The Role of District Leaders in Improving Achievement and Advancing Equity: How District Leaders Build Capacity

Author: Peter J. Cushing

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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 ADVANCING EQUITY: HOW DISTRICT LEADERS BUILD CAPACITY

Dissertation in Practice by

Peter J. Cushing

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

and Zachary J. McLaughlin

submitted in partial fulfillment of the requirements

for the degree of Doctor of Education

May 2016

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How District Leaders Build Capacity

by

Peter J. Cushing

Dissertation Chairperson: Dr. Vincent Cho

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

Abstract

Fierce political and social pressure has intensified the demands for district leaders to narrow achievement disparities but research provides limited guidance for practice. Rorrer, Skrla, and Scheurich (2008) described a theory: district leaders should enact certain essential roles for school reform. Capacity-Building efforts of district leaders are essential to the role of Instructional Leadership. Building capacity comprises the specific actions of district leaders to improve the district's ability to achieve complex goals.

This qualitative case study explored the actions district leaders took and how they prioritized those actions to build capacity to improve student achievement. Data was collected from a single Massachusetts school district using semi-structured interviews and document reviews. This study found that leaders: established concrete learning practices (i.e. job-embedded professional development, instructional coaching model); created a supportive learning environment (i.e. establishing trust and providing time); and reinforced teacher learning (i.e. feedback and support). This study also found that leaders' actions were driven by data. Recommendations include shifting to a data-

informed decision-making process, coordination of leadership team efforts across the district and limiting initiatives to core priorities.

DEDICATION

For my parents, John and Julie, the best a child could hope for; and

For my wife, Megan, may our adventures be as boundless as our love for each other

ACKNOWLEDGEMENT

First and foremost, I am compelled by duty, obligation and eternal love to express my unyielding gratitude to my parents for their support through 23 school years from kindergarten to now. John J. Cushing, Jr., who was called to rise on October 2, 2015, and Julianne R. Cushing have always valued education's power and have invested commensurate with those values for their three sons. I look forward to celebrating this achievement with my mother and two brothers. John and Matthew, thank you for supporting me in all my endeavors. To my father, while I know you have been present these past few months, I do wish you could enjoy this achievement in person with me.

I am extremely grateful to my chair, Dr. Vincent Cho for his support, compassion, wit, and insightful direction. I am also grateful for Dr. Maryellen Brunelle's energy and drive to provide needed messages of support and much needed editorial assistance. Without the encouragement and support to do my best possible work, I am uncertain if I would have been able to complete this journey. While the professors of this program have been remarkable, I would like to thank Dr. Pullin for setting a high bar for us to achieve greatness and holding us accountable.

Thank you to my partners in this amazing journey: Peter Botelho, Cathy Lawson, Lindsa McIntyre, and Zach McLaughlin. I am a far better person for knowing you and I am humbled at the power of our team. Coming together in July of 2013 I never knew the possibilities of how much I would come to depend on you for humor, support and the shared vision.

I would also like to thank the faculty, staff, families, and students of Narragansett Middle School.

Finally, my closest friend and wife Megan deserves more thanks than words can convey. Thank you for being supportive of a doctoral program that started the same day our honeymoon ended. I am excited for the new frontier of marriage without a doctoral program. As partners, we can conquer any challenge life sends our way.

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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, & Newton, 2010; Leithwood, 2010; Rorrer, Skrla, & Scheurich, 2008). In these efforts to

[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

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.

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[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).

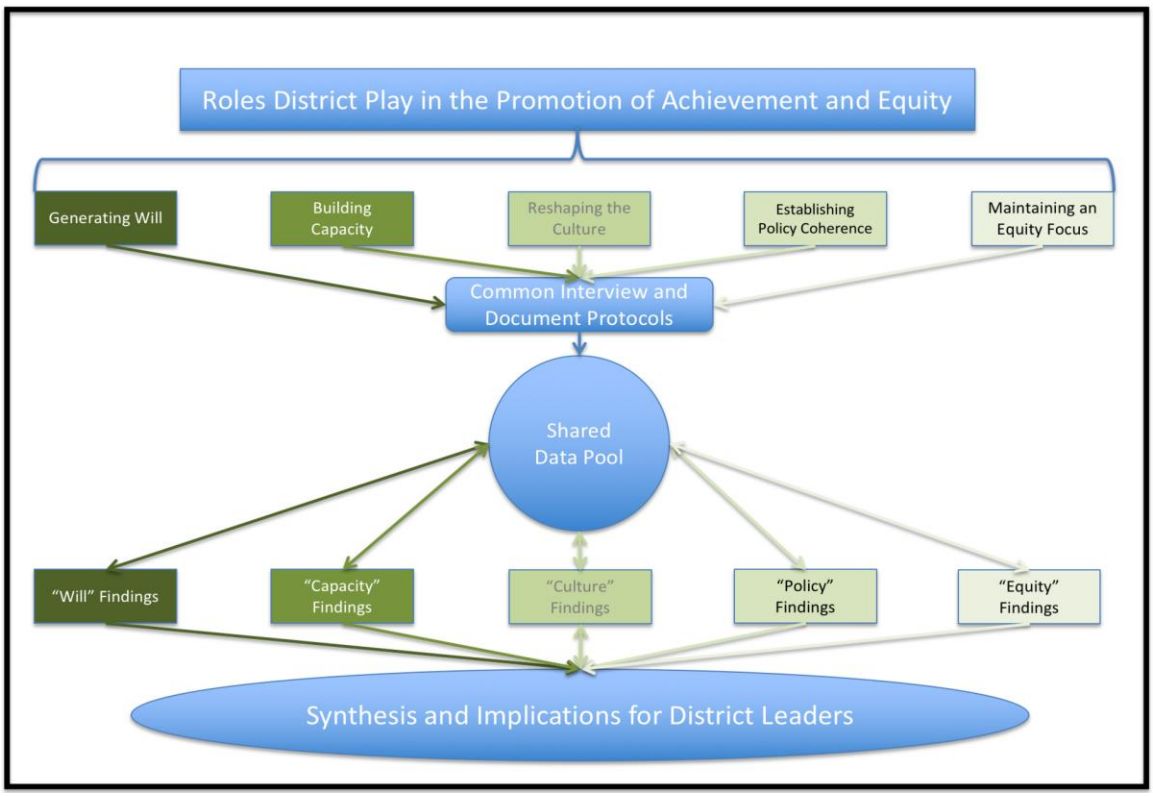

Figure 2.1 Overall study methodological map.

