Opportunity to Learn: the Role of Interactions in Understanding and Addressing Educational Inequities

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BOSTON COLLEGE

Lynch School of Education

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OPPORTUNITY TO LEARN: THE ROLE OF INTERACTIONS IN UNDERSTANDING AND ADDRESSING EDUCATIONAL INEQUITIES

Dissertation in Practice by

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submitted in partial fulfillment of the requirements for the degree of Doctor of Education

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Opportunity to Learn: The Role of Interactions in Understanding and Addressing Educational Inequities

by

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Abstract

A number of scholars are examining factors hindering student performance. Scholars suggest that understanding these factors is critical knowledge for leaders to cultivate as they work to address elements within their school or district that need to change if student learning is to improve. What is often overlooked in the literature is how educators understand the achievement gap and the impact this understanding has on the learning environment. Exploring how district- and school-level leaders understand disparities in student performance and how these understandings then influence the work of leadership may offer insight into factors hindering student performance. The study was conducted in a small, diverse urban district designated by the state as low performing based on state indicators.

Many scholars have explored interactions among leaders as a factor hindering student performance. These researchers indicate the significance of the role that interactions between district- and school-level leaders play in school improvement efforts. Although this is a central focus area in the literature, there is limited scholarship on how those interactions specifically impact leaders' understanding of barriers to students' opportunity to learn. Therefore, analyzing these relations may result in an increased awareness of their impact on the learning environment. This single case study uses document reviews and interview data to analyze leader relations and practice.

Findings reveal interactions among leaders resulted in an understanding of barriers in the learning environment; lack of trust hindered some relations but despite this, all leaders engaged in tasks intended to enhance student learning.

Opportunity to Learn:
Understanding and
Addressing
Educational Inequities

Executive Summary Dissertation in Practice

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Context and Background

The release of *A Nation at Risk* in 1983 marks a defining moment in the history of American education, heralding the advent of standards-based educational reform. Whereas previous reform efforts worked to provide *equal* access to education for minority groups (e.g., *Brown v. Board of Education*, Civil Rights Act of 1964, Elementary and Secondary Education Act, Amendments of 1966, Rehabilitation Act of 1973, Education for All Handicapped Children Act of 1975), the standards-based reform movement focuses on *excellence* for *all*. Providing the same to all may at times create unfair and unjust circumstances leading to greater levels of inequity and injustice. As a result, there are times when

PROVIDING THE SAME TO ALL MAY AT TIMES CREATE UNFAIR AND UNJUST CIRCUMSTANCES LEADING TO GREATER LEVELS OF INEQUITY AND INJUSTICE. "persons may be treated and rewarded unequally and also justly" (Green, 1983, p. 324). While some examples of inequalities are in fact just, inequities are never just.

In the pursuit of excellence, the role of standards continued to gain strength, culminating in the reauthorization of the Elementary and Secondary Education Act of 1965, now commonly referred to as the No Child Left Behind Act of 2001 (NCLB). With bi-partisan support for the enactment of NCLB, standards-based educational reform emphasizing standards, assessments, and accountability "was catapulted into national policy" (Foorman & Nixon, 2006, p. 163). In order "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education" (20 U.S.C. 6302 § 1001), NCLB established a test-based accountability system (Hamilton, 2003; Hamilton & Koretz, 2002). Test-based accountability systems include four major components: goals (i.e., rigorous standards), measures (i.e., high-stakes state tests), targets (i.e., adequate yearly progress), and consequences (i.e., school transfer options, supplemental services, corrective actions, and restructuring) (Hamilton & Koretz, 2002).

Since the authorization of NCLB in 2001, there is little evidence to suggest that the current accountability system is having a positive effect on long-standing equity issues (Harris & Herrington, 2006). Even though the ultimate effectiveness

of current federal and state policy is yet unknown, policymakers continue to show unwavering support for the pairing of rigorous standards to test-based accountability. Most recently, support for this pairing was demonstrated by the provision of federal funding to the assessment consortiums of SMARTER Balanced and Partnership for Assessment of Readiness for College and Careers (PARCC) to support the development of a national testing system that will assess the Common Core State Standards (CCSS) adopted by 45 out of the 50 United States of America (Achieve, Inc., 2013; Massachusetts Department of Elementary and Secondary Education, 2011; SMARTER Balanced Assessment Consortium, 2012; U.S. Department of Education, 2013).

While efforts to raise standards and improve assessments deserve thoughtful consideration in the "landscape of educational policy, they are not effective drivers toward significantly changing the conditions for students who are in need....For a student, or to a parent whose child is academically drowning, simply moving the shoreline further away is not compelling" (Schott Foundation for Public Education, 2012, pp. 10-11). Instead, attention must turn towards formulating "a support-based reform agenda focused on creating the learning environment and condition in which...all children will have an opportunity to learn and succeed" (Schott Foundation for Public Education, 2012, p. 11).

Purpose of Study

The most recent "report cards" from the National Center for Education Statistics (NCES) highlight enduring and substantial achievement gaps. In these reports, disaggregated data from the National Assessment of Educational Progress (NAEP) reveal statistically significant discrepancies between the performance of African-American and Hispanic students and their White, non-Hispanic peers (NCES, 2011a, 2011b). Equally large performance gaps separate low-income from middle- to high-income students (NCES, 2011a, 2011b). And, although less attention has been focused on measuring, monitoring, and reporting changes experienced by English language learners (ELL) and students with disabilities (SD), considerable performance gaps also exist for these student populations (NCES, 2011a, 2011b). Equally alarming, national data exposes sizable differences in graduation rates when presented by race/ethnicity. These on-going, statistically

significant disparities raise critical questions regarding educational equity and students' opportunity to learn within the public school system.

Addressing long standing disparities in student performance calls for systemic change, a theme that resounds throughout and across the work of many educational practitioners, scholars, researchers, and advocacy groups. Igniting such a transformational change requires "step[ping] outside the situation, make[ing] sense of it, and reframe[ing] the problem" (Grogan & Shakeshaft, 2011, p. 54). Part of reframing the problem involves a collective shift in thinking that moves away from viewing disparate outcomes as an "achievement gap," which too often reinforces the beliefs and attitudes of some that the root cause of widely discrepant outcomes stems from underperforming students' lack of ability to achieve at high levels, and towards seeing disparate outcomes as an "opportunity gap," which places the onus for divergent outcomes squarely upon the educational system. This essential shift in thinking emphasizes that disparities in outcomes for students are absolutely "not a reflection of their potential nor their abilities—but a direct result of denying them equitable supports and resources they need to be fully engaged and succeed" (Schott Foundation for Public Education, 2012, p. 2). In an effort to further explore the "opportunity gap" that exists for many students, the purpose of this qualitative research study was to explore how district- and school-level leaders' understanding of the "nature of the gap" influences the work of leadership focused on addressing disparities in student performance related to race/ethnicity, class, and/or disability.

THIS STUDY SOUGHT TO ANSWER TWO OVERARCHING RESEARCH QUESTIONS:

- HOW DO DISTRICT- AND SCHOOL-LEVEL LEADERS
 UNDERSTAND DISPARITIES IN STUDENT PERFORMANCE
 RELATED TO RACE/ETHNICITY, CLASS, AND/OR DISABILITY?
- HOW DO THESE UNDERSTANDINGS THEN INFLUENCE THE WORK OF LEADERSHIP FOCUSED ON ADDRESSING DISPARITIES IN STUDENT PERFORMANCE RELATED TO RACE/ETHNICITY, CLASS, AND/OR DISABILITY?

Methodology

Under the umbrella of qualitative research designs, a case study approach was selected, "which focuses on understanding the dynamics present within single settings" (Eisenhardt, 1989, p. 534). Yin (2008) explains "a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident" (p. 18). Conducting a single case study allowed the research team the opportunity to fully analyze all aspects of the study in depth.

Sample and participant selection. This qualitative case study began by identifying a school district and superintendent through the review of district profiles on the Massachusetts Department of Elementary and Secondary Education website. Once a district was identified, the strategies of purposeful and snowball sampling were used to identify school-level leaders, as well as additional district-level leaders. To mitigate the risk of coercion, the superintendent of the district was asked to name more people than needed for the research study sample, and research team members have kept confidential who was, in fact, approached for recruitment. To further assure confidentiality, an administrator's decision regarding whether or not to participate in the research study was not shared with the superintendent.

Data collection. Data was collected primarily through semi-structured interviews and then supplemented by the gathering of documents recommended by participants during their interviews. The researchers used purposeful sampling for the identification and collection of relevant school and district documents. The collection and analysis of document data offered researchers the opportunity to crosscheck and verify interviewee responses, as well as the conclusions being drawn by the researchers as they engaged in data analysis. This process of verification supported the triangulation of data and thus strengthened the trustworthiness of the study's findings and final conclusions.

Data analysis. This research study followed the three components of data analysis described by Miles and Huberman (1994): (a) data reduction, (b) data display, and (c) conclusion drawing/verification. Once data was entered into a

data display, several tactics were used to both draw and verify conclusions. Ultimately, the researchers aimed to draw conclusions that have been rigorously tested for "their plausibility, their sturdiness, their 'confirmability'—that is, their validity" (Miles & Huberman, 1994, p.11).

Findings and Discussion

The fourteen participants involved in this study shared their perspectives and revealed that they engaged in interactions that contributed to their understanding of the nature of the achievement gap. Some leaders in the New Hope School District recognized that disparities in student outcomes was "not a reflection of their potential nor their abilities—but a direct result of denying them equitable supports and resources they need to be fully engaged and succeed" (Schott Foundation for Public Education, 2012, p. 2). In turn, this understanding influenced their work focused on addressing disparities in student performance related to race/ethnicity, class, and/or disability. This was evident in both participant responses and a full review of documents.

This research study applied the distributed leadership theoretical framework to explore the following research questions: How do district- and school-level leaders understand disparities in student performance related to race/ethnicity, class and/or disability? How do these understandings then influence the work of leadership that focuses on addressing disparities in race/ethnicity, class, and/or disability? The distributed leadership framework allowed for a focus on interactions and the practice of leadership (Spillane, 2006; Spillane et al., 2004; Spillane et al., 2009, Spillane & Sherer, 2011). Specifically, the practice of leadership focused on the interactions of district- and school-level leaders and aspects of their work such as the tools and routines utilized to address disparities in student performance and broaden students' opportunity to learn (Spillane, 2006; Spillane & Sherer, 2011).

In this study four researchers (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014) explored how district- and school-level leaders' understanding influenced the work of addressing barriers inhibiting students' opportunity to learn. In an attempt to answer the overarching research

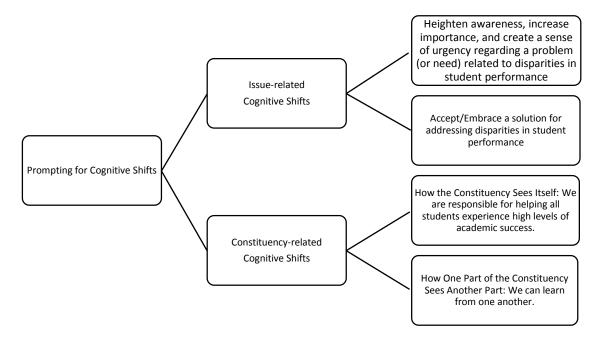
questions, each researcher examined separate aspects of the central phenomenon, including:

- The specific shifts in thinking that district- and school-level leaders
 identified as needed before disparities in student performance related to
 race/ethnicity, class, and/or disability could be effectively addressed, as
 well as the strategies district- and school-level leaders used in their
 attempts to prompt these shifts in thinking (Allwarden, 2014).
- The professional learning leveraged by district-level leaders for schoollevel leaders as an action to further learn about, understand, and address the barriers that may be inhibiting students' opportunity to learn (Talukdar, 2014).
- The data analysis structures and routines that district- and school-level leaders perceived to be essential in understanding and addressing disparities in student performance related to race/ethnicity, class, and/or disability, as well as promoting students' opportunity to learn (Potenziano, 2014).
- The influence that interactions between district- and school-level leaders
 had on their understanding of barriers to students' opportunity to learn,
 as well as the influence that existing ties between district- and school-level
 leaders had on their practice aimed at improving students' opportunity to
 learn (Zaleski, 2014).

Prompting cognitive shifts. The findings from this portion of the case study include (a) district-and school-level leaders used a range of framing strategies to prompt a common set of issue-and constituency-related cognitive shifts and (b) a correlation existed between leaders' use of particular framing strategies and their "level" of leadership (Allwarden, 2014). The cognitive shifts that district- and school-level leaders were attempting to prompt are presented in Figure 1 and have been divided into two broad categories: issue- and constituency-related cognitive shifts.

Issue-related cognitive shifts focus on the problems and solutions related to student performance disparities. When attempting to prompt for issue-related cognitive shifts, district- and school-level leaders' choice of framing strategies revealed similarities and differences. Whereas both district- and school-level

Figure 1. Prompting for Cognitive Shifts



leaders used data to quantify and clarify the magnitude of a problem in order to heighten awareness, increase importance, and create a sense of urgency (e.g., data war rooms, data walls, excel spreadsheets—all color-coded to emphasize the distribution of students by achievement level), district- and school-level leaders differed in their use of framing strategies for getting their audience to accept a solution. District-level leaders focused on offering proof that an idea worked. For example, they frequently leveraged the success of the Level 1 school with implementing inclusive practices. District-level leaders also focused on explicitly establishing the direction (e.g., schools had to establish a data war room; principals had to spend 2.5-3 hours a day in classrooms). School-level leaders, on the other hand, concentrated on presenting solutions as best practice (e.g., students analyze their own data, set individual goals, and track their progress; teachers use performance data to inform their instruction and select appropriate interventions). Furthermore, data collected from leaders of Level 1 and Level 2 schools revealed that these leaders also focused on framing issues as having leverage (e.g., being strategic, focusing on and prioritizing the "right things") and connecting solutions to their school's mission.

Constituency-related cognitive shifts involve a change in how an audience views themselves, their work, or others within the school district. The framing strategies that district- and school-level leaders used to prompt constituencyrelated cognitive shifts were the same. In order to foster a sense of responsibility for helping all children experience high levels of academic success, leaders focused on redefining and re-envisioning the constituency's role and responsibilities within the organization (e.g., district-level leaders working side by side principals; principals spending 2.5-3 hours a day in classrooms; using data to inform instruction). In order to promote the idea that we can learn from one another, leaders concentrated on building and acknowledging the competency and capacity present within the constituency. While the framing strategies used by district- and school-level leaders were the same, important differences were noted regarding the cognitive shift that emphasized learning from one another. Whereas district-level leaders spoke of the schools learning from one another (e.g., communicating regularly, sharing successful practices), school-level leaders spoke of learning from individuals, or groups of individuals, within their school (e.g., data meetings, common planning time). Another notable difference emerged with the disaggregation of data collected from leaders of Level 1 and Level 2 schools. These leaders used the framing strategy of redefining the students' role and responsibility within the organization to prompt the following cognitive shift among students: we are capable (e.g., knowing their data, setting goals, tracking their progress).

Social ties among leaders. Social capital theory reminds us that the structure of ties relate to how knowledge and resources flow to individuals in the network (Daly & Finnigan, 2011), and are considered to be a determinant in actions (Daly & Finnigan, 2010, 2012; Leanna & Pil, 2006), and that trusting, cohesive, partnerships are an essential element to the tie relation (Bryk & Schneider, 2002; Daly & Finnigan, 2011, 2012; Nahapiet & Ghoshal, 1998).

"I WISH WE COULD COME
TOGETHER MORE AS A
COLLECTIVE LEADERSHIP
GROUP IN THE DISTRICT.
WE'RE UNABLE TO. IT'S NOT
THE CULTURE...YOU HAVE TO
BE CAREFUL WHAT YOU SAY
AND HOW YOU SAY IT AND
WHEN YOU SAY IT; IT
SOMETIMES CAN COME BACK
AND GET YOU."
BUILDING LEADER JAYDEN

Therefore, strengthening social ties is one way to improve collaboration among district- and school-level leaders. After analyzing the data, the existing social ties and their influence on leadership practice as it relates to students opportunity to learn became clearer. As such, the following findings emerged: (a) lack of trust hinders building level leader ties with one another, (b) district leaders have greater ties and reciprocity among themselves than building leaders, (c) despite specific building and district relations, ties are evident between district- and school-level leaders, and (d) regardless of tie relations, all leaders engage in tasks to enhance student learning (Zaleski, 2014).

Lack of trust hinders building-level leader ties with one another. Figure 2 displays the first analysis of tie relations, which is the social network among building leaders. Each node represents one of the six interviewed building leaders and the arrows reflect the direction of the connection. Participant responses revealed that there are no mutual ties indicated in the group. Mutual ties in this study refer to an aspect of tie strength that involves a reciprocal sharing of information (Granovetter, 1973).

District leaders have greater ties and reciprocity among themselves than building leaders. Relationships between district leaders are represented in Figure 3. Here, it is noted that there are greater ties than in the building leader network as well as greater reciprocity. However, of the eight district leaders interviewed, there are no more than three mutual ties between them. Trust was mentioned as a factor among half of the district leadership team. Further interview data reveals that despite the nature of building or central office specific relations, this does not hinder the interactions between school and district level leaders.

"YEAH, I THINK PART OF IT YOU BUILD TRUST AS YOU GET TO KNOW PEOPLE...I ALREADY KNEW VERONICA COMING INTO THE POSITION ALREADY, AND I'VE LEARNED OVER THE PAST TWO YEARS TO HAVE A LOT MORE TRUST FOR SEAN, LOGAN, AND COTE...I THINK THIS GROUP HAS A GOOD WORKING DYNAMIC. I MEAN, DO WE GO BACK AND FORTH WITH EACH OTHER SOMETIMES ON SOME MATTERS, OF COURSE WE DO, BUT JUST OUT OF FRUSTRATION FOR THE WHOLE JOB AND LACK OF RESOURCES." **DISTRICT LEADER ADRIANNE**

Figure 2. Sociogram for School-Level Leaders

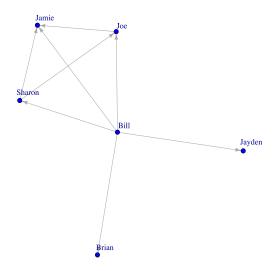
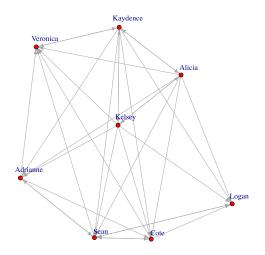
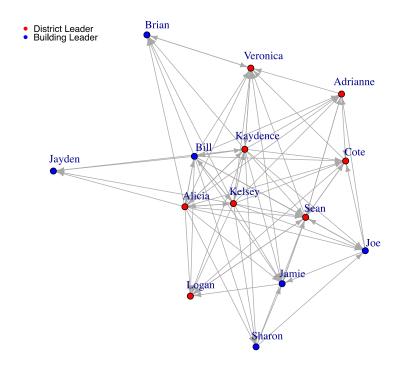


Figure 3. Sociogram for District-Level Leaders



Despite specific building and district relations, ties are evident between districtand school-level leaders. Despite the fact that trust impacts at least half of the relations at the school and district level, Figure 4 highlights that all building leaders have incoming ties from at least three district leaders. Figure 4 also highlights that more than half of the district leadership team is actively seeking out building leaders. Also, all five district leaders engaging with principals share at





least one mutual tie with a building leader. Similarly, four of the six building leaders (with the exception of Sharon and Jayden) revealed that they are seeking out district leaders to exchange knowledge, ideas, and seek advice. The two leaders not seeking out district leaders attribute this to a perception that central office has too much on their plate and other resources are more easily accessible at the building level.

"I GUESS PART OF IT IS THEY ARE PEERS OF MINE AND IT'S A NATURAL WAY
FOR ME TO KIND OF EXPAND THE KNOWLEDGE THAT I NEED BY WORKING
WITH THEM, AND PROBABLY PART OF IT IS PROXIMITY. THEY'RE HERE IN THE
SAME OFFICE WITH ME, I CAN SIT IN MY OFFICE AND SCRATCH MY HEAD AND
TRY TO FIGURE IT OUT OR I COULD WALK DOWN THE HALL AND TRY TO
BRAINSTORM AND TRY TO BRAINSTORM IT WITH THEM."
DISTRICT LEADER COTE

Complementary Findings

The following discussion synthesizes insights drawn from the four individual studies. These insights were gained by searching for complementary results based on the "complementarity model of triangulation" (Erzberger & Kelle, 2003, p.469). Applying the complementarity model of triangulation involved reviewing the individual studies for findings that complemented one another. Because the complementary findings were drawn from individual studies that highlighted different aspects of the central phenomenon, these findings offer a stronger depiction of the topic being analyzed (Erzberger & Kelle, 2003) and further inform current understandings about the work of leadership focused on addressing disparities in student performance and enhancing students' opportunity to learn.

Level 3 status: Catalyst for change. Gioia and Chittipeddi (1991) emphasized that initiating change often triggers cyclical patterns of acquiring knowledge and taking action. Insights from across the studies revealed that the designation of Level 3 state accountability status served as a catalyst for change in the New Hope School District. The assignment of Level 3 status led to the development of new organizational structures and routines, which, in turn, supported patterns of acquiring knowledge and taking action (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Specifically, the development of new organizational structures and routines led to (a) increased opportunities for leaders to interact with one another (Zaleski, 2014) and (b) enhanced opportunities for leaders to engage in professional learning (Talukdar, 2014). Furthermore, since the structures and routines described by district- and school-

level leaders occurred regularly (e.g., weekly, monthly, quarterly), leaders were provided with ongoing support as they grappled with understanding—or further developing their understanding—of barriers hindering students' opportunity to learn (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014).

"THE DSAC TEAM ASSISTED THE DISTRICT BY MEETING WITH SCHOOL AND DISTRICT LEADERS MONTHLY, AND SOMETIMES MORE OFTEN, AND HAS SUPPORTED AND ASSISTED US WITH COLLABORATING, ANALYZING DATA, AND CREATING THE ACCELERATED IMPROVEMENT PLAN."
DISTRICT LEADER SEAN

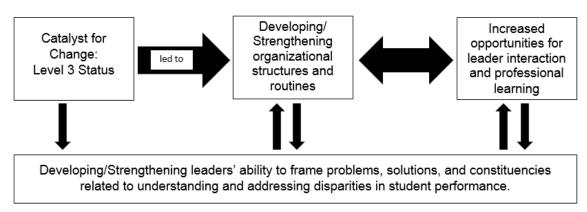
Additionally, the development of new organizational structures and routines provided leaders with a forum for presenting their plans for addressing disparities in student performance, as well as presenting the outcomes that resulted from actions taken.

Figure 5 depicts the relationship between the catalyst for change, the development of organizational structures and routines, and the increased opportunities for leader interaction and professional learning (Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Figure 5 also illustrates the relationship between these three elements and leaders' ability to frame problems, solutions and constituencies related to disparities in student performance (Allwarden, 2014). While the individual researchers of this study looked at specific aspects of leadership in isolation, Figure 5 offers a broader, more complete picture of how these elements interacted and influenced one another in real life.

As a result of the Level 3 status, district-level leaders sought out and established a partnership with the District and School Assistance Center (DSAC), a state sponsored organization. This partnership led to the establishment of new structures and routines which afforded on-going opportunities to conduct indepth analyses of (a) disparities in student performance, (b) barriers in the learning environment, and (c) organizational challenges related to students' opportunity to learn. Grogan and Shakeshaft (2011) emphasize the importance of analyzing situations in an objective fashion and framing issues from a different perspective when working to addressing long-standing disparities in student performance. The partnership with DSAC led to the construction of structures and the development of routines that supported this aspect of leadership work.

As leaders came together to analyze disparities in student performance, barriers in the learning environment, and organizational challenges related to students' opportunity to learn, the professional learning environment within the district was further enhanced. The interactions that took place within this learning environment between district- and school-level leaders were examined as a critical element relating to school improvement (Daly & Finnigan, 2010, 2011, 2012). The superintendent's statement captures the value of these interactions when he offered, "The DSAC team assisted the district by meeting with school

Figure 5. The Interrelationship of Elements Studied



and district leaders monthly, and sometimes more often, and has supported and assisted us with collaborating, analyzing data, and creating the Accelerated Improvement Plan (AIP)." Frequently, interactions between district- and school-level leaders occurred during Administrative Council (ADCO), Full Administrative Council (FADCO), and traveling cabinet meetings (Zaleski, 2014). These meetings offered leaders regular opportunities to engage in professional learning that enhanced their capacity to (a) identify and describe gaps in student performance and (b) consider and explore potential barriers to student learning (Talukdar, 2014). In other words, these meetings offered leaders opportunities "to engage in continuous and sustained learning about their practice in the setting where they actually work...confronting similar problems of practice" (Elmore, 2004, p. 127).

Finnigan and Daly (2010) remind us that sharing knowledge and mobilizing resources embedded in individual interactions is critical to influencing practice and enhancing success in "purposive action" (p. 180). The assignment of Level 3 status triggered the mobilizing of resources to develop new structures and routines, which then enhanced leaders' ability to share knowledge and take purposive action (Allwarden, 2014; Potenziano, 2014; Zaleski, 2014). The actions taken were deliberate (thought about and discussed), developmental (designed to assist with growth and bring about improvement), and progressive (kept moving forward), always with the intent of ensuring that students' opportunity to learn was enhanced. These actions supported understanding student performance disparities and informing solutions to address barriers to students' opportunity to learn.

The leaders in New Hope School District also used organizational routines and structures to help distribute leadership responsibilities (Spillane, 2006). Prior to the Level 3 designation, structures and routines were in place that required district- and school-level leaders to meet. However, leaders were not required to collectively identify and develop a shared understanding of achievement disparities. Following Level 3 designation, enhanced and newly created structures and routines helped promote collaboration and build robust intra-organizational ties (Chrispeels, 2004; Honig, 2004; Togneri & Anderson, 2003). The use of the structures and routines also played a critical role in guiding the New Hope School District in their development of a clearly aligned vision and mission (Harris, Leithwood, Day, Sammons & Hopkins, 2007; Waters & Marzano, 2006).

Structures and routines led to shared understandings and collective action. New Hope School District leaders described specific structures and routines that had been set in place to support collaboration between district- and school-level leaders, as well as to support data use practices. The

PARTICIPANT QUOTES

"AS AN ADMINISTRATIVE
LEADERSHIP GROUP...
WE'VE DONE, LET'S SEE
MONTHLY MEETINGS....
CERTAINLY TALKING ABOUT
THE DATA, TALKING ABOUT
THE IMPLICATIONS OF
DATA....THEN, OKAY, HOW
DOES THIS TRANSLATE INTO
WHAT YOUR TEACHERS ARE
DOING IN THE CLASSROOM."
BUILDING LEADER BILL

"IF I'VE LEARNED ANYTHING *IN MY TIME HERE, EACH* SCHOOL IS A FUNCTION OF THEIR PRINCIPAL, THE LEADERSHIP CULTURE AT THEIR SCHOOL I THINK NOW WITH THIS ACCELERATED *IMPROVEMENT PLAN WHICH* WE ARE IN YEAR TWO OF, I THINK IT WILL HELP MOST *OF THESE LEVEL 3 SCHOOLS MOVE UP AT LEAST ONE* LEVEL...I'M CONFIDENT THEY CAN MOVE UP FROM AT LEAST THREE TO TWO." DISTRICT LEADER LOGAN

Administrative Council (ADCO), Full Administrative Council (FADCO), traveling cabinet, DSAC meetings, and the Accelerated Improvement Plan (AIP) are examples of structures and routines put in place to support collaboration and data use among district- and school-level leaders (Allwarden, 2014; Potenziano, 2014; Zaleski, 2014). In addition, these structures allowed leaders to engage in ongoing professional learning (Talukdar, 2014). Spillane (2006) describes this

leadership practice as "a product of the joint interactions of school *leaders*, *followers*, and aspects of their *situation* such as tools and routines" (p. 3).

