are making on a daily basis, wise leaders should take the time to engage both groups and individual employees in semi-structured dialogue (Yauch & Steudel, 2003). These interview approaches create the possibility of a give and take that can lead in unanticipated directions and a deeper understanding of complex issues (Skinner, Tagg & Holloway, 2000). Individual interviews offer the opportunity for each participant to give a longer, personal account of their views (Dougherty & Smythe, 2004). Meanwhile, focus groups may be the preferred method of those in need of an accelerated timeline. These group dialogues not only provide a chance to speak to more participants in a single sitting, but they also give the leader an opportunity to quickly determine shared assumptions by watching the interaction of focus group participants (Brander, Paterson & Chan, 2012; Schein, 2010).

Approaches to Shaping Organizational Culture

Once a leader has come to an understanding of their culture, they may need to turn their attention to reshaping that culture to help create desired outcomes. One of the most popular models of cultural change was originated with psychologist Kurt Lewin the

1950s. This model lays the foundation for many researchers exploring cultural change in organizations (Dent, 1999; Burnes, 2004; Medley & Akan, 2008; Schein, 1999). In fact, Schein described just how important Lewin's ideas were to his own work in an endnote:

> I have deliberately avoided giving specific references to Lewin's work because it is his basic philosophy and concepts that have influenced me, and these run through all of his work as well as the work of so many others who have founded the field of group dynamics and organization development (1999, p. 72).

This section will describe the basics of Lewin's three-step change framework. The power of freezing, changing, and refreezing will be explored.

This first step in Lewin's model is unfreezing. During this process, effective leaders prepare their staff for a coming change by creating cognitive dissonance, creating guilt, and building psychological safety. During this stage, leaders will present organization members with reasoning or a set of data that demonstrates the need to change. The information provided disconfirms the validity of the status quo (Schein, 2010). This challenging leads to level of guilt amongst organization members. This guilt can result in some initial resistance through denying the validity of the data or scapegoating others (Coghlan, 1996).

Even if there is no resistance, there will be mental discomfort for the members. In the midst of this discomfort, effective leaders will work to ensure that enough psychological safety is provided for employees to feel that they are safe enough to take the first steps toward change (Coutu, 2002; Edmondson, 1999). Often that goal can be

accomplished by focusing on achievable goals and promoting a sense of the group being in this growing process together (Alvesson and Sveningsson, 2008).

In stage two, the members begin to do the hard work of changing. With leaders focusing on building trust and trustworthiness, consistency, empowerment and, mentorship, members are able to overcome the paralyzing nature of learning anxiety (Kane-Urrabazo, 2006). Creating this safe environment is especially important as members struggle to unlearn and replace old habits of the mind (Coghlan, 1992). During this period of time, changing members will be looking for other members who are showing success by embracing the effort. Leaders should enlist the help of these key members and support their efforts (Alvesson and Sveningsson, 2008; Callon and Latour, 1981).

As organizational members are starting to consider the possibility that the new approaches may work, the leader enters stage 3: refreezing. During this stage, the organization aims to restabilize based on the new beliefs. In order for that to happen, the changing members will need to see positive results of their efforts (Schein, 2009). At the beginning of this period, effective cultural leaders will ensure that cultural themes stay a part of the ongoing organizational dialogue (Kotter, 1999). Then as time moves on, the leader focuses on buttressing and institutionalizing the new beliefs and behaviors to create the desired long-term success (Medley & Akan, 2008).

Research Design and Method

Guided by my theoretical framework, this case study examined the selected district's efforts to increase student achievement and equity via the reshaping of culture.

The work of the district was examined through district leaders that include the

superintendent, central office administrators, principals, and instructional coaches.

Data Collection

The research team shared a single interview protocol that explored respondent

perceptions of district leaders improving achievement and advancing equity

system-wide. While this researcher pulled data from multiple questions in the protocol,

there were two questions, and corresponding probes as necessary, which were designed

to help explore my research focus (See Appendix A for full protocol and probes):

1. Districts are often full of staff who have deeply held beliefs. Tell me
    about how you go about trying to understand what your staff really
    believes.

2. So, can you tell me about a time when you have tried to shape these
    beliefs?

Original versions of these questions used the term "culture." Based on cognitive

interviews, "culture" was deemed to have created an obstacle to getting rich responses.

As a result, the team shifted to the term "belief," which upon additional testing seemed

more effective. The research team's debrief of cognitive interviews led to more thorough

development of probes and potential follow-up questions. The themes of these probes

included requesting detailed descriptions of how leaders came to judgments about culture

and evaluating how important culture-building is in relation to other leadership tasks.

Data Analysis

Dedoose software was used to code all data. This first cycle approach

summarized the topic of a passage with a short phrase like "district culture" (Saldaña,

2013). During this process, the researcher made passes starting from an *a priori* list (Miles et al., 2014) developed from the review of literature. The goal of this first wave of coding was to simply identify data that would fall under the umbrella of district culture. In the next step, these identified passages were given subcodes of "understanding culture" or "shaping culture." In wave three, subcodes consistent with the conceptual framework were also used: artifacts, espoused values and beliefs, and basic underlying assumptions. Additional descriptive codes were developed as the data was engaged (Saldaña, 2013).
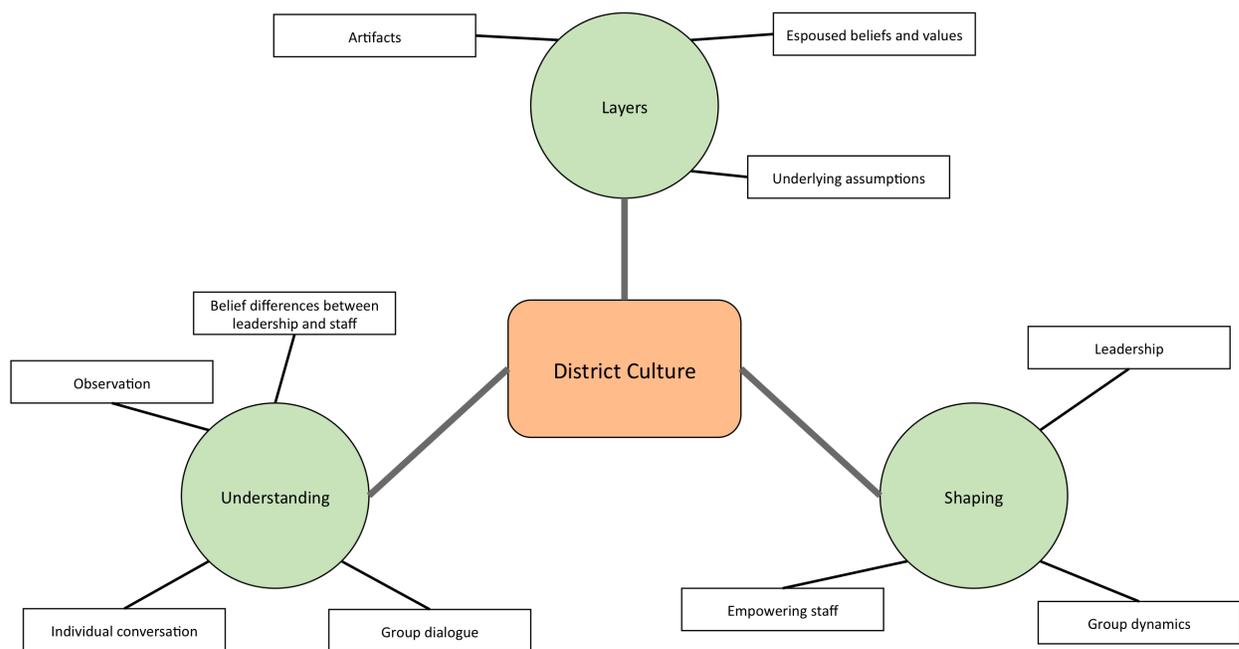
Figure 3.2. Coding Map

These included specific codes for data that addressed *understanding culture* and *shaping culture* (See Figure 2). This approach allowed the study to be flexible and open to "interesting" data that may point to unanticipated trends.

Findings

In the sections that follow, I will explain the ways in which Wyoma's district leaders approached trying to understand and shape their district culture. These leaders reported using a variety of strategies to understand the underlying assumptions of their staff, but most were primarily reliant on dialogue with their employees. Then I will demonstrate that once the leaders felt they began to understand their organizational culture they relied on the manipulation of small group dynamics, the experiential power of common walkthroughs, and the empowerment of early followers to help shape the district culture.

Understanding Their District Culture

For an educational leader, striving to comprehend organizational culture involves interpreting artifacts, weighing espoused values, and understanding underlying assumptions. In speaking with district leaders, it was clear that they believed in the importance of understanding organizational culture. When asked to discuss the importance of organizational culture in the potential success of their district and schools, several leaders gave statements similar to this one from an elementary principal:

> I think it's incredible. I think it's one of the most important parts because you can tell people to do whatever you want them to do but ultimately what people do is directly connected to their beliefs….What we believe determines how we act, determines how we respond to things. It's everything and it's the least that we talk about.

While there was no common district approach to understanding culture, each leader was able to explain their personal approach to the task. In this next section, I will both break

down these variety of approaches used and explore the most consistent approach used in this district.

Understanding culture through a variety of methods. The leaders in Wyoma relied on a variety of tools and approaches to try to understand the underlying assumptions of their staffs.

Group discussion. Several leaders whom were new to the district described attempts to start to analyze the staff culture through group discussion. Whether in whole staff meetings or in smaller groups, the leaders engaged staff in talking about their beliefs about their profession and the students they taught. These leaders used different types of approaches for these attempts; however, the concern was the same. Each leader felt that when their staffs were surrounded by professional colleagues that there was an inherent lack of psychological safety. Knowing that this lack of safety existed, several leaders commented that what staff said in these meetings was a "big front" rather than what staff really believed.

Surveys. Some principals in the district decided to use a method that might address this safety concern. More than half of the principals interviewed referenced using some form of staff survey to get feedback. While in most cases these surveys did not directly address underlying assumptions, principals still drew some conclusions about staff culture through answers to questions about items like professional development offerings or scheduling concerns.

In at least one important case, a principal explained that the comparison of the beliefs of two sets of stakeholders on the same question led to some important reflective conversation amongst the staff at the high school. Students were asked whether they

believed that they were going to college. Staff were asked what percentage of the students were going to college. The principal reported that the building had to do some self-evaluating after the "80 to 90" percent of the students saw themselves as college bound and the teachers saw that number as "60 to 70" percent.

Observation. Every principal, academic-focused central office leader, and instructional coach reported at least a partial reliance on observation to help understand staff beliefs. As one principal described it, each observation of a staff member was a "snapshot." He believed in being amongst his staff as much as possible and watching what they do. He felt that these efforts would help him build a "collage" of these "snapshots" which would give him a good picture of what each staff member was doing and believing.

The difficulty with observational data is the complex task of interpreting the artifacts that you are seeing. Despite that fact, multiple leaders told stories about their observations of staff that they felt demonstrated their clear understanding of the district culture and the specific staff members' underlying assumptions. In one example of this, a central office leader and former principal told a story of having bought kidney shaped tables and circular classroom meeting rugs to try to encourage small group instruction and responsive classroom programs:

> I went in her room. The kidney table was in the corner, and she had flower pots on it. The rug was on the floor and the desks went right over the rug in rows….she was not going to change….I wish we took a picture of that room, because it was like, "What does resistance look like? Here you go, honey. This is resistance."

The notable aspect of the story was that the tables and rugs were purchased during the summer and placed into teachers' rooms while they were gone. As a means of sparking conversation, the principal had intentionally not told anyone what to do with them or that they were coming. While on the surface, it seems very clear that an interpretation of resistance is likely accurate, it is possible that multiple interpretations of the actions of the teacher described could be correct; yet, a single conclusion was drawn by the leader. As identified in previous research, this interpretation of observational data can be challenging.

Whether through group dialogue, surveys, or observation, the educational leaders of Wyoma attempted many different means of understanding their organizational culture. While the approaches were inconsistent, a lack of confidence in each of these as a primary means of grasping their staff's beliefs seemed apparent. This lack of confidence in these approaches, some of which allowed the possible analysis of several staff members in a single attempt, pushed all these leaders to indicate their primary means of understanding their culture occurred one-to-one: individual conversation.