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 Finance Director Child Welfare & Community Support Director	Central Office Leaders	District Leaders
3 Elementary Coaches 5 Elementary Principals Middle School Principal High School Principal	School Level Leaders	

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 DISTRICT LEADERSHIP BUILDS CAPACITY TO IMPROVE ACHIEVEMENT AND ADVANCE EQUITY

Problem, Purpose and Research Questions

Fierce political and social pressure for school reform that builds capacity for improvement has intensified the need for district leaders to act quickly. Building capacity comprises the specific actions of district leaders to improve the district's ability to achieve complex goals. Nevertheless, reforming quickly does not necessarily build capacity or create improvements that can be sustained (Harris, 2011). Studying district leaders' efforts to successfully build and sustain capacity is important given the lack of real change following decades of reform (Harris, 2011; Honig, Copland, Rainey, Lorton, & Newton, 2010; Payne, 2008).

Capacity has long played a pivotal role in educational reform (Spillane & Thompson, 1997). Despite understanding the pivotal role capacity plays, "we know surprisingly little about the development of capacity within [districts or the work of district leaders]" (Cosner, 2009). State and federal mandates, such as No Child Left Behind (NCLB), that are driven by specific sanctions and quotas masked by improvement language, provide district leaders with few specific supports (Mintrop & Sunderman, 2009; Weinbaum, Weiss, & Beaver, 2012). Well-intentioned but significant pressure to immediately increase student scores has resulted in superficial initiatives that neither build capacity nor substantially reduce the achievement gap (Booher-Jennings, 2005; Leithwood, 2010; Mintrop & Sunderman, 2009). Now, district leaders are essential to building the capacity of educators by focusing intensive work to build principals'

[3] Chapter 3 was authored by Peter J. Cushing

instructional leadership abilities (Honig, 2012); nevertheless, "research and experience . . . suggest that districts likely will not implement [capacity-building] strategies well" (Honig, 2012). Even newly hired leaders expected to shift the district office toward innovative operational ideas tend to fall back upon traditional practices that impeded capacity-building efforts (Honig, 2012). District leaders must resist such tendencies, which serve as reform impediments, to resolve the *problem* of building capacity to successfully achieve complex goals.

District leaders must be aware of their district-specific needs and context in order to know which capacity or capacities to build. According to Spillane and Thompson (1997), district capacity:

> consists of human capital, (knowledge, skills, and dispositions of leaders in the district), social capital (social links within and outside of the district, together with the norms and trust to support open communication via these links), and financial resources (as allocated to staffing, time, and materials).

Capacity represents the district's collective ability to achieve established goals (Firestone, 1989). Building capacity naturally connects with organizational learning concepts as district leaders attempt to use group and system learning to embed new thinking, practices and experiences to transform the organization (Cook & Collinson, 2006). Garvin, Edmondson & Gino (2008) describe three building blocks of organizational learning that support capacity-building efforts: a supportive learning environment; concrete learning processes and practices; and leadership that reinforces learning.

Therefore, the purpose of this qualitative case study is to explore how district leaders attempt to build and sustain capacity to improve student achievement. Two

specific research questions will guide this study: What actions do district leaders take to build capacity in the district to improve student learning? How do district leaders prioritize their efforts to build capacity toward advancing equity?

Literature Review

District leaders can build and sustain capacity in a number of ways. This literature review will consider: the importance of capacity; the relationship between building capacity at the district level and organizational learning theory; the dimensions of capacity and their impact on student achievement and equity; and current practices district leaders use to build capacity.

The Importance of Capacity

Districts with low capacity may irreparably damage a child's ability to participate in our democratic society and limit lifelong earnings (Darling-Hammond, 2010). The responsibility to build district and school capacity for high-quality teaching and learning rests with district leaders (Honig, 2008). District leaders need high levels of instructional leadership capacity as well as managerial capacity in order to be successful (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010). Managerial capacity includes managing buses, buildings, budgets and bureaucratic directives (Hightower, 2002). Top-down managerial actions that do not improve matters of teaching and learning often emerge when district leaders are confronted by these operational responsibilities and impatient constituents demanding improvement (Honig & Hatch, 2004). Such managerial actions do not build capacity for improving student achievement.

District leaders' capacity-building actions can create a sense of community and lead to shared commitments to improve student learning (Bryk et al., 2010). Classroom

educators, often isolated, represent a loosely coupled organizational structure that is challenging to capacity-building efforts (Weick, 1976). Capacity-building actions should be designed to connect educators across the organization. Connecting educators with instructional coaches, principals and other teachers can improve instructional practice (O'Day, 2002). While some research highlights districts that have overcome structural challenges (Togneri & Anderson, 2003), those studies fail to reveal the practical actions of district level staff that support such outcomes in midsize districts (Honig, 2008).

Contributions of Organizational Learning Theory to Building Capacity

Organizational learning theory, traditionally used in business (Argyris & Schon, 1996), has natural application to school districts (Gallucci, 2008; Honig, 2008; Leithwood, 1995; Leithwood, Leonard, & Sharratt, 1998) as they are complex organizations that require equally complex improvement efforts, including building capacity. According to Bryk et al. (2010), "Districts are unlikely to succeed in advancing student learning absent a sustained, integrated, and coherent focus on building . . . capacity" (p. 198) across the organization. District leaders, confronting mounting forces demanding improvement, need to foster a learning organization punctuated by open discussion and trust with constituents skilled at creating, sharing and seeking knowledge (Garvin et al., 2008; Senge, 2006).