According to the distributed leadership framework, the structures used within the New Hope School District can be thought of as tools and routines because they involved recurring patterns of "interdependent actions, involving multiple actors" (Feldman & Pentland, 2003, p. 311). For instance, the traveling cabinet structure supported the routine of leaders meeting regularly to engage in ongoing professional learning that involved the frequent review and analysis of student performance data (Potenziano, 2014; Talukdar, 2014). Established structures and routines also sought to allow district-and school-level leaders to develop an understanding of the opportunity gaps present in the learning

environment (Allwarden, 2014; Zaleski, 2014). The action planning template and the AIP that leaders created in partnership with DSAC facilitated this understanding (Zaleski, 2014). As a result, leaders' ability to recognize barriers was evident in the areas of leadership skills, curriculum alignment and implementation, and instructional practice. More specifically, leaders identified barriers specific to students with disabilities, students from low-income households, Latino/a students, and English language learners (ELL). Additionally, the implementation of enhanced and newly developed structures and routines helped to expose inequitable practices in the New Hope School District.

"THE SCHOOLS WE'RE STILL STRUGGLING WITH, YOU MAY HEAR [PRINCIPALS] SEPARATE OUT ONE POPULATION OF STUDENTS FROM ANOTHER, BUT THE SCHOOLS THAT WERE A SUCCESS, LIKE I SAID WITH THE DATA, THEY'RE ALL INCORPORATED IN; IT'S ALL STUDENTS ALL THE TIME. AND THERE'S A BIG SHIFT IN THE DISTRICT AROUND INCLUSIVE TEACHING." DISTRICT LEADER **ADRIANNE**

District- and school-level leaders interviewed consistently referred to students receiving special education as the sub-group most impacted by the achievement gap in the New Hope School District. Research findings revealed that one of the barriers to student learning for students with special needs was inequitable access to the general education curriculum (Allwarden, 2014; Potenziano, 2014;

Talukdar, 2014; Zaleski, 2014). Greene (1983) explains that equality in education focuses on "inputs" and ensures that the same is provided to all, while equity places emphasis on "outputs" and focuses on achieving the same outcomes for all. Lindsey et al. (2009) contend accommodations that account for differences, such as race and ethnicity, language, and ability are sometimes needed in order to achieve educational equity.

Students receiving special education services in the New Hope School District were often educated in separate settings. Research evidence revealed there were some schools that deliberately encouraged equitable learning environments for special education students. When comparing schools across the district, data indicated that schools utilizing co-teaching and inclusion models earned higher state accountability ratings than those that did not. By focusing on differentiating instruction to meet the needs of all students within the general education classroom, leaders within the New Hope School District believed that school staff were moving closer to creating educational equity while improving students' opportunity to learn.

When examining how district-level leaders sought to leverage professional learning opportunities in the New Hope School District, leaders took advantage of improved structures and routines resulting from the DSAC partnership (Potenziano, 2014; Talukdar, 2014). Knapp (2003) reported "professional learning" could involve changes in one's capacity for practice (i.e., changes in professionally relevant thinking, knowledge, skills, and habits of mind) and/or changes in practice itself (enacting the new knowledge and skills in one's daily work)" (pp. 112-113). New structures and routines, such as traveling cabinet meetings, not only resulted in increased interaction between leaders, but also offered occasions for leaders to build their data analysis and decision-making capacity (Talukdar, 2014; Zaleski, 2014). Further, structures and routines promoted sustained, jobembedded professional learning (e.g., ADCO, FADCO, and traveling cabinet meetings, learning walks, and 9-day instructional coaching cycle) and allowed for frequent collaboration and discussion of factors influencing teaching and learning (Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Given the evidence of deficit thinking that existed among some school staff, particularly as it related to special

education students, district leaders also sought to leverage professional learning to prompt cognitive shifts (Talukdar, 2014).

As district- and school-level leaders' understanding developed, so did their ability to influence how others understood factors contributing to disparities in student performance related to race/ethnicity, class, and/or disability. Influencing how others understand a situation is a critical aspect of leadership work, and the ability to effectively frame the problems, solutions, and constituencies related to disparities in student performance becomes a powerful means for shifting the thinking of others. After all, when effectively done, influencing how others understand a situation can positively impact individuals' perceptions of their work and provide a powerful source of inspiration and motivation (Awamleh & Gardner, 1999; Goldman & Ospina, 2008).

The interactions and professional learning that occurred among leaders as a result of the structures and routines that were in place not only led to an understanding of the nature of the gap, it also led to an influence on their work, which focused on addressing disparities in student performance (Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Specifically, leaders recognized that ongoing data analysis was critical to teaching and learning improvements. The task of analyzing data was distributed among all leaders for the specific purpose of improving the professional capacity to identify gaps in learning with the goal of eliminating barriers. For instance, when looking at data, one building leader recognized that low-income and Latino students lacked opportunities pertaining to course placement; it was then brought to the attention of a district leader who subsequently mandated that all students take at least one Advanced Placement course prior to graduation. Similarly, as a result of student performance data analysis, several building-based accelerated improvement plans were strategically created and utilized as tools across the district to enhance the learning environment.

The Accelerated Improvement Plans included specific initiatives and objectives that were designed by school and district leaders as tools to guide their work in an effort to eliminate identified barriers and enhance student opportunities to learn. Harris, Leithwood, Day, Sammons, and Hopkins (2007) remind us that

school improvement based on a distributed leadership model is not automatic, rather, "much depends on the way in which leadership is distributed, how it is distributed and for what purpose" (p. 9). The strategic approach utilized to address barriers in the learning environment in the New Hope School District as mentioned above reinforces that they subscribed to a distributed leadership model. It is clearly indicated that school and district leaders have gained an understanding of barriers in the learning environment pertaining to low-income students, as well as students with disabilities, as a result of their interactions with one another. However, further data reveals that despite these interactions some school leaders need additional support as they work to continually understand and address barriers in the learning environment.

School leaders need more central office support. During interviews some of the school level leaders indicated that they need more support from district level leaders regarding data analysis. District leader Kelsey acknowledged that district level leaders tend to assume everyone including administrators knows how to use data, and she further offered:

We need to make sure that everybody understands what it is that we're analyzing, and exactly what a particular tool is able to do for us. So if we're looking at benchmarks in fluencies, people need to be aware that we are looking at fluency, and just fluency, and then extrapolating from that what that means, okay, that people need to understand what that can do for you and what it can't do for you.

Daly and Finnigan (2010, 2011) emphasize that schools are rooted in the wider efforts of the district, and district-level leaders may have a direct influence on change initiatives and outcomes through the development of network ties between district- and school-level leaders. In an effort to examine leader connectedness and its relation to the performance of leadership tasks (Borgatti, Jones, & Everett, 1998), ties and relations among leaders was examined.

Student learning is enhanced regardless of tie relations. District- and school-level leaders revealed that they are engaging in a variety of practices to enhance students' opportunity to learn at the school and district level. This was evident regardless of whether or not trusting ties were formulated and existent between

individuals (Zaleski, 2014). For example, to prompt shifts in thinking and practice among principals and school staff, district leaders fostered and leveraged professional learning activities (Talukdar, 2014). Interview responses suggested professional learning played a role in the way some thought about and in-turn approached their work with particular sub-groups of students (e.g., students with disabilities).

In addition, some district- and school-level leaders appeared more willing to learn from the best practices of schools realizing academic growth. One of the ways in which these educators were able to learn more about successful schools was through professional learning activities (e.g., book studies, belief surveys, case studies, and resource sharing) (Talukdar, 2014). For example, although Jamie shared no outgoing tie connections with building leaders, she acknowledged that she engaged in efforts with Bill and Joe to create a school within her school to address students and subgroups with risk factors such as poor attendance, retention, and high discipline referrals (Zaleski, 2014).

The systems and structures (ADCO, FADCO, traveling cabinet) are supporting leaders with enhancing students' opportunity to learn across the district. One school in the district did move from a Level 2 to Level 1 status last year; this is the highest performance rating assigned by the state. District leaders are diligently working with principals to close gaps in performance via the structures in place, and district leader Sean is working with principals on improvement planning at the building level. District leader Alicia also works with principals on attendance, dropout rates, and graduation rates within a four-year period of time. Although there was a lack of tie relations at the building and district level, this did not result in initiatives being stalled (Zaleski, 2014). Rather, despite the nature of relations in the New Hope School District, the organizational structures in place resulted in both building and district leaders being actively engaged in practices that were intended to support enhancing students' opportunity to learn (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014).

Recommendations for Practice

First and foremost, we recommend that the New Hope School District keep organizational structures intact. ADCO, FADCO, and the traveling cabinet offer

building leaders direct oversight and support from central office leaders. Spillane (2013) states that the advantages of organizational structures and routines are that they "allow efficient coordinated action; [provide] a source of stability; and reduce conflict about how to do work". Furthermore, the use of organizational structures and routines that district- and school-level leaders institute has significant potential to enhance students' opportunity to learn. This was best evidenced in the New Hope School District when district- and school-level leaders analyzed student data with uniformity resulting in at least one school narrowing achievement gaps and advancing to Level 1 status. School districts that embrace these types of structures and routines increase the likelihood that interaction among administrators will take place which will allow knowledge and resources to flow through the network of leaders, ultimately informing the work of practitioners (Daly & Finnigan, 2010). Sustainability is also likely enhanced when these structures and routines are in place. Hargreaves and Fink (2006) emphasize "sustainable leadership matters [as it] preserves, protects, and promotes deep and broad learning for all in relationships of care for others" (p. 23). In an effort to enhance relations, increase support from central office leaders to building leaders, and enhance success at the building level, it is recommended that the district consider creating prescribed structures/routines that require school-level leaders to visit each other's schools to analyze data together and share successful practices. In doing so, school-level leaders are also less likely to feel unsupported and isolated from one another.

Varying tie relations may be a result of competitive pressure at the local level to perform and meet accountability demands (Zaleski, 2014). Daly (2009) points out that as a result of high stakes accountability, relations between school and district leaders tend to become less collaborative and more official and organized. One way to remedy this is by fostering the professional growth of leaders and differentiating supports for principals depending on their needs as instructional leaders. Daly and Finnigan (2010) highlight that "leadership development programs both outside and within districts have the unique opportunity to create the space for reflection and dialogue for leaders to explore these tensions and how they may be brought into balance" (p. 520). Therefore, it is essential that school districts add a component to their existing professional development plans that specifically promote the building of relationships among

leaders across the district in a way that supports collaboration (Talukdar, 2014; Zaleski, 2014). The National Institute for School Leadership Program (NISL) is one example of a program designed to assist leaders with collaborating and enhancing their skills in the face of accountability demands (NISL, 2013). Participation in the NISL program also holds the potential to increase the social capital among leaders and assist with policy implementation at the local level (Daly & Finnigan, 2010).

District-level leaders should also consider creating opportunities for school-level leaders to strengthen relations and formulate new ties (Zaleski, 2014). Allowing leaders' time to meet and discuss building based concerns without a central office driven agenda may enhance relations as well. Daly and Finnigan (2010) point out in a related study "district[s] will have to avoid the trap of merely providing time and directives to work together as this does not necessarily result in meaningful collaboration between leaders" (p.128). Therefore, practitioners should heed the advice of DuFour and Burnette (2002) by insisting that principals develop improvement plans demonstrating the collective efforts of the team and not merely the work of individuals.

Enhancing connections at the district level will assist with building relations across the district, ultimately improving the overall school climate (Zaleski, 2014). Curtis and City (2009) agree that collaboration is critical and begins at the central office level stating:

Central office departments create teams to do their work most effectively. The superintendent convenes a senior leadership team to shape and drive the direction of the system's work. Effective collaboration is critical to success at all levels of the organization. Yet the knowledge, skills, and dispositions required for collaboration are seldom taught. It is deeply ironic that a skill students need to ensure their future opportunities is one that the adults responsible for their education often do not possess and have not had the opportunity to learn (p. 38).

In order for the central office team to be considered high functioning, there must be a "high level of trust, a willingness to be vulnerable, and comfort with conflict" (Curtis & City, 2009, p.56). District leaders are encouraged to implement and

facilitate team-building activities to work on strengthening partnerships with each other. Incorporating time on meeting agendas for district- and school-level leaders to engage in activities focused on developing authentic relationships is a suggested activity (Curtis & City, 2009). For instance, Curtis and City (2009) suggest leaders complete the Meyers & Briggs Personality Inventory and share results in an effort to enhance relations and build trust. Hargreaves and Fink (2006) emphasize that "investing resources in training, trust building, and teamwork" (p. 267) is a function of sustainable leadership that has long lasting effects.

District leaders should consider expanding liaison support to all principals, and not limit this resource to struggling schools alone (Zaleski, 2014). Honig et al. (2010) point out that central office staff can engage in efforts to support the teaching and learning environment entirely by "taking the case management and project management approaches to their work" (p. 7). Honig et al. (2010) emphasize that the case management approach enables district leaders to utilize their expertise to fully support "the specific needs, strengths, goals, and character of each individual school in their case load" with the goal of working to provide "high-quality, responsive services appropriate to their individual schools" (p. 8). Likewise, the project management approach results in district leaders directly "solving problems that promised to help schools engage in teaching and learning, even if those problems cut across multiple central office units" (p. 8).

District-level leaders should also consider expanding professional learning opportunities intended to eliminate deficit thinking within the district (Talukdar, 2014). The New Hope School District superintendent took positive steps to support principals in their efforts to dismantle deficit thinking and enhance some of the skills needed to assume responsibility for teaching and learning improvements. Moving forward, the superintendent must deepen the dialogue around instructional issues beyond data review. In light of the success of schools that ensured students with disabilities had full access to the curriculum, consideration should be given to expanding the full-inclusion teaching model across the district.

Consideration should also be given to implementing multicultural and anti-racist professional learning opportunities in order to continue to prompt shifts in teacher beliefs. While anti-racist and multicultural education are closely related in the goal to improve student outcomes, Kailin (1998) believes that multicultural education is a non-threatening way to address gaps in student performance because it is focused around building teachers' and students' cultural awareness rather than tackling structural aspects of racism. Kailin (1998) further argues that an anti-racist approach to education must focus on the deliberate dismantling of racism whereas multicultural education strives to broaden teachers' understanding of the diverse histories of students they serve as a means to empower them. It is important to note, however, that ultimately multicultural education and anti-racism both seek raise the academic achievement of students of color while nurturing the growth of all students. By implementing multicultural and anti-racist professional learning opportunities, administrators of the New Hope School District will be better equipped to learn about, understand and address the undeniable correlation between students' race and ethnicity and disparities in student performance.

There are prevailing approaches to multicultural and anti-racist professional development and learning that espouse to reduce the achievement gap while transforming teacher beliefs (Ferguson, 2007; Howard, 2007; Singleton & Linton, 2006; Skrla, McKenzie & Scheurich, 2009). Ferguson (2007) is responsible for putting forth a conceptual framework titled the Tripod Project, which aims to close the achievement gap by addressing the three legs of the "tripod": content, pedagogy and relationships. He argues that in order to reduce achievement gaps, content must be accessible and culturally relevant, pedagogy must involve varied approaches to meeting students' needs, and teachers must develop meaningful relationships with students while maintaining high expectations for ALL students. Skrla et al. (2009) describe the need to use Equity Audits as a means to creating equitable and excellent schools. They contend that by assessing the equity and inequity of programs, as well as teacher quality and achievement, school leaders will be better prepared to develop an action plan that uncompromisingly promotes educational equity. They describe particular skills teachers must develop to improve their practice that include clearly communicating

expectations, stimulating students with high-level tasks, and using an asset-based approach when working with diverse populations.

While experienced, high-quality teachers within the New Hope School District may already possess many of the skills needed to serve most students effectively, Singleton and Linton (2006) argue that in order to reduce the "racial" achievement gap, educators must be willing to engage in courageous conversations about race. Additionally, they and many others (Darling-Hammond & McLaughlin, 1995; Gay & Howard, 2000; Ladson-Billings, 2006; Lawrence & Tatum, 1997; Nieto, 2000; Tatum, 1997) believe it is critical for teachers to explore their own racial identities and consider how it affects their teaching of students, particularly students of color (i.e., Asian American, Hispanic/Latino, Black/African-American, Multiracial and Native American). The research of Singleton and Linton (2006) indicates when white teachers were able to relate to their diverse students experiences, and as they developed cultural awareness or competence, a narrowing of the achievement gap occurred. Given over 90% of administrators and teachers in the New Hope School District are white while over 60% of students identify as students of color, and in light of the existing racial achievement gap as measured across three performance indicators (i.e., state achievement tests, graduation rates, and SAT performance reports), serious consideration should be given to implementing multicultural and anti-racist professional learning opportunities.

Recommendations for Policy Makers

Cohesive relations between school and district leaders are often hindered by accountability policy demands (Daly 2009). This often complicates the job of leaders trying to effect change in schools (Zaleski, 2014). Daly and Finnigan (2010) point out that "effectively responding to state and federal accountability policies at the local level may require a more collaborative relationship among and between central office and school administrators to allow for the diffusion of innovation and knowledge" (p.131). In an effort to strike this balance, district leaders need to develop systems and structures to enhance collaboration within school districts (Potenziano, 2014; Zaleski, 2014). New Hope School District leaders implemented structures to support collaboration in an effort to enhance students' opportunity to learn. Their efforts yielded evidence that some schools

were making progress. This supports the research claim that school culture, namely interactions, is a valuable consideration when enhancing student opportunities to learn. Policy makers should be mindful of this consideration and recognize that accountability demands alone do not promote equitable student opportunities to learn (Harris & Herrington, 2006).

Recommendations for Future Research

While this study contributed to theoretical knowledge and provided a practical contribution to the field of education, future research areas must be noted. First, conducting an exploration of interactions among leaders using an external social capital lens (Leana & Pil, 2006) may prove beneficial. The external partnership with DSAC in this study was instrumental in assisting leaders with responding to accountability demands beyond standardized testing through the development of the Accelerated Improvement Plan. A deeper exploration of external partnerships may yield findings in relation to the importance of these relations when attempting to enhance students' opportunity to learn. Second, an examination of which structures and routines district- and school-level leaders perceive to be important when analyzing student data in multiple districts on a larger scale may prove beneficial. Third, future research should include multiple districts with similar demographics in an effort to gain a more comprehensive and generalizable understandings of how district- and school-level leaders seek to understand and address disparities in student performance.

Finally, because the research team members sought to understand how districtand school-level leaders learned about, understood, and addressed barriers to students' opportunities to learn, interviews were limited to district- and schoollevel leaders. This had potential implications for the overall conclusions drawn. Future research efforts involving staff at all levels could help to address this limitation and assist in uncovering the true impact of efforts aimed at eliminating barriers to students' opportunity to learn.

Conclusion

The literature portrays a multifaceted depiction of how many factors have the potential to impact district- and school-level leaders understanding of the nature of the gap and how these understandings then influence the work leadership

focused on addressing disparities in student performance. It was the intent of the research team to enhance insight in this area for practitioners. It is evident that leaders' interactions and framing of events coupled with how they practice has the potential to enhance the school climate and increase students' opportunities to learn (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Additionally, the purposeful distribution of leadership work provides the opportunity to enhance collaboration and collective action (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Conversely, without proper district-level leadership and leader distribution, effectively addressing disparities in student performance may be hindered.

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Table of Contents

Executive Summary	i
Acknowledgements	xxix
Chapter One, Introduction	1
Statement of the Problem	1
Research Questions	4
Chapter Two, Literature Review	7
Historical Context	7
Opportunity to Learn (OTL)	10
The Challenge of Defining and Measuring OTL	12
A traditional perspective of OTL	13
A sociocultural perspective of OTL.	13
Common ground.	14
Theoretical Framework	15
Chapter Three, Methods	20
Qualitative Research	20
Case Study	22
Sample and Participant Selection	23
District selection: Stage one.	24
District selection: Stage two.	26

District selection: Stage three.	27
School-level leaders and additional district-level leaders.	29
Data Collection	31
Interview	31
Documents	34
Data Analysis	35
Data reduction.	36
Data displays	40
Conclusion drawing and verification	41
Traditional analysis sequence	43
The Use of Triangulation	43
Reliability and Validity	45
Researcher Bias and Assumptions	46
Chapter Four, Description	47
Overview of the New Hope Public School District	48
Disparities in Student Performance	52
State achievement tests	52
Graduation rates	54
SAT performance reports	57

Chapter Five, Opportunity to Learn: The Role of Interactions	in Understanding and
Addressing Educational Inequities	61
Statement of Purpose	61
Relevant Background	64
Shifting to the Role of Social Capital	66
Network Ties	67
Methods	68
Case Study	68
Sample and Participant Selection	68
Data Collection	69
Interviews	69
Documents.	70
Data Analysis	71
Data reduction.	71
Conclusion drawing and verification	73
The Use of Triangulation	74
Reliability and Validity	74
Researcher Bias and Assumptions	75
Results	75
Influential Interactions between Leaders	75

The level 3 status of the district led to leader interactions	76
Organizational structures promote increased interactions among leaders	81
Interactions Resulted in Leaders' Understanding of Barriers	84
Barriers Exist for Disabled, Low Income and Latino Students	86
School Leaders Need More Central Office Support	88
Social Ties among Leaders	90
Lack of Trust Hinders Building Level Leader Ties with One Another	91
District Leaders Have Greater Ties and Reciprocity among Themselves than Build	ing
Leaders	93
Despite Specific Building and District Relations Ties Are Evident between District	t-
and School-Level Leaders	96
Regardless of Tie Relations All Leaders Engage in Tasks to Enhance Student Learn	ning
	98
Discussion	105
Limitations and Future Areas for Research	. 110
Chapter Six, Discussion and Recommendations	112
Complementary Findings	. 114
Level 3 status: Catalyst for change	. 114
Structures and routines led to shared understandings and collective action	. 117
Student learning is enhanced regardless of tie relations	. 122

Recommendations for Practice	124
Recommendations for Policy Makers	130
Recommendations for Future Research	131
Overarching Study Limitations	132
Conclusion	132
References	134
Appendix A	169
District-level Leader Interview Questions	169
School-level Leader Interview Questions	170

List of Tables and Figures

Tables

- **Table 3.1** Tactics for Drawing and Verifying Conclusions 42
- **Table 4.1** New Hope District- and School-level Leaders 50
- **Table 4.2** Percentage of Students Scoring Proficient or Higher on the State Test 51
- **Table 4.3** Four Year Graduation Rate 58
- **Table 4.4** Performance of New Hope Students in Reading and Mathematics on the SAT *60*
- **Table 5.1** Research Questions 72
- **Table 5.2** Description of Codes 73

Figures

- **Figure 1.1** Developing an In-depth Understanding of the Central Phenomenon 5
- Figure 3.1 Single-case Study 24
- Figure 3.2 Sequence of Interview Process 33
- **Figure 3.3** Data Analysis Sequence 44
- **Figure 3.4** Modified Traditional Data Analysis Sequence 44
- **Figure 4.1** PPI Scores from the 2012-2013 School Year *52*
- **Figure 4.2** New Hope School District's ELA MCAS Results 54
- Figure 4.3 New Hope School District's Mathematics MCAS Results 54
- **Figure 5.1** Sociogram for school leaders 92
- **Figure 5.2** Sociogram for district leaders 94
- **Figure 5.3** Sociogram for School and District Leaders 97
- **Figure 6.1** The Interrelationship of Elements Studied *115*

Chapter One¹

Introduction

Statement of the Problem

The most recent "report cards" from the National Center for Education Statistics (NCES) highlight enduring and substantial achievement gaps. In these reports, disaggregated data from the National Assessment of Educational Progress (NAEP) reveal statistically significant discrepancies between the performance of African-American and Hispanic students and their White, non-Hispanic peers (NCES, 2011a, 2011b). Equally large performance gaps separate low-income from middle- to high-income students (NCES, 2011a, 2011b). And, although less attention has been focused on measuring, monitoring, and reporting changes experienced by English language learners (ELL) and students with disabilities (SD), considerable performance gaps also exist for these student populations (NCES, 2011a, 2011b). Equally alarming, national data exposes sizable differences in graduation rates when presented by race/ethnicity. For example, while the graduation rate for White, non-Hispanic students' reaches 82%, the graduation rates for African-American and Hispanic students are at 63.5% and 65.9% respectively (Stillwell, Sable, & Plotts, 2011). These on-going, statistically-significant disparities raise critical questions regarding educational equity and students' opportunity to learn within the public school system.

While the reporting of disaggregated data by student subgroup ensures "a focus on the extent to which an achievement gap exists" (Shaul & Ganson, 2005, p. 152), it fails to provide district- and school-level leaders with the descriptive, diagnostic data

¹ Chapter One was co-authored by Ann F. Allwarden, Phillip J. Potenziano, Sujan S. Talukdar, and Karen J. Zaleski.

needed to identify key factors inhibiting student performance (Braun, 2005; Stecher, 2005). Identifying and understanding factors hindering student performance is critical knowledge for leaders to cultivate as they work to address elements within their school or district that may need to change if student learning is to improve. Boykin and Noguera (2011) also emphasize the need for educators to develop a deep understanding of these underlying complexities, warning:

Before undertaking efforts to eliminate the disparities in outcomes that, in most districts, correspond to the race and class backgrounds of students...it is essential that educators understand the nature of the gap and why it exists. Absent a clear understanding of the causes of the gap, it is easy for schools to adopt strategies that either do not work or, in some cases, even exacerbate the problem (p. 1).

Addressing long standing disparities in student performance calls for systemic change, a theme that resounds throughout and across the work of many educational practitioners, scholars, researchers, and advocacy groups. Igniting such a transformational change requires "step[ping] outside the situation, make[ing] sense of it, and reframe[ing] the problem" (Grogan & Shakeshaft, 2011, p. 54). Part of reframing the problem involves a collective shift in thinking that moves away from viewing disparate outcomes as an "achievement gap," which too often reinforces the beliefs and attitudes of some that the root cause of widely discrepant outcomes stems from underperforming students' lack of ability to achieve at high levels, and towards seeing disparate outcomes as an "opportunity gap," which places the onus for divergent outcomes squarely upon the educational system. This essential shift in thinking emphasizes that disparities in outcomes for students are absolutely "not a reflection of their potential nor their

abilities—but a direct result of denying them equitable supports and resources they need to be fully engaged and succeed" (Schott Foundation for Public Education, 2012, p. 2). In regards to the notion of providing equitable supports and resources, Katie Haycock, director of The Education Trust, contributed the following quote to a press release entitled "A Dream Deferred: 50 Years after Brown vs. Board of Education":

We have never made good on the promise of equal opportunity in public education....The fact is, we have organized our educational system in this country so that we take children who have less to begin with and then turn around and give them less in school, too. Indeed, we give these children *less* of all of the things that both research and experience tell us make a difference (The Education Trust, 2004).

In an effort to further explore the "opportunity gap" that exists for many students, the purpose of this qualitative research study will be to explore how district- and school-level leaders' understanding of the "nature of the gap" influences the work of leadership focused on addressing disparities in student performance related to race/ethnicity, class, and/or disability. In this study, the "work of leadership" will be defined as "influencing the community to face its problems....leaders mobilize people to face problems, and communities make progress on problems because leaders challenge and help them do so" (Heifetz, 1996, p. 14). Based on this description, challenging and helping communities to make progress on addressing an identified problem is a key outcome of leadership. Therefore, this study will examine specific ways leaders go about challenging and helping their community to face the problem of student performance disparities (i.e., prompting changes in thinking, leveraging professional learning), as well as specific

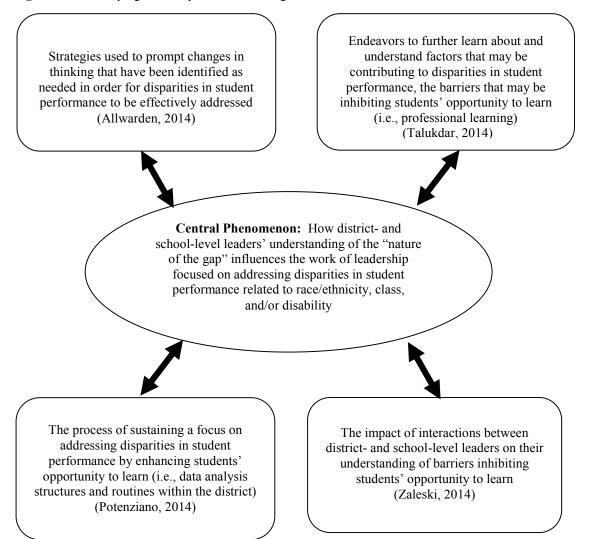
aspects of the situation that may be contributing to the community's collective capacity to address student performance disparities (i.e., data analysis structures and routines, relationships between district- and school-level leaders) (see Figure 1.1).

