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

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

Dissertation in Practice
By

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ABSTRACT

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As district- and school-level leaders face increasing pressure from federal, state, and local accountability mandates there has been increased dependence on using and analyzing student data to help improve student performance. While the reporting of disaggregated data by student subgroup confirms that achievement gaps exist, it does not provide district- and school-level leaders with the diagnostic data needed to identify key factors inhibiting student performance. 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. This research study examined specific ways district- and school-level leaders go about challenging and helping their community to face the problem of student performance disparities, as well as specific aspects of the situation that may be contributing to the community's collective capacity, to address student performance disparities.

Without proper district-level leadership, effectively addressing operational conditions that may lead to disparities in student learning is unlikely. Yet, little is known about which structures and routines district- and school-level leaders perceive to be important when analyzing student data. This single case study presents the results of an examination of student data analysis structures and routines within a small diverse urban

Massachusetts district designated by the state as low-performing based on state indicators. In order to further understand structures and routines, interview and document data were reviewed. Four primary findings identified the district leadership's response to educational inequities: (1) ***a mandate for using data war-rooms and student data walls***; (2) ***a traveling cabinet to ensure uniform review of student data across the schools in the district***; (3) ***a mandate for individual school improvement plans; and (4) the use of school-based instructional coaches.***

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 "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.

PROVIDING THE SAME TO ALL MAY AT TIMES CREATE UNFAIR AND UNJUST CIRCUMSTANCES LEADING TO GREATER LEVELS OF INEQUITY AND INJUSTICE.

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"

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?*

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.

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:

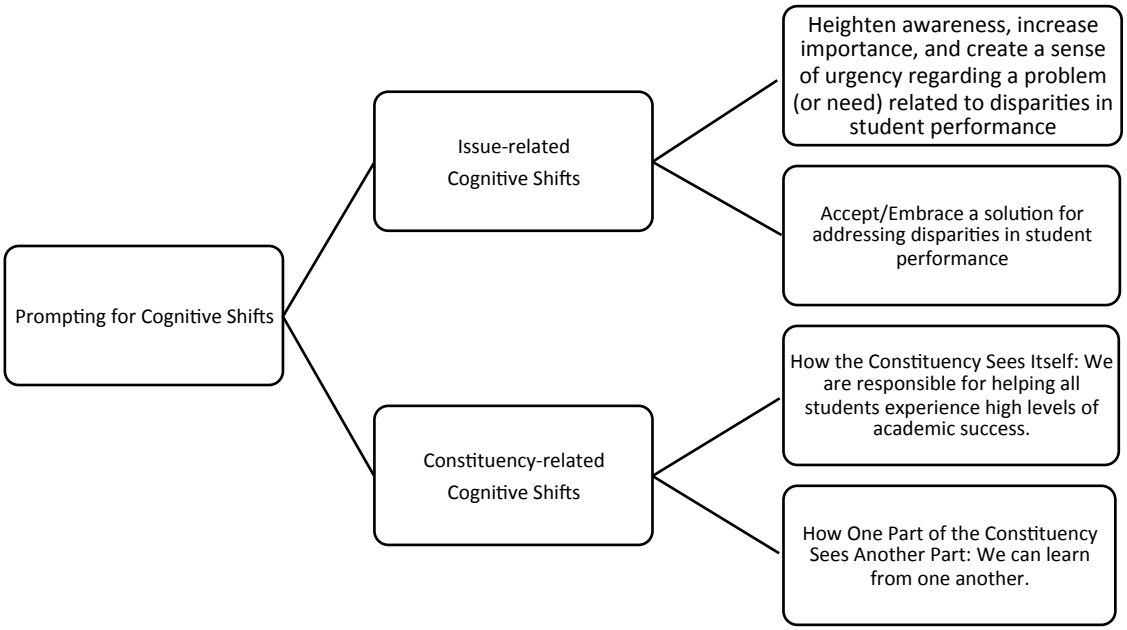
- The specific shifts in thinking that district- and school-level leaders identified as needed before disparities in student performance related to race/ethnicity, class, and/or disability could be effectively addressed, as well as the strategies district- and school-level leaders used in their attempts to prompt these shifts in thinking (Allwarden, 2014).
- The professional learning leveraged by district-level leaders for 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).

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 constituency-related 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).

[redacted]

"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

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).

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).

[redacted]

"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 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.