Scholars define organizational learning in several ways. While an organizational learning review identified over 80 such definitions (Templeton, Lewis, & Snyder, 2002), this study adopts the view that organizational learning refers to the use of group and system learning to embed new thinking, practices and experiences to transform (i.e., build capacity) the organization (Cook & Collinson, 2006; Gallucci, 2008).

Argyris & Schon (1996) first proposed an organizational learning perspective focused on data analysis to understand how individuals first think about and then solve a problem of practice. More recently, Honig (2008) has advanced another perspective of organizational learning referred to as sociocultural learning theory. This theory explores, "how learning unfolds . . . through an individual's engagement with others and various artifacts or tools in particular activities" (Honig, 2008, p. 631). In this manner, Honig diverges from previous scholarship and illustrates this perspective as joint work or professional communities where learners socially construct meaning to solve a problem of practice. Understanding the complex challenges and solving these persistent problems of practice that hinder a district from becoming a learning organization require the confluence of both perspectives.

Looking beyond educational research offers a useful way of applying organizational learning to school districts. Garvin, Edmondson, and Gino (2008) presented a comprehensive measure to examine organizational learning that conceptualized three essential "building blocks" (Garvin et al., 2008) necessary to be a learning organization. The building blocks are: (1) a supportive learning environment, (2) concrete learning processes and practices, and (3) leadership that reinforces learning (Garvin et al., 2008). These building blocks connect well with the dimensions of capacity (See Table 1). As a conceptual framework for organizational learning to build district capacity, these building blocks will inform methodology instrumentation.

Table 3.1

Building Blocks of Organizational Learning connected to Dimensions of Capacity

Building Block	**Dimension of Capacity**
A Supportive Learning Environment	Social Capital Trust Time
Concrete Learning Processes	Human Capital Instructional Coaching Model Professional Development Hiring and Retaining Staff
Leadership that Reinforces Learning	Creating a Sense of Urgency Providing Frequent Feedback and Support

Note: Adapted from Garvin, David A., Edmondson, Amy C., & Gino, Francesca. (2008). Is yours a learning organization? *Harvard Business Review, 86*(3), 109.

Dimensions of Capacity and Their Impact on Student Achievement and Equity

Scholars have described capacity according to a variety of dimensions, including: the human capital, social capital, technical resources and threshold conditions necessary for the district to achieve established goals. These dimensions are described below.

Human capital. Human capital consists of the skills and knowledge of staff and leaders connected with the persistence necessary to achieve organizational goals (Wahlstrom, Louis, Leithwood, & Anderson, 2010). Thus, districts with strong human capital are better able to educate students. Human capital consists of improving teachers' professional development, ensuring quality instruction and hiring and retaining effective teachers.

One way district leaders can support human capital is to improve professional development. Leadership can improve professional development in several ways. First,

leaders can engage teachers with professional development relevant to student, teacher or organizational needs (Knapp, 2003). Relevant professional development can improve a teacher's academic skills and teaching knowledge (Darling-Hammond, 2010). Relevance emerges when needs are identified through a collaborative process with teachers that evokes the ethical imperative for improvement (Leithwood, 2010; Opfer, Henry, & Mashburn, 2008; Scheurich & Skrla, 2001). Second, district leaders can use job-embedded professional development. Job-embedded professional development with instructional coaches provides teachers the opportunity to learn in their environment with students (Togneri & Anderson, 2003). Third, district leaders can refocus meetings from information delivery to professional development (Leithwood, 2010). Finally, district leaders can give professional development high priority through the visible supports of time, money and other resources (Cawelti, 2001; McLaughlin & Talbert, 2003). As a result of these and other improvement efforts, district-wide professional development requires significant effort and resources to successfully build capacity across the organization (Leithwood, 2010; Opfer et al., 2008).

Another way for district leaders to improve human capital is to ensure quality instruction. Teachers' instructional quality heavily influences student achievement (Darling-Hammond, 2010; King & Bouchard, 2011; Leithwood, 2010). Some teachers are better able to educate students (Murnane & Duncan, 2014). Leaders in high-performing districts focus on observing and improving teacher instructional quality (Harris, 2011). Improved instructional quality develops over time with the support of leaders and colleagues. Teachers desire to hear how they are performing not only from principals but also from peers and coaches (Curtis & Wurtzel, 2010). Teachers who learn

to better educate as part of a group are better able to support traditionally low-achieving students (Langer, 2000). Conversely, the devastating effects of low quality teachers are evident:

> Not only in the costs of low achievement borne by their students, but also the costs to schools of remediation, grade retention, special education, and disciplinary problems tied to . . . failure. Furthermore, society bears the later costs of drop-outs, incarceration, and low productivity in the workforce (Darling-Hammond, 2010, p. 107).

Finally, district leaders can hire and retain qualified teachers. A qualified educator can implement curriculum, manage a classroom, know their subject and is passionately driven by the moral imperative of students achieving their potential (Murnane & Duncan, 2014). To hire these teachers, district leaders can improve working conditions (Darling-Hammond, 2010), improve salaries (Curtis & Wurtzel, 2010) and provide technology or other resources (Fullan & Hargreaves, 2012). Even if many under-resourced district leaders are required to hire novice teachers due to budget restrictions (Darling-Hammond, 2010), these other leadership actions can still attract qualified teachers. Consequently, this could help districts be more selective about who they hire in the first place. For example, district leaders may be forced to hire novice teachers but they should be able to select the best of the graduating class (Fullan & Hargreaves, 2012). District leaders can retain teachers through an effective professional development program as previously mentioned. Retaining effective teachers also requires social capital and technical resources. These will be discussed in the next sections.

S**ocial capital.** Social capital is the quality of interactions between and among teachers and leaders (Leana, 2011) that improves their access to knowledge as well as their senses of obligation and trust (Fullan & Hargreaves, 2012). As such, districts that effectively leverage social capital are better able to educate students. Leaders must employ a variety of management strategies (Goleman, 2000) that secure teacher buy-in (Bryk et al., 2010) to build capacity using social capital. These strategies include establishing trust and creating a productive environment.