Research Questions

Facing problems often involves initiating change, and initiating change often triggers cyclical patterns of acquiring knowledge and taking action (Gioia & Chittipeddi, 1991). In order to better understand the actions of district- and school-level leaders, the following research will be explored:

- How do district- and school-level leaders understand disparities in student performance related to race/ethnicity, class, and/or disability? How do these understandings then influence the work of leadership focused on addressing disparities in student performance related to race/ethnicity, class, and/or disability (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014)?
- What specific shifts in thinking do district- and school-level leaders identify as needed before disparities in student performance related to race/ethnicity, class, and/or disability can be effectively addressed? What specific strategies do district- and school-level leaders use to prompt shifts in thinking about disparities in student performance related to race/ethnicity, class, and/or disability (Allwarden, 2014)?
- How do district-level leaders leverage professional learning for school-level leaders as an action to further learn about, understand, and address the barriers that may be inhibiting students' opportunity to learn (Talukdar, 2014)?

Figure 1.1. Developing an In-depth Understanding of the Central Phenomenon



- What data analysis structures and routines do district- and school-level
 leaders perceive to be essential in understanding and addressing disparities in
 student performance related to race/ethnicity, class, and/or disability, as well
 as promoting students' opportunity to learn (Potenziano, 2014)?
- How do interactions between district- and school-level leaders influence their understanding of barriers to students' opportunities to learn (Zaleski, 2014)?

In general, this study aims to further inform the work of district- and school-level leaders by helping them to examine and evaluate specific leadership practices that focus on understanding and addressing disparities in student performance. Spillane and Diamond (2007) point out that "knowing what leaders do is one thing, but a rich understanding of how, why and when they do it, is essential if research is to contribute to improving the practice of leading and managing schools" (p.5). Understanding how, why, and when to engage in specific leadership practices will allow district- and school-level leaders to more effectively and strategically address disparities in student performance—ultimately enhancing students' opportunity to learn.

The concept of opportunity to learn has an interesting, as well as controversial, history. The following section will explore a range of policies and scholarship from which the notion of opportunity to learn emerged and developed. This review of relevant policies and scholarship also serves to illuminate the incredibly complex and challenging work of leadership, specifically the work of leadership focused on understanding and addressing the seemingly entrenched discrepancies in student performance.

Chapter Two²

Literature Review

Historical Context

The release of *A Nation at Risk (NAR)* in 1983 marks a defining moment in the history of American education, heralding the advent of standards-based educational reform. While previous reform efforts worked to provide *equal* access to education for minority groups (e.g., *Brown v. Board of Education*, Civil Rights Act of 1964, Elementary and Secondary Education Act Amendments of 1966, Rehabilitation Act of 1973, Education for All Handicapped Children Act of 1975), the standards-based reform movement focuses on *excellence* for *all*. Recommendations identified in the *NAR* report included (a) developing rigorous and measurable standards, (b) lengthening the amount of time spent in school, (c) increasing the requirements for high school graduation, (d) improving teacher preparation and salaries, and (e) strengthening educational leadership (NCEE, 1983). These recommendations, which called for a significant investment of resources, were put into motion in an effort to regain "our once unchallenged preeminence in commerce, industry, science, and technology innovation" (NCEE, 1983, p. 1).

Published during the same year as *NAR*, "Excellence, Equity, and Equality" by Thomas F. Green (1983) offers further insight into the thinking that surrounded and informed policymakers' decision-making processes during this time period. Green (1983) explains how the quest for one educational ideal (i.e., excellence, equity, or equality) may inhibit the development of another (p. 381). In particular, Green (1983) clarifies that the

² Chapter Two was co-authored by Ann F. Allwarden, Phillip J. Potenziano, Sujan S. Talukdar, and Karen J. Zaleski.

principles of equality and equity differ in significant ways. For example, the ideal of equality focuses on "inputs" and denotes providing the same to all, disregarding differences such as race/ethnicity, language, age, gender, and ability (Green, 1983; Lindsey, Nuri Robins, & Terrell, 2009). Providing the same to all may at times create unfair and unjust circumstances leading to greater levels of inequity and injustice. As a result, there are times when "persons may be treated and rewarded unequally and also justly" (Green, 1983, p. 324). While some examples of inequalities are in fact just, inequities are never just. This is a critically important distinction. The ideal of educational equity is based upon fair treatment through "justified inequality" (Green, 1983, p. 331). Equity acknowledges and promotes the notion of providing accommodations "for differences so that the outcomes are the same for all individuals" (Lindsey et al., 2009, p. 166).

After describing, comparing, and contrasting the ideals of excellence, equity, and equality, Green (1983) goes on to carefully consider "which of the ideals should have priority in the formulation of policy" (p. 318). He concludes:

Policies in pursuit of educational excellence are more likely to produce gains in equity than policies in pursuit of equality are likely to produce gains in excellence. Thus, it is better to pursue the ideal of equity through the pursuit of excellence than to pursue excellence through the advancement of equality. If this is true, then it is better to formulate policy for the advancement of excellence than to formulate policy for the advancement of equality (p. 331).

Therefore, even though the *NAR* report was not particularly concerned with strengthening educational equity (Harris & Herrington, 2006), Green (1993) concluded that through the

development of policies that pursue excellence of education, the interests of educational equity will also be served. In their analysis of the implementation of *NAR* recommendations, Harris and Herrington (2006) offer further support for Green's conclusion, stating that the "reforms recommended in NAR...had a significant positive impact on achievement equity" (p. 213). Yet, initial gains credited to *NAR* recommendations, which focused on providing more resources and better content, slowed as the attention of policymakers turned to the development of an accountability system.

In the pursuit of excellence, the role of standards continued to gain strength, culminating in the reauthorization of the Elementary and Secondary Education Act of 1965, now commonly referred to as the No Child Left Behind Act of 2001 (NCLB). With bi-partisan support for the enactment of NCLB, standards-based educational reform emphasizing standards, assessments, and accountability "was catapulted into national policy" (Foorman & Nixon, 2006, p. 163). In order "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education" (20 U.S.C. 6302 § 1001), NCLB established a test-based accountability system (Hamilton, 2003; Hamilton & Koretz, 2002). Test-based accountability systems include four major components: goals (i.e., rigorous standards), measures (i.e., high-stakes state tests), targets (i.e., adequate yearly progress), and consequences (i.e., school transfer options, supplemental services, corrective actions, and restructuring) (Hamilton & Koretz, 2002).

Since the authorization of NCLB in 2001, there is little evidence to suggest that the current accountability system is having a positive effect on long-standing equity issues (Harris & Herrington, 2006). Even though the ultimate effectiveness of current federal and state policy is yet unknown, policymakers continue to show unwavering

support for the pairing of rigorous standards to test-based accountability. Most recently, support for this pairing was demonstrated by the provision of federal funding to the assessment consortiums of SMARTER Balanced and Partnership for Assessment of Readiness for College and Careers (PARCC) to support the development of a national testing system that assesses the Common Core State Standards (CCSS) adopted by 45 out of the 50 United States of America (Achieve, Inc., 2013; Massachusetts Department of Elementary and Secondary Education, 2011; SMARTER Balanced Assessment Consortium, 2012; U.S. Department of Education, 2013).

While efforts to raise standards and improve assessments deserve thoughtful consideration in the "landscape of educational policy, they are not effective drivers toward significantly changing the conditions for students who are in need....For a student, or to a parent whose child is academically drowning, simply moving the shoreline further away is not compelling" (Schott Foundation for Public Education, 2012, pp. 10-11). Instead, attention must turn towards formulating "a support-based reform agenda focused on creating the learning environment and condition in which...all children will have an opportunity to learn and succeed" (Schott Foundation for Public Education, 2012, p. 11).

Opportunity to Learn (OTL)

The punitive nature of current policy and legislation increases pressure on school leaders to address educational inequities and narrow existing achievement gaps—or suffer the consequences of not making adequate yearly progress. This increased focus on students' achievement, as measured by standardized tests, heightens an awareness of and concern for the consequences of high-stakes tests on students (Darling-Hammond, 1994,

2004; Guiton & Oakes, 1995; Porter, 1994, 1995). Critics of accountability measures argue that it is unfair to hold schools and students accountable for content and skills they have not had the opportunity to learn (Darling-Hammond, 1994, 2004; Guiton & Oakes, 1995; Traiman, 1993; Ysseldyke, Thurlow, & Shin, 1995). Therefore, while NCLB outlines the legal responsibilities that accompany the current test-based accountability system, there remain important ethical considerations regarding increased accountability and high expectations.

Starratt (2003) argues "imposing...accountability systems without fully addressing the issue of OTL is a violation of social justice" (p. 298). Have all students had the opportunity to learn? Darling-Hammond (2007) emphatically disputes the notion that standards and testing alone will improve schools or guarantee equitable opportunities to learn, emphasizing that "the biggest problem with the NCLB act is that it mistakes measuring schools for fixing them" (p. 9). Instead, school reform efforts need to focus on ensuring access to high-quality teaching and providing equitable opportunities to learn rigorous curriculum (Darling-Hammond, 2004, 2007).

Although a recurring theme of current school reform, a focus on truly providing equitable opportunities to learn rigorous curriculum struggles to gain—and hold—center stage. As a result, prominent individuals within the field of education have called for the inclusion of data beyond results from high-stakes state tests. In her testimony for the House Education and Labor Committee on the reauthorization of NCLB, Darling-Hammond (2007) emphasized the need for multiple indicators of learning and school performance in order to "build a more powerful engine for educational improvement by understanding what is really going on with students and focusing on the elements of the

system that need to change if learning is to improve" (p. 72). Darling-Hammond goes on to present and describe an indicator system that includes measures of (a) student learning (e.g., state and local assessments), (b) additional student outcomes (e.g., data on attendance, promotion/retention, and graduation rates), and (c) learning conditions (e.g., school climate, instructional practices).

Part of the intent behind the development of school process indicators, or a complete "indicator system," is that they offset the deficiencies arising from an overfocus on school inputs (i.e., standards) and school outputs (i.e., test scores). School process indicators measure "services the education system is actually providing" (Stecher, 2005, p. 4). The intent of school process indicators is to "monitor the nature of schooling: the curriculum students study, the instruction teachers provide, and the environment in which teaching and learning take place" (Porter, 1991, p. 13).

Consequently, data from school process indicators offer district- and school-level leaders opportunities to evaluate their school reform efforts and strengthen their decision-making process, which could ultimately lead to more effective and equitable school improvement planning and implementation.

The Challenge of Defining and Measuring OTL

Threaded throughout much of the available research is the ongoing challenge of defining and measuring a variable, or set of variables, which represent a valid and reliable measure of a school's contribution to students' learning. The challenge resides in the fact that school systems are inherently complex organizations. Therefore, identifying, isolating, and measuring school factors that contribute to students' learning remains an on-going difficulty. As a result, the thinking of scholars and researchers who have

actively confronted these challenges differs considerably. In an effort to illustrate noteworthy differences, two contrasting perspectives will be presented. The work of Andrew Porter represents a traditional view of OTL, and the work of James Paul Gee represents a sociocultural view of OTL.

A traditional perspective of OTL. Porter (1994) discusses how OTL has historically been defined as "the enacted curriculum as experienced by the student" (p. 427). Porter (1994) also points out that enacted curriculum encompasses both the content of instruction and "the pedagogical quality of instruction" (p. 427). "The content and pedagogy of instruction are the two best school-controlled predictors of student achievement" (Porter, 1994, p. 427). Therefore, Porter (1991, 1994) presents for consideration a theoretical model that focuses on the content of instruction as a school process indicator. The model predicts a causal relationship between the level of curriculum alignment and student outcomes. In other words, stronger curriculum alignment leads to better student outcomes.

Efforts aimed at strengthening curriculum alignment focus on increasing the degree of alignment between (a) instruction, (b) standards, (c) assessments, (d) curriculum materials and resources, and (e) professional development opportunities (Porter, Smithson, Blank, & Zeidner, 2007). Yet, whereas efforts that focus on curriculum alignment have the potential to significantly improve student outcomes (Porter, 1991, 1994), "alignment is only good for education if the target for alignment is of sufficient quality" (Porter, Smithson, Blank, & Zeidner, 2007, p. 29).

A sociocultural perspective of OTL. Gee (2008), in contrast, argues against definitions of OTL based on a traditional view of knowledge, which focuses on

quantifying exposure to instructional content that is aligned with standards and assessments. These definitions are built upon the assumption: If students are exposed to the same instructional content, then they have been provided with an equal opportunity to both (a) learn the instructional content and (b) demonstrate their learning on an assessment. Embedded within this notion are underlying "complexities" (Gee, 2008, p. 77). These underlying complexities relate closely to the concept of equality and justice discussed earlier. Providing equal opportunities does not ensure equal outcomes. Instead, students need to be provided with equitable opportunities to learn instructional content and demonstrate their learning. This shift in thinking significantly complicates measuring students' OTL. The difference between measuring equal and equitable opportunities to learn is the difference between a teacher covering instructional content and a student learning instructional content. Yet, if these underlying complexities are ignored, Gee argues that the resulting measure of OTL offers an incomplete picture.

Gee (2008) defines OTL from a sociocultural perspective, which examines the relationship between learners and their environment. Gee describes the "action possibilities" (p. 81) that exist within learners' environments. Gee then discusses the impact of learners' abilities, or lack thereof, to first recognize action possibilities available to them, and then to convert those action possibilities into "actual and effective" (p. 81) actions. This pairing of action possibilities with learners' capacity to take meaningful action broadens the traditional view of what it means to offer opportunities to learn.

Common ground. The distinct perspectives embraced by Porter and Gee illustrate the challenges and limitations that accompany defining and measuring OTL.

Yet, interesting to consider is the motivation behind both Porter and Gee's work. Although Porter and Gee provide very different ways of thinking about and conceptualizing OTL, both share a common focus on examining what is happening in schools. What is the nature of schooling, and how does it enhance or inhibit students' opportunities to learn? This emphasis on the part of researchers and scholars to untangle complexities inherent within the process of schooling provides further incentive for looking more closely at the specific actions of district- and school-level leaders as they grapple with these very challenges. Additionally, Boykin and Noguera (2011) put forth for consideration: "It is essential that educators understand the nature of the gap and why it exists" (p. 1). Therefore, this research study will focus on how district- and school-level leaders' understanding of the "nature of the gap" influences their actions as they work to address disparities in student performance related to race/ethnicity, class, and/or disability, including (a) the use of strategies to prompt shifts in thinking, (b) the leveraging of professional learning, (c) the use of data analysis structure and routines, and (d) the relationships between district- and school-level leaders.

Theoretical Framework

A useful theory helps you *organize* your data....A useful theory also *illuminates* what you are seeing in your research. It draws your attention to particular events or phenomena and sheds light on relationships that might otherwise go unnoticed or misunderstood (Maxwell, 1998, p. 227).

The researchers of this study viewed the process of identifying and reviewing potentially useful theories, which ultimately led to the final selection of a useful theory, as an important part of developing an appropriate research design. The researchers

recognized that a useful theory would influence the methods of data collection and would also become an important instrument for generalizing the results of the case study (Yin, 2009). Therefore, researchers believed the identification and selection of a useful theory would further support and enhance their ability to thoroughly investigate the research questions and draw valid and reliable conclusions. At the same time, the researchers considered the disadvantages to using existing theory. Maxwell (1998) follows the benefits of using an existing theory with the following warning:

Existing literature, and the assumptions embedded in it, can deform the way you frame your research, causing you to overlook important ways of conceptualizing your study or key implications of your results....Trying to fit your insights into this established framework can deform your argument, weakening its logic and making it harder for you to see what this new way of framing the phenomenon might contribute (Maxwell, 1998, p. 227).

After reviewing both the beneficial and detrimental effects of using existing theory, the advice of Becker (1986) ultimately guided the selection and implementation of existing theory in this study. "A serious scholar ought routinely to inspect competing ways of taking [sic] about the same subject matter,' and warns 'Use the literature, don't let it use you'" (Becker, 1986 as cited in Maxwell, 1998, p. 227). Therefore, the researchers explored various existing frameworks in their efforts to both (a) identify an existing theory that appropriately aligns with the research focus and will allow the research team to reap the potential benefits and (b) examine existing theories in an effort to help them "routinely inspect" competing ways of seeing and understanding the same subject matter.

Since this research study will be examining district- and school-level leaders' understandings and how these understandings then influence the work of leadership, the researchers determined that the distributed leadership theoretical frame, with its focus on interactions and the practice of leadership aligns most closely with this study (Spillane, 2006; Spillane, Halverson, & Diamond, 2004; Spillane, Healey & Parise, 2009). Spillane (2006) states distributed leadership practice is defined as "a product of the joint interactions of school *leaders*, *followers*, and aspects of their *situation* such as tools and routines" (p. 3). Tools can be defined as outer portrayals of ideas that multiple leaders use in their practice, such as lesson plans, student work samples, observation protocols, and student assessment data (Spillane, 2006). Spillane (2012) uses the definition of routines created by Feldman and Pentland (2003): "a repetitive, recognizable pattern of interdependent actions, involving multiple actors" (p. 311). As this theoretical frame is applied to the present study there will be focus on both leaders' interactions and aspects of their situations as defined from this perspective.

A distributed leadership perspective is primarily about interactions and leadership practice (Spillane, 2006; Spillane, Halverson, & Diamond, 2004; Spillane, Healey & Parise, 2009). According to this framework, decisions are not made in isolation, rather, the interactions between many individuals involved in shared activities contribute to the decision making process. "These collaborative dialogues are a key component of what Spillane et al. (2004) have defined as the social distribution of leadership" (Scribner, Sawyer, Watson, & Myers, 2007, p.71). Leadership from a distributed perspective is defined as individuals, officially or unofficially assigned to leadership roles, taking responsibility for the work of leadership (i.e., leadership activities) (Spillane, 2006).

Distributed leadership is more than leaders interacting and assuming responsibilities. Instead, it is the interactions among these individuals that specifically contribute to the practice of leadership that is critical to this theoretical framework (Harris, Leithwood, Day, Sammons, & Hopkins, 2007; Spillane, 2006).

The distributed leadership framework highlights the potential and opportunity for any individual within a school district to engage in the work of leadership, strengthening the collective capacity of individuals to change and improve schools (Harris, 2002). Examining this shared aspect of leadership work, as well as how it can be intentionally distributed across individuals as they work to address disparities in student performance, offers the researchers greater insight into the topic being studied as they seek to answer the research questions.

The development of distributed leadership is also believed to enhance school improvement by building the capacity of employees to achieve goals collectively (Copland, 2003; Harris, 2004). However, it is important to note that school improvement based on a distributed leadership model is not automatic, rather, "much depends on the way in which leadership is distributed, how it is distributed and for what purpose" (Harris, Leithwood, Day, Sammons, & Hopkins, 2007, p. 9). Specific consideration will be given to these factors when examining leadership practices at the district and school levels.

Spillane (2006) and Spillane et al. (2004) further state that distributed leadership offers an analytic perspective that is designed to allow school leaders to reflect on and diagnose the distribution of leaders, the practices employed, and the impact on outcomes which enhances the design process. Spillane (2006) describes three governing design

principles:

- The practice of leadership should be a central focus in efforts to improve school leadership because it is a more proximal cause of instructional improvement than leadership roles, processes or structures.
- Intervening to improve leadership necessitates attention to interactions, not
 just actions, because leadership practice takes shape in the interactions
 between leaders and followers.
- Intervening to improve leadership practice requires attention to the design and redesign of aspects of the situation, such as routines and tools, because the situation helps define leadership practice (p. 93).

The distributed leadership framework will inform this study and assist in identifying and assessing the routines and tools utilized in practice and distributed among district- and school-level leaders as they work to address disparities in student performance. Additionally, the framework will assist us in exploring the significant nature of relations between district- and school-level leaders. This framework also supports the individual portions of this study, which examine related but distinct aspects of leadership work—cognitive shifts, professional learning, data structures and routines, and leader interactions.

Chapter Three³

Methods

The focus of this study was on investigating how district- and school-level leaders understand disparities in student performance due to race/ethnicity, class, and/or disability, and how their understandings of those disparities then influence the work of leadership focused on addressing disparities in student performance related to race/ethnicity, class, and/or disability in a culturally diverse school district. Therefore, the design of this research sought to answer the following questions:

- 1. How do district- and school-level leaders understand disparities in student performance due to race/ethnicity, class, and/or disability?
- 2. How do these understandings then influence the work of leadership focused on addressing disparities in student performance due to race/ethnicity, class, and/or disability?

Because the researchers were interested in "not only the physical events and behavior taking place, but also how the participants in [the] study make sense of these and how their understandings influence their behavior" (Maxwell, 2008, p. 221), qualitative methods offered the greatest opportunity to gain an in-depth understanding.

Qualitative Research

Maxwell (2008) outlines five broad research goals which he believes are especially well-suited to qualitative research. Three of the five goals identified by Maxwell (2008) were particularly relevant to the researchers' proposed inquiry:

• Understanding the meaning, for participants in the study, of the events,

³ Chapter Three was co-authored by Ann F. Allwarden, Phillip J. Potenziano, Sujan S. Talukdar, and Karen J. Zaleski.

- situations, and actions they are involved with, and of the accounts that they give of their lives and experiences.
- Understanding the particular context within which the participants act and the influence this context has on their actions.
- Understanding the processes by which events and actions take place (Maxwell, 2008, p. 221).

The researchers wanted to hear richly detailed, first-hand accounts of events, situations, and actions that have influenced district- and school-level leaders' understanding of existing disparities in student performance. In other words, they wanted to "achieve an understanding of how people make sense out of their lives, delineate the process (rather than the outcome or product) of meaning-making, and describe how people interpret what they experience" (Merriam, 2009, p. 14). Furthermore, the researchers hoped to gain insight into how these understandings then influence the work of leadership focused on addressing disparities in student performance. As a result, they believed the characteristics, or features, which distinguish qualitative research, provided them with the greatest opportunity to develop and share an in-depth understanding of the research focus.

Eisner (1991) describes six features that make a study qualitative. First, qualitative studies are "field focused." Researchers "observe, interview, record, describe, interpret, and appraise settings as they are" (Eisner, 1991, p. 33). Next, researchers consider themselves to be the main "instrument." This is important because "the features that count in a setting do not wear labels on their sleeves: they do not announce themselves. Researchers must see what is to be seen...it is not a matter of checking

behaviors, but rather of perceiving their presence and interpreting their significance" (Eisner, 1991, pp. 33-34). The third feature of a qualitative research identified by Eisner (1991) is its "interpretive character." Interpretive character refers to a researcher's ability to make sense of and explain a situation, including the significance it holds for those involved in the situation. A fourth feature of qualitative research is "the use of expressive language and the presence of voice in text....We display our signatures. Our signature makes it clear that a person, not a machine, was behind the words" (Eisner, 1991, p. 36). The fifth feature is its "attention to particulars." This allows the readers to "gain a feeling for the distinctive characteristics of the case. The classroom, the school, the teacher are not lost to abstraction" (Eisner, 1991, p. 39). The final feature detailed by Eisner (1991) involves the criteria used to evaluate qualitative research. "Qualitative research becomes believable because of its coherence, insight, and instrumental utility" (Eisner, 1991, p. 39).

The researchers believed the six features of qualitative research, as described by Eisner (1991), captured the type of inquiry in which they needed to engage to successfully address both the research goals and questions. Under the umbrella of qualitative research designs, the researchers selected the case study approach "which focuses on understanding the dynamics present within single settings" (Eisenhardt, 1989, p. 534).

Case Study

Creswell (2012) defines a case study as "an in-depth exploration of a bounded system (e.g., activity, event, process, or individuals) based on extensive data collection (Creswell, 2007). Bounded means that the case is separated out for research in terms of

time, place, or some physical boundaries" (p. 465). Yin (2008) explains "a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident" (p. 18) (see Figure 3.1).

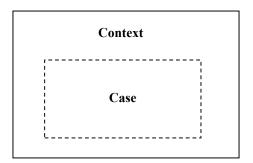
Case studies rely on multiple sources of evidence (Creswell, 2012), and both single and multiple case studies are used in case study research (Yin, 2008). Yin (2008) explains that case study research is quite challenging and should not be underestimated. The single case study allows the researcher to devote more time to exploring the case in depth (Creswell 1998, 2012). Conducting a single case study allowed the research team the opportunity to fully analyze all aspects of the study in depth.

Sample and Participant Selection

The study began with the identification of a school district and superintendent through purposeful sampling. Patton (2002) contends that "the logic and power of purposeful sampling lies in selecting *information-rich* cases for study in depth.

Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry" (p. 230). Similarly, Maxwell (1998) describes purposeful sampling as "a strategy in which particular settings, persons, or events are deliberately selected for the important information they can provide that cannot be gotten as well from other choices" (p. 235). Merriam (2009) further explains that "purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p. 77). As a result, purposeful sampling allows "for the examination of cases that are critical for the theories that the study began with or that

Figure 3.1. Single-case Study (Yin, 2008, p.18)



have been subsequently developed" (Maxwell, 1998, p. 235). In other words, the sampling for this study was theoretically-driven. "Choices of informants, episodes, and interactions are being driven by a conceptual question, not by a concern for 'representativeness'" (Miles & Huberman, 2004, p. 29). The researchers' main goal was to select a site and individuals who could help them gain an in-depth understanding of the central phenomenon to be studied. Therefore, the researchers established criteria that guided their selection of the school district. The following sections outline three "stages" of sampling. During each successive stage, established criteria was applied to further narrow the pool of potential research sites to include only districts that would provide a strong case for this research study.

District selection: Stage one. Researchers visited the Department of Elementary and Secondary Education's (DESE) website to review school district profiles. School districts that met the following criteria were noted: (a) a K-12 public school district, (b) a small to medium-sized school district (i.e., five to ten schools), and (c) a school district with identifiable, measurable disparities in student performance related to race/ethnicity, class and/or disability.

According to the National Assessment of Educational Progress (2012):

A difference in scores between two groups of students (for instance male and female, Black and White, or Hispanic and White) can only be considered an achievement gap if the difference is statistically significant, meaning larger than the margin of error.

As such, in stage one of district selection the researchers adhered to this definition in order to identify measurable disparities in student performance. When reviewing school district profiles on the DESE website, particular attention was paid to MCAS scores and graduation rates disaggregated by race/ethnicity, class, and/or disability. Further, the researchers sought to understand disparities in performance across student sub-groups within a single-school district. Disparities within the district were not compared to the performance of students across the state or the nation.

The first criterion, a K-12 public school district, and the third criterion, a school district with identifiable, measurable disparities in student performance related to race/ethnicity, class and/or disability, relate directly to the educational issue that this research study identified as concerning: On-going, statistically significant disparities raise critical questions regarding educational equity and students' opportunity to learn within the public school system.

The second criterion, a small to medium-sized school district (i.e., five to ten schools), was pre-determined to provide the research team with an opportunity to conduct both comprehensive and in-depth interviews of district- and school-level leaders. Since qualitative studies require researchers to "define aspects of your case(s) that you can study within the limits of your time and means" (Miles & Huberman, 1994, p. 27), a small to medium-sized district allowed the researchers to conduct in-depth interviews of

most of the district- and school-level leaders. Furthermore, interviewing most of the district- and school-level leaders provided a richer, more insightful understanding of the case, as well as increased the credibility of the study. Comparing and contrasting data collected from individuals with different perspectives is a form of triangulation, which is an important strategy for strengthening the internal validity of a research study (Merriam, 2009).

District selection: Stage two. During the second stage of sampling, the criteria for selection shifted to identifying school districts whose administrators (a) believed they were committed to addressing disparities in student performance related to race/ethnicity, class, and/or disability and (b) thought they were actively engaged in work that focused on eliminating performance gaps related to at least one of the following areas: race/ethnicity, low income, and/or disability. The research team reviewed school district websites for evidence relating to one or more of the following areas:

- The district thought it was investing resources (e.g., time, money, people) in an effort to address disparities in student performance related to race/ethnicity, class, and/or disability.
- The district thought it was implementing a strategic change effort that targeted addressing student performance related to race/ethnicity, class, and/or disability.