Understanding culture through individual conversation. While all the leaders interviewed talked about using multiple approaches for understanding their staff culture, there was a clear default means of understanding their staff. Each leader ultimately relied on having a lot of ongoing individual conversation with their staff members. These conversations helped build a high degree of psychological safety for staff, were often prompted with the pointing to a common external "enemy," and were calibrated over multiple sittings.

Creating safety. Unlike the concerns about honesty discussed in relation to larger group discussions, the leaders interviewed felt a far higher level of confidence in the reliability of the insight they gained from individual conversations with their staff. In large part, they believed that through individual conversations, effective information was transmitted as a result of a far higher level of psychological safety. The leaders also reported that this process of building psychological safety could often take longer than they anticipated. One principal detailed her surprise at the number of conversations that it might take to build trust:

> People are nervous to say what they really think, and we are building trust every minute. We need to have those moments where, "Jeez, I really thought I had built that trust with that person, I thought we had a relationship." [These teachers are] still not comfortable to say what they really think.

This obstacle was a common one for the leaders in this study. When explaining the methods they were using to overcome this roadblock, the Wyoma leaders generally coalesced around two concepts: the use of a common enemy and the power of longevity.

Creating a common enemy. The first way that these leaders felt that they got good information was to try to develop the idea that they and the staff member are in it together. These leaders had to walk a difficult line. The staff they were trying to have candid, value-changing conversations with are also people whom they have supervisory power over. This power dynamic creates a gap between them and their staff. The challenge for supervisors was to help staff feel that they were also imposed on by the hierarchy above them.

A trend in this was consistency in how these external "others" were identified (see Figure 1). When a leader at any of the levels interviewed—central office, principal, or instructional coach—specifically mentioned an external "other" they utilized in a conversation with a staff member, the target was always the immediate next tier of the hierarchy.
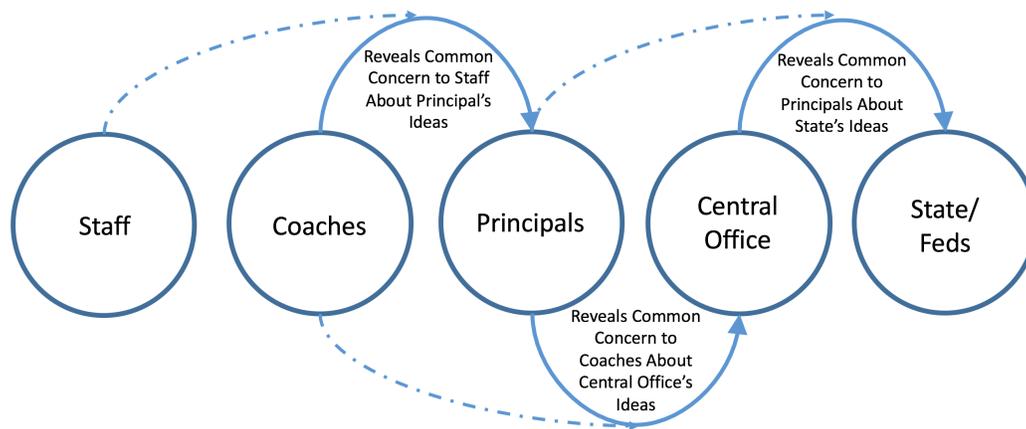
Figure 3.3. Common "Enemy" Patterns

When this type of approach was explained, central office staff would acknowledge frustration with the state, principals would show some disagreement with central office, and coaches would portray a lack of complete agreement with principals. As one new principal described, her initial interviews with staff were laced with considerations of whether central office directives were sound:

I really think it's habits, the communication piece, and being able to sit with someone and say, "Hey, what do you really think about all this?" I've had those conversations, "The district is saying these are some things we need to do. What are your thoughts on that? How can we reach our goals, and do it in such a way

that we feel good about it? And how do we know that we're doing what's right by

the kids that are sitting in front of us at [our] school." It's that relationship piece

again. It's key.

This choice seems to be strategic as it represents a showing of greater trust in the staff

member to share of a lack of complete agreement with an immediate supervisor. That

granting of trust can potentially be strong currency in receiving reciprocal confidence

needed to reveal true beliefs.

    The importance of leadership longevity. The second way that leaders reported

that they developed trust was through their longevity. While this creation of commonness

via creating an external "other" seems to be a frequent practice, a few leaders seemed to

indicate that there was no substitute for longevity in a position. Knowing beliefs comes

with knowing the people. Knowing people comes with ongoing opportunities to have

common experiences. As one principal explained:

That [leadership] consistency [is] how you really get people to change, because

you've really got to know your staff. I'd like to say there's certain things you do,

like activities that I can look back at…that we've done over the last 4 years to say

that, but a lot of it comes down to the conversations we have and a lot of it is

based in, I think, knowing your staff.

While not every veteran administrator directly shared the same view, it was easy to see

that the leaders with more longevity in their position had a higher degree of confidence in

their understanding of their staffs.

    The heavy reliance on individual conversations as the primary means of grasping

a district culture helps show the complexity of understanding the underlying assumptions

and motivations of a school staff member and a staff as a whole. As such, it was not surprising to discover that the methods of acting upon these understandings both seemed difficult and hard to measure for Wyoma's leaders.

In the next section, I examine how these leaders tried to use this knowledge of their existing culture to help shape new cultures.

Shaping Their District Culture

As district leaders began to understand their organizational culture, they started to use that knowledge to shape that culture. Below I will describe how district leaders tried to shape the culture of their district. In particular, leaders focused on subgroup dynamics, used walkthroughs, and empowered their early followers.

Focusing on subgroup dynamics. Leaders recognized that people tend to interact most frequently in small groups (e.g. department or grade level teams). They explained that those groups helped shape each employee's system of beliefs about both the organization and their profession. Knowing that these groups could be powerful, these leaders explained that they worked to understand each of the players in each subgroup, mixed groups to create desired subcultures, and purposely consolidated groups of resistors.

Several leaders, and a high concentration of principals, understood the power of a subgroup and thought carefully about how to compose working groups within schools:

> [W]e all know that we have your third that's going to jump on board for anything.
> There is a third that's in the middle that you can persuade them. Then your top
> third will get them to go, because they don't want to be left behind. Then you have

that another third that you can break in two pieces that will never get there and the

group that just maybe.

In several interviews, different leaders referred to this idea of the thirds. It seemed to be a

shared concept that was likely discussed amongst the leadership team. Building from this

concept, different leaders discussed responding to these subgroups in different ways.

One approach that seemed to be popular was the intermingling of staff from

various levels of enthusiasm for current change initiatives. Leaders mixed groups

strategically in hopes of influencing their cultures. Here is how one principal described

his approach to grouping:

When I mixed the departments together and people together, we always have a

rhyme and a reason. When we do group work, I could take someone that might

not have the same belief as you and have you guys work together. I think you

have to look at your staff's personalities. You look at what you want to

accomplish for that day. Then you divide and conquer the hold-outs, but you also

bring people together for the day they work together.

In this approach, leaders strategically mixed believers and nonbelievers. Two ideas

seemed to drive the strategy. First, there was a desire to dilute groups of resistors.

Second, there seemed to be a hope that believers might bring around their non-believing

colleagues.

While some leaders saw "divide and conquer" as the purpose of strategic

grouping, others took exactly the opposite path. These leaders decided to purposefully

group together resistors.

The active resisters—I'm going to be honest with you—when I moved things

around, I moved it around on purpose to try and keep those people [together]...

My philosophy is trap and contain and isolate from infiltrating the rest of the staff.

For these leaders, the potential reward of putting members of the most enthusiastic third

together with the most resistant third was not worth the risk that a resistor could sway a

colleague more who was previously inline with the desired culture or could derail an

important building process. For these leaders, there was often a conscious decision to

target resources to where they perceived they were going to be most effectively used.

Using walkthroughs as an experiential impetus for change. While every leader

discussed the importance of conversation in understanding culture, several indicated that

talking often was not an effective means of *shaping* belief. Leaders talked about different

means of inducing experiences that would challenge existing beliefs, in particular they

discussed the power of walkthroughs. In their view, teacher-to-teacher walkthroughs, and

shared administrative walkthroughs, created experiential opportunities for staff to test

their existing beliefs about the organization.

Amongst the leaders who had the most to say concerning the shaping of culture,

peer walkthroughs were pointed to as a potential perspective and assumption-changing

strategy. One principal explained that peer walkthroughs were heralded by staff as their

most powerful professional development opportunity:

> When I did a survey at the end of that school year, they said the biggest thing that
>
> affected change in the classroom was doing the learning walks. How important
>
> that was and crucial that was to say they've got to get out and see what's going on
>
> in other classrooms.

This principal explained that walkthroughs forced organizational reflection when teachers realized that what they thought was happening in their colleagues' classrooms—whether good or bad—often did not reflect the reality.

While teacher-to-teacher walkthroughs were acknowledged as a positive approach, multiple administrators pointed to the importance of administrative walkthroughs. In particular a new administrator explained it as important for her own development in the district culture. Administrators worked to do common walkthroughs of their buildings:

> One of the processes that we have been going through this year, which is great for me being a new administrator…[we are looking at] how are we doing our walkthroughs and pushing us to do it together so that we're all looking at the same standards so we identified it together.… we've been really trying to get into each other's buildings and doing walkthroughs, and having that discussion of what we see.

For this new administrator, this process of completing and debriefing common walkthroughs helps her understand the organizations underlying assumptions including "what is good teaching?" and "what should we try to improve?"

In both of these experiences shared with district colleagues, staff members at different levels of the hierarchy are given an opportunity to share a common experience with others. This experience and the process of interpreting each as a cohort as the potential to shift assumptions about the nature of the organization, the work itself, and the students they serve.

Empowering early followers. Each leader was working to build a culture that reflected the beliefs they felt were necessary to create positive outcomes for students. On the path to shaping that culture, several leaders expressed the importance of creating, empowering, and building upon one's earliest followers.

In most cases, the leaders identified followers through a combination of their individual conversations and observations of individual staff members. Whether through a conversation that brought out a key desired belief or the observation of a classroom practice that was interpreted to reflect a desired core assumption, leaders came to identify a group of staff as early followers.

Once those believers were identified, the majority of the veteran leaders discussed the need to empower those people to move forward. As one principal, who was preparing his staff to move to a new building, clarified:

> You have those three groups that you're dealing with. Right now, my focus has been on the people who are excited about moving to the new building. I'm utilizing their excitement to get some of this work done right now. At some point, we'll have to utilize [others].

This empowerment could come in the form of additional coaching from the leader, additional resources, or a higher level of autonomy in a designated district procedure.

In some cases, leaders discussed the concept of effectively establishing a beachhead in a resistant subgroup and building from there. As one central office leader described, the finding of the first willing group in a difficult building can be essential, "We'll work through [the resistance]…if I can get one strong department to join and do something ... do business a little differently… and maybe it will spread."

Several subjects explained that this process of cultivating and empowering followers can be easier with younger staff. The existing culture is not yet instilled in these members, so they tend to be more open to new ideas and belief shifts. One leader discussed how she was able to mold a culture amongst a glut of new hires. These teachers—who were both new to the district and the profession—were not tied to old organizational beliefs about what was not possible to accomplish with low-income students. As this leader retold, her young staff would say to low income students:

> "You will graduate from high school and you will go to college and you will be proficient on [the state tests], because that's what our expectation for you is." That was them. You bring a bunch of 24 year olds together and they think they can do that. [So] they do [it] ... they had no idea they "couldn't do that."

The school that she led had the toughest demographics and the lowest scores. It is this school's improvement that had the greatest impact the district's improved scores.

When that change occurred, this former principal explained that her building was jokingly referred to in the district as "America's Next Top Model" as the change was being driven by a strong and determined group of young female teachers in their twenties who bought into the beliefs that the low income students were still worthy of high expectations. Without the need to overcome these staff members' commitment to an existing organizational assumption about possibilities, the principal in question found it far easier to shape her building's culture.

Discussion

The purpose of this study was to examine the actions of a district in reshaping their district culture. To evaluate whether the district, as an institutional actor, was performing

the role of culture shaping, two essential aspects of culture shaping were probed: understanding culture and shaping culture. This study finds that district leaders in Wyoma Public Schools are at least attempting both of these fundamental components; however, the strategies behind these attempts is both individualized to each leader and shows varying degrees of success.