One way for district leaders to improve social capital is to establish trust. Leaders can establish trust by: modeling expectations; listening to and supporting individuals; being accountable for strategic goals; acting with integrity; and demonstrating effective management of the organization. Consequently, capacity cannot be built if educators are reluctant to identify failing initiatives to leaders or if leaders have failed to create an instructionally-focused peer environment (Bryk et al., 2010; Cosner, 2009; Spillane & Thompson, 1997).

Another way district leaders can build capacity using social capital is by creating a productive environment. Opportunities should be provided for authentic discussions that go beyond the rhetoric of all kids can learn (Cawelti, 2001). Going beyond the rhetoric can lead to specific actions to build capacity through a productive environment. For example, actions that foster a productive environment include: creating curriculum together (Hargreaves & Fullan, 2013); fostering group conversations centered on instruction (Leana, 2011); and partnering novice educators with experienced educators, “who help them learn the complex craft of teaching” (Murnane & Duncan, 2014, p. 49). These are dependent on certain technical resources district leaders should provide.

Technical resources. District leaders are expected to be masters of instructional leadership focused on student learning along with the development and evaluation of staff (Bryk et al., 2010). Despite this, leaders are still responsible for technical resources affecting capacity. These include time and data analysis.

Lack of time hinders instructional reform and leaders' ability to build capacity (Spillane & Thompson, 1997). Time is often limited by teacher contracts (Murnane & Duncan, 2014). Leaders can use time more effectively by fostering instructionally-focused teacher relationships. This can be done by aligning preparation periods or making faculty meetings about instruction rather than administrative matters (Leithwood, 2010). Educators need time to collaborate instructionally with peers, connect data points and inform instructional practice.

Data helps to fine tune teaching and learning (Knapp, Copland, Honig, Plecki, & Portin, 2010). Despite this, many teachers and leaders are adverse to the technical demands of data analysis. District leaders can leverage teacher talent by identifying teachers with the ability to analyze data or by providing opportunities to learn this skill (Curtis & Wurtzel, 2010).

District Leaders' Efforts to Build and Sustain Capacity

Building capacity requires tremendous effort and skill. Instructional capacity is built by district leaders who exercise smart yet strong leadership (Dinham & Crowther, 2011). These leaders use collaborative efforts to directly improve instruction (Elmore, 2000). Collaborative efforts to build capacity can supplant the indispensability of an individual (Lambert, 2007).

For example, Massachusetts expects district leaders to, "promote the learning and growth of all students and [staff success] by cultivating a shared vision that makes teaching and learning the central focus of learning" (MA Model System for Educator Evaluation, 2012). In Massachusetts, district instructional leaders are expected to spend 70% of their day in classrooms observing and providing feedback. Neither the Department of Elementary and Secondary Education nor other policy making bodies have provided guidance on how to make this happen and, "to simply say that principals must now be instructional leaders and spend at least half their time within classrooms while simultaneously [managing daily affairs] *is an educational pipe dream* [emphasis added]" (Bryk et al., 2010).

Research Design and Methodology

As part of a larger team project, this individual qualitative case study analyzed data connected to district leaders' deliberate actions to build and sustain capacity for improving student achievement and equity. Refer to Chapter 2 for the research team's overarching methods. The bounded system in this case study consisted of one set of district leaders comprised of central office leaders (i.e. the superintendent and other central office leaders) and school level leaders (i.e. principals and coaches). The methods and interview questions unique to this study are discussed below.

Data Collection

Data collection was from September to November 2015. Data included semi-structured interviews and document review.

Interviews. Semi-structured interviews (Merriam, 2014; Yin, 2014) were conducted with the aforementioned district leaders to gain insight into their actions to

build and sustain capacity. As these individuals represent the district's inner circle of hierarchical decision-making authority (Firestone, 1989), they were interviewed using questions focused on capacity-building (See Table 2).

Interview questions were constructed in light of what existing literature proposes about organizational learning, instructional reform and sustainable school improvement to answer the research questions about capacity-building efforts. Questions 1 to 4 were most connected to the first research question but offered insight into answering the second research question as well. The first two questions, designed for another individual study within the overarching project, provided an unexpected opportunity for leaders to describe their efforts to build capacity. Question 3 sought to understand collaborative quality of capacity-building efforts. Questions 3 and 4 were explicitly designed to understand district leaders' deliberate actions to build capacity and the extent to which their actions were connected to the district's strategic goals, initiatives, and vision for teaching and learning as recounted. Question 5 focused on how district leaders selected their actions to build capacity.

Table 3.2

Building Capacity Interview Questions

Research Questions	Interview Questions
What actions do district leaders take to build capacity in the district to improve student learning?	1. What is the district's vision for teaching and learning? a. *Possible Probe: How is it communicated?* 2. What strategic goals and initiatives is the district currently pursuing? 3. How are you, along with other district leaders, working to improve achievement for all students in the district? 4. What are you doing to help your staff improve their practice? a. *Possible Probe: Do you have structured time to discuss teaching and learning?* b. *Possible Probe: What professional development do you offer?*
How do district leaders prioritize their efforts to build capacity toward advancing equity?	5. How did you decide what to do? What was your process for deciding what to focus your efforts on? a. *Possible Probe: In terms of structured PD, how do you decide what you do?*

Document review. The district mission and vision statements, along with the district's 2012 strategic plan, were reviewed to triangulate interview data. These documents were selected because they are reform blueprints independent from the, "whims of human beings whose cooperation is essential for collecting good data through interviews" (Merriam, 2009, p. 139). Whereas interviews provided the most pertinent responses to answer the research questions, documents were reviewed to determine if interview responses and written artifacts aligned.