The criteria for this stage of sampling was directly related to the study's overarching research questions. In order for the researchers to examine how district- and school-level leaders understand disparities in student performance due to race/ethnicity, class, and/or disability, as well as how their understandings of these disparities then

influence the work of leadership focused on addressing disparities in student performance, the school district ultimately selected believed that they were committed to and actively engaged in addressing student performance disparities.

In addition to visiting and reviewing the websites of the school districts, the strategy of reputational sampling was relied upon heavily during this stage. Reputational sampling involves seeking out recommendations from experts or key informants (Miles & Huberman, 1994). The researchers asked experts and key informants in the field (e.g., superintendents, principals, university professors, and researchers) to suggest school districts that they believed met the pre-determined criteria. Therefore, while the review of district websites served as a source of useful information, it was not a requirement for this stage of sampling.

District selection: Stage three. Once the research team narrowed down a list of potential research sites that met the pre-determined criteria, additional sampling was conducted to ensure that the superintendents or assistant superintendents of the school districts met the following established criteria: (a) had provided the district with stable, consistent leadership and (b) thought they were providing school-level leaders with a professional learning opportunity that focused on addressing student performance related to race/ethnicity, class, and/or disability. With regard to stable and consistent district-level leadership, the research team sought out a district that had either employed their superintendent or assistant superintendent for at least two years and/or had a district-level leadership team that had provided consistent leadership over the course of at least two consecutive years in the area of addressing disparities related to race/ethnicity, class, and/or disability.

Although the state and district websites provided evidence indicating that a superintendent or assistant superintendent met the pre-determined criteria, the researchers relied more heavily upon reputational sampling as a strategy during this stage. Once a district that seemingly met all of the established criteria was identified, initial contact was made with the superintendent. The initial contact was made by an individual who was known to the research team and was also a colleague of the superintendent. After talking with the superintendent, this individual connected the research team with the superintendent through email. Through email the superintendent asked the research team to send a description of what the proposed study would entail. A member of the research team responded:

Thank you for your email and interest in our study. On behalf of our research team, I have attached a brief overview of what our study entails. We would love the opportunity to discuss this with you, and it is our hope to set up a date/time to meet with you at your convenience. We look forward to your response and please do not hesitate to contact us with any specific questions you may have regarding our study.

The overview sent to the superintendent included (a) the study's research questions, (b) the purpose of the research study, (c) a description of how and what data would be collected, and (d) the amount of time research participants would need to commit to the study. After the superintendent read the overview of the proposed study and indicated that he was interested in talking further with the research team, the team provided the superintendent with a number of potential meeting dates and times, the superintendent selected a date and time that worked best for him and a face-to-face meeting was

scheduled.

Three out of the four researchers were able to meet with the superintendent. At this meeting the superintendent began by sharing some of his personal history, including where he grew up and where he had lived as an adult. He expressed that living in different areas of the state strengthened his lens and passion to serve all students regardless of their socio-economic background. The superintendent then went on to briefly describe the current focus of the district- and school-level leaders' work. The superintendent described the role of data in their efforts to improve student achievement. He also emphasized the importance of collaboration between district- and school-level leaders. Lastly, the superintendent expressed interest in participating in the proposed study but stated he would need to consult with the leaders making up the Full Administrative Council (FADCO), as they would be asked to participate.

The superintendent asked the research team to attend the next FADCO meeting and present to the other district- and school-level leaders. The research team agreed and returned to the district two weeks later to provide members of FADCO an overview of the proposed study. After the presentation, the superintendent asked the members of FADCO to let him know if they had any hesitations or questions. He later sent an email to the research team that read "I asked people to get back to me if they had any hesitations or questions and the only feedback I have gotten are yes."

School-level leaders and additional district-level leaders. The strategies of purposeful and snowball sampling were used to identify school-level leaders, as well as additional district-level leaders. All building principals were asked to participate in the study. In order to identify additional district-level leaders to interview, the researchers

relied on the superintendent and assistant superintendent to recommend individuals whom they felt could best describe efforts aimed at impacting students' opportunity to learn and performance gaps. This strategy of sampling is referred to as snowball sampling. Creswell (2012) defines snowball sampling as "sampling procedure in which the researcher asks participants to identify other participants to become members of the sample" (p. 628). Merriam (2009) further elaborates by stating that snowball sampling "involves locating a few key participants who easily meet the criteria you have established for participation in the study. As you interview these key participants [i.e. the superintendent and the assistant superintendent] you ask each one to refer you to other participants" (p. 79). Thus, the interview snowball grew to include additional district-level leaders who played a critical role in efforts aimed at understanding and addressing barriers inhibiting students' opportunity to learn.

Additionally, under specific conditions the use of snowball sampling would have been extended. For example, if a building principal had stated to an interviewer that he or she should interview another building-level leader because this individual played a critical role in the school's efforts to understand and address barriers inhibiting students' opportunity to learn, the researchers would have considered extending the use of snowball sampling. This recommendation would have needed be freely offered during the interview. The researcher would not have actively sought out this information.

Furthermore, the research team would have met to discuss and debate the usefulness and appropriateness of including the recommended interviewee in the sample. Using snowball sampling to reach additional individuals that otherwise would have been excluded would have potentially allowed the research team to gain further information

that may have helped strengthen the triangulation of interview data. Furthermore, the use of snowball sampling aligned with both the type of research being conducted (i.e., qualitative) and the study's theoretical framework (i.e., distributed leadership) because it would have used the social or personal knowledge of the individual being interviewed (Cohen, Manion, & Morrison, 2011). Although extending the use of snowball sampling was part of the initial research design, none of the participants interviewed recommended interviewing individuals beyond central office leaders and building principals.

Data Collection

Data was collected primarily through semi-structured interviews and then supplemented by the gathering of documents recommended by participants during their interviews.

Interview. DeMarrais (2004) defines the research interview as "a process in which a researcher and participant engage in a conversation focused on questions related to a research study" (p. 55). Merriam (2009) provides a continuum of three types of interviews: highly structured/standardized, semi-structured, and unstructured/informal (p. 89). Open-ended semi-structured individual interviews served as the primary method of data collection for this case study. Falling in the middle of the "interview structure continuum" (Merriam, 2009), a semi-structured interview method provides a researcher the opportunity "to enter into the other person's perspective" (Patton, 2002, p. 341), and to respond flexibly to new information that may surface related to topic being studied (Merriam, 2009).

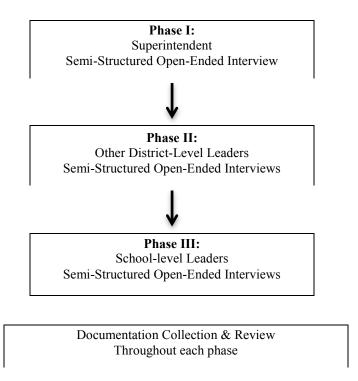
Semi-structured interviews allow the opportunity to digress from the primary question and probe a response to understand more clearly what is seen as a

provocative remark on the part of the interviewee. Such remarks may come in two categories: (1) the researcher has not heard that position stated before or (2) what has been said seems to be in contradiction to comments others have made previously (James, Milenkiewicz, & Bucknam, 2008, pp. 73).

While semi-structured interviews allowed for flexibility, they also provided for some uniformity among the researchers during data gathering. Additionally, having a predetermined list of questions enhanced the researchers' ability to efficiently gather needed information. More open-ended, less focused interview protocols can lead to collecting "too much superfluous information...An overload of data will compromise the efficiency and power of the analysis" (Miles & Huberman, 1994, p. 35). Interviews assisted researchers in answering the study's overarching research questions, as well as provided insight into the researchers' individual portions of the study. Figure 3.2 provides a conceptual design that illustrates the order of interviewing. The interview process also assisted the researchers in determining "what services the education system is actually providing" (Stecher, 2005, p.4).

Interviews were conducted in-person within the school district setting, in as natural an environment as possible, most frequently at each interviewee's office, unless an alternate location was mutually agreed upon. Privacy was a factor in determining the location to ensure the session was uninterrupted, and in the hopes that this would enhance the participants' attentiveness and willingness to respond in a fashion that was open and honest. In an effort to minimize intrusion upon the interviewees' ability to perform their professional duties, all interviews were arranged at a time convenient for the interviewees. Specific interview protocols for this study were used and are located in

Figure 3.2. Sequence of Interview Process



Appendix A. All participants were asked to sign a Consent to Participate form. This consent reviewed participants' rights, details of confidentiality and record keeping procedures, and offered them the information necessary to make an informed decision prior to agreeing to participate.

Each interviewer allowed for approximately one hour per interview. All four research team members conducted interviews individually or in pairs with interview assignments predetermined. All interviews were recorded in their entirety unless a participant asked otherwise. If an interviewee preferred that the interview not be recorded, the interviewer proceeded with the interview by taking hand-written notes. This happened only once during the collecting of data. One participant asked that the audio recording be stopped in the middle of an interview. The participant wanted to share information that he or she was not comfortable having audio recorded. The participant

agreed to the interviewer taking notes by hand during this portion of the interview.

Following this portion of the interview, the recording of audio resumed for the remainder of the interview.

The research team piloted the research questions. Each member of the research team piloted the interview protocol a minimum of two times and reported back to the research team on what was learned from those interviews and how to improve upon them (Merriam, 2009). Merriam (2009) stresses the importance of piloting interview questions:

Not only do you get some practicing interviewing, but you also quickly learn which questions are confusing and need rewording, which questions yield useless data, and which questions, suggested by your respondents, you should have thought to include in the first place" (p. 95).

Research team members used the strategy of conducting pilot interviews in pairs to ensure that the interview protocol was sufficiently covered, as well as to ensure that there was consistency across researchers regarding how interviews were conducted. In addition, during the interview piloting process, the researchers attempted to mitigate any issues that the presence of a digital voice recorder may have caused by practicing with the recording devices they planned to use (McMillian, 2004). A professional transcriptionist, who was required to sign a confidentiality agreement, was hired to transcribe some of the interview recordings. In an effort to further strengthen the reliability of the study, secondary sources of data were also sought out, including archived schools documents (Creswell, 2012).

Documents. The researchers used purposeful sampling for the identification and collection of relevant school and district documents. Creswell (2012) extols that the use

of "documents represent a good source for text data for a qualitative study" (p. 223). Furthermore, Stake (1995) states that using a variety of data sources such as archival documents will reduce the potential for misinterpretation and help produce greater reliability. Yin (2009) also states the benefit of using documents in case studies, explaining that documents are not the case study but rather help explain and corroborate details of the study.

In an effort to collect relevant documents, each participant was asked during his or her interview if there were specific documents that he or she viewed as particularly germane to the researchers' areas of focus (i.e., prompting shifts in thinking, professional learning, data analysis structures and routines, interactions) and would recommend that the researchers collect for analysis. Researchers also sought out additional documents that they believed were pertinent to the case, including:

- District Improvement Plan
- School Improvement Plans
- Documents outlining and detailing professional learning opportunities relevant to the study topic offered by the district

The collection and analysis of document data offered researchers the opportunity to crosscheck and verify interviewee responses, as well as the conclusions being drawn by the researchers as they engaged in data analysis. This process of verification supported the triangulation of data and thus strengthened the trustworthiness of the study's final conclusions and findings.

Data Analysis

This research study followed the three components of data analysis described by

Miles and Huberman (1994): (a) data reduction, (b) data display, and (c) conclusion drawing/verification.

Data reduction. The first component of data analysis, data reduction, involves "selecting, focusing, simplifying, abstracting, and transforming the data" (Miles & Huberman, 1994, p. 10). For this study, the process of data reduction began with the identification of a theoretical framework (i.e., distributed leadership) and the development of specific research questions (i.e., How do district- and school-level leaders understand disparities in student performance related to race/ethnicity, class, and/or disability? How do these understandings then influence the work of leadership focused on addressing disparities in student performance related to race/ethnicity, class, and/or disability?). The process of data reduction continued with the selection of specific strategies for sampling (i.e., criterion-based selection and snowball sampling). Decisions regarding the choice of a theoretical framework, the development of research questions, and the selection of sampling strategies served as important mechanisms for focusing and narrowing (or reducing) the data that was ultimately collected. Miles and Huberman (1994) refer to these decisions as "anticipatory data reduction" (p. 10) because they are made before the collection of data has begun.

The process of data reduction continued throughout the study. During (and after) the data collection period of the study, data reduction occurred as researchers engaged in the coding process. Creswell (2011) defines coding as a "qualitative research process in which the researcher makes sense out of text data, divides it into text or image segments, labels the segments, examines codes for overlap and redundancy, and collapses these codes into themes" (p. 618). Similarly, Miles and Huberman (1994) describe coding as "a

way of forcing you to understand what is still unclear, by putting names on incidents and events, trying to cluster them, communicating with others around some commonly held ideas, and trying out enveloping concepts against a wave of observations and conversations" (p. 62). In other words, as researchers engaged in the process of coding, they identified and assigned labels to "chunks," in essence highlighting and extracting sections of data that seemed particularly relevant. The process of coding, therefore, was inherently analytical and served as another important mechanism for further reducing the data collected.

Creating codes. Prior to entering the research site, each researcher created a "start list" of codes based on the study's theoretical framework and their specific research questions. In order to ensure the consistent application of codes across interview transcripts and documents each researcher developed clear definitions for each of their master codes (Miles & Huberman, 1994). Definitions for master codes were theoretically based and drawn from the literature. The analysis of collected data began with the coding of the transcript from the interview with the superintendent. The process of coding continued through subsequent phases of analyzing different "sets" of interviews (i.e., district-level leaders, school-level leaders). These successive sets of data were analyzed using the constant comparative method. The constant comparative method "involves comparing one segment of data with another to determine similarities and differences. Data are grouped together on a similar dimension. The dimension is tentatively given a name; it then becomes a category" (Merriam, 2009, p. 30). The use of the constant comparative method—constantly comparing the data for similarities and differences further refined each researcher's initial set of codes. (Information regarding how each

researcher's initial list of codes changed across the course of the study is detailed in the researcher's individual section of the study.) Miles and Huberman (1994) cite the work of Lincoln and Guba (1985) as they describe the different ways in which codes can be revised as a study progresses:

- Filling in: adding codes, reconstructing a coherent scheme as new insights
 emerge and new ways of looking at the data set emerge
- Extension: returning to materials coded earlier and interrogating them in a new way, with a new theme, construct, or relationship
- Bridging: seeing new or previously not understood relationships within units of a given category
- Surfacing: identifying new categories (Miles & Huberman, 1994, p. 62)

Coding procedures. The process of coding began following the first trip to the field to collect data. Researchers first independently read and coded interview transcripts and any collected documents. Then, after the researchers completed their independent coding of the data (i.e., interview transcripts, documents), the researchers met in pairs to share how each coded the data. The researchers then worked to reach consensus regarding interpretations. Additionally, the researchers had planned to follow the recommendation of Miles and Huberman (1994) which encourages researchers to code data collected during each visit to the site before returning to the site to collect more. This cycle would have supported researchers' emerging understanding by "working through iterative cycles of induction and deduction to power the analysis" (Miles & Huberman, 1994, p. 65). The scheduling of interviews did not provide the researchers enough time to code a data set before returning to the field. Yet, following the collection of data, coding

procedures still involved iterative cycles of induction and deduction as the researchers refined and revised their list of codes and then recoded previously coded data.

Marginal remarks. As researchers coded multiple pages of text, they interspersed coding with written remarks in the "margins." Since researchers used web-based qualitative research software, marginal remarks were recorded by clicking on and opening a comment window. These remarks included the researchers' thoughts and reactions to the data. Miles and Huberman (1994) emphasize that "these ideas are important; they suggest new interpretations, leads, connections with other parts of the data" (p. 67). Miles and Huberman (1994) also suggest that recording marginal notes may "point to important issues that a given code may be missing or blurring, suggesting revisions in the coding scheme" (p. 67). In addition to noting marginal remarks early in the coding cycle, researchers were also able to retrieve and review "chunks" of text that share a common code and add new marginal remarks.

Memoing. Glaser (1978) describes memoing as "the theorizing write-up of ideas about codes and their relationships as they strike the analyst while coding" (p. 83). The content and focus of memos varies. Memos can be written when a researcher is confused or surprised. Memos can also be written in response to another researcher's memo, sharing an alternative perspective. Other memos may focus on proposing a new code (or set of codes). Memos are_frequently written to explore emerging patterns and themes. While the content and focus of memos varies, the writing of each memo provides researchers important opportunities to gain further clarity and insight. The researchers of this study followed the memoing advice of Miles and Huberman (1994):

Always give top priority to memoing.

- Memoing should begin as soon as the first field data start coming in, and should usually continue until right up to production of the final report.
- Keep memos "sortable."
- Memos are about ideas...Simply recounting data examples is not enough.
- Don't standardize memo formats or types, especially in a multi-researcher study.

"case study database" (Yin, 2008). A case study database refers to the collection and organization of data. The storage and organization of the data was critically important. A well-organized case study database allowed for the easy retrieval of relevant data during analysis. For this reason, a "code-and-retrieve" computer software program was used to ensure the development of a well-organized case study database. Code-and-retrieve programs allowed researchers to "divide text into segments or chunks, attach codes, and find and display all instances of coded chunks (or combinations of coded chunks)" (Miles & Huberman, 1994, p. 312). This coding scheme allowed for the easy retrieval of relevant data to support the work of determining (a) the frequency of themes and patterns, (b) the intersection of themes and patterns, and (c) the comparisons of themes and

Data displays. The second component of data analysis, data displays, involves displaying the data as "an organized, compressed, assembly of information that permits conclusion drawing and action" (Miles & Huberman, 1994, p. 11). The use of data displays further supported the work of comparing and contrasting data, identifying patterns and themes, detecting trends, and ultimately enabling researchers to draw valid

conclusions. The process of creating data displays involved transforming multiple pages of text into a visual format that fit on a single page and displayed data in ways that:

- show the data and analysis in one place,
- allow the analyst to see where further analyses are called for,
- make it easier to compare different data sets, and
- permit direct use of the results in a report, improving the credibility of conclusions drawn (Miles & Huberman, 1994, p. 92).

The researchers of this study used data displays within their individual research sections.

Conclusion drawing and verification. The third component of data analysis, conclusion drawing and verification, involves deciding "what things mean...noting regularities, patterns, explanations, possible configurations, casual flows, and propositions" (Miles & Huberman, 1994, p. 11). Once data has been entered into a data display, several tactics can be used to both draw and verify conclusions. The researchers of this study began by applying tactics appropriate for drawing initial conclusions; the researchers then selected from a different set of tactics to verify those conclusions. Table 3.1 lists the range of tactics used by the research team as they worked to draw and verify both individual and group conclusions. The tactics used by individual researchers as they worked to answer questions specific to their portion of the research study are further detailed within each researcher's individual section. The main tactics used by the research team as they worked together to answer the research study's overarching questions, which involved drawing and verifying conclusions based on the findings from each of the researchers' individual sections, included (a) noting patterns and themes, (b) making comparisons and contrasts, (c) triangulating to ensure reliability and validity.

Table 3.1Tactics for Drawing and Verifying Conclusions (Miles & Huberman, 1994)

Tactics for Drawing Conclusions	Description
Noting patterns, themes	Note recurring patterns, themes, or "gestalts" (p. 246)
Seeing plausibility	Jot down what some plausible conclusions seem to be, and then check them with other tactics (p. 248)
Clustering	Grouping and then conceptualizing objects that have similar patterns of characteristics (p. 249)
Counting	"See" the general drift of the data more easily and rapidly by looking at distribution (p. 253)
Making contrasts/comparisons	How does X differ from Y (p. 254)
Noting relations between variables	Once you are reasonably clear about what variables might be in play in a situationHow do they relate to each other (p. 257)
Tactics for Verifying Conclusions	Description
Triangulating to ensure reliability and validity	Triangulating: • By method (i.e., interview, document) • By source (i.e., persons to be interviewed) • By researcher (i.e., investigator A, B, C, and D) (p. 267)
Following up on surprises	 Follow up on surprises: Reflect on the surprise to surface your violated theory Consider how to revise it Look for evidence to support your revision (p. 271)
Making if-then tests	 Make if-then statements on data about which you: Are increasingly puzzled or blocked Feel on the brink of an Aha! (p.272)
Checking out rival explanations	During the final analysis, first check out the merits of the "next best" explanation you or others can think of as an alternative to the one you preferred at the end of the field work (p. 275).

Ultimately, the researchers aimed to draw conclusions that have been rigorously tested for "their *plausibility*, their *sturdiness*, their '*confirmability*'—that is, their *validity*" (Miles & Huberman, 1994, p.11).

Traditional analysis sequence. The process of data analysis followed a slightly modified "traditional analysis sequence" (see Figures 3.3 and 3.4). The traditional analysis sequence includes (a) conducting interviews, (b) transcribing the interviews, (c) coding the interview data, (d) displaying the interview data, (e) drawing conclusions, (f) creating an outline for the final report, and (g) writing the final report. Whereas a traditional data analysis sequence involves multiple cycles of conducting interviews, transcribing interviews, coding data, displaying data, and drawing conclusions before moving on to creating an outline and writing the final report, the sequence of this study involved multiple cycles of coding data, displaying data, and drawing conclusions before moving on to creating an outline and writing the final report.

This modification to the traditional data analysis sequence resulted from the limited amount of time available between trips to the field. The research team conducted three full days of interviews. The three days were evenly spread across a three week time span. The researchers discovered that a week was not enough time to transcribe the data (write up the data), code the data, display the data, and draw conclusions before the next trip into the field. Therefore, all the data was collected and written up before any significant coding, displaying, or conclusion drawing occurred. Yet, valuable and iterative cycles of induction and deduction occurred as researchers refined and revised their list of codes which led to the recoding of previously coded data.

The Use of Triangulation

Researchers of this study applied two distinct understandings regarding the role and purpose of triangulation. The first understanding views triangulation as a way to ensure reliability and validity. In qualitative studies, reliability refers to "whether the

Figure 3.3. Traditional Data Analysis Sequence (Miles & Huberman, 1994, p. 85)

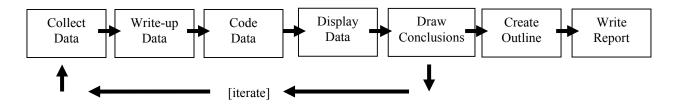
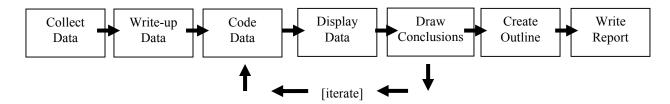


Figure 3.4. Modified Traditional Data Analysis Sequence



results are consistent with the data collected" (Merriam, 2009, p. 221). Lincoln and Guba (1985) describe reliability in terms of "dependability" and "consistency." Ultimately, the reliability of a study depends on the likelihood that others, "outsiders," would draw the same conclusions given the data collected (Merriam, 2009). If yes, then the study's results are consistent with the data collected and therefore reliable, as in dependable (Lincoln & Guba, 1985). Validity, in qualitative studies, speaks to the credibility of a study's findings (Merriam, 2009). "Do the findings capture what is really there" (Merriam, 2009, p. 213)? Do the findings emanate accuracy and truthfulness? If yes, then the study's results are considered valid, as in credible.

The second understanding views triangulation "less as a strategy for validating results and procedures than an alternative to validation...which increases scope, depth, and consistency" (Flick, 1998, p. 230 as cited by Erzberger & Kelle, 2003, p. 461). Within the researchers' individual sections, the first understanding of triangulation was applied (see the following section entitled "Reliability and Validity"). Then, as the researchers brought together the understandings and findings that emerged from their

individual sections in order to address the overarching research questions of the larger study, the researchers shifted to apply the second understanding of triangulation. At this point, the work of the researchers focused on searching for complementary results based on the "complementarity model of triangulation" (Erzberger & Kelle, 2003, p.469), meaning, that as the researchers investigated the central phenomenon of the larger study "different methods highlight different aspects of it" (Erzberger & Kelle, 2003, p.469). As a result, the researchers reviewed and examined understandings and findings from the individual sections looking for findings that complemented each other, ultimately resulting in a stronger depiction of the topics being analyzed (Erzberger & Kelle, 2003).

Reliability and Validity

It is critical to ensure the trustworthiness of findings based on the information gathered and data analysis. Merriam (2009) states "the most well-known strategy to shore up the internal validity of a study is what is known as triangulation" (p. 215). Creswell (2012) also emphasizes the process of triangulation as ensuring the validity of the findings. Both Merriam (2009) and Miles and Huberman (1994) describe triangulation from Denzin's (1978) description of the four forms of triangulation, including: by method, by source, by researcher, or by theory. Each form of triangulation serves to verify the study's findings. The researchers of this study applied the following forms of triangulation within their individual sections: (a) by method (i.e., interviews and documents), (b) by source (i.e., multiple district- and school-level leaders), and (c) by researcher (i.e., multiple researchers collecting and analyzing data).

The process of "check coding" was also used to ensure reliability (Miles & Huberman, 1994, p. 64). Check coding occurs when more than one researcher codes data,

then they review and discuss the results together. Once the data was accurately coded and triangulated, the data was interpreted and written in narrative form (Creswell, 2012; Merriam, 2009).

Researcher Bias and Assumptions

This research team consisted of four doctoral candidates who were all working as administrators in public school districts that were attempting to address disparities in student performance. Each of districts had different approaches to this work and as a result the researchers brought different experiences and perspectives to the analysis process. Because of the varying backgrounds and viewpoints, it is important to note that the researchers may have shared certain characteristics with the research participants. As a result, the researchers may have brought bias regarding the interpretation of leaders' understanding about the nature of the gap and related actions. Merriam (2009) states that researchers are the primary instrument in the data collection and analysis process, therefore, biases may influence the research study. Rather than trying to remove the biases, it is essential to "identify them and monitor them as to how they may be shaping the collection and interpretation of data" (Merriam, 2009, p.15).

Chapter Four⁴

Description

The city of New Hope, Massachusetts was first settled in the 1700s. The city is positioned on the New Hope River and a railway. Comprised of numerous one-way streets, bridges, and hills, New Hope is divided into several diverse neighborhoods that each have a specific ethnic identity (City of New Hope, 2013). Upon entering the city of New Hope, visitors encounter the downtown area which is intersected by the river.

A cluster of human service agencies line Main Street and are geared toward providing services in the city and nearby surrounding towns. The downtown business district is deprived of hustle and bustle, foot traffic, and commerce. This once prosperous nineteenth century manufacturing center now consists of numerous derelict factories undergoing conversion for alternate uses such as businesses and residences. The city shows further signs of a troubled economy with many vacant storefronts and apparently abandoned buildings throughout. Despite this sense of hardship, there are undercurrents of revitalization in the city. There is an acknowledgement of the arts in the city in the form of sculptures, and there are numerous restaurants catering to an ethnically diverse palette. A local college recently accredited with University status lies in the heart of the city.

New Hope is governed by a Mayor and is populated with over 40,000 individuals and up to 10,000 families residing in multi-family and single family homes. There is a 50% homeownership rate in the city of New Hope. According to the United States 2010 Census Bureau, the racial makeup of the city was roughly 80% White, 5% African

⁴ Chapter Four was co-authored by Ann F. Allwarden, Phillip J. Potenziano, Sujan S. Talukdar, and Karen J. Zaleski.

American, 0.3% Native American, 4% Asian, 0% Pacific Islander, 9% from another race, and 4% from two or more races and more than 20% of the population is made up of Hispanic or Latinos of any race. English is spoken as the first language in more than 75% of the homes. The median income for a household in the city averaged just below \$50,000 and the median income for a family was slightly below \$60,000 (United States Census Bureau, 2010). About 15% of families and 19% of the population were below the poverty line which included almost 30% of those being under age 18 and roughly 13% of those ages 65 or over (United States Census Bureau, 2010). As of 2011 the crime rate was estimated at roughly 400.1 compared with the U.S. average of 213.6 (City-Data, 2011). New Hope has the highest crime rate in comparison to the eight surrounding towns (City-Data, 2011). The New Hope Police Department responds to over 40,000 incidents each year.