Understanding District Culture

In their explanations of how they try to understand their staffs, these district leaders presented a range of investigative approaches. While ultimately most found that individual conversations with their staff provided the most reliable and insightful information, almost universally, these leaders felt that group dialogue was the least effective. Organizational culture researchers like Schein (2010) would argue that avoiding this approach precludes any possible understanding of the organization's underlying assumptions. To see the shared assumptions, the leader would need to see sets of employees discuss beliefs in a group.

Within these sessions, most employees may attempt to articulate responses that are not seen as outside of the assumed culture. This idea builds on sociological work examining public/private faces (Goffman, 1959) and psychological safety (Edmondson, 2003). These leaders found, that in a period of intense external pressure to change, staff members were often unable to talk honestly about their beliefs in front of peers. This conclusion leads these leaders to miss an opportunity to reveal the district culture. Shared underlying assumptions are more than just a collection of individual assumptions. The district culture is a set of shared beliefs that can only be understood by having multiple members engage in them through dialogue or action.

Building from these findings, practitioners would be well-served to consider means of administering these sorts of group dialogues. Few educational administrative preparation programs have extensive training in conducting effective focus groups. Educational leaders may need to pursue training outside of typical educational circles and seek out research or corporate training opportunities. Even with this sort of training, districts may decide that dialogues facilitated by internal leaders will not be conducive to accurate reporting. In these situations, district should consider turning to outside consultants to complete a cultural inquiry.

Shaping District Culture

All of the leaders felt comfortable discussing their attempts to shape culture. These leaders all saw culture as an important piece of having a successful district. While their responses to the question of shaping demonstrated a lack of a strategic district-wide process or language, some common themes did emerge. Whether through the engagement with disappointing data or through the experience of peer walkthroughs, several respondents created experiences that attempted to begin to unfreeze the existing culture (Lewin, 1951) by disconfirming the validity of the status quo (Schein, 1999). These leaders then reported that they carefully crafted groups to either distribute believers amongst non-believers or contain resistors by grouping them with fellow malcontents. Finally, these leaders empowered early followers to create models of success.

Building leaders need to begin to develop careful strategies to both reward and punish staff in relation to their adherence to desired cultural norms (Schein, 2000). While a potentially dangerous activity that can put staff members' face at risk, this action can

create staff members who are not only models of successful alignment of cultural goals and personal success, but also important symbols for the organization's goals.

As a researcher-practitioner, the struggle of my subjects to find precise language to describe and explain their approaches to culture was unexpected. The lack of language to describe an organizational concept is often an indication of a lack of grappling with the distinct characteristics that make up that concept. Wyoma may be a district that needs to strategically build a common model and language for understanding and discussing cultural goals. The adoption of a shared conceptual model of culture, whether Edgar Schein's or someone else's, can start to create a more shared understanding amongst district leaders.

Limitations

While this study provides detailed insight into the perceptions of leaders in the mid-sized district, there are inherent limitations to the transferability of its conclusions. The core of this study's data is composed of self-reported interviews. While some documents were examined to create context and confirm espoused beliefs and values, the bulk of the data consists of the unverified views of participants. The lack of additional data forms to further triangulate conclusions limits the extent to which the researcher is able to confirm the actual implementation of the role of reshaping culture.

Future Research

Future researchers examining the development of the organizational culture of districts should consider the use of a mixed methods approach (Rousseau, 1990). While quantitative approaches can struggle to reveal the unspoken assumptions of a district (Scott, Mannion, Davies and Marshall, 2003), those same quantitative methods can be

used to test a hypothesis created through qualitative inquiry. This process could also be flipped. Researchers could identify interesting trends in subject responses to a survey instrument (Yauch & Steudel, 2003). Then those trends could be more deeply explored through the in-depth interviewing championed by more anthropologically-inclined researchers (Alvesson & Sveningsson, 2008; Hamada, 1994; Schein, 2010). In addition, the collection of observational data should be considered as a means of testing to what extent the interview data is representative of actual action.

Another recommended next step for researchers would be to compare the ability to shape culture amongst veteran and novice staff. When examining the success of Wyoma schools in increasing student achievement while closing achievement gaps, much of the marginal achievement improvement can be traced back to one school. This elementary school had the highest level of poverty and English Language Learner status amongst its students. This is the same school that had been referred to as "America's Top Model" due to its young staff that the principal felt were more open to new ideas. When considering the notion that it is the unlearning of existing beliefs that might be more challenging than the development of new beliefs (Colghan, 1996), it could be time for a study to compare the development of desired organizational cultures between these two groups.

Conclusion

Ultimately, this study provides a building block for an in-depth exploration of the role of reshaping culture. The application of Edgar Schein's framework of organizational culture (2010) to Rorrer et al.'s (2008) theory fills a gap left in the original theory. While Rorrer et al.'s narrative analysis provided potential conceptual skeletons for role

exploration to build on, there was no such skeleton developed of reshaping district culture. The closing of that gap provides an opportunity for future studies into this important role to evaluate new cases using a similar lens.

CHAPTER FOUR[4]

DISCUSSION, RECOMMENDATIONS, AND LIMITATIONS

Discussion

This study aimed to explore the work of district leaders in improving achievement and advancing equity system-wide. In doing so, our research team examined the degree to which the actions of a district leadership team reflected an enactment of the four essential roles of district leaders in educational reform as conceived by Rorrer et al. (2008). Cushing (2016) and Lawson (2016) focused on how leaders attempted to build capacity and generate will when providing instructional leadership. McLaughlin (2016) focused on how leaders strived to reorient the organization's culture. Botelho (2016) focused on how leaders worked to establish policy coherence. McIntyre (2016) focused on the extent to which leaders maintained an equity focus in their efforts to improve achievement and equity system-wide.

Two central findings emerged following a synthesis of our individual lines of inquiry. First, consistent with research on standards based systemic reform (Leithwood, 2010; McLaughlin & Talbert, 2003), our studies found that district leaders played an important role in efforts to improve achievement and equity system-wide. Second, we found the actions of district leaders were consistent with Rorrer et al.'s (2008) theory of districts as institutional actors. Albeit to varying degrees, in their efforts to improve student outcomes, all district leaders were attempting to enact the four reform roles conceived by Rorrer et al.

---

[4] This chapter was jointly written by the authors listed and reflects the team approach of this project: Peter J. Botelho, Peter J. Cushing, Catherine L. Lawson, Lindsa C. McIntyre, and Zachary J. McLaughlin

The following sections will discuss these findings and their implications for both practice and research in light of current scholarship. First, we discuss the three prominent leadership moves leaders made when attempting to improve achievement and equity. Second, we discuss how leaders enacted the four leadership roles as conceived by Rorrer, et al.'s theory. Third, we provide recommendations for practice that can be used to guide the future efforts of leaders seeking to improve achievement and equity system-wide. Lastly, we discuss the limitations of this study and provide recommendations for future research.

Leaders Played an Important Role in Efforts to Improve Achievement and Equity

Consistent with current educational reform research (Bird, et al., 2013; Honig, et al., 2009; Knapp, et al., 2010), our studies suggest that Wyoma Public Schools district leaders played an important role in efforts to improve student achievement and equity across the system. Public reporting of the district's high stakes test scores, which revealed existing achievement disparities (Brown, 2003), and the Level 3 status[5] of one elementary school incentivized district leaders to implement large-scale instructional improvements. A synthesis of findings from individual lines of inquiry revealed three prominent leadership moves when attempting to improve achievement and equity: leaders (1) provided and supported instructional leadership; (2) implemented evidenced based decision making practices; and, (3) promoted equity across the system. In the next sections we discuss these leadership moves and the potential implications our findings may have on practice in light of current scholarship.

---

[5] The Massachusetts accountability system uses aggregate high stakes test scores to designate districts as level 1, 2, 3, 4, or 5. A Level 1 district is the highest performing level, where Level 5, are performing at levels low enough to be placed in receivership by the state. Level 3 districts are considered in need of improvement and qualify for targeted support from the state.

Leaders attempted to provide and support instructional leadership. Similar to Galucci (2008), who considers underachievement a "problem of learning," leaders in Wyoma recognized the need for new knowledge and changes in instructional practice for improving student achievement. In order to realize these types of improvements, foremost, district leaders emphasized the importance of high expectations for learning for all students. This value of high expectations for all students was communicated using a variety of mediums and leaders sought to maintain high expectations by balancing support (professional learning and resources) with accountability (observations and evaluations). In addition to promoting high expectations, district leaders prioritized the development of instructional leadership throughout the district. Our data suggests leaders attempted to provide support by establishing "learning-focused partnerships (Honig, 2012)." These partnerships appeared to exist on and across many levels, (i.e. among central office, principals, coaches, and teachers) and were fostered through professional learning communities (PLCs), data teams, use of common goals and by allotting time for collaboration and planning.

Specifically, central office administrators attempted to partner with schools to develop and deepen the principals' instructional practice by providing job-embedded supports. This was evidenced by the leadership coaching support provided to the principal of the Level 3 elementary school and the addition of a literacy coach[6] position to her school budget. Similarly, a multi-year federal grant program was used to provide

---

[6] The coaching model was first implemented at the elementary school designated as level 3, then expanded to another elementary school experiencing an increase of low SES students due to a change in student demographics. The coaching model was expanded over time to include a literacy coach and math coach at all elementary schools and the middle school. Additionally, there are 7 facilitators at the high school who provide curricular leadership without also formally evaluating staff.

resources and professional development to support the high school principal in initiating standards-based instruction and establishing PLCs.

Furthermore, the recent efforts to provide instructional coaches with their own coaching support demonstrated an awareness that investments in the learning of instructional leaders should extend beyond the principals to include other formal and informal leaders (Spillane et al., 2009). Similarly, principals, all of whom identified themselves as instructional leaders, described efforts to motivate and support positive changes in teaching and learning by working in "partnership" with coaches and teachers in their schools. In these efforts, they distributed leadership through both formal (coaches) and informal (peer-peer learning) ways. In addition, principals structured PLCs, data team meetings and collaboration time to support formal OTL, while recognizing how conversations and interactions during these forums created opportunities for incidental learning to occur during social interactions throughout the school day. Furthermore, principals described explicit attempts to differentiate support for their teachers (Knapp et al., 2010), including how they negotiated pacing and access to necessary supports when setting expectations. Lastly, similar to Anrig (2015), who found trust and time as essential for developing the levels of deep collaboration between administrators and teachers that led to significant improvements in low-income districts, leaders in Wyoma identified trust and time as critical to supporting and building their staff's capacity.

Nevertheless, despite clear attempts to "lead the learning" (Honig, 2012), our data suggests some leaders at the elementary level attempted to improve achievement scores by narrowing the curriculum. In these schools, social studies and science were neglected

to provide opportunities for longer instructional blocks in literacy and mathematics. Similarly, some leaders focused on improving test scores of the "bubble students" (Booher-Jennings, 2005), who were on the border of being proficient on the state exam, and focused instruction on explicit test preparation strategies).

While these types of test gain strategies are commonly used by schools with varying achievement levels and different types of subgroup failures (Weinbaum, et al., 2012), there are costs associated with relying primarily on this strategy. A focus on test gain without improving opportunities to learn (OTL) can create an illusion of improvement (Pullin & Haertel, 2008). In these circumstances, for example, instruction typically does not focus on developing student's critical thinking skills. Instead, instruction focuses on developing students' test taking skills and skills that cannot be generalized beyond the test or the academic setting (Jacob, 2005). An emphasis on test gain strategies can also lead to over-classification of students as Limited English Proficient (LEP) and special needs, thereby inadvertently reinforcing educational inequity and further marginalizing underperforming students (Darling-Hammond, 2010; Dentith, et al., 2013).

Leaders implemented evidence based decision-making practices. Evidence-based decision-making was infused throughout almost all leaders' efforts to improve achievement and equity. Multiple forms of data, including surveys, observational data, assessment scores and evaluation trends were used to make systemic change imperative (Wright & Harris, 2010); set direction, prioritize improvement and strategically allocate resources (O'Dogherty & Ovando, 2010). Survey and observational data were also used to understand and shape beliefs and culture.