Data Analysis

Interview transcripts and documents were analyzed in three rounds. The overall coding approach allowed data to be readily available for answering the research questions. The initial round involved descriptive coding that summarized data with a word or short phrase (Saldaña, 2013). These initial codes were derived from the research questions. The initial codes were capacity-building actions and prioritizing capacity. The goal of this first wave of coding was to chunk data into initial categories.

In the second and third rounds, comments were coded using an *a priori list* (Huberman, Miles, & Saldaña, 2014). Codes in the second round were derived from the theoretical framework of organizational learning. These codes were concrete learning processes, a supportive learning environment and leadership that reinforced learning (Garvin et al., 2008). The third round of coding was influenced by capacity-building themes that emerged from the literature review. These codes included the concepts of human capital, social capital and technical resources, as well as vision and goal-setting. Further descriptive codes were inductively developed as the researcher engaged with the data (Saldaña, 2013). In order to comprehensively understand the work of district leaders to build and sustain capacity, these codes were fundamental to constructing the results of this research. Approaching the data in this manner allowed for unforeseen trends to emerge.

Research team meetings were held to gain a collective understanding of a coherent set of themes to code participant responses as well as documents (Wayman, Jimerson, & Cho, 2012). These meetings afforded team members the opportunity to complete member checks and develop analytic memos to build trustworthiness (Merriam,

2014). These team meetings allowed the researchers to assess if the interpretation of the data represented the respondents' or the documents' meaning. Team members reviewed portions of their individual coding cycles. Members also contributed to a shared document tracking their ongoing process as a researcher and their understanding of the case (Denzin & Lincoln, 2000).

Findings

In what follows, I describe how district leaders attempted to build and sustain capacity in their efforts district-wide. District leaders, especially principals, viewed themselves as instructional leaders who prioritized building instructional capacity. First, I identify specific actions district leaders took to build capacity. Second, I identify the process district leaders used to prioritize their efforts.

Actions of District Leaders to Build Capacity District-Wide

The first research question related to district leaders' actions to build capacity. In the sections below, I describe these actions: establishing concrete learning practices; creating a supportive learning environment for educators; and leadership that reinforces learning.

Establishing concrete learning practices. The first way that leaders built capacity was through establishing concrete learning practices. Concrete learning practices are tangible, visible actions to improve capacity. Respondents noted numerous leadership actions illuminating how teachers were provided concrete learning practices. Two were consistently mentioned: deployment of the instructional coaching model and professional development.

Instructional coaching model deployed. One concrete learning practice was instructional coaching. Coaches were visible and present throughout the district. Coaches were initially deployed through a consultant in a Level 3 elementary school. The district invested $780,000 in the instructional coaches during FY15 and FY16. Specifically, the district employed 10 instructional coaches for the purposes of improving overall teacher pedagogy while improving math and literacy content instruction.

District leaders saw instructional coaches as a way to improve district capacity. For example, one school level leader stated, "The instructional coaching model is instrumental. The role changes the dynamic by providing specific skills and supports for teachers." The instructional coaching model involved: 1:1 collaborative unit planning; debriefing model lessons with teachers; and helping teachers create an environment with direct academic supports for struggling students. Respondents viewed the instructional coaching model as a way to cultivate teacher practice and improve student achievement. Another school level leader described coaches' work as "a tremendous asset for the building." The instructional coaching model was designed to provide teachers "the capability and skill set to work with all students," as stated by another school leader.

Wide variation in teachers' capabilities and skills were described by respondents. Previously, teachers were expected to plan and deliver a lesson. School leaders described an expectations shift that demanded teachers plan a lesson, examine student data from the lesson, identify students who struggled, identify resources to reteach students and plan a small group lesson that would help those students. A school leader described this as "a lot more work" for teachers, work "teachers might not be able to do." Opposition to the instructional coaching model, as well as the increased work, was mentioned by several

leaders. One school leader instructed the coach to "latch onto your successes with those staff who are really engaged," while another school leader said such successes have "other teachers asking for supports so they can get kiddos where they need to be like the other teachers." Despite continued challenges from some teachers, the instructional coaching model built teacher capacity to meet the new expectations.

Despite overwhelming support for the instructional coaching model by both school and central office leaders, 13 of 15 respondents understood the high financial cost and were concerned about sustainability during periods of economic difficulty.

Initiating professional development. Professional development was another concrete learning practice. District leaders viewed professional development as a way to build capacity. For example, one school leader specifically stated that, "professional development is the single most important element to school change." This view was echoed in similar fashion by both district and school level leaders. Leaders spoke about this work in terms of three specific areas: making professional development effective; embedded professional development through coaches; and unit planning professional development.

Making professional development effective. Leaders illustrated past problems regarding teacher-selected and district-implemented professional development. One central office leader disdainfully described educators who selected ineffective classes, "from a distance learning school versus rigorous courses offered by [a local university]." That respondent further stated, "They were selecting courses like fitness walking! How does fitness walking improve your ability to teach kids?" Ineffective teacher-selected courses were rejected by district leaders who controlled the approval process. District-

wide professional development was also described as ineffective when one school level leader stated:

> We have not done a great job providing professional development. The most effective PD . . . has occurred when we've been allowed to do it at the building level and identifying exactly what [building leaders] think the staff need.

District-wide professional development efforts did not build educator capacity. Consultants who lacked recent practical experience, unsustainable silo workshops and poor coordination of professional development efforts that failed to connect teacher and district needs were described by respondents. Credibility with teachers was confirmed by a school leader who stated, “you were a teacher twenty years ago and now you are a consultant . . . that did not have a lot of [impact with teachers].” This belief was affirmed when another school leader stated, “the most effective professional development is when it is colleague to colleague or peer to peer.” Past professional development lacked coordination as evidenced by a school leader who stated:

> We identified the idea that professional development for teachers was the biggest place we needed to start, we needed to start looking at what their content knowledge was in each of the subject areas, we had to look at what their pedagogical skills, do [teachers] use instructional strategies in their classrooms, and then we needed to help them differentiate and plan instruction to meet the needs of all learners.