Overview of the New Hope Public School District

The city of New Hope has eight public schools, five private/parochial schools, a regional vocational technical school, and a charter school that services students from the city of New Hope (City of New Hope, 2013). Students are registered and assigned to the public schools based on their primary residence; however, parents have the option of requesting their child's school assignment based on their top 3 choices of schools within the district (City of New Hope, 2013). Students are also accepted into the district by school choice. According to the Massachusetts Department of Elementary and Secondary Education (2013) school choice gives parents the option of seeking school enrollment for their children in a school district outside of their hometown. All application considerations are processed by the New Hope School District's Director of

ELL who also handles registration for the district. Students are accepted into the only charter school in the district via a lottery.

The public school district serves approximately 4,900 students in grades K-12 and of those, approximately 76% qualify for free and reduced lunch and 21% have individualized special education programs. The student population is identified racially as 44.6% Hispanic, 38.2% White, 5.8% Black/African American, 5.5% Asian, 5.7% Multi-Race, Non-Hispanic and the remaining Native American or Native Hawaiian, Pacific Islander. There are different home languages, and 32% of the students speak a first language other than English.

Using 2012-2013 district data, there are approximately 282 full time equivalent teachers in the district. Of those, approximately 258 are White, 16 Hispanic, 5

Black/African American, 2 Asian and 1 Multi-Race Non-Hispanic, with the gender breakdown being 221 females and 61 males. The complete district wide staffing data by race, ethnicity, and gender by full time equivalents is as follows: 602 White, 39 Hispanic, 15 African American/Black, three Asian, one Multi Race Non-Hispanic, 116 males and 544 females for a total of 660 staff.

The New Hope School District has eight district-level leaders and eight school-level leaders (i.e., principals). Interviews were conducted with all eight of the district-level leaders and six out of the eight school-level leaders. The following pseudonyms were given to district-level leaders: Sean, Adrianne, Veronica, Kaydence, Cote, Kelsey, Alicia, and Logan. The pseudonyms assigned to school-level leaders included: Ken, Mary, Brian, Jayden, Joe, Bill, Jamie, and Sharon. Table 4.1 offers additional information about each of the leaders interviewed. This table also includes information about the

Table 4.1New Hope District- and School-level Leaders

Participant	District/School	Accountability and Assistance Level 2010-2012	Accountability and Assistance Level 2013
Sean	District	Level 3	Level 3
Adrianne	District	Level 3	Level 3
Veronica	District	Level 3	Level 3
Kaydence	District	Level 3	Level 3
Cote	District	Level 3	Level 3
Kelsey	District	Level 3	Level 3
Alicia	District	Level 3	Level 3
Logan	District	Level 3	Level 3
Ken	Elementary School	Level 2	Level 1
Mary	Elementary School	Level 3	Level 3
Brian	Elementary School	Level 3	Level 3
Jayden	Elementary/Middle School	Insufficient Data	Level 2
Joe	Middle School	Level 3	Level 3
Bill	Middle School	Level 2	Level 2
Jamie	High School	Level 3	Level 3
Sharon	High School	Insufficient Data	Insufficient Data

Note. Information shaded in gray indicates the district's top performing schools.

district's accountability and assistance level, as well as each school's accountability and assistance level.

In the state of Massachusetts, each school is assigned an accountability and assistance level. There are five different levels (1-5). Level 1 status is assigned to the highest performing schools, and Level 5 is assigned to the lowest performing schools. (Districts are assigned a level based on the level of their lowest performing school.) Currently, the majority of schools within the state of Massachusetts have been assigned Level 1 or Level 2 status (Massachusetts Department of Elementary and Secondary Education, 2013b). A school assigned a Level 3 status indicates that it is among the lowest performing 20% of schools (Massachusetts Department of Elementary and

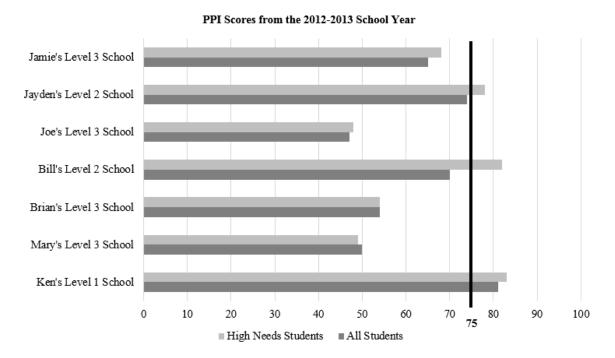
Secondary Education, 2013a).

In order to determine the accountability and assistance level for each school, the state uses the Progress and Performance Index (PPI). The PPI "combines information about narrowing proficiency gaps, growth, and graduation and dropout rates into a number between 0 and 100" (MADESE, 2013a, p. 2). A school is considered to be making progress toward narrowing proficiency gaps when the cumulative PPI for both the "all students" group and "high needs" group reaches or surpasses 75 (MADESE, 2013a). The high needs group is comprised of an "unduplicated count" of all students in a school belonging to at least one of the following subgroups: students with disabilities, English language learners (ELL)/Former ELL students, low income students (eligible for free/reduced price school lunch) (MADESE, 2013a, p. 2). The state's decision to include the high needs group stems from the belief that it will hold "more schools accountable for the performance of students belonging to historically disadvantaged groups" (MADESE, 2013a, p. 2). A school's level status can change from one year to the next based on their PPI score and their school percentile.

School percentiles (1-99) are reported for schools with at least four years of data. This number is an indication of the school's overall performance relative to other schools that serve the same or similar grades. State law requires ESE [Massachusetts's Department of Elementary and Secondary Education] to classify a school into Level 3 if it is among the lowest performing 20 percent of schools relative to other schools of the same school type (percentiles 1-20) (MADESE, 2013a, p. 7).

Figure 4.1 illustrates each school's PPI score for "all students" and "high needs" students

Figure 4.1. PPI Scores from the 2012-2013 School Year



from the 2012-2013 school year. With the target being 75, some schools seem better positioned to qualify for a move up in accountability and assistance level. The following section will explore further the disparities in student performance at both the district and individual school level.

Disparities in Student Performance

In an effort to describe clearly the student performance disparities that exist within the New Hope School District, three key indicators were examined: (a) state achievement tests, (b) graduation rates, and (c) Scholastic Aptitude Test (SAT) performance reports.

State achievement tests. Between the years of 2009 and 2013, an average of 50% of students attending the New Hope School District scored proficient or higher on the English Language Arts (ELA) portion of the state test. On the Mathematics portion of the state test, an average of 40% of New Hope students scored proficient or higher. The

disaggregation of this data illustrates the performance differences that exist among the specific student subgroups. As shown in Figures 4.2 and 4.3, the performance of some student subgroups falls substantially below the performance of other student subgroups. The greatest disparities (i.e., "gaps") in student performance, as measured by the state test, are experienced by Students with Disabilities, ELL students, Hispanic/Latino students, and Low Income students. Discrepancies in performance are evident in both ELA and mathematics for the students in these subgroups.

Table 4.2 provides the same information but disaggregated by school. Similar to district results, the greatest disparities in student performance have been experienced by Students with Disabilities, ELL students, Hispanic/Latino students, and Low Income students. This holds true for student performance in both ELA and mathematics. Table 4.2 also shares the percentage of students statewide who scored proficient or higher on the ELA and mathematics portions of the state test. Comparing individual school results against state results allows for a greater level of analysis. For example, the Students with Disabilities, ELL students, and Low Income students in Ken's Level 1 elementary school have regularly met or exceeded the state's performance. This further clarifies why Ken's school recently moved from Level 2 to Level 1. Another example includes the ELA performance of Low Income students in Bill's Level 2 school. Students within this subgroup have made steady gains since 2009, culminating in a record high of 52% percent scoring proficient or higher in 2013 which exceeded the state's performance by two percentage points. Although small, the percentage of Students with Disabilities scoring proficient or higher in Bill's school has also increased across the last five years. Other "stand outs" include the Students with Disabilities and Low Income students

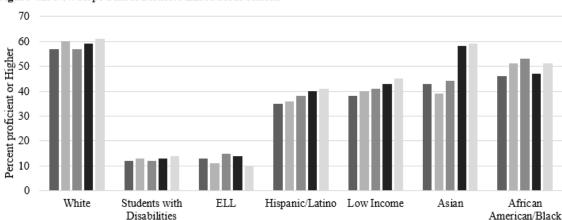
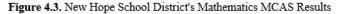
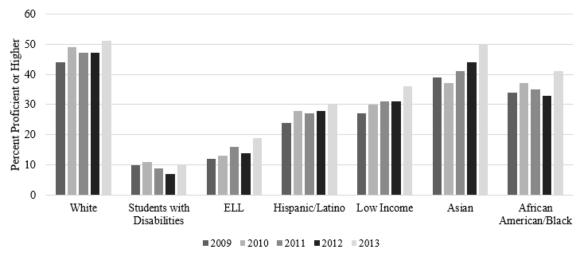


Figure 4.2. New Hope School District's ELA MCAS Results





attending Jamie's Level 3 school. Although the performance of students in these subgroups seems to fluctuate from year to year (rather than demonstrating steady gains), their performance has regularly met or exceeded the state's performance.

Graduation rates. Between the years of 2009 and 2012, approximately 70% of students attending the New Hope School District graduated. When data on graduation rates is disaggregated by student subgroup, differences once again emerge. Table 4.3 further illustrates the disparities in graduation rates that exist for Students with Disabilities, Hispanic/Latino students, ELL students, and Low Income Students when

 Table 4.2.

 Percentage of Students Scoring Proficient or Higher on the State Test

		<i>J</i>											
		Ken's Level 1 School											
		ELA Results				Math Results							
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>			
White	45	56	53	62	55	53	49	51	59	53			
Asian	-	-	-	-	-	-	-	-	-	-			
African American/Black	86	81	69	69	-	71	91	69	69	-			
Low Income	40	50	46	56	50	49	41	47	53	49			
ELL	18	21	22	30	22	23	21	34	40	43			
Hispanic/Latino	39	40	36	54	46	43	36	36	47	47			
Students w/ Disabilities	22	44	14	23	7	29	28	12	21	24			
		Mary's Level 3 School											
		E	LA Resu	ılts			Ma	ath Resi	ults				
	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013			
White	49	48	40	41	35	40	55	44	40	43			
Asian	13	27	25	55	33	19	9	17	45	41			
African American/Black	-	31	47	16	17	-	38	33	23	25			
Low Income	24	34	27	27	24	19	37	29	25	34			
ELL	12	5	0	0	6	12	9	13	8	21			
Hispanic/Latino	30	32	19	16	24	24	31	20	13	30			
Students w/ Disabilities	8	6	7	11	5	8	6	7	11	10			
				Br	ian's Le	vel 3 Scl	nool						
		EI	A Resu	lts			M	ath Res	ults				
	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013			
White	46	50	31	51	51	46	39	44	47	63			
Asian	43	21	33	27	40	28	21	33	33	60			
African American/Black	31	33	33	36	33	31	25	25	36	41			
Low Income	24	30	25	32	33	29	21	27	27	37			
ELL	9	14	28	19	16	12	8	10	16	27			
Hispanic/Latino	22	29	29	31	28	24	21	26	25	31			

Note. Bolded percentages in a high needs category indicate that the percentages were equal to or higher than the state's percentages for that year. ^a A "-" indicates insufficient data. Since data from the state's test was not available for Sharon's high school, her school was not included in the table.

Students w/

Disabilities

Table 4.2. (continued)Percentage of Students Scoring Proficient or Higher on the State Test

				Jay	den's Le	evel 2 Sc	hool				
		ELA Results					Math Results				
	2009	2010	<u>2011</u>	2012	2013	2009	<u>2010</u>	<u>2011</u>	2012	2013	
White	-	-	-	-	61	-	-	-	-	50	
Asian	-	-	-	-	58	-	-	-	-	50	
African American/Black	-	-	-	-	63	-	-	-	-	52	
Low Income	-	-	-	-	43	-	-	-	-	37	
ELL	-	-	-	-	7	-	-	-	-	13	
Hispanic/Latino	-	-	-	-	35	-	-	-	-	32	
Students w/ Disabilities	-	-	-	-	12	-	-	-	-	9	
		Bill's Level 2 School									
		El	LA Resu	ılts			M	ath Resu	ılts		
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	2012	<u>2013</u>	
White	-	53	54	60	63	-	40	36	38	45	
Asian	-	39	43	68	65	-	31	34	36	46	
African American/Black	-	48	59	48	41	-	24	29	28	26	
Low Income	_	40	44	47	52	-	22	23	24	29	
ELL	-	21	26	20	7	-	12	15	4	10	
Hispanic/Latino	-	39	44	43	49	-	22	25	24	25	
Students w/ Disabilities	-	12	17	18	19	-	6	6	9	9	
				Jo	e's Lev	el 3 Scho	ool				
		EL	A Resu	lts			M	ath Resu	ılts		
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	
White	69	69	68	60	66	51	55	50	47	52	
Asian	56	39	42	55	50	43	45	43	37	43	
African American/Black	53	54	61	48	45	41	35	29	29	36	
Low Income	45	44	47	43	45	31	34	29	30	34	
ELL	13	3	6	6	8	7	10	11	6	10	
Hispanic/Latino	43	42	43	41	42	27	32	26	27	27	
Students w/ Disabilities	16	13	10	7	10	13	14	6	2	6	

Note. Bolded percentages in a high needs category indicate that the percentages were equal to or higher than the state's percentages for that year. ^a A "-" indicates insufficient data. Since data from the state's test was not available for Sharon's high school, her school was not included in the table.

56

Table 4.2. (continued)Percentage of Students Scoring Proficient or Higher on the State Test

		Jamie's Level 3 School										
		El	LA Resu	lts		Math Results						
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>		
White	75	79	85	84	90	62	79	79	76	78		
Asian	50	61	78	100	100	57	72	78	83	82		
African American/Black	59	71	60	63	88	59	66	53	38	65		
Low Income	48	46	63	64	78	44	50	64	44	58		
ELL	25	-	-	-	-	-	60	-	-	-		
Hispanic/Latino	41	37	63	58	72	37	43	63	38	51		
Students w/ Disabilities	31	14	38	33	54	22	39	38	13	20		
		State										

		State								
		ELA Results					Math Results			
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
White	74	76	77	76	76	63	64	65	66	67
Asian	74	75	77	77	78	73	75	77	77	79
African American/Black	47	47	50	50	51	31	35	34	35	37
Low Income	45	47	49	50	50	33	37	37	38	41
ELL	19	22	22	22	21	22	24	26	24	25
Hispanic/Latino	41	43	45	45	45	30	34	34	34	38
Students w/ Disabilities	28	28	30	31	29	20	21	22	21	23

Note. Bolded percentages in a high needs category indicate that the percentages were equal to or higher than the state's percentages for that year. ^a A "-" indicates insufficient data. Since data from the state's test was not available for Sharon's high school, her school was not included in the table.

compared to the graduation rates of other student subgroups.

SAT performance reports. Reports of students completing the SAT were compiled and reviewed for discrepancies in student performance. The SAT is a college admissions examination that tests skills students have learned while attending school in the areas of reading, writing, and mathematics. In essence, "the SAT provides a trusted,

Table 4.3.Four Year Graduation Rate

		Percer	ntage Gradu	ated	
	2009	<u>2010</u>	<u>2011</u>	2012	Ave.
White	75	74	73	79	75
Asian	79	75	90	93	84
African American/Black	67	70	77	85	75
Low Income	64	62	70	69	66
ELL	55	61	71	74	65
Hispanic/Latino	59	57	63	64	61
Students with Disabilities	55	48	63	65	58

globally recognized indicator of...academic readiness for college" (The College Board, 2013). Upon close examination of the available data regarding the number of high school graduates who completed the SAT between 2009 and 2013, it is interesting to note that in the case of White and Hispanic/Latino, the percentage of students taking the test is inconsistent with the percentage of students that make up these subgroups within the district. In other words, while 40% of the total number of students in the New Hope School District is identified as White, an average of 63% of the SAT test takers were White between 2009 and 2013. Alternatively, while 40% of students are identified as Hispanic/Latino, on average only 17% of students belonging to this subgroup took the SAT between 2009 and 2013. This also held true when looking at socioeconomic status. While 65% of the total high school population was defined as low income between 2009 and 2013, only 38% of students belonging to this subgroup completed the SAT during those years. Because the number of students who took the SAT that were classified as ELL and Students with Disabilities was so small, performance data was not available for the purpose of making comparisons. When SAT performance data is disaggregated by

student subgroup, disparities once again become evident. Table 4.4 illustrates differences among the various student subgroups on the reading and math sections of the SAT.

Across all three indicators (i.e., state achievement tests, graduation rates, and SAT performance reports), discrepancies in the performance of students attending the New Hope School District exist. These disparities in performance correspond to students' race/ethnicity, class, and/or disability.

Table 4.4.Performance of New Hope Students in Reading and Mathematics on the SAT

	SAT Reading Scores								
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	Ave.			
White	490	483	472	494	469	482			
Asian	421	415	387	408	421	410			
African American/Black	381	425	426	436	402	414			
Low Income	415	427	409	425	415	418			
ELL	-	-	-	-	-	-			
Hispanic/Latino	423	445	401	412	412	419			
Students with Disabilities	-	-	418	-	-	418			
		SA	T Mathem	atics Score	es				
	2009	2010	<u>2011</u>	2012	2013	Ave.			
White	505	481	476	491	474	485			
Asian	474	500	431	448	456	462			
African American/Black	383	444	413	414	386	408			
Low Income	428	446	406	427	412	424			
ELL	-	-	-	-	-	-			
Hispanic/Latino	420	442	394	420	406	416			
Students with Disabilities	-	-	367	-	-	367			

Chapter Five⁵

Opportunity to Learn: The Role of Interactions in Understanding and Addressing **Educational Inequities**

Statement of Purpose

The overarching study recognizes that a primary motivation behind the NCLB legislation was to ensure the use of accountability measures as a way to strengthen instruction and improve student outcomes. Yet, to date, there is minimal evidence supporting the premise that the use of high-stakes tests improves either instruction or student outcomes; accountability measures have not had a positive impact on longstanding equity issues (Harris & Herrington, 2006). As a result, school districts maintain a responsibility beyond accountability measures to reform schools in a way that will reduce disparities in student performance related to race/ethnicity, class, and/or disability and provide equitable opportunities to learn for all students (Darling-Hammond, 2004, 2007). Therefore, it is important to examine school climate as a factor and indicator relating to student performance beyond standard accountability measures (Darling-Hammond, 2007). Spillane et al. (2004), define school climate as conditions, primarily leadership practice, geared at changing teaching and learning. Spillane (2006) also suggests that the school environment of teaching and learning is directly impacted by leadership practice. Specifically, these authors emphasize that the manner in which leaders interact with one another is a factor influencing their practice and the overall school learning environment (Spillane, 2006; Spillane et al., 2004).

⁵ Chapter Five was authored by Karen J. Zaleski.

From a distributed leadership lens, leadership practice is extended to encompass the work of all leaders (Spillane, 2006). Within this network of leaders, the leadership action of one influences—and is influenced by—the leadership actions of others (Spillane, 2006). This perspective emphasizes that within the actions of leaders are specific interactions that ultimately make up leadership practice (Spillane, 2006). By this definition, leadership practice is not limited to school-level leader interactions, thus implying that leadership practice beyond the school walls has the potential to impact the school learning environment as well. Therefore, school climate will be examined from the distributed leadership perspective of leadership practice, namely interactions between district- and school-level leaders, and the impact these interactions may have on their understanding of barriers in the learning environment.

When examining school climate from this perspective, district-level leadership plays a critical role. Researchers Daly and Finnigan (2010, 2011, 2012) emphasize the importance of interactions between district- and school-level leaders when examining learning environments and improvement efforts in schools, and they heavily focus on interactions between leaders through the concept of social networks. Social networks are defined as ties between individuals resulting in relationships being formulated which make up an important part of the climate and composition of a school district. These ties determine individual and collective actions among individuals. Honig and Venkateswaran (2012) highlight that schools rely on interactions with district leaders to result in partnerships that offer support with initiatives which ultimately influence leadership practice and the overall school climate. Honig, Copland, Rainey, Lorton, and Newton (2010) revealed that interactions between district- and school-level leaders assist with

capacity building to improve instruction and the learning environment, and Harris, Leithwood, Day, Sammons, and Hopkins (2007) confirm "there is increasing evidence of the importance of capacity building as a means of sustaining school improvement" (p.340). Finally, Leithwood, Louis, Anderson, and Wahlstrom (2004) state that the relationship between district- and school-level leaders is essential to leadership practice.

While much of the literature explores the role that interactions between districtand school-level leaders play in school improvement (Daly & Finnigan, 2010, 2011,
2012; Harris et al., 2007; Honig et al., 2010; Honig & Venkateswaran 2012; Leithwood et
al., 2004), there is limited scholarship on how those interactions specifically impact
leaders' understanding of barriers to students' opportunities to learn and related practice.
According to Mohrman, Tenkasi, and Mohrman (2003)

changes must be appropriated by the participants and incorporated into their patterns of interaction, it is through the interactions of the participants that the social system is able to arrive at a new network of relations and new ways of operating of which some aspects will conform to the intended designs whereas others will be creative and more effective departures from the original intentions (p.321).

This research suggests the importance of not only analyzing interactions but also conducting a social network analysis in order to better understand how leaders are relating to one another and the impact this has on their practice when engaging in efforts to improve schools. Borgatti, Jones, & Everett (1998) discuss social network analysis as a methodology that allows for connections between individuals to be analyzed in terms of patterns of interactions that relate to the performance of leadership tasks. Accordingly,

the purpose of this portion of the study is to address the gap in literature by conducting a qualitative social network analysis of district- and school-level leaders' interactions. It does so by analyzing how these interactions relate to their understanding and practice regarding students' opportunity to learn.

This study is guided by the following research questions: How do interactions between district- and school-level leaders influence their understanding of barriers to students' opportunity to learn? What ties exist between district- and school-level leaders that may influence their practice regarding students' opportunity to learn?

Relevant Background

There are numerous dynamics and subsystems at work within the overall school environment that impact teaching and learning (Sheppard, Brown, & Dibbon, 2009). Chapter 2 outlines the importance of formulating "a support-based reform agenda focused on creating the learning environment and condition in which...all children will have an opportunity to learn and succeed" (Schott Foundation for Public Education, 2012, p. 11). Leaders are constantly examining school climates and adopting practices in an effort to bridge the gap between leadership and learning outcomes, which are supported by the structures that are built in place to support reform and overall school improvement (Hallinger & Heck, 2010). These structures serve as "go-betweens" (Spillane, 2006, p.75) that are carried out through interactions between individuals. Specifically, the impact of district- and school-level leaders' interactions on their practice is a current focus area in the field of education (Daly & Finnigan, 2010, 2011, 2012; Harris et al., 2007; Honig et al., 2010; Honig & Venkateswaran 2012; Leithwood et al., 2004). Prior research has focused on a single leader's practice as being the most

important factor relating to student outcomes and change efforts (Gronn, 2003). More recent research points out that affecting student outcomes and change in schools involves positive interactions between all individuals and the efforts and practices of more than one leader (Copland, 2003; Hallinger & Heck, 2009; Leithwood, Harris, & Hopkins, 2008; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Levin, 2006; Sheppard, Brown, & Dibbon, 2009).

A distributed theory of leadership specifically emphasizes that the focus on leadership shifts away from one appointed leader's specific actions and highlights that the practice of leadership in schools is embedded in the interactions of many individuals and elements of their situation, such as tools and routines (Spillane, 2006; Spillane, Halverson, & Diamond, 2004). Distributed leadership specifically looks to the role of multiple leaders, as well as followers, and how they interact within a school context which ultimately defines the practice of leadership (Spillane, 2006; Spillane et al., 2004). The distributed leadership framework, therefore, emphasizes that the practice of all leaders is facilitated by relations and specific tasks distributed among leaders (Firestone & Martinez, 2007; Spillane, 2006; Spillane et al., 2004). A significant point within this theory is that it is precisely the leadership practices, and not the role that is heavily influenced and driven by connectedness in relationships (Spillane, 2006; Spillane et al., 2004). The interactions and connectedness between leaders in practice can be considered a resource when implementing and sustaining initiatives to close disparities in student performance and enhance students' opportunity to learn. This resource is derived through leaders' relations with one another and can be thought of as a form of social capital. Both distributed leadership and social capital theories speak to the collaborative nature of

leadership. However, social capital theory looks specifically at networks that are formed within organizations (Leana & Pil, 2006) to assist with improvement efforts and overall practice. Therefore, when examining relations in schools, it is important to look to the role that social capital plays in this process.

Shifting to the Role of Social Capital

Within a distributive context, Spillane (2006) defines leadership as:

Activities tied to the core work of the organization that are designed by organizational members to influence the motivation, knowledge, affect, or practices of other organizational members or that are understood by organizational members as intended to influence their motivation, knowledge, and practices; influence relationships that are not tied to the core work of the organization would not count as leadership by this definition (p. 12).

Social capital theory complements distributed leadership theory in that it ultimately looks to the importance of sharing knowledge and mobilizing resources embedded in individual interactions as critical to influencing practice and enhancing success in "purposive action" (Finnigan & Daly, 2010, p. 180). Many scholars have researched and defined the concepts of social capital through organizational, business and sociological perspectives (Adler & Kwon, 2002; Bourdieu, 1986; Coleman, 1988; McGrath & Krackhardt, 2003; Nahapiet & Ghoshal, 1998). Despite varying perspectives among these scholars, a common theme exists across the literature that describes social capital as the knowledge and resources rooted in relationships between individuals that are viewed as a determinant in actions (Daly & Finnigan, 2010, 2012; Leanna & Pil, 2006). Resources refer to essential information, advice, creative ideas and knowledge

flowing through the network to drive actions (Daly & Finnigan, 2012). Similar to distributed leadership theory, social capital relates to the resources that are available within the relations of many individuals. These relations are often discussed as ties in the social capital literature (Daly & Finnigan, 2010).

Network Ties

Ties between individuals, also known as social networks, are heavily defined through social capital theory as relationships between individuals which allow for enhanced communication, the flow of resources, and effective action in organizations and schools (Borgatti, Mehra, Brass, & Labianca, 2009; Daly & Finnigan, 2011, 2012; Leana & Pil, 2006; Lin, 1999; Vardaman, Amis, Dyson, Wright, & Van de, 2012). Trusting, cohesive, partnerships between district- and school-level leaders is essential in order to create these ties (Bryk & Schneider, 2002; Daly & Finnigan, 2011, 2012; Nahapiet & Ghoshal, 1998). According to Finnigan and Daly (2010),

ties that exist between hierarchal levels within organizations such as school and central office administrators, are critical to building capacity for change, and at the same time, lateral communication is vital for the diffusion of new ideas and to facilitate knowledge transfer, cooperative relationships, and innovation between groups (p.180).

Daly and Finnigan (2010, 2011) further emphasize that schools are rooted in the wider efforts of the district, and district-level leaders may have a direct influence on change initiatives and outcomes through the development of network ties between district- and school-level leaders. Research further indicates that ties between district- and school-level leaders relate to the pace in which the district progresses (Daly & Finnigan, 2011).

Analyzing social networks between district- and school-level leaders allows for the exploration of patterns of tie relations, as well as the exchange of resources that is taking place within these ties to determine the potential impact this may have on leaders' understanding of barriers relating to students' opportunity to learn and their practice.

Methods

The intent of this portion of the study was to (a) analyze interactions between district- and school-level leaders in a small, culturally diverse urban school district and (b) examine the ways in which leaders obtain the skills and knowledge necessary to understand and address barriers inhibiting students' opportunity to learn. While the methodology outlined in the overarching study was followed, the subsequent sections further detail information specific to this portion of the study.

Case Study

Under the umbrella of qualitative research designs, the researcher selected the case study approach "which focuses on understanding the dynamics present within single settings" (Eisenhardt, 1989, p. 534). The methodology employs a qualitative single case study design which supports the researcher in conducting a thorough exploration of the case being studied (Creswell 1998, 2012). This case study relies on multiple sources of evidence (Creswell, 2012). Yin (2008) explains that this type of case study research is quite challenging and should not be underestimated. Conducting a single case study allowed the researcher the opportunity to fully analyze all aspects of the study in depth.