A synthesis of our data suggests the district was in the beginning phases of effectively using evidence to inform educational practice in a way that leads to improved achievement For example, central office personnel, principals and coaches appeared to value evidence and were attempting to use data to inform decisions about instruction Furthermore, leaders allotted time for staff to collaboratively review multiple measures of achievement data on an ongoing basis and attempted to focus collaborative conversations on understanding data These moves reflect efforts to foster the types of meaningful conversations that Wayman et al. (2012) suggest can lead to common understandings about teaching, learning and data; an important aspect of organizational improvement. However, while use of data was apparent throughout the district, clarity surrounding buy-in, effectiveness and consistency of use among leaders was unclear (Finnegan, et al., 2013).

Nevertheless, while findings suggest leaders had a common preliminary understanding of how data can inform instructional practices that lead to improved student achievement scores, there did not appear to be a common understanding of the potential of data to also inform the opportunities students were given to learn (Pullin & Haertel, 2008; Wayman et al. 2012). In this respect, a strict focus on achievement-related data at the classroom level appeared to eclipse other types of educational data that could be used to detect potential learning inequities. For example, leaders did not appear to be examining discipline, attainment, or advanced placement data for proportionality across subgroups, or for the prevalence of "opportunity gaps" which can lead to underachievement.

Leaders promoted equity through responsiveness. Education is often referred to as the Great Equalizer (Scutari, 2008) and many scholars suggest that public school districts can improve achievement by attending to equity (Hewson et al., 2006; McIntyre, 2016; Rorrer et. al, 2008; Theoharis & Brooks, 2012; Turner, 2014). Our data found that leaders were attempting to attend to equity by owning past inequities relative to the larger student subgroups, and by making efforts to correct past inequities by responding to the needs of individual students.

Leaders acknowledged past inequities by explicitly identifying and owning that achievement disparities did exist between SWDs, ELLs, and economically-challenged students and their white and economically advantaged peers In their attempts to correct past inequities, leaders focused on providing opportunities and empowering both administrators and teachers to apply potential solutions (O'Doherty & Ovando, 2010; Turner, 2014), which they did by promoting both high expectations and a student-centered learning environment. For example, the district invested in instructional and emotional support systems (OECD, 2012) by strategically designating instructional coaches, equity coordinators and adjustment counselors for every building, over time. In addition, the district invested in research-based instructional programs at the elementary level, such as the responsive classroom and a research-based literacy program based on the Response to Intervention (RTI) model. Lastly, in an attempt to respond to students' individualized needs, the district employed a multi-faceted approach to professional development in ways that were equity oriented (i.e. co-teaching, responsive classroom, data-driven instructional interventions).

Many scholars of social justice leadership (Capper & Young, 2014; Orosco & Klinger, 2010; Scanlan, 2013) caution that leaders must be mindful of important factors such as inclusion and integration when attempting to narrow the achievement gap. For example, on one hand, RTI models provide "interventions" designed to support struggling learners, and they can prevent the over-identification of students for special education (Capper and Young, 2014). On the other hand, RTI can often remove students from general education classes, which has been found to increase segregation, particularly along race and class lines (Orosco & Klinger, 2010). Similarly, counselors are an important resource for students, but without the proper understanding of inclusion, leaders can unknowingly reinforce exclusion and restrict OTL for students if they must miss class time in order to access counseling services.

Additionally, in their efforts to be responsive, leaders described attempts to create socially just learning communities (Theoharis, 2007; Wright & Harris, 2010). For example, adjustment counselors' efforts to ensure students had warm coats and turkey to eat during Thanksgiving reflected an understanding of the importance of attending to the needs of the whole child (McIntyre, 2016). These kinds of efforts were consistent with those made by certain social justice leaders when attempting to "strengthen school culture and community" in Theoharis' (2007) study on social justice leadership.

Although leaders were attempting to implement socially-just practices that were responsive to the needs of students, leaders did not appear to be promoting cultural proficiency throughout the district, which Wright and Harris (2010) found to be a key strategy used in districts that reduced the achievement gap. Leaders appeared to understand language and special education needs and the impact of poverty but had not

appeared to acknowledge or unpack how race and ethnicity impacted achievement. There also did not appear to be a complex level of understanding of the historical struggles pertaining to race, ethnicity and culture that might inhibit students' opportunity to learn. For example, when describing their efforts to improve learning for ELL students, one of the larger student subgroups, there was no clear acknowledgement of how cultural and ethnic factors that are tied to language differences affected children. The next section will discuss how leaders enacted the four essential roles as conceived by Rorrer et al. (2008) during their efforts to improve achievement and equity.

Leaders Enacted Rorrer et al.'s (2008) Four Essential Roles to varying Degrees

While exploring district leaders' efforts to improve achievement, we explored in-depth the degree to which the actions of a district leadership team reflected an enactment of the four essential roles for district leaders in educational reform as conceived by Rorrer et al. (2008). Our data confirms Rorrer et al.'s assertion: district leaders in Wyoma were enacting these roles, albeit to varying degrees (see Table 4.1), in their effort to improve achievement and advance equity across the district. At the same time, data also suggests leaders did not have a common definition or understanding of these roles, nor did they have a common understanding of what implementation of these roles should look like. Similarly, enactment of these roles varied in degree, according to position and setting. Two possible explanations for these findings are the fact that the district's improvement process initially began at the school level (the level 3 school) and that here has been turnover in leadership positions over the past several years. The following expands on these findings by describing how the individual roles were enacted.

Table 4.1

How District Leaders' enacted the four roles as conceived by Rorrer, et al., (2008)

Individual Study	Role	Key Findings
Lawson, 2016	Instructional Leadership: Generating Will	Used transformational leadership and distributed leadership to build and sustain will; used resources, inducements and data to reinforce will.
Cushing, 2016	Instructional Leaders Building Capacity	Used observation, ongoing review of data, supervision and evaluation system to monitor instruction and efforts to improve instruction; procured fiscal and human resources to deploy an instructional coaching model.
McLaughlin, 2016	Reorienting the Organization: District Culture	Made efforts to decipher their organizational culture; used subgroups dynamics to influence culture change; empowered early adopters of the desired change.
Botelho, 2016	Establishing Policy Coherence: Mediating Policy	Response to policies was not proactive or deliberate; crafted policy by attempting to understand policy requirements and flexibility for implementing; reflected on the degree to which policy reinforced and/or conflicted with district goals and needs. Mediated policy by bridging and buffering implementation to serve local interests.
McIntyre, 2016	Maintaining a Focus on Equity	Owned past inequities and established vision and plan for correcting past inequities; allocated resources by adding positions that support "the whole child" by investing in positions, professional learning and curriculum that supports equity-oriented practice.

Providing instructional leadership. As described in the previous section, Rorrer et al. (2008) identified providing instructional leadership as the first role in a district's efforts to reform. This study confirmed that all leaders engaged in the "proactive administrative behavior" of providing instructional leadership by generating will and building capacity in ways that were supported by research (Daresh, 1991; Firestone,

1989; McLaughlin & Talbert, 2003). The two sub-roles of Instructional Leadership, Generating Will and Building Capacity, were examined independently.

Generating Will. Conclusions drawn from Lawson's (2016) inquiry were consistent with Rorrer et al.'s (2008) findings on two levels. First, the role of generating will was an "element" of leaders' efforts to provide instructional leadership. The second finding builds off of their assertion that the type of will necessary to initiate or sustain improvement, "does not arise automatically nor simply in response to external environments" (p. 315). The study concluded that leaders attempted to intrinsically motivate staff by acting as transformational leaders and distributing leadership in many ways that connected with an individual's values, beliefs and desires. Furthermore, when enacting these leadership constructs, leaders sought to use extrinsic motivators (praise and recognition, data to show growth, and resources such as time and professional learning opportunities) in ways that promoted individual's feelings of competence and sense of self-determination, which are the factors most strongly associated with employee engagement and the high levels of commitment required to realize sustainable improvements (Deci & Ryan, 2000; McLaughlin & Talbert, 2003).

Furthermore, leaders enacted this role while contending with economic, political, and cultural forces that played out differently depending on position (superintendent versus coach; new leader v. long term leader) and context (elementary or. high school). In this respect, it is not surprising that although leaders utilized the same leadership constructs, many leaders employed them in different ways. For example, some leaders used transformational strategies that focused on shaping beliefs by reviewing data, where others concentrated on building trusting relationships. Despite these types of differences,

all attempts to generate will reflected a strong commitment to improving teaching and learning (Daresh, 1991) by attempting to intrinsically motivate stakeholders to engage in the work of improving achievement and equity.

Building capacity. Rorrer et al. (2008) illustrated the fundamental importance of building capacity to maintain reform efforts as new challenges arise. Cushing (2016) explored district leaders' specific actions to build capacity as well as how district leaders prioritized capacity-building actions to improve student achievement.

According to Rorrer et al. (2008), there are three main strategies that proactive district leaders use to build capacity: (a) using communication, planning, and collaboration to coordinate and align constituent's work; (b) monitoring teacher and leader goals, classroom instruction, and efforts to improve instruction through transparent use of available data for accountability; and (c) procuring the necessary resources focused on improving instruction.

In regard to how district leaders are building capacity to improve achievement and advance equity district-wide, Cushing (2016) found that district leaders were primarily consistent with the last two of the three strategies enumerated by Rorrer et al (2008). First, school and district leaders observed instruction while checking to see that efforts to improve instruction were being implemented by teachers. They were also effectively using the new supervision and evaluation system as part of this monitoring. Second, district leaders procured the fiscal and human resources to deploy an instructional coaching model across the district. They recognized that past professional development was largely ineffective and worked to rectify that reality. Coaches modeled lessons for

teachers, monitored progress of instructional changes, and provided resources for teachers.

Despite this, implementation variations surfaced relative to the communication and collaboration necessary to align the work. For example, leaders varied in how they used coaches. Complicating this were teaching duties that had been added to coaches' responsibilities. Some leaders explicitly stated that the district was undertaking too many initiatives without clear communication or an understanding of what actions were effective. A lack of communication and alignment between district leaders resulted in fragmentation and a lack of clear vision for capacity-building efforts. In conclusion, while Wyoma district leaders were found to be building capacity in ways that were largely consistent with Rorrer et al (2008), many of their efforts were in the beginning stages and required monitoring.

Reorienting the organization: district culture. Rorrer et al. (2008) argue that two sub-roles exist beneath the role of reorienting the organization: refining and aligning organizational structures and processes and changing the district culture. McLaughlin (2016) explored the latter. That exploration discovered a need for a clearer conceptualization of culture shaping within Rorrer et al.'s framework, a push by Wyoma's district leaders to change their culture, and disconnectedness in their approaches.

In their brief discussion of the shaping of district culture, Rorrer et al. makes three main points: (a) culture is made up of norms, expectations, and values; (b) culture that supports reform is important for districts to create; (c) normative expectations are

necessary to promote reform. This study attempted to add structure and depth to Rorrer et al.'s framework.

Many Wyoma leaders expressed the importance of beliefs in impacting positive change for students. After applying a conceptual framework based on Schein (2010) to exploring the culture shaping efforts of district leaders, McLaughlin (2016) confirmed that Wyoma leaders were working to shape their culture to help improve both achievement and equity. Attempts to shape culture included: making efforts to decipher their organizational culture, using subgroup dynamics to influence culture change, and empowering early adopters of the desired change.

While efforts were being made by the district to create these positive cultural shifts, the type of tactics utilized generally varied between leaders. There was no singular, or even primary, approach to shifting the district's culture. Based on their own unique experiences and training, individual leaders implemented different methods. In addition to not having a common approach, interview data indicated that these leaders also did not have a common framework or language to think about or discuss culture shaping.

While exploring the role of reorienting culture, this study discovered two notable findings about leaders efforts to shape district culture. First, district leaders believed in the need to shape their culture. Second, their efforts to shape culture demonstrated a disjointed, inconsistent approach. These leaders met Rorrer et al.'s expectations of working to create a culture supportive of improvement. They also had been trying to develop norms and values that support change (Deal & Peterson, 2009). In order to assess the level to which that is occurring, future researchers will also need to apply their own

conceptual frameworks due to the the limited description of district culture provided in Rorrer et al.'s study.