Several school level leaders specifically mentioned a newly formed professional development committee. This committee was comprised of teachers and leaders who looked at the needs of teachers from the viewpoint of the teachers. A district leader

described professional development coordination as, “the big picture of what we tried to take on to build capacity.” Leaders identified the reasons professional development opportunities were ineffective and then initiated solutions.

Job-embedded professional development through coaches. Two leadership actions were connected to coaches. First was the aforementioned action that deployed the instructional coaching model. The second represents specific coaching actions that built instructional capacity. Despite a reluctance to use consultants, the instructional coaching model emerged from a partnership with an outside consultant.

Coaches, as discussed above, were critically important to the capacity-building efforts focused on improved student achievement. A central office leader stated that coaches are “teachers teaching teachers.” Leaders stated that coaches provide job-embedded professional development by modeling lessons, collaboratively developing lessons and providing curricular resources directly to teachers. One school leader described coaches’ work with teachers as “one of the most important benefits” for the students. Multiple leaders identified modeling as a particularly useful strategy to deploy new concepts or skills. Evidence supporting this was provided by school and central office leaders. Specifically, one school leader stated, “our coaches have done so much modeling with our teachers . . . focused on accountable-talk, interactive read-a-loud, and number sense.” Another school leader stated that coaches provide “non-evaluatory feedback to teachers in order to shift their practice.”

Despite the importance of the coaches, there was inconsistent deployment of the initiative. One example was reported by a school leader who reported, “Coaches are now responsible for the gifted and talented program in this school which includes teaching a

period and planning that instruction." Another school leader stated, "our students are in crisis and we could have made better use of those dollars by hiring an adjustment counselor or another special education teacher." Still another school leader stated, "Coaches have been an asset to the building; staff would disagree. I am a proponent of the coaching model but they don't see it." This same respondent further described how teachers used coaches as interventionists for challenging students.

Unit planning professional development. In discussing ways to improve student achievement, respondents discussed teachers' inability to unit plan effectively. Leaders expect "rigorous unit planning" but openly acknowledge "the most crucial [element of instruction] is the least recognized and least understood" by teachers who lack necessary skills for this work. For example, one school leader cited teachers who created "lists of activities" that did not "dig deeply" and "meet the [unit] objectives." Another school leader stated that "teachers weren't planning, they were opening up their plan books and writing" limited instructional information. Leaders are not blaming teachers for this lack of unit planning as one school leader stated:

> We don't really know what to do from the get go with kids, any of our kids, and I know that sounds horrible, but I have never felt that more in my career than I feel that here at this school. They are good people and they just do not know what to do, so they just do what they have always done or what they think is good.

Another school leader cited pairing strong teachers with weaker teachers to plan the units in order to minimize risk, and then observe how one person teaches the lesson, and then retool the lesson. Several school leaders cited their own lack of skill designing units and knowing how to help teachers. For example, one school leader stated, "I feel that it would

be helpful for me if the district deployed a template, collaboratively researched, and we are making a commitment to it."

A central office leader identified unit planning as a district priority. Despite this statement, I found that unit planning was mentioned inconsistently by district leaders. Also, there appeared to be a lack of a cohesive plan district wide to deploy a lesson plan template that has been collaboratively researched with effective professional development for teachers and leaders to be successful.

Creating a supportive learning environment for educators. The second way leaders built capacity was through creating a supportive learning environment. A supportive learning environment is critical for leadership actions to successfully build capacity. Leaders cultivated supportive learning environments through two main actions: creating trust and establishing time.

Creating trust. Nearly all leaders endeavored to reinforce capacity-building efforts by building trusting relationships. Leaders created trust through several visible actions. Teachers were allowed to make autonomous decisions informed by research or practice as one example of this. School level leaders "listened" to teacher ideas for student improvement while other leaders described "supportive partnerships." An example of this was the idea to drop the non-standards based math program at an elementary school. "As a principal I said: OK, make your best educational decision and allowed the teacher to drop the math program" recounted the school leader. The teacher, now a leader in the district, recounted, "I saw this autonomy to create a new math program as trust in my abilities." This autonomy allowed the educator to collaboratively build a new math program with an outside provider. Together, they combined multiple

resources into a cohesive math program. This new math program abandoned the text book but produced substantially improved student results. These results prompted other educators to ask "what were you doing there – can you help us?"

District leaders, 11 of the 15 interviewed, discussed the importance of educator experimentation to improve student achievement. Leaders understood that failure was a part of the experimentation. As one leader stated, "I don't care if [the teacher action] fails, what did you learn from the failure? Let's not just keep doing the failure, how do we move forward with the process?" When teacher action did fail, leaders visibly supported educators to be successful in their effort. Other leaders described the "risks" they were asking teachers to take by teaching all students. A school leader stated that, "risk taking in an environment of trust and collaboration builds the capacity of teachers to connect with an ever expanding range of students." Leadership actions such as these represent visible ways to build trust. Another school leader described conversations with teachers that exposed "we do not know what we are doing" and from these conversations she worked to provide support so teachers could improve. Another leader described "relationship building" with teachers and allowing wide latitude to try new things and implement strategies. A central office leader described adopting "community input teams" as an advisory group to examine problems of practice. This leader observed these in another district and expects to have teachers create guidelines and be responsible for the problem.

Establishing time. Nearly all of the leaders identified time as a limiting factor to effectively building capacity. These leaders mentioned the limits on available time connected to the contractual bargaining agreement with the union and limited financial

resources to pay teachers for additional time. One leader, who had just left the classroom, recounted the lament of teachers who stated, “We want to do this [capacity-building improvement] work; we just do not have the time to do it.” Leaders discussed several strategies for establishing time to build capacity by “strengthening teacher pedagogy.”