Sample and Participant Selection

As aforementioned, snowball sampling (Creswell, 2012; Merriam, 2009) and reputational sampling (Miles & Huberman, 1994) was used to identify superintendent,

school and district leaders dedicated to addressing disparities in student performance. The sampling included district-level and school-level leaders that were actively engaged in interacting with one another as they attempted to address gaps in student performance gap. The district-level staff included leaders who had been engaged in tasks to enhance students' opportunity to learn. In addition, the school-level staff included leaders that demonstrated through interactions and actions their commitment to enhance student performance and learning opportunities.

Data Collection

Data was collected primarily through semi-structured interviews and then supplemented by the gathering of documents recommended by participants during their interviews.

Interviews. Data was collected from participants on October 22, 2013 and October 30, 2013 primarily through individual semi-structured interviews (Merriam, 2009). Interviews were conducted in-person within the school district setting, in each interviewee's office. Privacy was a factor in determining the location to ensure the session was uninterrupted, and in the hopes that this would enhance the participants' attentiveness and willingness to respond in a fashion that was open and honest. In an effort to minimize intrusion upon the interviewees' ability to perform their professional duties, all interviews were arranged at a time convenient for the interviewees. Data was collected using the specific interview protocols outlined in Appendix A. All participants were asked to sign the Consent to Participate form (see Appendix B). This consent reviewed participants' rights, details of confidentiality and record keeping procedures, and offers them all of the information necessary to make an informed decision prior to

agreeing to participate. Interviews were approximately one hour in length. All interviews conducted were recorded in their entirety. A professional transcriptionist, who was required to sign a confidentiality agreement, was hired to transcribe most of the interview recordings.

Specific interview questions were developed for this portion of the study using the theoretical frameworks (i.e. distributed leadership, social capital), the literature review (i.e., network ties), and the research questions presented in this section of the research study. Specific questions pertaining to this section are outlined in Appendix items eight and nine primarily, however, all questions designed by the research team allowed for exploration of this section. The questions were asked of all participants and were designed to assist in answering these central research questions:

- How do interactions between district- and school-level leaders influence their understanding of barriers inhibiting students' opportunity to learn?
- What ties exist between district- and school-level leaders that may influence their practice regarding students' opportunity to learn?

Furthermore, seeking answers to these questions provides greater insight and understanding to the larger research team as they work to answer the study's overarching research questions as outlined in Table 5.1. In an effort to further strengthen the reliability of the study, secondary sources of data were sought out by participants, including archived schools documents (Creswell, 2012).

Documents. Purposeful sampling was used for the identification and collection of relevant school and district documents. In an effort to collect relevant documents, each participant was asked during his or her interview if there were specific documents that he

or she viewed as particularly relevant to the researcher's area of focus (interactions) and would recommend that the researcher collect for analysis. The researcher also sought out additional documents believed to be pertinent to the case, including:

- District Accelerated Improvement Plan
- Action Planning Template

The collection and analysis of document data offered the researcher the opportunity to crosscheck and verify interviewee responses, as well as the conclusions being drawn by the researcher when engaging in data analysis. This process of verification supported the triangulation of data and thus strengthened the trustworthiness of the study's final conclusions and findings.

Data Analysis

The analysis of data consisted of (a) data reduction, (b) displaying data, and (c) drawing/verifying conclusions (Miles & Huberman, 1994).

Data reduction. Data reduction involved "selecting, focusing, simplifying, abstracting, and transforming the data" (Miles & Huberman, 1994, p. 10). For this portion of the research study, the process of data reduction began prior to the collection of data with the development of following research questions:

- How do interactions between district- and school-level leaders influence their understanding of barriers inhibiting students' opportunity to learn?
- What ties exist between district- and school-level leaders that may influence their practice regarding students' opportunity to learn?

Data reduction continued throughout the analysis utilizing the coding process. A "provisional start list of codes prior to fieldwork" (Merriam, 2009, p.58) was developed.

Table 5.1

Research Ouestions

OTL: Understanding and Addressing Educational Inequities Overarching Research Questions	OTL: The Role of Interactions Research Questions
How do district- and school-level leaders understand disparities in student performance related to race/ethnicity, class, and/or disability?	How do interactions between district-and school level leaders influence their understanding of barriers to students' opportunity to learn?
How do these understandings then influence the work of leadership that focuses on addressing disparities in student performance related to race/ethnicity, class, and/or disability?	What ties exist between district-and school level leaders that may influence their practice regarding students' opportunity to learn?

This start list began with a master code for each research based category and sub codes to follow which "marked off segments of data in each class of variables" (Merriam, 2009, p.58). Definitions of the master codes were developed to ensure that the researcher was coding with the same phenomena in mind (Miles & Huberman, 1994). These definitions were drawn from research and the literature review. Master codes include ties, trust, resources and leadership practice and are outline in Table 5.2. Data reduction continued during and after the collection of data as sections of transcripts and documents was identified as relevant and labeled according to the codes.

Data displays. Creating a data display involved displaying the data in an organized fashion to allow for conclusions to be drawn (Miles & Huberman, 1994). Sociograms, graphic representations of tie relations made up of nodes which represent individuals in the network, display and reveal the results (Borgatti & Halgin, 2011). Arrows reflect the direction of the relationship in the network. An adjacency matrix was used as a starting point for the development of the sociograms. The matrix consisted of rows and columns filled with participants and the target of their tie relation as revealed

Table 5.2Description of Codes

Code	Description
Ties	The reported structure of relationships within the school and district which drives actions (Borgatti et al., 2009; Daly & Finnigan, 2011, 2012; Leana & Pil, 2006; Lin, 1999; Vardaman et al., 2012).
Trust	Cohesive partnerships between district- and school-level leaders which is essential in order to create ties (Bryk & Schneider, 2002; Daly & Finnigan, 2011, 2012; Nahapiet & Ghoshal, 1998).
Resources	Essential information, advice, creative ideas and knowledge flowing between school and district leaders (Daly & Finnigan, 2012).
Leadership Practice	Specific tasks distributed among leaders that have a direct influence on change initiatives related to student outcomes initiated through the development of ties between district- and school-level leaders (Firestone & Martinez, 2007; Spillane, 2006; Spillane et al., 2004).

during data collection and analysis (Hanneman & Riddle, 2005). According to Hanneman & Riddle (2005), "this kind of a matrix is the starting point for almost all network analysis, and is called an 'adjacency matrix' because it represents who is next to, or adjacent to whom in the 'social space' mapped by the relations that we have measured"(p.3). Comparing and contrasting the responses of individual leaders in this fashion led to a full analysis of tie relations which is further explained in the results section.

Conclusion drawing and verification. The final component of data analysis, conclusion drawing and verification, involves determining the meaning of the data (Miles

& Huberman, 1994). As outlined in Chapter 3 various tactics are used to draw conclusions and verify those conclusions (Miles & Huberman, 1994). The initial adjacency matrix listed all the participants, and their relations to one another. Once completed, the initial matrix led to the development of sociograms noting the various relations. Comparing each individual sociogram led to a deep analysis of relations among leaders. Ultimately, the sociograms supported the analysis of relations between school and district level leaders and the impact of these relations on their work. Finally, conclusions were drawn from the data that have been rigorously assessed for their validity (Miles & Huberman, 1994).

The Use of Triangulation

It is critical to ensure the trustworthiness of findings based on the information gathered and data analysis (Merriam, 2009). Specific strategies were utilized to ensure trustworthiness Data was triangulated (Merriam 2009; Creswell, 2012). The following forms of triangulation were used: (a) by method (i.e., interviews and documents), (b) by source (i.e., multiple district- and school-level leaders), and (c) by researcher (i.e., multiple researchers collecting and analyzing data). Each form of triangulation serves to verify the study's findings. Triangulating in this manner yielded valuable information pertaining to the role of interactions and its impact on leaders' understanding and practice.

Reliability and Validity

Both Merriam (2009) and Creswell (2012) emphasize that triangulation ensures the validity of the findings. Ultimately, triangulation assisted with ensuring the validity of the findings in this section. Additionally, the process of "check coding" was used to

ensure clarity of the definitions when coding and to guarantee reliability (Miles & Huberman, 1994, p. 64). Check coding occurs when more than one researcher codes data, then they review and discuss the results together. Once the data was accurately coded and triangulated, the data was interpreted and written in narrative form (Creswell, 2012; Merriam, 2009).

Researcher Bias and Assumptions

This researcher is a doctoral candidate who is working as an administrator in a Level 3 public school district that is attempting to address disparities in student performance with DSAC. As a result of the researcher's background and viewpoints, it is important to note that the researcher shared certain experiences with the research participants. Therefore, the researcher may have brought bias regarding the interpretation of leaders' understanding about the nature of the gap and related actions. Merriam (2009) states that researchers are the primary instrument in the data collection and analysis process, therefore, biases may influence the research study. Rather than trying to remove the biases, it is essential to "identify them and monitor them as to how they may be shaping the collection and interpretation of data" (Merriam, 2009, p.15).

Results

Influential Interactions between Leaders

A potential factor influencing leaders' understanding of barriers inhibiting students' opportunity to learn is the manner in which leaders interact with one another. In particular, the interactions between district and school level leaders may result in a greater understanding of obstacles in the learning environment. Ultimately, this impacts their practice and the overall school learning environment (Spillane, 2006; Spillane et al.,

2004). The review of transcripts and documents focused on searching for evidence of leaders' interactions. After analyzing the data, findings about the interactions between district- and school-level leaders emerged: (a) the Level 3 status of the district led to leader interactions, and (b) organizational structures promoted increased interactions among leaders. Once these interactions were discovered, data was further analyzed to determine the influence of these interactions on leaders' understanding of barriers in the learning environment, in an effort to answer the first research question.

The following sections provide a discussion of these findings based on the analysis of both document and interview data.

The level 3 status of the district led to leader interactions. A review of online documents in the form of the Massachusetts Department of Elementary and Secondary Education accountability data (2013a) revealed that over a five year span from 2009-2013; there is a significant gap in performance between the subgroups and White students in the New Hope District. There is a fifty-nine percent difference from White students when examining the advanced and proficient performance of subgroups in English language arts. Additionally, there is a forty-eight percent difference between White students and subgroups when examining those who scored proficient or above in Math on the Massachusetts standards based assessment system. Upon closer examination of the accountability data, the New Hope District has not earned seventy-five points on the annual progress and performance index (PPI) which is needed to be considered "on target" in terms of performance (Massachusetts Department of Elementary and Secondary Education 2012, p.2). Contributing factors include the aforementioned inability to narrow gaps in student performance and maintain growth in Math/English

Language Arts as well as New Hope's seventy-five percent graduation rate and estimated fourteen percent drop-out rate calculated for all students in 2012. Sixteen percent of students who dropped out are students who met low income guidelines, students who are disabled, and/or English Language Learners in comparison with non-students of color who averaged a seven percent drop-out rate in 2012. These disturbing results are hindering the district's ability to be on target according to the state standards and emphasize the likelihood that barriers are present in the district that are hindering students' opportunity to learn.

After analyzing both interview and document data to reflect interactions between district- and school-level leaders, coded responses yielded valuable information generated from documents and participant responses. An initial interview was conducted with Sean, an experienced district leader of the New Hope School District. During the interview Sean explained that beginning in 2010, the New Hope School District partnered with the Massachusetts District and School Assistance Center (DSAC). According to the Massachusetts Department of Elementary and Secondary Education (2013b), school districts that choose to partner with DSAC are assigned a team comprised of several individuals including a Regional Assistance Director, a professional development coordinator, and a support, data, math, and literacy specialist. "The DSAC teams collaborate with districts to assess their strengths and needs, facilitate access to resources and professional development, establish partnerships and networks, and deliver individualized assistance for the region's districts" (Massachusetts Department of Elementary and Secondary Education, 2013b, p.1). According to the Massachusetts Department of Elementary and Secondary Education (2013c), "in accordance with state

law, the Department of Elementary and Secondary Education (ESE) annually classifies the lowest performing 20 percent of schools into Level 3" (p.1). Sean reports that because the New Hope School District is a Level 3 school district, they were given priority for receiving DSAC services which increased collaboration between school and district leaders. Sean states, "The DSAC team assisted the district by meeting with school and district leaders monthly, and sometimes more often, and has supported and assisted us with collaborating, analyzing data, and creating the Accelerated Improvement Plan (AIP)." It is worth noting that school districts that are deemed Level 3 are not required to operate under an Accelerated Improvement plan. Rather, districts classified as Level 4 by the Department of Elementary and Secondary Education are required to "operate under Accelerated Improvement Plans to address systematic challenges" (Massachusetts Department of Elementary and Secondary Education, 2013b, p.1). The New Hope District made a voluntary local choice to create the AIP in partnership with DSAC in 2010. The Department of Elementary and Secondary Education offers DSAC services to Level 3 districts based on the belief that intervention will assist with enhancing student outcomes. This is best outlined in the DSAC guide for Level 3 districts emphasizing, "The theory of action concerning district improvement is that if a district can define a narrow set of strategic objectives to accelerate student learning, execute well-defined initiatives with a relentless focus on implementation, and systematically monitor the impact of those initiatives to inform mid-course corrections, then outcomes for students will be dramatically transformed" (Massachusetts Department of Elementary and Secondary Education, 2013b, p.2). Ultimately the partnership between DSAC and New Hope school and district leaders was a choice, not a state mandate.

Both district- and school-level leaders acknowledged during interviews that DSAC was instrumental in offering support with data and enhancing interactions between district- and school-level leaders. District leader Alicia has a unique role in that in some school settings it might be typical for her to be unaware of DSAC related data initiatives. Her role is completely removed from that of an instructional leader in the district. However, when referring to how central office supports principals in data analysis, Alicia responded by stating, "it was a year-long process that we participated with; it's through the DSAC." This response was impressive, given her role, and strengthened the notion that interactions exist at the school and district level as evidenced by her knowledge of this initiative and ability to respond to this inquiry. Comparably, Kaydence, who also has a district role, confirms there is an exchange taking place between school and district leaders through DSAC initiatives, stating:

But we've had an initiative now for two years, we haven't quite reached the critical mass after, this particular training we will, where we're looking at RBT and their data inquiry, and it's sponsored by the DSAC which is one of our local department of ed initiative types of thing for support.

Bill, a building leader, captured the theme that interactions were taking place between school and district level leaders and that support was evident in these interactions by offering:

And more recently, or most recently, last year we attended, probably half the administrative group attended a collaborative inquiry workshop... And that was looking at data.... And I thought that that was probably some of the best training, and best information that I've had in a number of years.

Evidence from interviews revealed that the external partnership with DSAC, because of the district's status, led to interactions between school and district leaders. While many documents were reviewed as recommended by participants, the Accelerated Improvement Plan (AIP) yielded the most pertinent information pertaining to leader interactions. As previously mentioned by Sean, the interactions between district- and school-level leaders led to the creation of the Accelerated Improvement Plan. This plan consists of strategic objectives designed to address barriers in the learning environment. District leader Logan makes a strong statement of his belief that the AIP, which has an indicator for collaboration, will assist leaders with school improvement efforts:

If I've learned anything in my time here, each school is a function of their principal, the leadership culture at their school.... I think now with this accelerated improvement plan which we are in year two of, I think it will help most of these Level 3 schools move up at least one level... I'm confident they can move up from at least three to two.

Strategic objective one of the AIP is geared toward developing the skills of school and district leaders, and identifying and promoting effective teaching, and improving student achievement. Initiative 1 highlights that school and district leaders implement the new educator evaluation system to ensure consistent evaluation of instruction and feedback in all schools. The first action within this indicator promotes collaboration through a professional development structure and outlines that all administrators will participate in a five-session professional development workshop on calibrating observations and providing consistent feedback to staff. They are then required to collaborate with each other and the Superintendent to review sample observation logs in

an effort to demonstrate consistency in identifying effective teaching practices.

Additionally, the second action in this indicator gave all administrators the option of interacting and collaborating by receiving Learning Walk training. Collaboration was identified by school and district leaders as so critical to their practice that they created a second part to initiative 1 designed specifically to promote collaboration. Initiative 1.2 of the AIP outlines that the district will establish an organizational structure that promotes collaboration among administrators and assists in identifying positive trends in, and impediments to, advancing student achievement.

Organizational structures promote increased interactions among leaders. As a result of the Level 3 status of the district and the AIP initiative to promote collaboration, district leader Sean added structures in the district to support collaboration. There are two structures called Administrative Council (ADCO) and Full Administrative Council (FADCO) in the district. Sean reports that ADCO consists of all principals and directors and FADCO includes those aforementioned as well as assistant principals. Interviews reveal a consistent shared theme among all building leaders (Joe, Bill, Jamie, Sharon, Jayden, Brian) and all district leaders (Sean, Kelsey, Kaydence, Logan, Cote, Veronica, Adrianne, Alicia), that these meetings are designed to ensure school and district leaders are interacting and discussing data. Key statements from building administrators acknowledged the connection to central office as critical to analyzing and using data to drive practice. Bill, a building leader, when asked how the connection to central office has helped with data offered:

During our data debriefings...As an administrative leadership group...we've done, let's see monthly meetings.... Certainly talking about the data, talking about

the implications of data.... Then, okay, how does this translate into what your teachers are doing in the classroom.

Jamie, another building leader, states, "administrative council, really focused on things like the Progress and Performance Index, taking best practices from, say, a school or whatever, or one of the ones that was moved to Level 2 or 1." Sharon, another building leader, acknowledges that central office has not only discussed data with building leaders but they have also trained administrators to work with teachers around data. District leader Adrianne summarizes the overall district sentiment, stating:

We meet regularly as a cabinet...ADCO which are all administrators at the Principal level and then FADCO which is the full administrative, so we do a lot of review, have data discussions.

District leader Kelsey acknowledges that these meetings enhance interactions, stating, "And sometimes after those meetings we linger, and those who don't have to rush off are still there. That seems to be a time that we try to connect with each other if we have something in particular." Evidence further reveals that through these interactions, one district leader has developed a strong sense of empathy towards principal leaders as a result of these meetings. Logan admits:

As I sit here sometimes when we have our ADCO... I have a great feel of empathy for our principals because I think the job that they entered ... in a challenged urban district I think it's much different. And frankly, I think at some point it just wears on them in terms of their bandwidth and their ability to kind of balance central office and staff and where they're at. So it's tough. It's tough.

In addition to ADCO and FADCO, the district developed the AIP in an effort to increase interactions between school and district leaders. Review of the AIP document shows that within the collaboration initiative lay the expectation that administrators will meet every two weeks at a different school. During these meetings the hosting administrator provides a presentation on trends found in current observation visits and on student achievement identified from the school's data wall. Interview data revealed that leaders refer to this structure as a traveling cabinet. Sean states:

Last year I started a traveling cabinet meeting, so cabinet meetings are meetings of central office so it's Veronica and me, Logan, Cote, and Adrianne, and every other week we meet in the school. We used to meet up here all the time, but now we meet in the school and the school knows we're coming and they're supposed to present their data, where they are, what are they doing with their data teams, what's their biggest weakness, how are they going to address that, and then basically what do you need, what more do you need to do your work.

District leaders Cote and Kaydence confirm that Sean began having cabinet meetings last year which involved district leaders being directly involved in the work that principals are doing.

District leader Veronica summarizes district leaders' feedback that collaboration is authentic, and solid between school and district leaders as a result of these meetings, stating:

Collaboration is genuine, strong and deep; school to school not so much.... Some of our elementary schools are very strong, but it's really still leadership and personality driven. Now, at the district level we try to create that kind of

underlayment of cohesion through our coaches.... We meet with the coaches once a month, every one.... And deepening the work they do...we have a common way to do that through what we call the 9-day coaching cycle and the activities we engage in.

Specific evidence regarding tie relations, or lack thereof, pertaining to building leader interactions is outlined in the next section addressing tie relations. During interviews, at least two building leaders acknowledged central office supporting them as a result of the traveling cabinet. Joe states "People from central office come over and debrief with us, you know, how we did relative to the district and what standards and that sort of stuff that you know how kids are approaching." Similarly, Jayden reports "yeah, there's coaches and there's district people and they're coming in working with us and so, you know, that's a plus."

It is evident that given the Level 3 status of the district and the organizational structures in place, school and district leaders are interacting regularly. Now that there is a clear understanding of how leaders interact with one another, it is important to examine exactly how these interactions influence leaders' understanding of barriers inhibiting students' opportunity to learn. There is strong evidence revealing that these interactions did in fact lead to an understanding of barriers hindering student learning opportunities. The following section provides this insight.

Interactions Resulted in Leaders' Understanding of Barriers

As previously mentioned, the AIP document yielded a great deal of relevant information. The AIP defined specific objectives to improve student performance, categorized initiatives to meet the objectives, and included a strategy for accountability

through a system of monitoring the execution and effect of the initiatives (Massachusetts Department of Elementary and Secondary Education, 2013b). A thorough review of the AIP revealed that interactions between district- and school-level leaders led to an understanding of barriers that inhibited students' opportunity to learn, evident in the strategic objectives they created together.

Strategic objective one focuses on the need to develop the skills of the superintendent and administrators to identify and promote effective teaching and improve student achievement. The implementation of the new educator evaluation system was noted as the initiative in conjunction with a five session professional development opportunity to assist administrators with this process. Strategic objective two of the AIP reveals that school and district leaders have identified the lack of an aligned curriculum as another barrier inhibiting students' opportunity to learn. As a result, a plan has been developed for the Assistant Superintendent, in conjunction with staff committees at the building level, to align the curriculum in all grades to the state frameworks and implement the new guides throughout the district. Strategic objective three of the AIP is aimed at identifying critical instructional practices that provide a district-wide focus and promote the use of these practices in all classrooms. The action identified to carry out this objective includes the development of a task force that includes both district- and schoollevel leaders as well as content-area coaches who are given the responsibility of determining teaching practices that provide a framework for instructional improvement.

Ultimately, the creation of the AIP document reveals that, collectively, all districtand school-level leaders have identified the following barriers in the learning environment: leaders' skills need to be enhanced to identify and promote effective teaching and improve student achievement, the curriculum needs to be aligned as well as implemented, and critical instructional practices need to be identified to promote a district- wide focus regarding promotion of use of critical instructional practices in all classrooms. While this provides a general overview of elements that need to be addressed in the learning environment, an action planning template was also reviewed. This template was developed by district- and school-level leaders during the DSAC Collaboration Institute training they received which revealed specific information pertaining to students with disabilities. Additionally, interview data revealed that collaboration between a school and district leader led to findings outlined below pertaining to ELL and students who met low income guidelines.

Barriers Exist for Disabled, Low Income and Latino Students

When asked to describe gaps in academic performance, nearly every administrator interviewed described students from low-income backgrounds, ELL and students with special needs among those most impacted by gaps in student performance. Review of standardized test scores available through the Department of Education website confirmed this to be true. Upon review of the action planning template it is evident that district- and school-level leaders concluded that students with disabilities do not have full access to standards-based, general education, grade level curriculum to insure sufficient, accelerated and/or equitable academic growth and achievement as measured by MCAS. Contributing factors included teachers as well as administrators, who lacked the knowledge and skills to successfully support students with disabilities. Also, it was determined that within the schools and district there were varying visions and theories of actions relating to servicing students with disabilities.

Specific barriers were identified by all district- and school-level leaders as hindering opportunities to learn for students with disabilities:

- Staff does not have the appropriate knowledge or training to support students
 with disabilities in standards-based academics and emotional/behavioral
 systems in their regular classrooms.
- Teachers still believe that students should be separated by learning needs and instruction should be adjusted/lowered to meet those grouping needs.
- Mixed-messaging regarding administration: administrators have a range of skills, but also have site-based autonomy.
- The district culture aims to balance autonomy and coherence but not always successfully.
- Building-level professional development is separate from district-directed.
- Staff members make independent professional development choices; too broad a menu of options.

In addition to the six barriers noted, Sean also acknowledged that continually assigning paraprofessionals to students was also a barrier in the learning environment. He states:

Often times our approach to special education students was to throw more adults at them, and oftentimes it was less qualified adults...exacerbating the dependence rather than accelerating the independence of learning. So we really shifted the model to really change that and create more team teaching between special education and regular education teachers.

Veronica relayed that there is still a struggle around "who owns the learning for students with disabilities and second language learners." Adrianne shares Veronica's belief, stating:

The schools we're still struggling with, you may hear them separate out one population of students from another, but the schools that were a success, like I said with the data, they're all incorporated in; it's all students all the time. And there's a big shift in the district around inclusive teaching.

During the course of interviewing building leader Jamie, it was revealed that in addition to students with disabilities needing support there was a lack of equity pertaining to AP enrollment of low income and Latino students. She reports:

But we also have achievement gaps with AP participation.... In just two years, we've got from 135 enrollments to 382 ... We've gone from six APs to 12. We've gone from seven Latino students to about 40 taking at least one. We've gone from 25, 26 low income to over 100.

Sean acknowledges that he partnered with Jamie to ensure all students now take at least one AP course prior to graduation. It is clearly indicated that some school and district leaders have gained an understanding of barriers in the learning environment pertaining to low income, Latino, as well as students with disabilities as a result of their interactions with one another. However, further data reveals that despite these interactions some school leaders need additional support as they work to continually understand and address barriers in the learning environment.

School Leaders Need More Central Office Support

During interviews some of the school level leaders indicated that they need more

support from district level leaders regarding data analysis. Jayden states "the district gives more of an umbrella and doesn't get into a lot of the nuts and bolts." He further offers:

It's being left up to the principals, and I would wonder if the efficacy of some of the lower performing schools is they don't know how... the district mandates a lot of data collection and I'm not sure they've trained us very well and some people might need better training on how to use that data to drive instruction.

Brian addressed his overall frustration regarding not receiving enough support from central office in this area offering: "central office hasn't done any training with student data, they have asked us and required us to do is have a data room and data walls." Kelsey acknowledges that district level leaders tend to assume everyone including administrators knows how to use data and she further offers:

We need to make sure that everybody understands what it is that we're analyzing, and exactly what a particular tool is able to do for us. So if we're looking at benchmarks in fluencies, people need to be aware that we are looking at fluency, and just fluency, and then extrapolating from that what that means, okay, that people need to understand what that can do for you and what it can't do for you.

Ultimately, some school leaders appear to be feeling that support is not as strong as it could be in the area of data analysis. As a result of this finding it is essential to conduct a deeper analysis of the interactions taking place between individuals to determine leader connectedness and its relation to the performance of leadership tasks (Borgatti, Jones, & Everett, 1998).

Social Ties among Leaders

Social capital theory reminds us that the structure of ties relate to how knowledge and resources flow to individuals in the network (Daly & Finnigan, 2011), and are considered to be a determinant in actions (Daly & Finnigan, 2010, 2012; Leanna & Pil, 2006), and that trusting, cohesive, partnerships are an essential element to the tie relation (Bryk & Schneider, 2002; Daly & Finnigan, 2011, 2012; Nahapiet & Ghoshal, 1998).

After analyzing the data findings about what ties exist between district- and school-level leaders that may influence their practice regarding students' opportunity to learn, the following emerged: (a) lack of trust hinders building level leader ties with one another, (b) district leaders have greater ties and reciprocity among themselves than building leaders, (c) despite specific building and district relations, ties are evident between district- and school-level leaders, and (d) regardless of tie relations, all leaders engage in tasks to enhance student learning.

It is evident that interactions are taking place between school and district leaders resulting in a resource exchange which led to understandings of barriers in the learning environment. However, it is essential to examine the extent to which leaders are connected in the network in order to determine the potential impact on their practice. When analyzing the relationships between school and district leaders, participants were asked whom they go to for advice and the reason for seeking out the identified person(s). Participants were then asked to share the nature of their conversations and whether or not they led to actions at the school or district level. Trust was also assessed as a factor by asking participants not only the reason they sought out a specific person(s), but also if

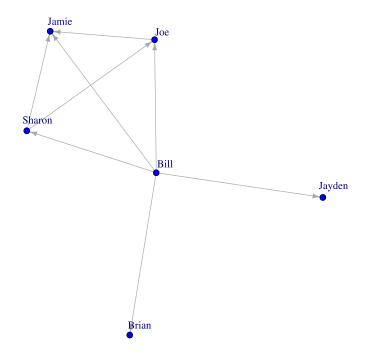
there were others they chose not to seek out. Findings reveal that building leaders are the most isolated in the network from one another.