Establishing policy coherence. Establishing policy coherence emerged as a third essential dimension. According to Rorrer et al. (2008), district leaders are critical to establishing policy coherence. This role has two subcomponents: mediating federal, state, and local policy; and aligning resources with district needs. In doing so, district leaders take on a "pro-active policy making stance" (Spillane, 1996, p. 65) adapting state and federal policies to serve local goals and needs and allocating resources in a strategic fashion.

With respect to how district leaders were attempting to establish policy coherence, Botelho (2016) found that district leaders were clearly working to navigate federal and state policies in a manner that was somewhat consistent with the role described by Rorrer et al. At times, they explicitly considered their crafting policy coherence role and took on this role fully. In doing so, they discussed how they worked to understand what a particular policy required and how much flexibility existed in implementation. They then explicitly reflected upon the degree to which the policy reinforced and, or conflicted with the goals and needs of the district. Finally, leaders mediated the policy by implementing it in a manner that best met those local needs (Honig & Hatch, 2004). This part of the process involved bridging or buffering policies to serve local interests.

However, this role of establishing policy coherence was enacted inconsistently. Most leaders did not seem to craft coherence in a proactive and deliberate manner. This was especially true of building leaders who typically failed to be able to speak explicitly of this role. Others employed bridging and buffering strategies but did not seem to be

able to reflect clearly upon the reasons for doing so. Additionally, building leaders seemed inclined to bridge, and not buffer, policies thus making it difficult for them to protect schools, teachers and students from negative unintended consequences that might result from some policies. Regardless of how individual leaders enacted the role, a clear and consistent understanding of the role of establishing coherence did not appear to exist.

Maintaining an equity focus. According to Rorrer et al. a focus on equity is a "pivot point for reform" (p. 329). In exploring this role, McIntyre (2016) sought to understand the ways in which leaders enacted the two subcomponents, which includes owning past inequities and foregrounding equity for other leaders. This study found that district leaders in Wyoma enacted each subcomponent to varying degrees. How they went about enacting each subcomponent is described previously in greater detail. In general, leaders owned past inequities by making equity an explicit value in their reform agenda (strategic plan), which laid the "foundation on which members of the school community construct common ground and the school culture" (Ancess & Ort, 1999, p.3).

Consistent with Rorrer et al.'s assertion that successful districts operationalize an equity plan that fosters the belief that all students can learn, leaders foregrounded equity by employing a calculated process for achieving equitable opportunities and outcomes for all students. Specifically, the leaders process for foregrounding equity involved acknowledging their limitations in teaching to many of the diverse populations and attempts to address prior inequities through collaboration and partnerships.

Recommendations for Practice

In light of our findings and current research on systemic reform, the following section provides recommendations for practice that can be used to guide the future efforts

of district leaders seeking to improve achievement and equity system-wide. In this section we discuss how district leaders can fulfill the following recommendations for practice: make equity and explicit and defining collective value; focus instructional leadership efforts on improving educational outcomes; become "data-informed;" and last, but not least, use Rorrer et al.'s (2008) theoretical framework to guide systemic reform efforts.

Make Equity an Explicit and Defining Collective Value

Rorrer et al. (2008) contend that districts that successfully improve achievement and equity do so by demonstrating a "value commitment" that involves making equity a "defining, explicit value, and a desired outcome" (p.334). The following sections discuss how leaders can make equity a defining value by developing their understanding of equity and by foregrounding equity.

Develop an understanding of equity. While acknowledging past inequities and making allowances for correction are important steps in the improvement process (O'Doherty & Ovando, 2010), it will serve district leaders well to make equity an explicit and defining collective value in the district. First and foremost, leaders must understand that there is a relationship between achievement and educational equity (Brown, 2004). Educational equity involves the distribution of educational resources towards learning opportunities that support optimal achievement outcomes for all students (Kahle,1998; Noguera, 2007), where inequity, creates opportunity gaps and leads to low levels of achievement (Darling-Hammond, 2010). The works of Kahle (1998) and Noguera et al. (2012) can deepen leaders' understanding of how inequitable educational practices perpetuate achievement disparities. Capper and Young (2014) can further deepen leaders

understanding of not only what inclusion/integration means, but also the importance of making this understanding the "central, visible, unambiguous anchoring feature of all . . . practices" (Capper & Young, 2014, p.162).

Second, leaders' understanding of achievement disparities must not be limited to the context of education. Leaders must be mindful of the fact that school systems do not exist in isolation from the community. Therefore, the community's social and economic capacity must also be understood and potential linkages between the school and community that aim to build the capacity of both should be explored (Datnow, et al. 2005). Leaders must also understand the broader context, including but not limited to, the history of inequity and factors such as the economic and social capacity within a community that can perpetuate inequity (Datnow et al., 2005; Johnson, 2007). Furthermore, leaders understanding should include the impact of inequity on educational attainment, social and occupational mobility, and our nation's position in the global economy (Darling- Hammond, 2010; NRC, 1997). By understanding the factors and forces that contribute to inequity, leaders will be better equipped to foreground equity as a defining value.

Foreground equity. One way to begin foregrounding is to determine if leaders are inadvertently promoting inequitable practices by evaluating how learning opportunities are distributed among students across the district. Equity audits are one way to assess for both opportunity and outcome gaps (Hehir, 2012; Skrla, et al., 2011). Equity audits are used to examine the extent to which access to quality teachers and enrollment in honors classes, discipline rates, dropout rates, college acceptance rates, and representation in special education is proportionately represented by different groups of

students (Noguera, et al., 2012; Skrla et al., 2011). Results of the equity audit should inform a plan for instituting equitable practices and close existing opportunity gaps.

Professional learning opportunities for leaders (Brown, 2003; Johnson, 2007) that focus on culturally-responsive instructional leadership will develop leaders' ability to understand their role and responsibility when it comes to supporting equity. For example, training in culturally proficient leadership can enable leaders to gain insight into how individual biases and often-unconscious "blind-spots" reinforce leadership practices that reinforce inequity. At the same time, training in social justice leadership can increase leaders' knowledge and awareness of the history and traditions of a diverse student body (Theoharis, 2007). By developing the ability to practice culturally-responsive instructional leadership, district leaders will be able to recognize their own critical consciousness, biases, assumptions and privileges, and understand how they impact the learning environment. As a result, leaders will increase their ability to proactively develop policies and practices that support equitable learning opportunities, and pedagogy and community based partnerships that are culturally responsive (Johnson, 2007).

Focus Instructional Leadership Efforts on Improving Educational Outcomes

District leaders play an important role in improving achievement and equity across the system (McLaughlin & Talbert, 2003; Spillane & Thompson, 1997) and are most likely to support student learning by providing instructional leadership (Honig, 2007; 2012). Thus, it will serve leaders well to focus their attention on improving teaching and learning in ways that leads not only to improved achievement scores, but also to improved educational *outcomes* (Datnow, et al. 2005). Knapp et al.'s (2010)

study, *Leadership for Learning Improvement*, can assist leaders in positively affecting student outcomes by providing guidance on how to (1) invest in staffing and other resources that support equitable learning improvements, (2) develop and exercise distributed instructional leadership within the school, and (3) and transform central office work practices and the district-school relationship in order to develop and sustain instructional leadership capacity. Honig (2012) and Burch & Spillane (2004) provide further guidance by illustrating how leaders can sustain instructional leadership capacity by acting as brokers of information and boundary spanners.

Support and develop principals' capacities to provide instructional leadership. The principal's capacity to provide instructional leadership is another critical aspect of district leaders work to support student learning (Honig, 2010). Findings from this study noted that all principals identified themselves as instructional leaders and viewed the work of improving both teachers' capacity and student learning as a priority. District leaders attempting to bring systemic improvements to scale should nurture this mindset in principals. Additionally, principals (and all formal and informal leaders) should be provided with ongoing job-embedded professional supports and OTL that strengthen their capacity to provide instructional leadership. Of particular importance is the ability of principals to effectively examine evidence that reflects the "quality of teaching" and how to use that evidence to support teachers in improving how they teach (Leithwood, et al., 2004).

Provide high quality opportunities for ongoing professional learning across all levels of the system. Formal opportunities to learn through workshops and courses play an important role in supporting improvement. However, reform efforts are more

likely to achieve scale if professional learning opportunities: are closely connected to the content of classroom practice; are sustained over time; and involve modeling, mentoring and coaching (Datnow, et al. 2005). Thus, it will serve leaders well to focus efforts on providing both leaders and teachers opportunities to learn "during and from" the daily work (Bryk, Camburn & Louis, 1999; Spillane, et al., 2009). Instructional coaching models and the collaboration structures implemented in Wyoma public school district are examples of ongoing, job-embedded OTL, which relied on social interactions for the transfer of information.

The transfer of information through social interactions is essential to learning and knowledge development (Frank, Zhao, & Borman, 2004). Therefore, it will benefit district leaders to be mindful of the power of conversation when planning to make large-scale changes in practice (Datnow, et al. 2005. The casual and informal conversations that occur throughout the workday and that result from accidental encounters among and across stakeholders have a tremendous influence on both the success and failure of reform (Datnow et al. 2005; Scanlan, 2013).

Although this study did not focus on sociocultural learning perspectives (Gee, 2008), an understanding of the theory can aid leaders in creating the conditions that will enable social processes to serve as a valuable tool for professional learning and for garnering the commitment needed for improvement to occur. Sociocultural learning theory underscores that actions and interactions between and among individuals and their environment are fundamental to learning and knowledge. Many scholars of this theory view schools as "communities of practice" (Wenger, 1998) comprised of groups who share a common practice and learn how to pursue this purpose "with and from" each

other (Scanlan, 2013). PLCs, vertical teams, and data review teams are also examples of communities of practice that can provoke new ideas and the rethinking of old mindsets (Mezirow, 2000); they can further be used to promote socially just learning communities (see Scanlan, 2013). Additionally, communities of practice that occur across grade levels and settings create opportunities for boundary spanning, which can minimize conformity and groupthink (Burch & Spillane, 2004). Lastly, communities of practice can also foster trusting professional relationships and the kinds of "relational linkages" that Datnow et al. (2005) posit are essential to reform. The works of Wenger (1998), Gee (2008), Knapp (2008) and Scanlan (2013) can provide a lens for understanding sociocultural perspectives of learning and inform practices that promote continuous professional learning afforded by the social processes that occur within and between communities.

Become "data-informed." When planning for data use, leaders must not only develop the capacity to use data, they must be able to use it wisely and make meaningful connections with data (Wayman et al., 2012) in ways that support both achievement and equity. Beyond developing their own capacity to use data effectively, leaders must know how to build the district's capacity. Therefore, leaders should be informed, not driven by data. Capacity building efforts to become data-informed should be developed for both leaders and teachers. According to Wayman et al. (2012), three important steps to cultivate a data-informed district are: (1) developing shared district-wide understandings of the continuous process of data analysis as opposed to quick outcomes; (2) providing a content-focused collaborative environment for job-embedded professional learning opportunities, similar to the Wyoma Public School District data team model; and (3)

leveraging computer systems that are easily accessed and supported district-wide that support rather than overwhelm collegiality and professional community.

Leaders should, furthermore, develop data-related district policies to build capacity for data use (Wayman, et al., 2012). Specifically, leaders should develop policies that: (1) address context and how data is used; (2) foster positive attitudes toward data by mitigating structural barriers, (3) mandate that principals develop data strategies and act (e.g. computer data systems professional development and collaboration time); and (4) seamlessly integrate data systems for educators to improve rather than impede instructional outcomes with minimal technical skill. Using the aforementioned actionable steps, district leaders can implement improvement strategies for both achievement and equity by being data-informed.

Use Rorrer et al's (2008) Theoretical Framework to Guide Systemic Reform Efforts

Rorrer et al.'s framework regarding the four critical dimensions of leadership provides not only a promising theoretical framework for future studies (Leithwood, 2010), but also a propitious guide for the practice of district leaders who are working to improve achievement and equity system-wide. The team found that district leaders in Wyoma were enacting all four roles, to varying degrees, in ways that were consistent with Rorrer et al.'s theory. However, in Wyoma and districts throughout the nation involved in the complex and challenging work of systemic reform, enacting the roles in a more informed, proactive and deliberate manner can have tremendous value.