School leaders described shifting available faculty meeting time to be focused on professional development and problems of practice. A respondent provided an example of this by stating, “within the last four years we have looked at faculty meetings being driven in a professional [development] format so they are whatever we need to work on as a staff to develop.” Another leader stated, “So, I try to think strategically about what practices do I want them to do and how am I going to get them to do this, so I really changed my staff meetings.” Some school level leaders described providing “grade level time” within the day. Another school leader stated that time, along with other supports, was provided “during professional development days for teachers to focus on the work I am asking them to do.” Another leader described an unintended benefit of hiring young teachers “who would often stay until 6, 7, 8 o’clock at night and we would have dinner and they would come in on Sundays as well because [the building was open].” This leader understands “this expectation is unrealistic,” but these teachers were willing to do this because of the sense of urgency. Another building leader faced almost the opposite effect with teachers “who hear the bell and are out of the building faster than the students.”

Leadership that reinforces learning. The third way leaders built capacity was by reinforcing the learning of the organization. Leadership that reinforces learning includes signaling the importance of the problem and evaluating progress of capacity-

building efforts. Leaders mentioned numerous actions to reinforce learning. Two were frequently mentioned: creating a sense of urgency and providing frequent feedback and support.

Creating a sense of urgency. Several leaders described using Level 3 accountability status to create urgency for the work. This urgency was mentioned frequently as a way to motivate teachers. For example, one central office leader stated:

> Now there is a sense of urgency, now you have the ability to say, we are changing the way we do business, *we suck* [emphasis added], we're at Level 3, we're not doing a good job, our kids aren't learning, we have to stop with the excuses and we have to change the way we do business.

A school leader further supported this in stating "this staff never had an instructional leader" that provided authentic feedback. This staff then examined student work collaboratively against the expected standards. Deficiencies were clearly evident.

Providing frequent feedback and support. Providing frequent feedback and support allowed district leaders to build capacity through modeling and mentoring that encouraged quality instruction. Leaders follow observing and evaluating teacher practice with frequent and specific feedback. This feedback is essential but not nearly as essential as the peer feedback. Several school leaders described using "peer observation" and "learning walks." These tools were used to provide opportunities to observe each other and then have structured conversations concerning what they saw. One school leader stated "teachers, initially reluctant, have embraced peer observation and discussion." Another principal referenced the positive teacher practice shifts in advance of follow-up visits.

School leaders were also provided feedback and support. A central office leader noted "we hired these coaches and then realized they needed to learn how to coach." Several principals mentioned the support of a principal coach as one stated, "being a principal is very isolating and the coach provides an opportunity for insight."

Process District Leaders Used to Prioritize Capacity-Building Efforts

Whereas the first research question examined the actions and tools district leaders might utilize to build capacity, the second research question related to the process leaders took to prioritize their actions. How do they choose what to do? Described below are two primary findings connected to this research question. First, district leaders relied upon data to drive their actions. Second, district leaders stated that fiscal constraints limit available actions.

Using data to drive actions. Data were used to help leaders prioritize their actions. Data, as one central office leader stated, provided leaders the ability to "know what they need to do." Leaders stated that data drove their decision-making. The following three types of data were consistently mentioned by district leaders: teacher observation data, testing data and surveys of teachers and students.

Leaders stated that teacher observation data influenced how they prioritized capacity-building actions. For example, one school leader stated, "the top of the list for me is my evaluation responsibility for [teachers]." This "responsibility" revealed data from numerous classroom observations that students were not "interacting with authentic texts or higher order thinking skills." This leader used the data to shift the school-based actions the following year to focus on these expectations. Thirteen of 15 leaders mentioned the importance of observing classrooms to understand where improvement

needed to be made. Data collected from these observations and evaluations helped to inform district goal setting.

Leaders also used testing data to prioritize capacity-building efforts. Leaders identified statewide assessment results as well as national metrics including SAT, AP and ACT results. One central office leader stated, “I utilized my data knowledge to share with the building principal how bad the data in math looks.” Advanced Placement (AP) scores revealed that Wyoma’s students were below the state average scores in math. This leader coupled the two data points together in order to address math deficiencies at the high school. Furthermore, this leader identified the construction of a new Wyoma Middle School that will provide new technology and classroom opportunities. Middle school teachers are, “shifting teaching practices now to be ready for the new building.” This leader believed high school math problems will stand out all the more as a result. Another school level leader identified poor student performance on open response questions as a way to prioritize efforts to build capacity to improve student achievement in writing.

Several building leaders mentioned that they used surveys of teachers and students to collect data. These data, however, were not implemented district wide in a manner that would influence how district leaders prioritize capacity-building efforts. A review of the 2012 strategic plan revealed that professional development surveys for the district were listed as well. These were not referenced by any of the respondents. A central office leader also used a visioning process that was utilized by the middle school architects to understand the strengths of the school and how to improve the school as a whole. This leader used this process in both “math and foreign language” to identify the vision in an ideal world and then set out to achieve those goals.

Overall, this research found that while data was used to prioritize capacity-building actions, little cohesive district-wide prioritization exists. Much of this work has occurred in silos. This was evidenced when one leader described:

> An issue was exposed that while we at leadership have this great vision, none of the principals are going back and sharing what that looks like in a classroom and what the expectation is for teaching and learning.

A school level leader stated that the prioritization process has, "evolved over the years, sometimes it has been very top-down and other times it is what teachers are into." This leader further stated that elementary leaders would work collaboratively to decide what actions they were going to undertake. Given that school leaders do not effectively share the district vision, the prioritization process appears to shift on the whims of the majority.

Fiscal constraints limit actions. Leaders stated that budget limitations hindered their ability to implement some capacity-building efforts. As stated in the district context in Chapter 2, Wyoma has overwhelmingly supported construction projects but has not approved an operational override for the schools. District leaders understand that there are limitations to the financial resources available. Most of the district leaders support the instructional coaching model; however 14 out of 15 district leaders stated a concern about maintaining funding for these positions. A central office leader stated that the district had sought to implement behavioral specialists but could not hire any as a result of uncompetitive salaries. Another central office leader stated that initiatives are not cut because of cost, but may not be started.