Figure 2. Sociogram for School-Level Leaders

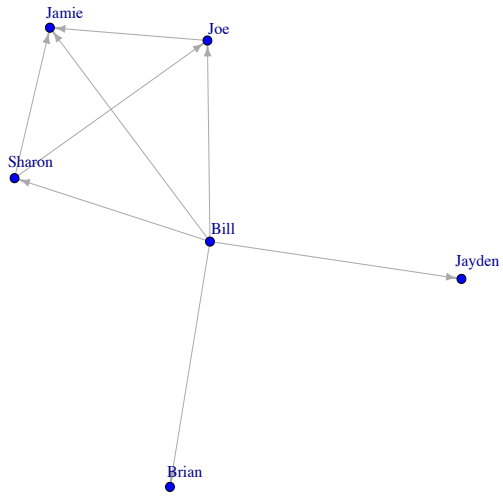
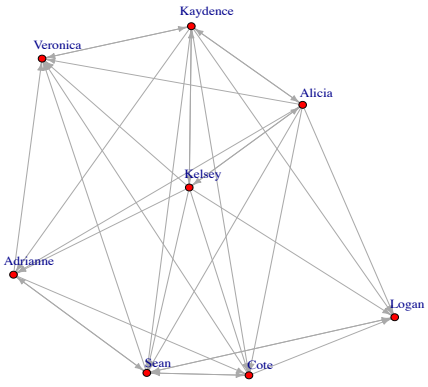


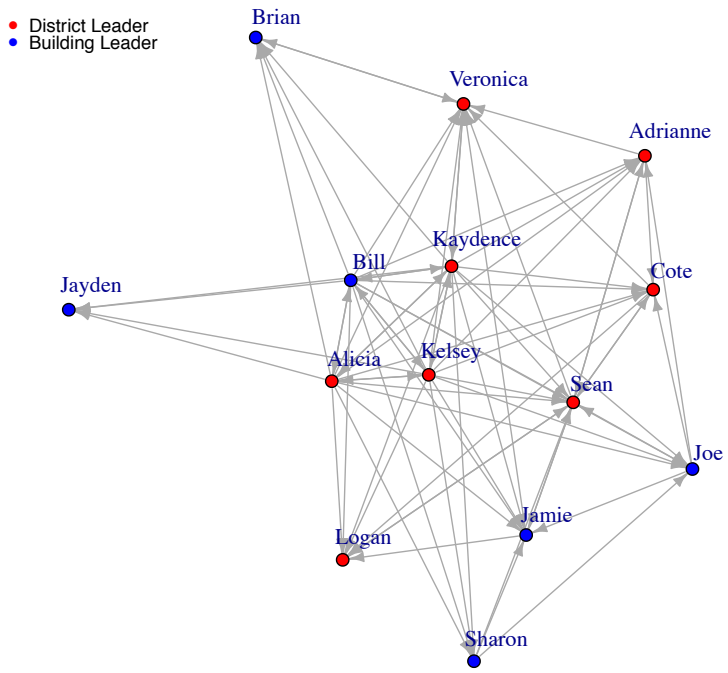
Figure 3. Sociogram for District-Level Leaders



Despite specific building and district relations, ties are evident between district- and 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

Figure 4. Sociogram for District- and School-Level Leaders



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

[redacted]

"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

office has too much on their plate and other resources are more easily accessible at the building level.

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

[redacted]

"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

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.

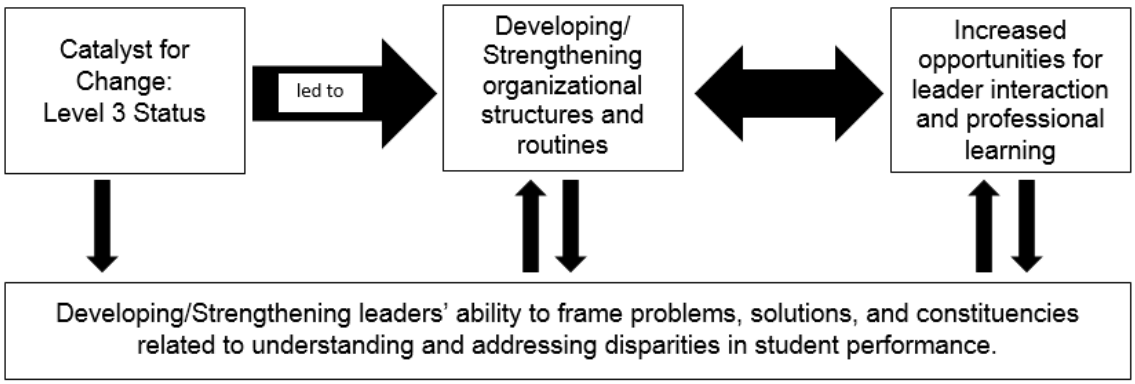
Figure 5 depicts the relationship between the catalyst for change, the development of organizational structures and routines, and the increased opportunities for leader interaction and professional learning (Potenziano, 2014; Talukdar, 2014; Zaleski, 2014). Figure 5 also illustrates the relationship 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 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 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).