For this reason, leadership teams should be introduced to Rorrer et al.'s (2008) framework in an explicit and constructive manner. Because this framework is not a prescriptive process, when preparing for reform, leaders should think about the respective

context in which they will be implementing the four roles and how to implement the framework accordingly. Leaders should also develop a common definition of each role. A common understanding of both the district context and the four roles can aid leaders in determining what implementation should look and what strategies could be used to successfully implement each role. Furthermore, given that the composition of all leadership teams will inevitably change over time, it will serve leaders well to incorporate strategies for orienting new leaders (formal and informal) to Rorrer et al.'s framework into respective improvement plans. In taking these steps, the hope is that leaders would come to deeply understand the four roles so they could proactively enact them and continuously monitor the application of each of the roles in a systematic way while reflecting upon their progress towards improving achievement and equity in the district.

This type of research-based, multi-dimensional leadership approach would provide a unified practical framework for reform that all central office and building leaders could share. At the same time, it provides the necessary flexibility for leaders to focus more directly on certain roles and subsequent relevant goals and initiatives based upon the current context of the district. The individual studies associated with this research project can provide specific guidance on how district leaders can effectively enact each of the four roles in service to improvements in achievement and equity system-wide.

Limitations and Recommendations for Future Research

The heavy reliance on interview data and the lack of existing case study research using the full model created potential weaknesses in the study's reliability and transferability. While this study provides detailed insight into the perceptions of leaders

in the mid-sized district, there are inherent limitations to the transferability of its conclusions. The core of this study's data is composed of self-reported interviews gathered over the course of several months. While some documents were examined to create context and confirm espoused beliefs and values, the bulk of the data consists of the unverified views of participants. The lack of additional data forms to further triangulate conclusions and lack of longitudinal data limit the extent to which the researcher is able to confirm the actual implementation of the roles addressed in the study.

The second of our challenges was the lack of empirical studies that attempted to test Rorrer et al.'s full theory. The researchers found the theory to be a compelling conceptualization of the complexity of the task of raising student achievement while focusing on equity. On the surface that may to appear to present challenges to the study's transferability; however, this study's intent was not to create a set of universal responses to its research questions. Rather the researchers desire was to begin the process of detailed examinations of bounded cases. At the conclusion of their work, Rorrer et al. called for future research to build a series of case studies to examine the roles that district's play. This study represents one of the building blocks of that comparative process.

Future researchers can overcome these concerns with the benefit of time. First, with additional site time researchers could pair large amounts of observational data with the perceptions of respondents over a longer period of time. Second, with the passage of time, future research teams will likely have produced numerous additional case studies

using the framework. This will give future studies an opportunity to place itself within a growing body of research that will both reinforce and challenge its own findings.

Conclusion

The persistence of the achievement gap continues to pose a significant threat to the overall stability of the United States. As a result, district leaders are faced with tremendous pressure to improve achievement and equity for all students with little to no guidance. Rorrer, et al. (2008) proposed a theory of district leaders as institutional actors that involves the enactment of four essential roles leaders play in reform, however these roles are not well understood.

This qualitative case study explored the degree to which a district leadership team, attempted to enact the four essential roles as conceived by Rorrer et al. (2008), while working to improve achievement and equity. This study's conclusion is that leaders were attempting to (1) Provide Instructional Leadership (2) Reorient the Organization, (3) Establish Policy Coherence, and (4) Maintain an Equity Focus to varying degrees, as conceived by Rorrer et al. Furthermore, findings revealed that district leaders' support of ongoing, job-embedded professional learning and efforts to improve teaching and learning in a data-informed and equity-oriented way were prominent components of their reform work.

Overall, this study suggests that the implementation of the essential roles of Rorrer et al. (2008) can serve as a promising guide for the practice of district leaders who are working to create the complex changes required for improving achievement and equity system-wide. Synchronously, our study serves as a call for additional case study research of districts' efforts using Rorrer et al.'s framework.

References

American Education Research Association. (2000). *AERA position statement concerning high-stakes testing preK-12 education*. Washington, DC: Author. Retrieved November, 11, 2001.

Anrig, G. (2015). How we know collaboration works. *Educational Leadership*, *72*.

Arnold, H. J. (1976). Effects of performance feedback and extrinsic reward upon high intrinsic motivation. *Organizational Behavior and Human Performance*, *17*(2), 275-288.

Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *The Leadership Quarterly*, 6(2), 199-218.

Barbuto, J. E. (2005). Motivation and transactional, charismatic, and transformational leadership: A test of antecedents. *Journal of Leadership & Organizational Studies*, 11(4), 26-40.

Albano, A. D., & Rodriguez, M. C. (2013). Examining differential math performance by gender and opportunity to learn. *Educational and Psychological Measurement,* 73(5), 836-856.

Ancess, J., & Ort, S. (1999). *How the coalition campus schools have re-imagined high school: Seven years later. Executive Summary*. New York: Teachers College.

Beatty, P. C., & Willis, G. B. (2007). Research synthesis: The practice of cognitive interviewing. *Public Opinion Quarterly, 71*(2), 287-311.

Benford, R. D., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. *Annual review of sociology*, 611-639.

Berliner, D. (2011). Rational responses to high stakes testing: The case of curriculum narrowing and the harm that follows. *Cambridge Journal of Education,* 41(3), 287-302.

Bird, J., Dunaway, D., Hancock, D., & Wang, C. (2013). The superintendent's leadership role in school improvement: Relationships between authenticity and best practices. *Leadership and Policy in Schools*, 12(1), 37-59.

Booher-Jennings, J. (2005). Below the bubble: "Educational triage" and the Texas accountability system. *American Educational Research Journal,,* 42(2), 231-268.

Brown v. Board of Education, 347 U.S. 483 (1954).

Brown, K. M. (2010). Schools of excellence and equity? Using equity audits as a tool to expose a flawed system of recognition. *International Journal of Education Policy & Leadership*, 5(5), 1-12.

Brown, P. (2003). The opportunity trap: Education and employment in a global economy. *European Educational Research Journal*, 2(1), 141-179.

Bryk, A., Camburn, E., & Louis, K. S. (1999). Professional community in Chicago elementary schools: Facilitating factors and organizational consequences. *Educational Administration Quarterly*, 35(5), 751-781.

Bryk, A. S., Sebring, P. B., Allensworth, E., Easton, J. Q., & Luppescu, S. (2010). *Organizing schools for improvement: Lessons from Chicago*. University of Chicago Press.

Burch, P., & Spillane, J. (2004). *Leading from the middle: Mid-level central office staff and instructional improvement*. Chicago: Cross City Campaign for Urban School Reform.

Burns, J.M. (1978). *Leadership*. New York: Harper & Row.

Burris, C. C., & Welner, K. G. (2005). Closing the achievement gap by detracking. *Phi Delta Kappan,* 86(8), 594-598.

Cameron, Judy, and W. David Pierce. "Reinforcement, reward, and intrinsic motivation: A meta-analysis." *Review of Educational research* 64.3 (1994): 363-423.

Carter, P. L., & Welner, K. G. (2013). *Closing the opportunity gap: What America must do to give every child an even chance*. Oxford University Press.

Cassidy, T., & Lynn, R. (1991). Achievement motivation, educational attainment, cycles of disadvantage and social competence: Some longitudinal data. *British Journal of Educational Psychology*, 61(1), 1-12.

Celep, C., & Yilmazturk, O. E. (2012). The relationship among organizational trust, multidimensional organizational commitment and perceived organizational support in educational organizations. *Procedia-Social and Behavioral Sciences*, *46*, 5763-5776.

Chalofsky, N., & Krishna, V. (2009). Meaningfulness, commitment, and engagement: The intersection of a deeper level of intrinsic motivation. *Advances in Developing Human Resources*, *11*(2), 189-203.

Chudowsky, N. M., Chudowsky, V., & Kober, N. (2009). *State score test trends through 2007-2008, part 4: Has progress been made in raising achievement for students with disabilities?* George Washington University: Center on Educational Policy.

Coburn, M., & Coburn, C. (2008). Evidence-based decision making in school district central offices: Toward a research agenda. *Educational Policy*, 22(4), 578-625.

Coburn, C., Toure, J., & Yamashita, M. (2009). Evidence, interpretation, and persuasion: Instructional decision making at the district central office. *Teachers College Record,* 111(4), 1115-1161.

Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R. (1966). *Equality of educational opportunity.* Washington, DC, 1066-5684.

Conrad, F. G., & Blair, J. (2009). Sources of error in cognitive interviews. *Public Opinion Quarterly, 73*(1), 32-55.

Corcoran, T., Fuhrman, S., & Belcher, C. (2010). The district role in instructional improvement. *Phi Delta Kappan,* 83(1),78-84. Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles: SAGE Publications.

Cosner, S. (2009). Building organizational capacity through trust. *Educational Administration Quarterly*, *45*(2), 248-291.

Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: a meta-analytic test of their unique relationships with risk taking and job performance. *Journal of applied psychology*, *92*(4), 909.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Darling-Hammond, L. (2000). New standards and old inequalities: School reform and the education of African American students. *Journal of Negro Education, 69*(4), 263-87.

Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future*. Teachers College Press.

Datnow, A., Lasky, S. G., Stringfield, S. C., & Teddlie, C. (2005). Systemic integration for educational reform in racially and linguistically diverse contexts: A summary of the evidence. *Journal of Education for Students Placed at Risk*, 10(4), 441-453.

Deci, E. L. (1972). Intrinsic motivation, extrinsic reinforcement, and inequity. *Journal of personality and social psychology*, *22*(1), 113.

Deci, E. L., Koestner, R., & Ryan, R. M. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of educational research*, *71*(1), 1-27.

Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological bulletin*, *125*(6), 627.

Dentith, A., Frattura, E., & Kaylor, M. (2013). Reculturing for equity through integrated services: a case study of one district's reform. *International Journal of Inclusive Education*, 17(3), 223-237.

Dinham, S., & Crowther, F. (2011). Sustainable school capacity building-one step back, two steps forward?. *Journal of Educational Administration*, *49*(6), 616-623.

Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: meta-analytic findings and implications for research and practice. *Journal of applied psychology*, *87*(4), 611.

Dunn, L. M. (1968). Special education for the mildly retarded: Is much of it justifiable? *Exceptional Children,* 35(1), 5-22.

Eisenberger, R., Pierce, W. D., & Cameron, J. (1999). Effects of reward on intrinsic motivation—Negative, neutral, and positive: Comment on Deci, Koestner, and Ryan (1999).

Elementary and Secondary Education Act of 1965, PL. No. 89-10 (1965).

Elmore, R.E. (2004). *School reform from the inside out; Policy, practice, and performance.* Cambridge. MA. Harvard University Press.

Espinosa, O. (2008). Solving the equity-equality conceptual dilemma: a new model for analysis of educational process. *Educational Research,* 49(4), 343-363.

Ewert, S., Sykes, B., & Petit, B. (2014). The degree of disadvantage incarceration and inequality in education. *The ANNALS of the American Academy of Political and Social Science,* 651(1), 24-43.

Eyal, O., & Roth, G. (2011). Principals' leadership and teachers' motivation: Self-determination theory analysis. *Journal of Educational Administration*, *49*(3), 256-275.

Farley-Ripple, E. N., & Cho, V. (2014). Depth of use: How district decision-makers did and did not engage with evidence. In A. J. Bowers, A. R. Shoho, & B. G. Barnett

(Eds.), *Using data in schools to inform leadership and decision making*. Charlotte: Information Age.

Finnigan, K. S., Daly, A. J., & Che, J. (2013). Systemwide reform in districts under pressure: The role of social networks in defining, acquiring, using, and diffusing research evidence. *Journal of Educational Administration*, 51(4), 476-497.

Firestone, W. A. (1989). The progress of reform: An appraisal of state education Initiatives. *CPRE Research Report Series RR-014.*

Fletcher, J. K., & Käufer, K. (2003). *Shared leadership* (pp. 21-47). C. L. Pearce, & J. A. Conger (Eds.). Thousand Oaks, CA: Sage.

Floden, R. E., Goertz, M. E., & O'Day, J. (1995). Capacity building in systemic reform. *The Phi Delta Kappan*, *77*(1), 19-21.

Frank, K. A., Zhao, Y., & Borman, K. (2004). Social capital and the diffusion of innovations within organizations: The case of computer technology in schools. *Sociology of Education*, 77(2), 148-171.