Discussion

This study describes the ways leaders in one district implemented capacity building actions for improving achievement and equity for all students. Data analysis produced four primary findings. The first finding suggests leaders have established concrete learning practices by using an instructional coaching model and enhancing professional development. The second finding suggests leaders have created a supportive learning environment through creating trust and establishing time. The third finding suggests that leadership is reinforcing learning by creating a sense of urgency for the work as well as providing feedback for teacher practice. The final finding suggests that while district leaders independently prioritize capacity-building efforts for their individual schools, there is not a cohesive process in place to prioritize capacity-building efforts across the district.

The following sections discuss: (1) the ways in which these findings connect to prior scholarship and (2) the potential implications these findings may have for district leaders building the capacity of their organization. Many of the findings represent initiatives and work that are in their infancy. All indicators from this research study appear to demonstrate that Wyoma is making all the right moves to successfully build capacity.

Capacity-building by Establishing Concrete Learning Practices

District leaders are charged with the moral imperative to enact complex, system-wide goals that go "beyond the rhetoric of 'all students can learn' by developing programs, policies, and teaching strategies that lead to higher levels of achievement" (Cawelti, 2001, p. 31). Consistent with the research, Wyoma Public Schools district

leaders have developed programs to shift teaching practice across the district. Deploying the instructional coaching model throughout the district has begun to shift teacher practice. This coaching model is directly impacting the knowledge and skills necessary to build capacity and district leaders have committed to supporting the financial resources necessary for sustainment (Spillane & Thompson, 1997). In building the knowledge and skills of the teachers, district leaders are enhancing the human capital necessary to achieve organizational goals (Wahlstrom et al., 2010).

The instructional coaching model also shows district leaders' attempt to use group and system learning to embed new thinking, practices and experiences to transform the organization (Cook & Collinson, 2006). In attempting to build capacity to improve student achievement, Wyoma district leaders have used a practical action of deploying instructional coaches to provide clarity on how to actually build capacity (Leithwood, 2010).

Another critical connection to past scholarship is the quality of professional development available to the district (Bryk et al., 2010). District leaders have taken ownership of the past problems regarding poor professional development. In creating pathways to build better professional development through the newly formed PD committee and by analyzing various forms of data, district leaders are working to improve the quality of the teacher.

"[Districts] must broadly own human capital management in order to realize the goal of ensuring a *high level* [emphasis added] of instruction in every classroom" (Curtis & Wurtzel, 2010). Wyoma district leadership owns their responsibility of human capital management in order to produce the best student possible.

Consistent with Honig (2012), 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 position to her school budget.

While not discussed as a finding from the interviews or the document review, it is important to note from the district context (Chapter 2) that the district has invested more than $200 million dollars in construction or renovation of schools. The district is currently building a new middle school designed to eliminate severe overcrowding, replace an obsolete structure, and provide technology infrastructure along with a better work environment for teachers than currently available in the century old building. While this is not a specific concrete learning practice, this new school represents a marketing tool to hire and retain quality teachers (Fullan & Hargreaves, 2012).

Capacity-Building by Creating a Supportive Environment

Wyoma district leaders have built a supportive environment by providing the trust and time necessary for teachers to experiment without fear of reciprocity. These elements require thoughtful planning and integrity to attain. District leaders who exercise smart yet strong leadership, as necessary, are able to influence the capacity of the organization (Dinham & Crowther, 2011). Leaders who engender trust and feelings of loyalty have teachers who are more willing to stay late and help solve problems of practice that go beyond the contractual constraints. This was demonstrated in the findings. Leaders can use this leverage they have earned with teachers to build capacity to achieve student improvement.

Prioritization of Capacity-building Actions

The district appeared to be in the beginning phases of effectively using evidence to inform educational practice in a way that leads to improved achievement. For example, central office leaders, 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.

Recommendations

In view of these findings, three primary recommendations have emerged for the practitioners of Wyoma.

First, leaders need to continually check that selected actions are being deployed consistently across the district to build capacity to improve student outcomes. Small and mid-sized districts like Wyoma have small leadership teams. Including instructional coaches, the Wyoma leadership team is only fifteen people. Bryk et al. (2010) describes five essential supports for school improvement and the first of these is a coherent instructional guidance system. Wyoma lacks coordination within the small leadership team. Wyoma should focus on bringing the instructional leadership team together to work on creating the same district message. The district does not have a consistent message and deployment across all schools and levels.

Second, district leaders in Wyoma frequently described their decision-making process as “data driven.” This type of language posits that leaders and educators are not the decision-making authority of the district. This is contrary to Honig’s (2008) sociocultural learning view that individuals should engage with others as well as the

various artifacts or tools in data analysis. District leaders should use data wisely to make meaningful connections (Wayman et al., 2012) that inform actions to improve achievement and equity.

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

Using data should not be intimidating for leaders or educators. Data should not drive educational decision-making. Using the aforementioned actionable steps, district leaders can implement improvement strategies for both achievement and equity by being data-informed.

Finally, throughout the interview responses a theme emerged of initiative overload. This was most evident when instructional coaches described their expanded responsibilities that included teaching classes. As a district leadership team, Wyoma should limit the initiatives that are being undertaken at any one time. Practitioners should annually revisit the strategic planning process. Revisiting this process frequently will allow for leaders to decide initiatives that are succeeding or failing.

Conclusion

This individual study explored district leaders' actions, in one public school district that was making gains at closing the achievement gap, to build capacity for improving achievement and advancing equity. This individual study concluded that leaders attempted to build capacity by using concrete learning practices, creating a supportive learning environment, and being leaders that reinforce learning. This study also concluded that data use should inform the leaders' decision making process rather than drive quick, unsustainable actions. Improving achievement and equity is complicated work. This work is essential to resolve the inability of districts to actually build capacity (Cosner, 2009). This study's findings can serve as a guide for practitioners who are working to implement capacity building initiatives so the district can attempt to achieve complex goals of improving achievement and equity system-wide.

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.

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[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.

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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?*