Lack of Trust Hinders Building Level Leader Ties with One Another

Interviews were conducted and participants specifically mentioned who they were connected to in the network. Data relating to network connections was analyzed, placed in an adjacency matrix, and displayed in a sociogram as shown in Figure 5.1. Figure 5.1 displays the first analysis of tie relations which is the social network among building leaders. Each node represents one of the six interviewed building leaders and the arrows reflect the direction of the connection. Participant responses revealed that there are no mutual ties indicated in the group.

Mutual ties in this study refer to an aspect of tie strength that involves a reciprocal sharing of information (Granovetter, 1973). In three cases (Brian, Jayden, and Sharon) there is only a single incoming tie from Bill. Bill has no incoming tie connection; however, he seeks out all building leaders. Bill acknowledged that he goes to anyone and everyone in the network and he states, "So, I think that at least for me, as a building leader, I try to get as much information from others and say okay how this can apply to what we're doing." Jamie has the most incoming tie connections. Bill goes to Jamie as he does the others for information seeking, as noted above. Joe confirms that he is closest with Jamie, stating, "Well, I'll ask like Jamie, just general things, have you seen this, what do you think about this, what way did you handle this." Sharon acknowledges she has to go to Jamie stating, "There has to be a marriage... there has to be." Trust was not mentioned as factors in these tie relations. Jamie, Brian and Jayden have no direct

Figure 5.1. Sociogram for school leaders.



connection to anyone in the building leader tie relation. While others are seeking them out, they do not seek out anyone at the building level, which indicates half of the building leaders interviewed operates in isolation from the others. Causal factors relate directly to trust. Jamie acknowledges that she has minimal trust in the building leadership team stating she trusts central office leaders; however, "the other principals a little bit, one or two maybe in particular." Brian reports that there are at least two principals in the district who are not open to working collaboratively together. When asked if trust is a factor he states:

Yes, trust is a factor. One of the principals in the district is very close with central office administrators. She has a tendency, if you go to her for help or ask her a

question, she'll then blab that you don't know what you're doing.... And that comes out in the meeting, and you know who said that information to them.

Jayden also confirms trust is a factor in the tie relation by offering:

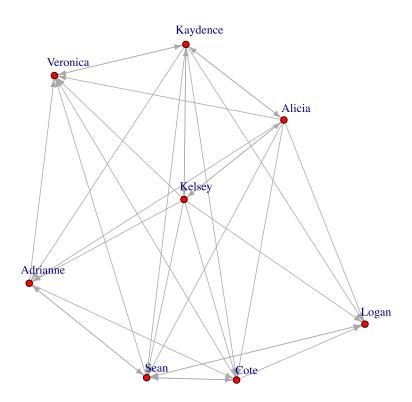
I wish we could come together more as a collective leadership group in the district. We're unable to. It's not the culture....You have to be careful what you say and how you say it and when you say it; it sometimes can come back to get you.

It is evident that lack of trust relates to half of the building leadership team operating in isolation at the building level. Interview data reveals that district leaders also struggled with trust, however, despite this, relations among the central office team were stronger.

District Leaders Have Greater Ties and Reciprocity among Themselves than Building Leaders

Relationships between district leaders are represented in Figure 5.2. Here, it is noted that there are greater ties than in the building leader network, as well as greater reciprocity. Veronica receives incoming ties from all leaders except Logan, and she reciprocates the tie with Kaydence. Similarly, Logan, Cote, and Adrianne receive at least three incoming ties and also have one reciprocated tie with Sean. Kaydence and Sean have the most reciprocated ties, three each. Kaydence shares ties with Alicia, Kelsey, and Veronica. Sean shares ties with Adrianne, Cote and Logan. All but one leader, Veronica, seek Sean out for advice. In sum, all district leaders are seeking out other district leaders and have reciprocated ties with each other.

Figure 5.2. Sociogram for district leaders.



Factors relating to the tie relation were noted during interviews. Sean states he goes to the identified people because "they know what I'm talking about." Trust was also mentioned as a factor. Alicia also acknowledges that she goes to folks because, "It would depend on what the subject matter is, obviously." When she was asked if trust was a factor she said, "I think always." Adrianne admits she seeks folks out to exchange information and knowledge and she summarizes trust as a main factor, offering:

Yeah, I think part of it you build trust as you get to know people...I already knew Veronica coming into the position already, and I've learned over the past two years to have a lot more trust for Sean, Logan, and Cote. It was just that I didn't

know them as well and previously hadn't had a lot of communication with them, but now I feel definitely I could walk into Sean's office at any point and just say I need to speak with you about something and he'll give me advice, his door is always open to me. I think this group has a good working dynamic. I mean, do we go back and forth with each other sometimes on some matters, of course we do, but it's just out of frustration for the whole job and the lack of resources.

Similarly, Cote identified trust as a definite factor in his relations, stating:

I would say that I have stronger relationships with some rather than others....

Sometimes comments that are made and heard by others that come back to me that have me scratching my head about why someone would say something that just appears to be a cheap shot at someone, you know. But then on the other hand deep down I feel that they're a strong good person, but you're wondering why in some cases the person does the things that they do.

Kelsey, Kaydence, Veronica and Logan did not specifically relay trust as a factor in the tie relation. Veronica makes a statement that captures seeking out individuals apart from trust, stating, "they're all folks who I think have a particular interest or passion or point of view about the world." It is evident that district leaders trust each other in the sense that despite the nature of relations they are willing to seek each other out to exchange resources. Unlike building leaders, they are not completely isolated in the network. However, of the eight district leaders interviewed, there are no more than three mutual ties between them. This indicates the potential impact of trust on these relations. Further interview data reveals that despite the nature of building or central office specific relations, this does not hinder the interactions between school and district level leaders.

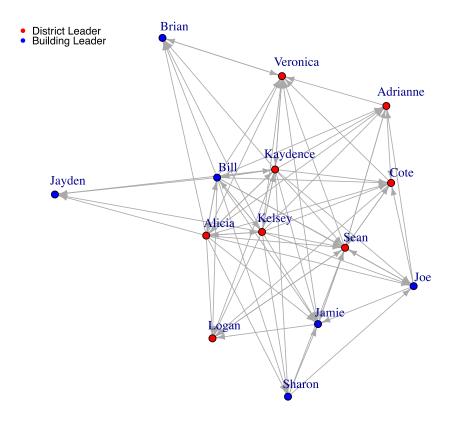
Despite Specific Building and District Relations Ties Are Evident between Districtand School-Level Leaders

Despite the fact that lack of trust impacts at least half of the relations at the school and district level, Figure 5.3 highlights that all building leaders have incoming ties from at least three district leaders. These district leaders exclude Adrianne, Cote and Logan who indicate no tie relation to building leaders. Adrianne acknowledges that she goes to district leaders for knowledge-sharing and exchanging ideas. Even though she did not mention having specific ties with principals, she does recognize the value of the principal leader relationships, stating, "As you know in the building, that's under NCLB, sits under the principal so you have to have a close relationship with them to really help them understand the workings of my position." When Cote, a district leader, was asked why he cited district leaders as people he seeks out, he offers:

I guess part of it is they are peers of mine and it's a natural way for me to kind of expand the knowledge that I need by working with them, and probably part of it is proximity. They're here in the same office with me, I can sit in my office and scratch my head and try to figure it out or I could walk down the hall and try to brainstorm it with them.

Cote did not mention trust as a factor pertaining to principal relations. Logan acknowledged that he does not necessarily collaborate with principals because they have a perspective of central office that is "stereotypically it's big, bad, central office." He did not relate trust as a factor in his choice of ties. He did offer "maybe trust" relates to principals' perspective of central office. Figure 5.3 highlights that more than half of the district leadership team is actively seeking out building leaders. Also, all five district

Figure 5.3. Sociogram for School and District Leaders



leaders engaging with principals share at least one mutual tie with a building leader.

Similarly, four of the six building leaders (with the exception of Sharon and Jayden)

revealed that they are seeking out district leaders to exchange knowledge, ideas, and seek advice.

Sharon points out the only reason she does not go to central office is "because they've just got so much on their plate." Trust is not a factor in the tie relation. Jayden contributes his autonomy and the location of his building as a factor in not having specific tie relations to district leaders. He states:

I have a luxury of having lots of colleagues next door....We have lots of great resources next door and we built a good rapport. So we seek our partners with that. But I would say one good piece of work, of seeking advice and help, is we come together for each other.

This final analysis of tie relations reveals that trust is not the sole factor in the tie relation; rather, resource exchange is equally important. Given this information, it is important to examine whether or not all of the identified tie relations have an influence on the practice of leadership.

Regardless of Tie Relations All Leaders Engage in Tasks to Enhance Student Learning

District- and school-level leaders revealed that they perceive they are engaging in a variety of practices to enhance students' opportunity to learn at the school and district level. This was evident regardless of whether or not trusting ties were formulated and existent between individuals. For instance, Jayden, the least connected in the network structure, reveals he has a data room, is carrying out a writing initiative by analyzing data around writing in the professional learning community, and has created an innovation planning team enhancing collaboration with teachers which has resulted in students and subgroups taking responsibility for their learning. He states:

One of the specific things that has come out of that (innovation planning team) is student led conferences and adding the goal to student led conferences around setting the goal around MCAS, and that is rolling down to fourth and third grade. It's in the middle school, but fourth grade now will be doing student led conferences, we're working towards that, and third grade is the next peripheral

thing. And that's taking it to the subgroup, to the kids, because student led conferences, as you might know, is that the student leads the conference to tell their parents how they're doing.

Further, he reports that he believes in, and is carrying out, initiatives that support the AIP and district initiatives for inclusion and data driven practice, stating:

Teachers can service as many children as possible and do it in a inclusionary method, as well as it cuts down on the coordination and planning which is a key ingredient to improving data management. But targeting is the ability for teachers to co-plan together, looking at data to drive instruction but also then having the schedule to go in and address those needs.

Therefore, despite his lack of connections to all leaders, Jayden is engaging in practices that align with district goals to support eliminating barriers in the learning environment. Similarly, although Jamie shares no outgoing tie connections with building leaders due to lack of trust, she acknowledged that she engaged in efforts with Bill and Joe to create a school within her school to address students and subgroups with risk factors such as poor attendance, retention, and high discipline referrals. She has also consulted with building leaders when developing an Honors Academy. Additionally, Brian, another building leader who claimed lack of trust hindered tie relations, admits he has put initiatives in place apart from district driven ones to enhance student learning. For instance, he has weekly grade level meetings to help teachers assess data. He also reports that although he is not specifically connected to Sean in the network structure, he is reaching out to him for support, stating he asks Sean "how to represent data and work with data better."

Building leaders who have specific trusting tie relations are also engaging in practices to enhance the learning environment, but no more than the other leaders who are not as connected. For instance, Jamie is connected to district leaders and she reports that as a result she has a "data and restructuring committee," and she is "looking at data daily." All building leaders report in some capacity that they are doing the same. In an effort to address the gap pertaining to low income and ELL students enrolling in AP courses, Jamie has partnered with Sean to ensure that all students take at least one AP course prior to graduating. While this may be unique to Jamie's school, as previously mentioned, it is not unique to have Sean help other leaders with initiatives that are less connected in the network. Similarly, Bill is engaging in practices similar to other building leaders:

So, we have common planning time. Every six days my teachers meet....We really started the year with everyone as a school looking at our data and then breaking that down into the common planning time really then looking at the grade level data, breaking that down and then looking at your classroom data.

Bill also acknowledges that the structures he has in place assist with meeting the needs of a diverse population, stating "it has helped us define more clearly what those subgroups are, which children fall into those subgroups". He is also using the new curriculum and a writing program geared toward supporting these students. Joe is also analyzing and showcasing data regularly, specifically in the area of special education, and he is using the writing program as well.

Ultimately, regardless of connections, all building leaders are engaging in similar practices. It is worth noting that during interviews, building leaders also acknowledged

that conducting walk throughs and giving constant feedback to teachers is critical to enhancing their practice and student outcomes. This further speaks to the influence that district leadership has had on their practice in that they have led by example and set similar systems and structures in place for building leaders. Therefore, apart from tie relations, consistent systems and structures are equally important.

These systems and structures are allowing leaders to enhance students' opportunity to learn by engaging in various practices at the building level. One school in the district did move from a Level 2 to Level 1 status last year; this is the highest performance rating assigned by the state. Sean indicates that the Principal of the highest performing school is the most advanced in terms of putting structures in place at the building level stating:

In one of our schools, which has actually had the highest academic success this year going from a Level 2 to a Level 1 school, is the most advanced in terms of an inclusion model so basically showing that inclusion actually produces results, and it's also our poorest school demographically with 87 percent free and reduced lunch. So what they've also put testimony to that – it's not about poverty. Poverty is not what holds students back, so I think that's the big key piece.

Similarly, Kaydence acknowledges that the colleague of a high performing school uses structures to support the learning environment, offering:

I think that probably most notably and recently is that even down to the students their talking about their data, and so teachers are working on putting up visual data walls. If you have an opportunity to speak with the Principal from the Level 1 school, he's got a lovely video of this fourth grader who's demonstrating this

data wall saying here's where I was, here's where I need to be, these are the things that we're doing.... He's like oh, there's a problem here, you know. But it's in a very positive way.

District leader Alicia, when asked if data structures have resulted in changes in the schools, states, "Absolutely...one of our elementary schools reached level one status; two schools reached level two status; and others are right on the cusp of levels one and two".

Adrianne also reports:

If you have an interview with district leader Veronica she'll talk a lot about the coaches and how they integrate with that data.... The biggest impact I think we've seen last year is people really focusing on those students and scores with their faces attached and really trying to move kids forward. Sean I'm sure talked a lot about the level one school and how they move forward.

Jamie also recognizes that the highest performing school is a model for progress offering:

Administrative council really focused on things like the PPI, taking best practices from, say, the Level 1 School.... In fact, some of the ideas on data review were modified from this school. And that's been promoted by central office.

This information confirms that apart from tie relations it is important to have consistent structures in place. Leaders in the New Hope District put structures in place which have had an impact on the school learning environment. The best evidence of this is the advancement of one school in the district to a Level 1 status this past year.

As aforementioned, district leaders Sean, Alicia, Cote, and Adrianne acknowledged trust was a factor in their tie relations. However, despite this, they, along with other district leaders, are participating in practices with each other and all school

leaders to support the work of enhancing student opportunities to learn. They all attend ADCO, FADCO, and traveling cabinet meetings with all building leaders. Cote confirms his involvement stating:

We were at a meeting at Joe's school, we had the cabinet there yesterday and they were showing us these color-coded cards that they had that kind of identified where the kids were in terms of ... their growth related to math, and then what interventions are going in. And then there was talking about sharing that information with the kids so the kids kind of had an understanding of ...what the growth means and how it affects overall not only their own learning but the district and accountability and how to try to raise everyone up.

Alicia reports that she has been actively involved with leaders surrounding attendance initiatives stating:

My focus is gaps related to attendance. What are the reasons for attendance? So to that end, I've absolutely been a part of many of the different initiatives and committee that are related to attendance, dropout rates, and graduation rates within a four-year period of time.

Adrianne also acknowledges her active involvement with initiatives, offering:

I have to say as far as my department is concerned, we've had a lot of rollover in directors... And people weren't very happy with the department, and one of my philosophies as a director is just, I'd meet regularly with the principal so I want to see their data, I want to understand what they're doing... so I can help support them. So I meet with them on a regular basis, and like I said we have ADCO all

the time where we meet, but I also go out to the building on a regular basis especially now that we're part of the evaluation system.

Regardless of ties, Sean also works with all principals and he reports:

This year I had every principal write either, if they moved up a level they were to write a sustained improvement plan, and if they didn't they were to write an accelerated improvement plan. Each district leader is assigned to a principal whose building has their own accelerated improvement plan.

Similarly, Veronica acknowledges that despite ties everyone is involved with the writing initiative:

This writing thing is a big thing with us. We sent five people to New York this summer, two principals, the two coaches and the literacy director. The units of study are in place, the coaches are running PD; we've had school wide writing performance-based assessments at the beginning of the year, at the end of every unit, at every grade level. So it's coherent in its design, and its implementation is in stages; it's district to school across the district. It's just not necessarily principal to principal.

In sum, when analyzing the influence of ties on leaders' practice it is evident that apart from trusting relations, other factors play a role. Physical proximity to one another allows district leaders to be more centralized and perhaps connected. Regardless of relations, leaders are connecting with one another to exchange resources. The structures set in place by district leaders allow for building leaders to be supported in their practice. Evidence also reveals that consistent structures are enhancing student opportunities to learn at the building level. Therefore, despite specific relations, interactions were taking

place between school and district leaders which is informing their practice and enhancing the learning environment. Although this study suggests that there was a lack of tie relations at the building and district level this did not result in initiatives being stalled.

Rather, despite the nature of relations in the New Hope District the organizational structures in place resulted in both building and district leaders being actively engaged in practices that were intended to support enhancing students' opportunity to learn.

Discussion

In this case study, the central features of interactions was examined from a social capital perspective. When examining ties between participants, relations and mutual exchanges within the network were considered (Leana & Pil, 2006; Daly & Finnigan, 2012). The types of interactions between individuals in the network were explored by analyzing trust (Leana & Pil, 2006). Trust, as discussed, is essential to the tie relation and "regarding its relationship to the structural aspects of social capital, trusting relations allow the transmission of more information as well as richer and potentially more valuable information" (Leana & Pil, 2006, p.354). Additionally, interactions were explored from a distributed leadership perspective by examining the role of multiple leaders, followers, and their interactions within the school district which contributed to their understanding and practice (Spillane, 2006; Spillane et al., 2004). The use of these two theoretical frameworks, in conjunction with the described methodology, contributes to the uniqueness of this study.

Findings suggest that the social capital and distributed leadership perspectives were supported in that ties between leaders did, in fact, lead to communication, resource exchange, and perceived effective action in schools (Borgatti et al., 2009; Daly &

Finnigan, 2011, 2012; Leana & Pil, 2006; Lin, 1999; Vardaman et al., 2012). Findings revealed that as a result of the district's status leaders had an opportunity to formulate ties with one another and increase interactions. School and district-level leaders dialogued regularly and were able to exchange ideas and resources. The collaborative discourses that took place among leaders led to the identification of barriers in the district resulting in actions aimed at enhancing the learning environment. The Accelerated Improvement Plan which consisted of strategic objectives designed to address barriers in the learning environment demonstrates how New Hope leaders shared knowledge and mobilized resources embedded in individual interactions which was critical to influencing their practice and enhancing success in "purposive action" (Finnigan & Daly, 2010, p. 180).

More specifically, these interactions led to leaders analyzing gaps in academic performance for students from low-income backgrounds, English language learners and students with special needs. Leaders took action as evidenced in the course placement decision that was made; the planning template for students with disabilities also indicated actions that needed to be taken for those who do not have full access to standards-based, general education, grade level curriculum to insure sufficient, accelerated and/or equitable academic growth and achievement as measured by MCAS. As aforementioned, contributing factors included teachers, as well as administrators lacked the knowledge and skills to successfully support students with disabilities, and there were varying visions and theories of actions relating to servicing students with disabilities. New Hope leaders recognized these barriers through their interactions and embraced the opportunity to partner with DSAC in an effort to address them.

It is evident that findings pertaining to the interactions between district- and school-level leaders support the stated research. The structure of ties in the New Hope District did relate to how knowledge and resources were flowing between leaders in the network (Daly & Finnigan, 2011), and were a determinant in actions (Daly & Finnigan, 2010, 2012; Leanna & Pil, 2006). However, it is worth considering that there could be a future opportunity to enhance resource exchange and district progress if New Hope school and district leaders work to develop relationships and share ties with those individuals not identified as a support in the network. Daly and Finnigan (2011) remind us that ties between district- and school-level leaders relate to the pace in which the district progresses, and Honig, Copland, Rainey, Lorton, and Newton (2010) strengthen the notion that that interactions between district- and school-level leaders is critical to improving instruction and the learning environment. Therefore, strengthened relations in this district and others may lead to more schools advancing to the level one status.

While distributed leadership and social capital theory was supported in the area of interactions, one question remains: do these theories hold up in a high stakes accountability environment? Relations among individuals contribute to the practice of leadership which is critical to the distributed leadership theoretical framework (Harris, Leithwood, Day, Sammons, & Hopkins, 2007; Spillane, 2006). Similarly, social capital theory emphasizes that improvement in organizations directly relates to the exchange of information that takes place within relationships (Leana & Pil, 2006). Mintrop (2004) points out that schools that are struggling to perform face many challenges and as a result educators are faced with incredible demands to improve student performance. The New Hope district is clearly faced with pressure to improve given the Level 3 status assigned

by the state. Perhaps the interactions, tools and routines that make up the practice of leadership (Spillane, 2006) in this district as well as the exchange of resources (Leana & Pil, 2006) that is taking place among district and school- level leaders is not a result of established relations and genuine collaboration, but rather the interactions and actions may be based solely on an expectation to perform and meet accountability demands.

There was evidence of district leaders encouraging this type of high pressure environment when they spoke of the Level one school being a model for the district. Daly and Finnigan (2012) emphasize that

Districtwide improvement of underperforming systems therefore requires a shift in the way that change strategies are conceptualized and enacted within a district. This shift entails a move from focusing on individual schools as the unit of reform to conceptualizing change as inclusive of the entire system. (p.496).

To that end, a future research consideration is to examine the way change strategies are conceptualized in underperforming districts and to examine whether or not roles and hierarchy influence the interactions and tasks that leaders are engaging in an environment that is struggling to perform based on state standards.

A noteworthy point is that although ties did result in leaders exchanging resources and taking actions aimed at addressing gaps across the district other factors influenced leaders' interactions. For instance, trust played a role in the tie relations among half of the building and district leadership team, however, it was not a sole factor in the overall network structure between school and district leaders. Organizational structures proved equally important. Leaders who did not specifically identify individuals as a target of their trusting tie relation still actively engaged with one another through ADCO,FADCO,

and the traveling cabinet in an effort to enhance students' opportunity to learn. Therefore, these results refute the notion that trusting, cohesive partnerships between district- and school-level leaders are always essential in order to create these ties (Bryk & Schneider, 2002; Daly & Finnigan, 2011, 2012; Nahapiet & Ghoshal, 1998) when trying to engage in school improvement efforts.

This study design provides a practical contribution to the field of education by emphasizing the significance of consistent organizational structures in addition to social networks as essential to resource exchange and informing the work that leaders engage in to enhance students' opportunity to learn. Through this exploration of interactions, district leaders can be better informed as to the nature of relations between leaders in the district and the potential impact these relations may have on the learning environment. Regardless of trust, interview data reveals that ties did exist between leaders and as a result most of them are working collaboratively at the school and district level. This finding supports Daly and Finnigan (2010, 2011) belief that schools are rooted in the wider efforts of the district, and district-level leaders may have a direct influence on change initiatives and outcomes through the development of network ties between district- and school-level leaders. Further, where evidence revealed that there was a lack of tie relations at the building and district level, this did not result in initiatives being stalled. Rather, the organizational structures in place resulted in both building and district leaders being actively engaged in practices that were intended to support enhancing student opportunities to learn. While it is evident that regardless of specific relations leaders are engaging in tasks at the school and district level to enhance student learning opportunities, it is possible that more trusting relations could result in even more task

engagement and substantial evidence of school improvement across the district which may be a future research consideration.

Additionally, this study revealed the importance of keeping consistent organizational structures intact in order to ensure that leaders are continually engaging in tasks to enhance student opportunities to learn. The current status of the district led to an enhanced organizational structure through ADCO, FADCO, and the traveling cabinet which shifted the focus away from the superintendent leader, evidenced in the distribution of tasks among central office and principal leaders to enhance student learning. This shift allowed the practice of leadership to be embedded in the interactions of many individuals (Spillane, 2006; Spillane et al., 2004). These interactions between school and district leaders led to a deeper understanding of barriers inhibiting students' opportunity to learn as outlined in the findings and were instrumental in informing their practice at the school and district level as evidenced in the many tasks they perceive to be engaging in across the district. These structures also serve as what Spillane (2006) defines as "go-betweens" that are carried out through interactions between individuals (p.75). All of this information can serve as a guide for leaders to focus on the importance of sustaining initiatives through the structures that are in place and to focus on what Spillane and Diamond (2007) label as "organizational development and includes developing and maintaining a school culture in which norms of trust, collaboration, and collective responsibility for student learning support ongoing conversations about instruction and its improvement" as a key function for schools to run effectively (p.3).

Limitations and Future Areas for Research

There are a few limitations in this case study. Conducting a deeper analysis of the

tie relations, including an examination of tie strength (Granovetter, 1973), would have allowed for a closer examination of the tie relations to better determine connectedness between leaders. Specifically, demographic variables such as gender, years in education, and/or years in the district that might relate to the ties were not explored and could have yielded results pertaining to the specific cause of the tie relation beyond trust. While this study focused on social capital from the perspective of internal relationships, external capital, defined as "links between the organization and its external stakeholders" (Leana & Pil, 2006, p.353) was not explored. These areas are a suggested focus for future research.

Additionally, researchers were unable to interview two building level leaders. The research team offered various methods for participation; however, neither candidate opted to participate. The study was further limited by the fact that teaching staff was not interviewed as part of this study further restricting the ability to generalize findings. The lack of this data potentially skews the analysis and overall conclusion of findings pertaining to this portion of the study. Finally, this study was conducted in a small district; no one district can truly represent the nature of interactions and the work of district and school level leaders across the state or nation. Conducting future research involving multiple districts could assist with addressing this limitation when examining the impact of interactions between school and district leaders on students' opportunity to learn.

Chapter Six⁶

Discussion and Recommendations

This research study applied the distributed leadership theoretical framework to explore the following research questions: How do district- and school-level leaders understand disparities in student performance related to race/ethnicity, class and/or disability? How do these understandings then influence the work of leadership that focuses on addressing disparities in race/ethnicity, class, and/or disability? The distributed leadership framework allowed for a focus on interactions and the practice of leadership (Spillane, 2006; Spillane et al., 2004; Spillane et al., 2009; Spillane & Sherer, 2011). Specifically, the practice of leadership focused on the interactions of district- and school-level leaders and aspects of their work such as the tools and routines utilized to address disparities in student performance and broaden students' opportunity to learn (Spillane, 2006; Spillane & Sherer, 2011).

In this study, four researchers examined specific actions of district- and school level leaders as they engaged in the work of understanding and addressing barriers to students' opportunity to learn. In an attempt to answer the overarching research questions, each researcher examined separate aspects of the central phenomenon, including:

• The specific shifts in thinking that district- and school-level leaders identified as needed before disparities in student performance related to race/ethnicity, class, and/or disability could be effectively addressed, as well as the strategies district- and school-level leaders used in their attempts to prompt these shifts in thinking

112

⁶ Chapter Six was co-authored by Ann F. Allwarden, Phillip J. Potenziano, Sujan S. Talukdar, and Karen J. Zaleski.

(Allwarden, 2014).

- The professional learning leveraged by district-level leaders for school-level leaders as an action to further learn about, understand, and address the barriers that may be inhibiting students' opportunity to learn (Talukdar, 2014).
- The data analysis structures and routines that district- and school-level leaders perceived to be essential in understanding and addressing disparities in student performance related to race/ethnicity, class, and/or disability, as well as promoting students' opportunity to learn (Potenziano, 2014).
- The influence that interactions between district- and school-level leaders had on their understanding of barriers to students' opportunity to learn, as well as the influence that existing ties between district- and school-level leaders had on their practice aimed at improving students' opportunity to learn (Zaleski, 2014).

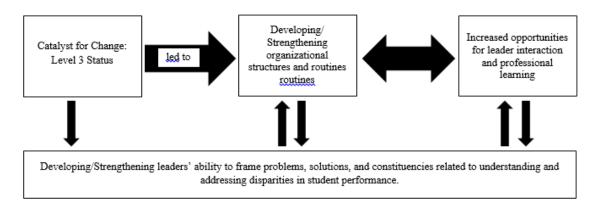
The following discussion synthesizes insights drawn from the four individual studies. These insights were gained by searching for complementary results based on the "complementarity model of triangulation" (Erzberger & Kelle, 2003, p.469). Applying the complementarity model of triangulation involved reviewing the individual studies for findings that complemented one another. Because the complementary findings were drawn from individual studies that highlighted very different aspects of the central phenomenon, these findings offer a stronger depiction of the topic being analyzed (Erzberger & Kelle, 2003) and further inform current understandings about the work of leadership focused on addressing disparities in student performance and enhancing students' opportunity to learn.