Fullan, M. (1994). Coordinating top-down and bottom-up strategies for educational reform. *Systemic reform: Perspectives on personalizing education*, 7-23.

Fullan, M. (2010). *All systems go: The change imperative for whole system reform*. Corwin Press.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational behavior*, *26*(4), 331-362.

Gallucci, C. (2008). Districtwide instructional reform: Using sociocultural theory to link professional learning to organizational support. *American Journal of Education, 114*(4), 541-581.

Gee, J. P. (2008). A sociocultural perspective on opportunity to learn. In Assessment, equity, and opportunity to learn, 76-108. In P.A. Moss, D.C. Pullin, J.P. Gee, E.H. Haertel, & L.J. Young (Eds.), *Assessment, equity, and opportunity to learn.* Cambridge University Press.

Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.

Geijsel, F., Sleegers, P., Leithwood, K., & Jantzi, D. (2003). Transformational leadership effects on teachers' commitment and effort toward school reform. *Journal of Educational Administration*, *41*(3), 228-256.

Goals 2000: Educate America Act, 20 U.S.C. §5801.

Goertz, M. (2005). Implementing the no child left behind act: Challenges for the states. *Peabody Journal of Education,* 80(2), 73-80.

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Harvard University Press.

Gottfried, M., & Johnson, E. (2014). Assessing access: Is there educational equity within urban schooling. *Education and Urban Society, 46*(7), 773-797.

Green, T. F. (1983). Excellence, equity, and equality. In L. Shulman & G.Sykes (Eds.) *Handbook of teaching and policy* (pp. 318-348). New York, NY: Longman Inc.

Gregory, A., Skiba, R. J., & Noguera, P. A. (2010). The Achievement Gap and the Discipline Gap Two Sides of the Same Coin?. *Educational Researcher*, *39*(1), 59-68.

Hamilton, L. S., Stecher, B. M., Marsh, J. A., McCombs, J. S., & Robyn, A. (2007). *Standards-based accountability under No Child Left Behind: Experiences of teachers and administrators in three states*. Rand Corporation.

Hardman, M. L., & Dawson, S. (2008). The impact of federal public policy on curriculum and instruction for students with disabilities in the general classroom. *Preventing School Failure,* 52(2), 5-11.

Harris, A. (2001). Building the capacity for school improvement. *School Leadership & Management*, *21*(3), 261-270.

Harris, D. N., & Herrington, C. D. (2006). Accountability, standards, and the growing achievement gap: Lessons from the past half-century. *American Journal of Education*, *112*(2), 209-238.

Hehir, T., Grindal, T., & Eidelman, H. (2012). Review of special education in the commonwealth of Massachusetts. Retrieved from http://www.doe.mass.edu/sped/2012/0412sped.htm.

Heller, M. F., & Firestone, W. A. (1995). Who's in charge here? Sources of leadership for change in eight schools. *The Elementary School Journal*, 65-86.

Hewson, P. W., Kahle, J. B., Scantlebury, K., & Davies, D. (2001). Equitable science education in urban middle schools: Do reform efforts make a difference? *Journal of Research in Science Teaching, 38*(10), 1130-1144. doi:10.1002/tea.10006

Holme, J. J., Richards, M. P., Jimerson, J. B., & Cohen, R. W. (2010). Assessing the effects of high school exit examinations. *Review of Educational Research*, 0034654310383147.

Holmes, C. J., & Zajacova, A. (2014). Education as "the great equalizer:" Health benefits for black and white adults. *Social Science Quarterly,* 95(4), 1064-1085.

Holtzman, W. H., & Messick, S. (1982). *Placing children in special education: A strategy for equity*. K. A. Heller (Ed.). National Academies.

Honig, M. (2007). *Policy Implementation and learning: How organizational and socio cultural learning theories elaborate district central office roles in complex educational improvement efforts.* University of Washington, Center for the Study of Teaching and Policy. Seattle: University of Washington.

Honig, M. I. (2012). District central office leadership as teaching: How central office administrators support principals' development as instructional leaders. *Educational Administration Quarterly, 48*(4), 733-774.

Honig, M., Copeland, M., Rainey, L., Lorton, J., & Newton, M. (2010). *Central office transformation for district-wide teaching and learning improvement.* Center for the Study of Teaching and Policy. Seattle: University of Washington.

Honig, M. I., Lorton, J. S., & Copland, M. A. (2009). Urban district central office transformation for teaching and learning improvement: Beyond a zero-sum game. *Yearbook of the National Society for the Study of Education*, 108(1), 21-40.

Hubbard, L., Mehan, H., & Stein, M. K. (2006). *Reform as learning: School reform, organizational culture, and community politics in San Diego*. Taylor & Francis.

Hunter, R. C., & Bartee, R. (2003). The achievement gap issues of competition, class, and race. *Education and Urban Society,* 35(2), 151-160.

Ingels, S. J., & Dalton, B. (2013). High School Longitudinal Study of 2009 (HSLS: 09) First Follow-Up: A First Look at Fall 2009 Ninth-Graders in 2012. NCES 2014-360. *National Center for Education Statistics*.

Ipka, V. W. (2003). At risk children in resegregated schools: An analysis of the achievement gap. *Journal of Instructional Psychology*, 30(4), 294.

Improving America's Schools Act (IASA) of 1994, 20 U.S.C. § 6301 (1994).

Isenberg, E., Max, J., Gleason, P., Potamites, L., Santillano, R., Hock, H., & Hansen, M. (2013). *Access to effective teaching for disadvantaged students. NCEE 2014-4001*. Institute of Education Sciences.

Jaafar, S. B. (2006). An alternative approach to measuring opportunity-to-learn in high school classes. *Alberta Journal of Educational Research*, *52*(2).

Jacob, B. A. (2005). Accountability, incentives and behavior: The impact of high-stakes testing in the Chicago Public Schools. *Journal of Public Economics*, *89*(5), 761-796.

Kahle, J. B. (1998). Equitable systemic reform in science and mathematics: Assessing progress. *Journal of Women and Minorities in Science and Engineering, 4*(2&3)

Kelly, A. (2012). Measuring "equity" and "equitability" in school effectiveness research. *British Educational Research Journal, 38*(6), 977-1002.

Knapp, M. S. (2008). How can organizational and sociocultural learning theories shed light on district instructional reform? *American Journal of Education*, 114(4), 521-539.

Knapp, M., Copland, M., Honig, M., Plecki, M., & Portin, B. (2010). *Learning-focused leadership and leadership support: Meaning and practice in urban systems.* University of Washington, Center for the Study of Teaching and Policy. Seattle: University of Washington.

Kober, N. (2001). *It takes more than testing: closing the achievement gap*. A report of the Center on Education Policy.

Koski, W. S., & Reich, R. (2006). When adequate isn't: The retreat from equity in educational law and policy and why it matters. *Emory Law Journal, (56)*, 545.

Kunjufu, J. (2007). *Raising black boys*. African American Images. C*ollege Board*, 37-1.

Ladson-Billings, G. (2008). A letter to our next president. *Journal of Teacher Education*, *59*(3), 235-239.

Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in US schools. *Educational researcher*, *35*(7), 3-12.

Lee, J. (2012). Educational equity and adequacy for disadvantaged minority students: School and teacher resources gaps toward national mathematics proficiency standard. *The Journal of Educational Research, 105*, 64-75.

Lee, V. E., Bryk A. S.(1989). "A multilevel model of the social distribution of high school achievement." *Sociology of education,* 172-192.

Lee, J., & Wong, K. (2004). The impact of accountability on racial and socioeconomic equity: Considering both school resources and achievement outcomes. *American Educational Research Journal, 41*(4), 797-832.

Lee Jr, J. M., & Ransom, T. (2011). The educational experience of young men of color. *New York, NY: College Board*, 37-1.

Leithwood, K. (1994). Leadership for school restructuring. *Educational administration quarterly, 30*(4), 498-518.

Leithwood, K. (2010). Characteristics of school districts that are exceptionally effective in closing the achievement gap. *Leadership & Policy in Schools, 9*(3), 245-291.

Leithwood, K., Louis, K., Anderson, S., & Wahlstrom, K. (2004). How leadership influences student learning. *Learning from Leadership*, 1-88.

Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (2nd ed., pp. 163-188). Thousand Oaks, CA: Sage Publications.

Linn, R. L. (2005). Conflicting demands of No Child Left Behind and state systems: Mixed messages about school performance. *Education policy analysis archives*, *13*(33), n33.

Linn, R. L. (2008). Educational accountability systems. In K. E. Ryan, & L. A. Shepard (Eds.), *The future of test based accountability* (pp. 3-24). New York: Routledge.

Levin, H. M. (2009). The economic payoff to investing in educational justice. *Educational Researcher*, 38, 5–20.

Louis, K. S. (2008). Learning to support improvement—next steps for research on district practice. *American Journal of Education, 114*(4), 681-689.

Maxwell, J. A. (2009). Designing a qualitative study. In L. Bickman, & D. J. Rog (Eds.), *The SAGE handbook of applied social research methods* (2nd ed. ed., pp. 214-253). Thousand Oaks, CA: SAGE Publications.

McKenzie, K. B., & Scheurich, J. J. (2008). Teacher resistance to improvement of schools with diverse students. *International Journal of Leadership in Education*, *11*(2), 117-133.

McLaughlin, M. W. (1987). Learning from experience: Lessons from policy implementation. *Educational evaluation and policy analysis*, *9*(2), 171-178.

McLaughlin, M. (1990). The rand change agent study revisited: Macro perspectives and micro-realities. *Educational Researcher*, *19* (9), 11-16.

McLaughlin, M. J., Artiles, A. J., & Diana Pullin, J. (2001). Challenges for the transformation of special education in the 21st century. Special Education Leadership, 14(2), 51.

McLaughlin, M., & Talbert, J. (2003). *Reforming districts: How districts support school reform.* Seattle: Center for the Study of Teaching and Policy.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* San Francisco: Jossey-Bass.

Merriam, S. B. (2014). *Qualitative research design: An interactive approach.* (Vol. 41 ed.) Sage.

Mezirow, J. (2000). Learning to think like an adult. Learning as transformation: *Critical perspectives on a theory in progress*, 3-33.

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: SAGE Publications.

Mintrop, H., & Sunderman, G. L. (2009). Predictable failure of federal sanctions-driven accountability for school improvement—and why we may retain it anyway. *Educational Researcher*, 38(5), 353-364.

Moreno, G., & Gaytán, F. X. (2013). Reducing subjectivity in special education referrals by educators working with Latino students: Using functional behavioral assessment as a pre-referral practice in student support teams. *Emotional and behavioral difficulties*, *18*(1), 88-101.

National Center for Educational Statistics (2013). *A first look: 2013 mathematics and reading*. National Assessment of Educational Progress. Retrieved at http://nces.ed.gov/nationsreportcard/subject/publications/main2013/pdf/2014451.pdf.

National Center for Educational Statistics (2014). *Public high school on time graduation rates and event dropout rates- years 2010- 1011, 2011-2012*. Retrieved from http://nces.ed.gov/pubs2014/2014391.pdf.

National Commission on Excellence in Education (1983). *A nation at risk: The imperative of educational reform.* Washington, D.C. U.S. Department of Education

National Research Council (Ed.). (1997). *Educating one and all: Students with disabilities and standards-based reform*. Washington, D.C.: National Academy Press

National Research Council (Ed.). (1999). *High stakes: Testing for tracking, promotion, and graduation,* Washington, D.C.: National Academy Press, Washington, DC

Nichols, S. L., Glass, G. V., & Berliner, D. C. (2006). High-stakes testing and student achievement: Does accountability pressure increase student learning?. *education policy analysis archives*, *7*, 1.

No Child Left Behind (NCLB) Act of 2001, 20 U.S.C. §1001 (2001).

Noguera, P. (2007). *School reform and second -generation discrimination; Toward the development of equitable schools*. Providence: Annenberg Institute for School Reform.

Noguera, P., Hurtado, A., & Fergus, E. (Eds.). (2012). *Understanding the disenfranchisement of latino men and boys*. Routledge.

Oakes, J., Rogers, J., Lipton, M., & Morrell, E. (2002). The social construction of college access. *Increasing access to college: Extending possibilities for all students*, 105-122.

O'Doherty, A., & Ovando, M. N. (2010). Drivers of success: One district's process for closing achievement gaps in a post–no child left behind context. *Journal of School Leadership*, 19, 6-32.