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

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) 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.

[redacted]

"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, job-embedded 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; Foldy, 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 district- and 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.

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

CHAPTER ONE [1]: 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).[1] 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.

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

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 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).

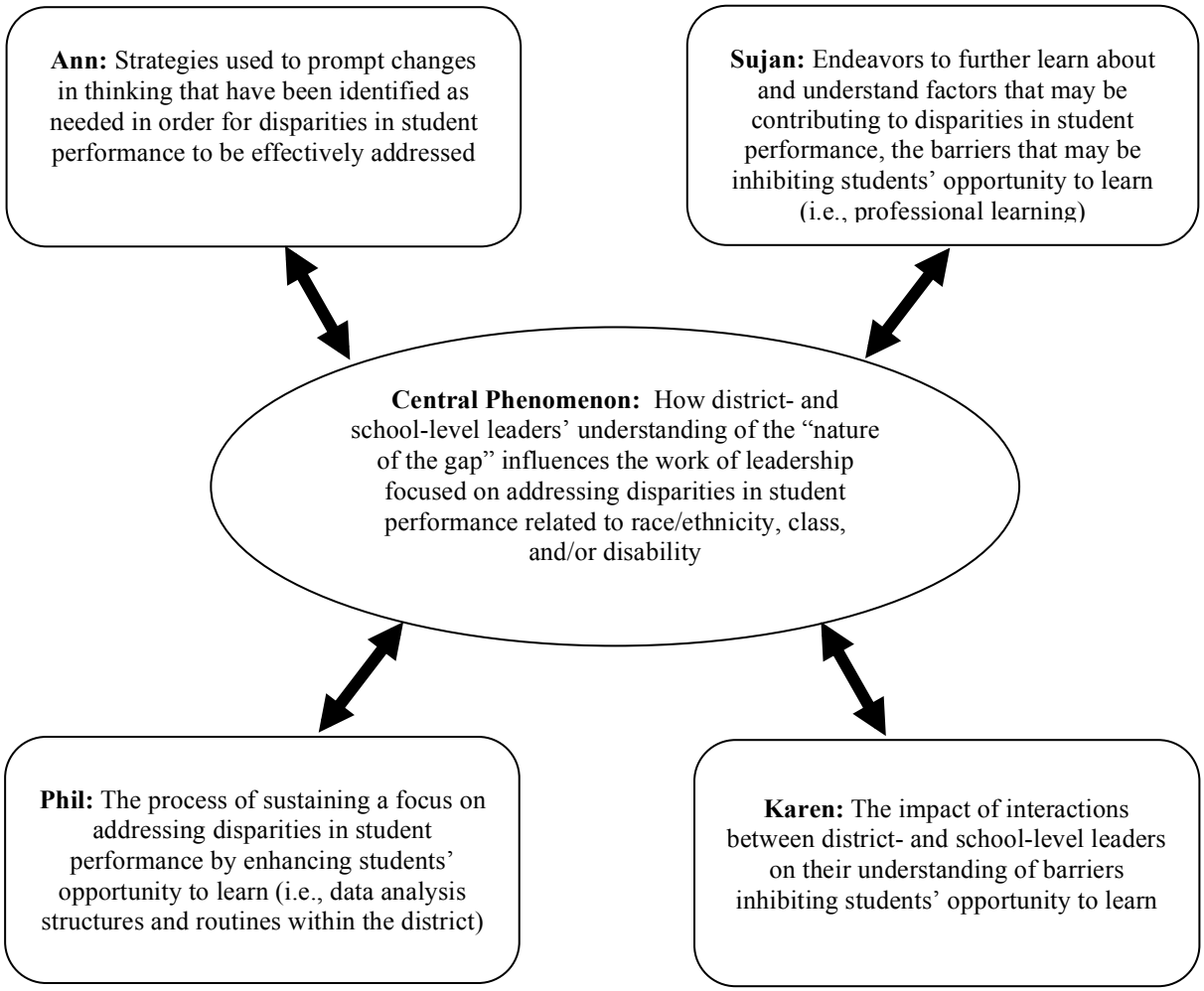
Research Questions

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)?
- 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)?