Complementary Findings

Level 3 status: Catalyst for change. Gioia and Chittipeddi (1991) emphasized that initiating change often triggers cyclical patterns of acquiring knowledge and taking action. Insights from across the studies revealed that the designation of Level 3 state accountability and assistance status served as a catalyst for change in the New Hope School District. The assignment of Level 3 status led to the development of new organizational structures and routines, which, in turn, supported patterns of acquiring knowledge and taking action. Specifically, the development of new organizational structures and routines led to (a) increased opportunities for leaders to interact with one another and (b) enhanced opportunities for leaders to engage in professional learning (Talukdar, 2014; Zaleski, 2014). Furthermore, since the structures and routines described by district- and school-level leaders occurred regularly (e.g., weekly, monthly, quarterly), leaders were provided with ongoing support as they grappled with understanding—or further developing their understanding—of barriers hindering students' opportunity to learn (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Additionally, the development of new organizational structures and routines provided leaders with a forum for presenting their plans for addressing disparities in student performance, as well as presenting the outcomes that resulted from actions taken. Ultimately, the opportunities that accompanied the establishment of new organizational structures and routines further supported and strengthened the development of shared understandings among districtand school-level leaders regarding why particular student performance gaps exist and how to most effectively address existing performance gaps.

Figure 6.1 depicts the relationship between the catalyst for change, the

Figure 6.1. The Interrelationship of Elements Studied



development of organizational structures and routines, and the increased opportunities for leader interaction and professional learning (Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Figure 6.1 also illustrates the relationship between these three elements and leaders' ability to frame problems, solutions and constituencies related to disparities in student performance (Allwarden, 2014). While the individual researchers of this study looked at specific aspects of leadership in isolation, Figure 6.1 offers a broader, more complete picture of how these elements interacted and influenced one another in real life.

As a result of the Level 3 status, district-level leaders sought out and established a partnership with the District and School Assistance Center (DSAC), a state sponsored organization. This partnership led to the establishment of new structures and routines which afforded on-going opportunities to conduct in-depth analyses of (a) disparities in student performance, (b) barriers in the learning environment, and (c) organizational challenges related to students' opportunity to learn. Grogan and Shakeshaft (2011) emphasize the importance of analyzing situations in an objective fashion and framing issues from a different perspective when working to address long standing disparities in

student performance. The partnership with DSAC led to the construction of structures and the development of routines that supported this aspect of leadership work.

As leaders came together to analyze disparities in student performance, barriers in the learning environment, and organizational challenges related to students' opportunity to learn, the learning environment within the district was further enhanced. The interactions that took place within this learning environment between district- and schoollevel leaders were examined as a critical element relating to school improvement (Daly & Finnigan, 2010, 2011, 2012). Sean's statement captures the value of these interactions when he offered, "The DSAC team assisted the district by meeting with school and district leaders monthly, and sometimes more often, and has supported and assisted us with collaborating, analyzing data, and creating the Accelerated Improvement Plan (AIP)." Frequently, interactions between district- and school-level leaders occurred during ADCO, FADCO and traveling cabinet meetings (Zaleski, 2014). These meetings offered leaders regular opportunities to engage in professional learning that enhanced their capacity to (a) identify and describe gaps in student performance and (b) consider and explore potential barriers to student learning (Talukdar, 2014). In other words, these meetings offered leaders opportunities "to engage in continuous and sustained learning about their practice in the setting where they actually work...confronting similar problems of practice" (Elmore, 2004, p. 127).

Finnigan and Daly (2010) remind us that sharing knowledge and mobilizing resources embedded in individual interactions is critical to influencing practice and enhancing success in "purposive action" (p. 180). The assignment of Level 3 status triggered the mobilizing of resources to develop new structures and routines which then

enhanced leaders' ability to share knowledge and take purposive action (Potenziano, 2014; Zaleski, 2014). Purposive action taken by district- and school-level leaders included attempts to prompt a common set of shifts in thinking, which focused on distributing across the district a shared understanding that would support collective action (Allwarden, 2014). The actions taken were deliberate (thought about and discussed), developmental (designed to assist with growth and bring about improvement), and progressive (kept moving forward), with the intent of ensuring that students' opportunity to learn was enhanced. These actions supported understanding student performance disparities and informed solutions to address barriers to students' opportunity to learn.

The leaders in the New Hope School District also used organizational routines and structures to help distribute leadership responsibilities (Spillane, 2006). Prior to the Level 3 designation, structures and routines were in place that required district- and school-level leaders to meet. However, leaders were not required to collectively identify and develop a shared understanding of achievement disparities. Following Level 3 designation, enhanced and newly created structures and routines helped promote collaboration and build robust intra-organizational ties (Chrispeels, 2004; Honig, 2004; Togneri & Anderson, 2003). The use of the structures and routines also played a critical role in guiding the New Hope School District in their development of a clearly aligned vision and mission (Harris, Leithwood, Day, Sammons & Hopkins, 2007; Waters & Marzano, 2006).

Structures and routines led to shared understandings and collective action.

New Hope School District leaders described specific structures and routines that had been set in place to support collaboration between district- and school-level leaders, as well as

to support data use practices. The Administrative Council (ADCO), Full Administrative Council (FADCO), traveling cabinet, DSAC meetings, and the Accelerated Improvement Plan (AIP) were examples of structures and routines put in place to support collaboration and data use among district- and school-level leaders (Allwarden, 2014; Potenziano, 2014; Zaleski, 2014). In addition, these structures allowed leaders to engage in ongoing professional learning (Talukdar, 2014). Spillane (2006) describes this leadership practice as "a product of the joint interactions of school *leaders*, *followers*, and aspects of their *situation* such as tools and routines" (p. 3).

According to the distributed leadership framework, the structures used within the New Hope School District can be thought of as tools and routines because they involved recurring patterns of "interdependent actions, involving multiple actors" (Feldman & Pentland, 2003, p. 311). For instance, the traveling cabinet structure supported the routine of leaders meeting regularly to engage in ongoing professional learning that involved the frequent review and analysis of student performance data (Potenziano, 2014; Talukdar, 2014). Established structures and routines also sought to allow district-and school-level leaders to develop an understanding of the opportunity gaps present in the learning environment (Allwarden, 2014; Zaleski, 2014). The action planning template and the AIP that leaders created in partnership with DSAC facilitated this understanding (Zaleski, 2014). As a result, leaders' ability to recognize barriers was evident in the areas of leadership skills, curriculum alignment and implementation, and instructional practice. More specifically, leaders identified barriers specific to students with disabilities, students from low income households, Latino/a students, and English language learners (ELL).

Additionally, the implementation of enhanced and newly developed structures and routines helped to expose inequitable practices in the New Hope School District. District-and school-level leaders interviewed consistently referred to students receiving special education as the sub-group most impacted by the achievement gap in the New Hope School District. Research findings revealed that one of the barriers to student learning for students with special needs was inequitable access to the general education curriculum (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Greene (1983) explains that equality in education focuses on "inputs" and ensures that the same is provided to all, while equity places emphasis on "outputs" and focuses on achieving the same outcomes for all. Lindsey et al. (2009) contend accommodations that account for differences, such as race and ethnicity, language, and ability, are sometimes needed in order to achieve educational equity.

Students receiving special education services in the New Hope School District were often educated in separate and substandard settings. Research evidence revealed there were some schools that deliberately encouraged equitable learning environments for students receiving special education services. When comparing schools across the district, data indicated that schools utilizing co-teaching and inclusion models earned higher state accountability ratings than those that did not. By differentiating instruction to meet the needs of all students within the general education classroom, school staff moved closer to creating educational equity while improving students' opportunity to learn.

When examining how district-level leaders sought to leverage professional learning opportunities in the New Hope School District, leaders took advantage of improved structures and routines resulting from the DSAC partnership (Potenziano,

2014; Talukdar, 2014). Knapp (2003) reported "professional learning could involve changes in one's capacity for practice (i.e., changes in professionally relevant thinking, knowledge, skills, and habits of mind) and/or changes in practice itself (enacting the new knowledge and skills in one's daily work)" (pp. 112-113). New structures and routines, such as traveling cabinet meetings, not only resulted in increased interaction between leaders, but also offered occasions for leaders to build their data analysis and decision-making capacity (Zaleski, 2014). Further, structures and routines promoted sustained, job-embedded professional learning (e.g., ADCO, FADCO, and traveling cabinets meetings, learning walks, and 9-day instructional coaching cycle) and allowed for frequent collaboration and discussion of factors influencing teaching and learning (Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Given the evidence of deficit thinking that existed among school staff, particularly as it related to students with disabilities, district leaders also sought to leverage professional learning to prompt needed shifts in thinking (Talukdar, 2014).

As district- and school-level leaders' understanding developed, so did their ability to influence how others understood factors contributing to disparities in student performance related to race/ethnicity, class, and/or disability. Influencing how others understand a situation is a critical aspect of leadership work, and the ability to effectively frame the problems, solutions, and constituencies related to disparities in student performance related to race/ethnicity, class, and/or disability becomes a powerful means for shifting the thinking of others. When effectively done, influencing how others understand a situation can positively impact individuals' perceptions of their work and provide a powerful source of inspiration and motivation (Awamleh & Gardner, 1999;

Goldman & Ospina, 2008). The interactions that occurred among district- and school-level leaders as a result of new structures and routines not only led to a shared understanding of student performance gaps and appropriate responses (Allwarden, 2014; Potenziano, 2014; Zaleski, 2014), they also contributed to leaders' attempting to prompt a common set of issue- and constituency-related cognitive shifts, which included:

- Heighten awareness, increase importance, and create a sense of urgency
 regarding a problem (or need) related to disparities in student performance
- Accept/Embrace a solution for addressing disparities in student performance
- We are responsible for helping all students experience high levels of academic success.
- We can learn from one another (Allwarden, 2014).

As leaders attempted to prompt this set of cognitive shifts, the work of leadership (which includes the managing of meaning for others) was further distributed across the district.

The interactions and professional learning that occurred among leaders as a result of the structures and routines that were in place not only led to an understanding of the nature of the gap, it also led to an influence on their work, which focused on addressing disparities in student performance (Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Specifically, leaders recognized that ongoing data analysis was critical to teaching and learning improvements. The task of analyzing data was distributed among all leaders for the specific purpose of improving the professional capacity to identify gaps in learning with the goal of eliminating barriers. For instance, when looking at data, one building leader recognized that low income and Latino students lacked opportunities pertaining to course placement; it was then brought to the attention of a district leader who

subsequently mandated that all students take at least one Advanced Placement course prior to graduation. Similarly, as a result of student performance data analysis, several building-based accelerated improvement plans were strategically created and utilized as tools across the district to enhance the learning environment.

The Accelerated Improvement Plan included specific initiatives and objectives that were designed by school and district leaders as tools to guide their work in an effort to eliminate identified barriers and enhance student opportunities to learn. Harris, Leithwood, Day, Sammons, and Hopkins (2007) remind us that school improvement based on a distributed leadership model is not automatic, rather, "much depends on the way in which leadership is distributed, how it is distributed and for what purpose" (p. 9). The strategic approach utilized to address barriers in the learning environment in the New Hope School District as mentioned above reinforces that they subscribed to a distributed leadership model.

Student learning is enhanced regardless of tie relations. District- and school-level leaders revealed that they were engaging in a variety of practices to enhance students' opportunity to learn at the school and district level. This was evident regardless of whether or not trusting ties were formulated and existent between individuals (Zaleski, 2014). For example, to prompt shifts in thinking and practice among principals and school staff, district leaders fostered and leveraged professional learning activities (Talukdar, 2014). Interview responses suggested professional learning played a role in the way some thought about and in-turn approached their work with particular sub-groups of students (e.g., students with disabilities). In addition, some district- and school-level leaders appeared more willing to learn from the best practices of schools realizing

academic growth. One of the ways in which these educators were able to learn more about successful schools was through professional learning activities (e.g., book studies, belief surveys, case studies, and resource sharing) (Talukdar, 2014). Another example was that although Jamie shared no outgoing tie connections with building leaders, she acknowledged that she engaged in efforts with Bill and Joe to create a school within her school to address students and subgroups with risk factors such as poor attendance, retention, and high discipline referrals (Zaleski, 2014).

Finally, the systems and structures (ADCO, FADCO, Traveling Cabinet) supported leaders with enhancing students' opportunity to learn across the district. One school in the district did move from a Level 2 to Level 1 status last year; this is the highest performance rating assigned by the state. District leaders were diligently working with principals to close gaps in performance via the structures in place, and District leader Sean was working with principals on improvement planning at the building level. District leader Alicia also worked with principals on attendance, dropout rates, and graduation rates within a four-year period of time. Although there was a lack of tie relations at the building and district level this did not result in initiatives being stalled (Zaleski, 2014). Rather, despite the nature of relations in the New Hope School District, the organizational structures in place resulted in both building and district leaders being actively engaged in practices that were intended to support enhancing students' opportunity to learn. Both group and individual findings informed researchers, resulting in the development of recommendations for practitioners, policy makers and research (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014).

Recommendations for Practice

First and foremost, we recommend that the New Hope School District keep organizational structures intact (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). ADCO, FADCO, and the traveling cabinet offer building leaders direct oversight and support from central office leaders. Spillane (2013) states that the advantages of organizational structures and routines are that they "allow efficient coordinated action; [provide] a source of stability; and reduce conflict about how to do work". Furthermore, the use of organizational structures/routines that district- and school-level leaders institute have significant potential to enhance students' opportunity to learn. This was best evidenced in the New Hope School District when district- and school-level leaders analyzed student data with uniformity district wide K-12, resulting in at least one school closing achievement gaps and advancing to Level 1 status.

Any school district that has an opportunity to learn gap should consider developing and implementing the types of structures and routines outlined in the New Hope School District. These types of structures and routines increase the likelihood that interaction among administrators will take place which will allow knowledge and resources to flow through the network of leaders, ultimately informing the work of practitioners (Daly & Finnigan, 2010). Sustainability is also likely enhanced when these structures and routines are in place. Hargreaves and Fink (2006) emphasize "sustainable leadership matters [as it] preserves, protects, and promotes deep and broad learning for all in relationships of care for others" (p. 23).

Varying tie relations in the New Hope School District may also be a result of competitive pressure at the local level to perform and meet accountability demands

(Zaleski, 2014). Daly (2009) points out that as a result of high stakes accountability, relations between school and district leaders tend to become less collaborative and more official and organized. One way to remedy this is by fostering the professional growth of leaders and differentiating supports for principals depending on their needs as instructional leaders. Daly and Finnigan (2010) highlight that "leadership development programs both outside and within districts have the unique opportunity to create the space for reflection and dialogue for leaders to explore these tensions and how they may be brought into balance" (p. 520). Therefore, it is essential that the New Hope School District add a component to their existing professional development plans that specifically promotes the building of relationships among leaders across the district in a way that supports collaboration (Talukdar, 2014; Zaleski, 2014). The National Institute for School Leadership Program (NISL) is one example of a program designed to assist leaders with collaborating and enhancing their skills in the face of accountability demands (NISL, 2013). Participation in the NISL program also holds the potential to increase the social capital among leaders and assist with policy implementation at the local level (Daly & Finnigan, 2010).

New Hope District-level leaders should also consider creating opportunities for school-level leaders to strengthen relations and formulate new ties (Zaleski, 2014).

Allowing leaders' time to meet and discuss building based concerns without a central office driven agenda may enhance relations. Daly and Finnigan (2010) point out in a related study that "district[s] will have to avoid the trap of merely providing time and directives to work together as this does not necessarily result in meaningful collaboration between leaders" (p.128). Therefore, New Hope practitioners should heed the advice of

DuFour and Burnette (2002) by insisting that principals develop improvement plans demonstrating the collective efforts of the team and not merely the work of individuals. In an effort to enhance relations, increase support from central office leaders to building leaders and enhance success at the building level, it is recommended that the New Hope School District consider creating prescribed structures/routines that require school-level leaders to visit each other's schools to analyze data together and observe successful practices (Potenziano, 2014; Zaleski, 2014). In doing so, school-level leaders are also less likely to feel unsupported and isolated from one another.

Enhancing connections at the district level in the New Hope School District as well as in other districts with an opportunity to learn gap will assist with building relations across the district, ultimately improving the overall school climate (Zaleski, 2014). Curtis and City (2009) agree that collaboration is critical and begins at the central office level stating:

Central office departments create teams to do their work most effectively. The superintendent convenes a senior leadership team to shape and drive the direction of the system's work. Effective collaboration is critical to success at all levels of the organization. Yet the knowledge, skills, and dispositions required for collaboration are seldom taught. It is deeply ironic that a skill students need to ensure their future opportunities is one that the adults responsible for their education often do not possess and have not had the opportunity to learn (p.38).

In order for the central office team to be considered high functioning, there must be a "high level of trust, a willingness to be vulnerable, and comfort with conflict" (Curtis & City, 2009, p.56). District leaders in the New Hope School District and those with

opportunity to learn gaps are encouraged to implement and facilitate team building activities to work on strengthening partnerships with each other. Incorporating time on meeting agendas for district- and school-level leaders to engage in activities focused on developing authentic relationships is a suggested activity (Curtis & City, 2009). For instance, Curtis and City (2009) suggest leaders complete the Meyers & Briggs

Personality Inventory and share results in an effort to enhance relations and build trust.

Hargreaves and Fink (2006) emphasize that "investing resources in training, trust building, and teamwork" (p. 267) is a function of sustainable leadership that has long lasting effects.

New Hope District leaders are also recommended to expand liaison support to all principals, and not limit this resource to struggling schools alone (Zaleski, 2014). Honig et al. (2010) point out that central office can engage in efforts to support the teaching and learning environment entirely by "taking the case management and project management approaches to their work"(p.7). Honig et al. (2010) emphasize that the case management approach enables district leaders to utilize their expertise to fully support "the specific needs, strengths, goals, and character of each individual school in their case load" with the goal of working to provide "high-quality, responsive services appropriate to their individual schools"(p.8). Likewise, the project management approach results in district leaders directly "solving problems that promised to help schools engage in teaching and learning, even if those problems cut across multiple central office units" (p.8).

New Hope District-level leaders should also consider expanding professional learning opportunities intended to eliminate deficit thinking within the district (Talukdar, 2014). The New Hope School District superintendent took positive steps to support

principals in their efforts to dismantle deficit thinking and enhance some of the skills needed to assume responsibility for teaching and learning improvements. Moving forward, the superintendent must deepen the dialogue around instructional issues beyond data review. In light of the success of schools that ensured students with disabilities had full access to the curriculum, consideration should be given to expand the full-inclusion teaching model across the district.

Consideration should also be given to implementing multicultural and anti-racist professional learning opportunities in order to continue to prompt shifts in teacher beliefs. While anti-racist and multicultural education are closely related in the goal to improve student outcomes, Kailin (1998) believes that multicultural education is a non-threatening way to address the gaps in student performance because it is focused around building teachers' and students' cultural awareness rather than tackling structural aspects of racism. Kailin (1998) further argues that an anti-racist approach to education must focus on the deliberate dismantling of racism whereas multicultural education strives to broaden teachers' understanding of the diverse histories of students they serve as a means to empower them. It is important to note, however, that ultimately multicultural education and anti-racism both seek to raise the academic achievement of students of color while nurturing the growth of all students. By implementing multicultural and anti-racist professional learning opportunities, administrators of the New Hope School District will be better equipped to learn about, understand, and address the undeniable correlation between students' race and ethnicity and disparities in student performance.

There are prevailing approaches to multicultural and anti-racist professional development and learning that espouse to reduce the achievement gap while transforming

teacher beliefs (Ferguson, 2007; Howard, 2007; Singleton & Linton, 2006; Skrla, McKenzie & Scheurich, 2009). Ferguson (2007) is responsible for putting forth a conceptual framework titled the Tripod Project, which aims to close the achievement gap by addressing the three legs of the "tripod": content, pedagogy and relationships. He argues that in order to reduce achievement gaps, content must be accessible and culturally relevant, pedagogy must involve varied approaches to meeting students' needs, and teachers must develop meaningful relationships with students while maintaining high expectations for ALL students. Skrla et al. (2009) describe the need to use Equity Audits as a means to creating equitable and excellent schools. They contend that by assessing the equity and inequity of programs, as well as teacher quality and achievement, school leaders will be better prepared to develop an action plan that uncompromisingly promotes educational equity. They describe particular skills teachers must develop to improve their practice that include clearly communicating expectations, stimulating students with high-level tasks, and using an asset-based approach when working with diverse populations.

While experienced, high-quality teachers within the New Hope School District may already possess many of the skills needed to serve most students effectively, Singleton and Linton (2006) argue that in order to reduce the "racial" achievement gap, educators must be willing to engage in courageous conversations about race.

Additionally, they and many others (Darling-Hammond & McLaughlin, 1995; Gay & Howard, 2000; Ladson-Billings, 2006; Lawrence & Tatum, 1997; Nieto, 2000; Tatum, 1997) believe it is critical for teachers to explore their own racial identities and consider how it affects their teaching of students, particularly students of color (i.e., Asian American, Hispanic/Latino, Black/African-American, Multiracial and Native American).

The research of Singleton and Linton (2006) indicates when white teachers were able to relate to their diverse students experiences, and as they developed cultural awareness or competence, a narrowing of the achievement gap occurred. Given over 90% of administrators and teachers in the New Hope School District are white while over 60% of students identify as students of color, and in light of the existing racial achievement gap as measured across three performance indicators (i.e., state achievement tests, graduation rates, and SAT performance reports), serious consideration should be given to implementing multicultural and anti-racist professional learning opportunities.

Recommendations for Policy Makers

Cohesive relations between school and district leaders are often hindered by accountability policy demands (Daly 2009). This often complicates the job of leaders trying to effect change in schools (Zaleski, 2014). Daly and Finnigan (2010) point out that "effectively responding to state and federal accountability policies at the local level may require a more collaborative relationship among and between central office and school administrators to allow for the diffusion of innovation and knowledge" (p.131). In an effort to strike this balance, district leaders in the New Hope School district and those in districts with an opportunity to learn gap need to develop systems and structures to enhance collaboration within school districts (Potenziano, 2014; Zaleski, 2014). New Hope School District leaders implemented structures to support collaboration in an effort to enhance students' opportunity to learn. Their efforts yielded evidence that some schools were making progress. This supports the research claim that school culture, namely interactions, is a valuable consideration when enhancing student opportunities to learn. Policy makers are recommended to be mindful of this consideration and recognize

that accountability demands alone do not promote equitable opportunities to learn (Harris & Herrington, 2006).

Recommendations for Future Research

While this study contributed to theoretical knowledge and provided a practical contribution to the field of education, future research areas must be noted. First, conducting an exploration of interactions among leaders using an external social capital lens (Leana & Pil, 2006) may prove beneficial. The external partnership with DSAC in this study was instrumental in assisting leaders with responding to accountability demands beyond standardized testing through the development of the Accelerated Improvement Plan. A deeper exploration of external partnerships may yield findings in relation to the importance of these relations when attempting to enhance students' opportunity to learn. Second, given the potential that leader relations may be "bureaucratic" due to accountability pressures (Daly & Finnigan, 2010, p.131), it may be worthwhile to conduct a similar study with a focus on examining the impact of roles and hierarchy on relations in a district that is attempting to enhance student opportunities to learn. Third, future research should include multiple districts with similar demographics in an effort to enhance generalizability.

Finally, because the research team members sought to understand how districtand school-level leaders learned about, understood, and addressed barriers to students'
opportunities to learn, interviews were limited to district- and school-level leaders. This
had potential implications for the overall conclusions drawn. Future research efforts
involving staff at all levels could help to address this limitation and assist in uncovering
the true impact of efforts aimed at eliminating barriers to students' opportunity to learn.

Overarching Study Limitations

A few limitations are noted in this study. The New Hope School District is a small district comprised of eight district leaders and eight school level leaders. As aforementioned, researchers were unable to interview two building level leaders. This hindered the overall analysis and conclusion of findings for the overarching study. Additionally, researchers relied on the strategy of snowball sampling as outlined by Creswell (2012) and Merriam (2009) to interview participants. Because the researchers relied on the superintendent and assistant superintendent to recommend individuals whom they felt could best describe efforts aimed at impacting students' opportunity to learn and performance gaps, key individuals were not recommended and were therefore not interviewed. Mentors, coaches, DSAC members, teachers, and students may have been able to provided information which might have enhanced the overall findings.

Conclusion

The literature portrays a multifaceted depiction of how many factors have the potential to impact district- and school-level leaders understanding of the nature of the gap and how these understandings then influence the work leadership focused on addressing disparities in student performance. It was the intent of the research team to enhance insight in this area for practitioners. It is evident that leaders' interactions and framing of events coupled with how they practice has the potential to enhance the school climate and increase students' opportunity to learn (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Additionally, the purposeful distribution of leadership work provides the opportunity to enhance collaboration and collective action (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Conversely, without proper

district-level leadership and leader distribution, effectively addressing disparities in student performance may be hindered.

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End Note

Due to differences in student populations, as well as variation found among the states' policies and practices for identifying and including SD and ELL students in NAEP testing, comparisons of performance results for SD and ELL populations may not accurately reflect increases and decreases over time (NCES, 2011). This likely explains why less attention has been focused on reporting discrepancies between students with and without disabilities (Foorman & Nixon, 2006), as well as between native English speaking students and English language learners. In an effort "to ensure that NAEP results accurately reflect the educational performance of all students in the target population and can continue to serve as a meaningful measure of U.S. students' academic achievement over time" (NCES, 2011, p.100), the National Assessment Governing Board recently adopted a new policy that focuses on testing and reporting on SD and ELL students.

Appendix A

District-level Leader Interview Questions

- To begin, please briefly describe your educational background, as well as your current role and your history in the school district.
- 2. Please describe any gaps in student performance that your district is focused on eliminating.
- 3. How has central office trained school leaders to use student data?
 - a. Are there any other supports offered?
 - b. What else helps people to learn how to use data in this district?
- 4. What changes have you seen in schools as a result of this training?
- 5. Have you seen any changes in the central office as a result of this training?
- 6. Do you believe people have changed the way they think about:
 - a. their professional responsibilities?
 - b. collaborating with others?
 - c. student subgroups?
 - d. Probes: How do you know? What have you seen? Can you provide an example?
- 7. What should schools be doing regularly when it comes to analyzing student data? How is central office supporting this?
- 8. Who do you go to for advice regarding work (if anyone)? Why?
 - a. What do you talk about? Give me an example of a recent conversation you have had?
 - b. Have you talked about gaps in student performance?

- c. Have any actions been taken as a result of these discussions?
 - i. Which student subgroup(s) have been/will be impacted by these actions?
- 9. Are there others you should be able to go to, but do not? Explain.
- 10. Imagine you had a magic wand. What else needs to happen in your district to improve student performance?
- 11. Are there any specific documents related to what we have just discussed that you would recommend for us to review?

School-level Leader Interview Questions

- 1. To begin, please briefly describe your educational background, as well as your current role and your history in the school district.
- 2. Please describe any gaps in student performance that your district is focused on eliminating.
- 3. How has central office trained school leaders to use student data?
 - a. Are there any other supports offered?
 - b. What else helps people to learn how to use data in this district?
- 4. What changes have you seen in your school as a result of this training?
- 5. Have you seen any changes in the central office as a result of this training?
- 6. Do you believe people have changed the way they think about:
 - a. their professional responsibilities?
 - b. collaborating with others?
 - c. student subgroups?

- d. Probes: How do you know? What have you seen? Can you provide an example?
- 7. What should schools be doing regularly when it comes to analyzing student data?
 - a. How are you supporting this?
 - b. How is central office supporting this?
- 8. Who do you go to for advice regarding work (if anyone)? Why?
 - a. What do you talk about? Give me an example of a recent conversation you have had?
 - b. Have you talked about gaps in student performance?
 - c. Have any actions been taken as a result of these discussions?
 - i. Which student subgroup(s) have been/will be impacted by these actions?
- 9. Are there others you should be able to go to, but do not? Explain.
- 10. Imagine you had a magic wand. What else needs to happen in your school to improve student performance?
- 11. Are there any specific documents related to what we have just discussed that you would recommend for us to review?