Organization for Economic Co-operation and Development. (2012). *Equity and quality in education: Supporting Disadvantaged Students and Schools*. OECD.

Ogawa, R. T. (1994). The institutional sources of educational reform: The case of a school based management. *American Educational Research Journal, 31*(3), 519-548.

Opfer, V., Henry, G., & Mashburn, A. (2008). The district effect: Systemic responses to high stakes accountability policies in six southern states. *American Journal of Education, 114*(2), 299-332.

Orosco, M. J., & Klinger, J. (2010). One school's implementation of RTI with English language learners: "Referring into RTI." *Journal of Learning Disabilities*, 43, 269–288.

Park, V., Daly, A. J., & Guerra, A. W. (2013). Strategic framing how leaders craft the meaning of data use for equity and learning. *Educational Policy*, 27(4), 645-675.

Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management journal*, *49*(2), 327-340.

Penfield, R. D. (2010). Test-based grade retention: Does it stand up to professional standards for fair and appropriate test use?. *Educational Researcher*, *39*(2), 110-119.

Piechura-Couture, K., Heins, E., & Tichenor, M. (2011). The boy factor: Can single-gender classes reduce the overrepresentation of boys in special education? *Journal of Instructional Psychology*, *38*(3-4), 255.

Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of management*, *22*(2), 259-298.

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The leadership quarterly*, *1*(2), 107-142.

Pullin, D.P., & Haertel, E.H. (2008). Assessment through the lens of "opportunity to learn." In *Assessment, equity, and opportunity to learn*, 76-108. In P.A. Moss, D.C.

Pullin, J.P. Gee, E.H. Haertel, & L.J. Young (Eds.), *Assessment, equity, and opportunity to learn.* Cambridge University Press.

Ready, T., & Hawley, W. D. (2003). *Measuring access to learning opportunities.* Washington, D.C.: National Academies Press.

Rorrer, A. K., Skrla, L., & Scheurich, J. J. (2008). Districts as institutional actors in educational reform. *Educational Administration Quarterly, 44*(3), 358.

Rutherford, C. (2009). Planning to change: Strategic planning and comprehensive school reform. *Educational Planning*, *18*(1), 1-10.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.

Saldaña, J. (2009). *The coding manual for qualitative researchers* (2nd ed.). London ; Thousand Oaks, Calif.: SAGE Publications.

Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). London, UK: SAGE Publications.

Scanlan, M. (2013). A learning architecture: How school leaders can design for learning social justice. *Educational Administration Quarterly*, 49(2), 348-391.

Schein, E. H. (2010). *Organizational culture and leadership* (3rd ed.). San Francisco: Jossey-Bass.

Scutari, M. (2008). Great Equalizer: Making sense of the supreme court's equal protection jurisprudence in american public education and beyond, *The Georgetown Law Journal*, (97), 917.

Sheldon, K. M., Arndt, J., & Houser-Marko, L. (2003). In search of the organismic valuing process: The human tendency to move towards beneficial goal choices. *Journal of Personality*, *71*(5), 835-869.

Sherman, J. D., & Smith, H. L. (1984). The influence of organizational structure on intrinsic versus extrinsic motivation. *Academy of Management Journal*, *27*(4), 877-885.

Silverstein, L. B., & Auerbach, C. F. (2003). *Qualitative data: An introduction to coding and analysis*. New York: New York University Press.

Singleton, R. A., & Straits, B. C. (2012). Survey interviewing. In J. F. Gubrium, J. A. Holstein, B. Marvasti & K. D. McKinney (Eds.), *The SAGE handbook of interview research: The complexity of the craft* (pp. 77-99). Los Angeles: Sage Publications.

Skerrett, A., & Hargreaves, A. (2008). Student diversity and secondary school change in a context of increasingly standardized reform. *American Educational Research Journal*, *45*(4), 913-945.

Skrla, L., McKenzie, K., Scheurich, J., & Dickerson, K. (2011). Home-town values and high accountability: A Texas recipe for district-wide success in an urban school district. *Journal of Education for Students Placed at Risk, 16*(2), 137-165.

Skrla, L., Scheurich, J. J., Garcia, J., & Nolly, G. (2004). Equity audits: A practical leadership tool for developing equitable and excellent schools. *Educational Administration Quarterly*, *40*(1), 133-161.

Skrla, L., Scheurich, J., Johnson Jr, J., & Koschoreck, J. (2001). Accountability for equity: Can state policy leverage social justice? *International Journal of Leadership in Education, 4*(3), 237-260.

Snow, D. A., Rochford Jr, E. B., Worden, S. K., & Benford, R. D. (1986). Frame alignment processes, micromobilization, and movement participation. *American sociological review*, 464-481.

Spillane, J. P., Healey, K., & Mesler Parise, L. (2009). School leaders' opportunities to learn: A descriptive analysis from a distributed perspective. *Educational Review*, 61(4), 407-432.

Spillane, J., & Thompson, C. (1997). Reconstructing concepts of local capacity: The local education agency's capacity for ambitious instructional reform. *Educational Evaluation and Policy Analysis, 19*(2), pp. 185-203.

Springer, M. G., Houck, E. A., & Guthrie, J. W. (2008). History and scholarship regarding United States education finance and policy. *Handbook of research in education finance and policy*, 3-22.

Srikantaiah, D. (2009). *How state and federal accountability policies have influenced curriculum and instruction in three states: Common findings from Rhode Island, Illinois, and Washington*. Center on Education Policy.

Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.) *The Sage handbook of qualitative research* (3rd ed., pp. 443-466). Thousand Oaks, CA: Sage Publications.

Steinberg, M. P., & Quinn, R. (2015). A tale of two decades: New evidence on adequacy and equity in Pennsylvania. *Journal of Education Finance*, 40(3), 273-299. Sutton, R. E. (1991). Equity and computers in the schools: A decade of research. *Review of Educational Research*, 61(4), 475-503.

Theoharis, G. (2007). Social justice educational leaders and resistance: Toward a theory of social justice leadership. *Educational Administration Quarterly, 43*(2), 221-257.

Theoharis, G., & Brooks, J. (2012). *What every principal needs to know to create equitable and excellent schools.* New York: Teachers College Press.

Togneri, W., & Anderson, S. (2003). Beyond islands of excellence: What districts can do to improve instruction and achievement in all schools: A leadership brief. *Learning First Alliance*.

Trujillo, T. (2013). The reincarnation of the effective schools research: Rethinking the literature on district effectiveness. *Journal of Educational Administration, 51*(4), 426-452.

Wallace, J. M., Goodkind, S., Wallace, C. M., & Bachman, J. G. (2008). Racial, ethnic, and gender differences in school discipline among U.S. high school students: 1991-2005. *The Negro Educational Review*, 59(1-2), 47-62.

Wang, J. (1998). Opportunity to learn: The impacts and policy implications. *Educational Evaluation and Policy Analysis, 20*(3), 137-156.

Warren, C. J. E. (1954). Brown v. Board of Education. *United States Reports*, *347*-483.

Wayman, J., Jimerson, J., & Cho, V. (2012). Organizational considerations in establishing the data-informed district. *School Effectiveness and School Improvement, 23*(2), 159-178.

Weinbaum, E., Weiss, M., & Beaver, J. (2012). *Learning from NCLB: School responses to accountability pressures and student subgroup performance*. Consortium for Policy Research in Education, RB, 54.

Welner, K., Burris, C., Wiley, E., & Murphy, J. (2008). Accountability, rigor, and de-tracking: Achievement effects of embracing a challenging curriculum as a universal good for all students. *The Teachers College Record*, *110*(3), 571-607.

Wenger, E. (1998). Communities of practice: Learning as a social system. *Systems Thinker*, 9(5), 2-3.

Weston, C., Gandell, T., Beauchamp, J., McAlpine, L., Wiseman, C., & Beauchamp, C. (2001). Analyzing interview data: The development and evolution of a coding system. *Qualitative Sociology, 24*(3), 381-400.

Wollard, K. K. (2011). Quiet desperation another perspective on employee engagement. *Advances in Developing Human Resources*, *13*(4), 526-537.

Wollard, K. K., & Shuck, B. (2011). Antecedents to employee engagement a structured review of the literature. *Advances in Developing Human Resources*, *13*(4), 429-446.

Wong, K. K., & Nicotera, A. C. (2004). Brown v. Board of Education and the Coleman report: Social science research and the debate on educational equality. *Peabody Journal of Education*, *79*(2), 122-135.

Wright, H., & Harris, S. (2010). The role of the superintendent in closing the achievement gap in diverse small school districts. *Planning and Changing*, *41*(3/4), 220.

Xia, C., & Glennie, E. (2005). *Cost-benefit analysis of grade retention*. Durham, NC: Center for Child and Family Policy, Duke University.

Yin, R. K. (2013). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: SAGE Publications.

Appendix A

Interview Protocol

Question alignment key

OAQ = Overarching Questions	**RC** = Reshaping Culture
GW = Generating Will	**PC** = Establishing Policy Coherence
BC = Building Capacity	**MEF** = Maintaining an Equity Focus

* Probes in italics

1. Please describe your current role in the district? And how long have you worked here? **(OAQ)**
    a. *What does this work look like day-to-day?*
2. How are you (along with other leaders in the district) working to improve achievement for ALL students in the district?
    a. *What's happening?* And *what is your involvement/role in this work?*
    b. *Are you making efforts to improve outcomes for groups of students that are struggling? What does that look like?*
3. What is the district's vision for teaching and learning?
    a. *How is it communicated? And how do you feel about it?*
4. What strategic goals and initiatives is the district currently pursuing?
5. How did you get (motivate) people to want to do the initiatives/work? **(GW)**
    a. *Was there resistance?*
    b. *How did you respond?*
6. What strategies were most effective in motivating people? Which were least effective? **(**
    a. *For example, ...*
7. How did you keep the initiatives going once started?
    a. *What got in the way?*
    b. *How did you handle it?*
    c. *How did you keep people motivated?*
8. Are there any key people you rely(ied) on to keep the work going?
    a. *Who? Why?*
9. What are you doing to help your staff to improve their practice? **(BC)**
    a. *Encourage experimentation*
    b. *Structured settings/time to discuss teaching and learning*

     c. *Professional development*

10. How did you decide what to do? What was your process for deciding what to focus?

     a. *In terms of structured PD, how do you decide what you do?*

11. Districts are often full of staff who have deeply held beliefs. Tell me about how you go about trying to understand what your staff really believes. **(RC)**

     a. *How did you come to that judgment (about their beliefs)?*

     b. *Do the staff's beliefs aligned with your desired beliefs for the district? How?*

     c. *Do the beliefs your staff speak about truly reflect what they believe? Artifacts*

     d. *Can you give a specific example of a way you approached trying to understand your staff's beliefs? How did it go?*

12. So, can you tell me about a time when you have tried to shape these beliefs?

     a. *Can you give a specific example of a way you approached trying to shape your staff's beliefs? How did it go?*

     b. *Is it possible to shape a district's beliefs?*

     c. *How important is culture-shaping in relation to other leadership tasks?*

13. What federal and state policies/mandates are you most focused on implementing? **(PC)**

14. How do you think these policies reinforce the goals and needs of the district?

15. In what ways do you think these policies conflict with the goals and needs of the district?

16. How do you implement these policies in a way that addresses local goals and needs? What does that look like?

     a. *How have you leveraged these policies to meet local goals?*

     b. *How have you adapted policies to meet local goals?*

     c. *How do you implement policies that conflict with the current needs and goals of the district?*

     d. *If there were no mandates to fulfill, how might the efforts of the district to improve achievement and equity look different?*

17. Currently, who are the students that you are struggling with? Why do you think they are not doing well in school? **(MEF)**

     a. *What makes you say that*

     b. *What are the barriers impeding their academic, social and/or emotional growth?*

     c. *What processes structures and/or practices need to be examined in order to remove the barriers?*

18. Are their any students you think might fall through the cracks?

     a. *Who are they? And what makes you say that?*

19. What have leaders done to improve the outcomes for those students?
    a. *If you were to change anything to further improve achievement of those students, what would that change look like?*
    b. *What changes might the school implement on its own to support those students?*
    c. *What would be the nature of district level change necessary to improve outcomes for those students?*