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



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 2[2]: 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 principles of equality and equity differ in significant ways. For example, the ideal of

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

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 over-focus 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 (2008), referring to the work of Becker (1986), 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, 2008, 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 3[3]: 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:

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

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

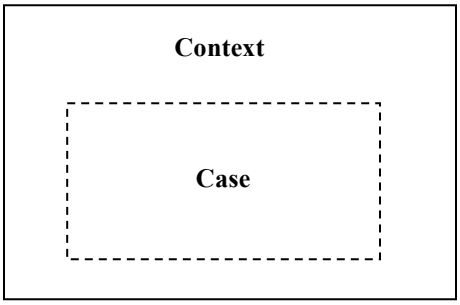
time, place, or some physical boundaries" (p. 465). Yin (2008) explains "a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident" (p. 18) (see Figure 3.1).

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

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



examination of cases that are critical for the theories that the study began with or that 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.

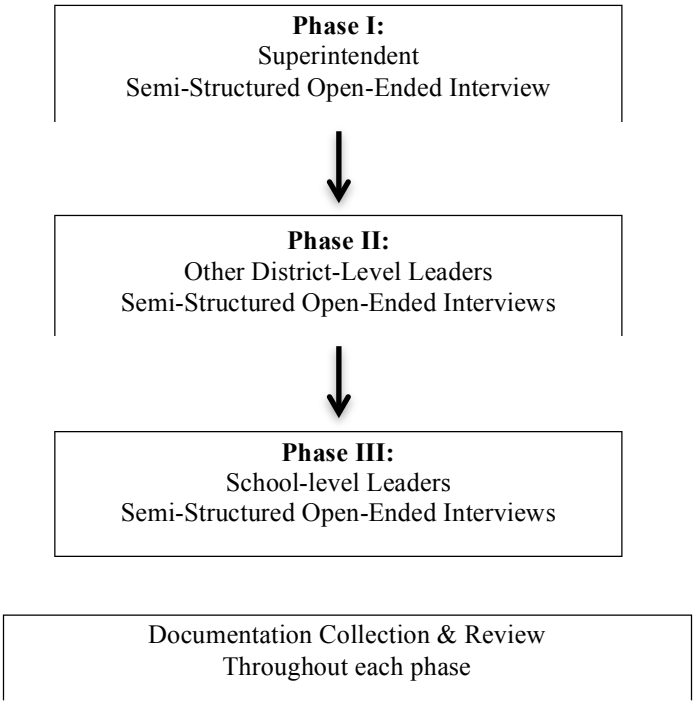
Interview. DeMarrais (2004) defines the research interview as "a process in which a researcher and participant engage in a conversation focused on questions related to a research study" (p. 55). Merriam (2009) provides a continuum of three types of interviews: highly structured/standardized, semi-structured, 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 pre-determined 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

Figure 3.2. Sequence of Interview Process



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 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.

Data storage and management. As data was collected, it was compiled into a "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 patterns.

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

Table 3.1

Tactics 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 situation….How 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).

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. 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

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

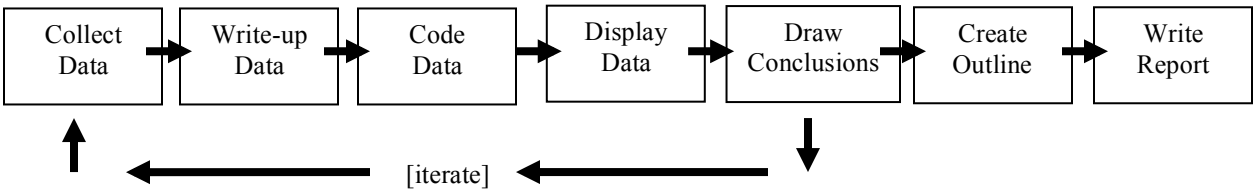
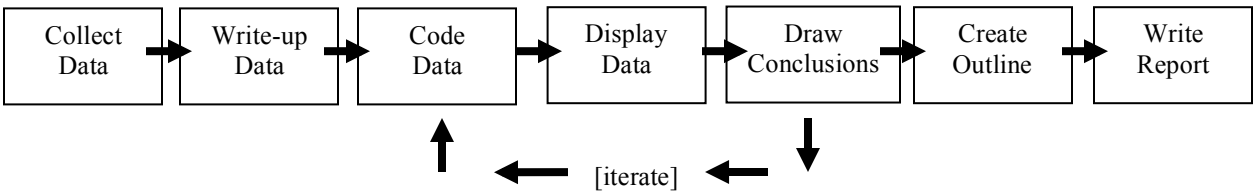


Figure 3.4. Modified Traditional Data Analysis Sequence



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 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). Ultimately, this required the researchers to rely solely on the data gathered rather than their bias and assumptions when analyzing the data.

CHAPTER 4[4]: 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 American, 0.3% Native American, 4% Asian, 0% Pacific Islander, 9% from another race,

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

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 district's

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

Table 4.1

New 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.

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

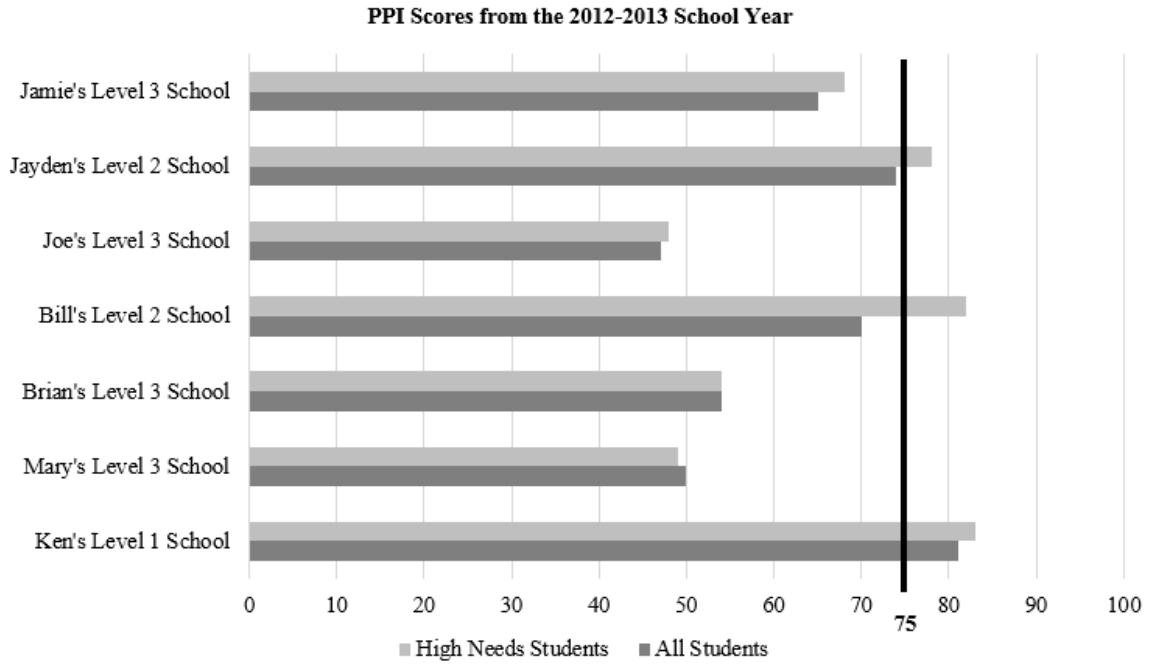
Secondary Education, 2013a).

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

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

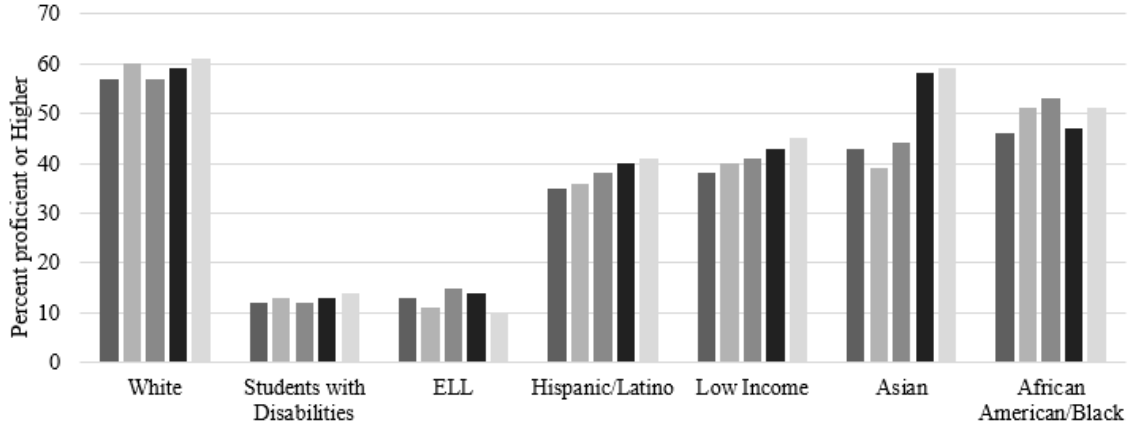
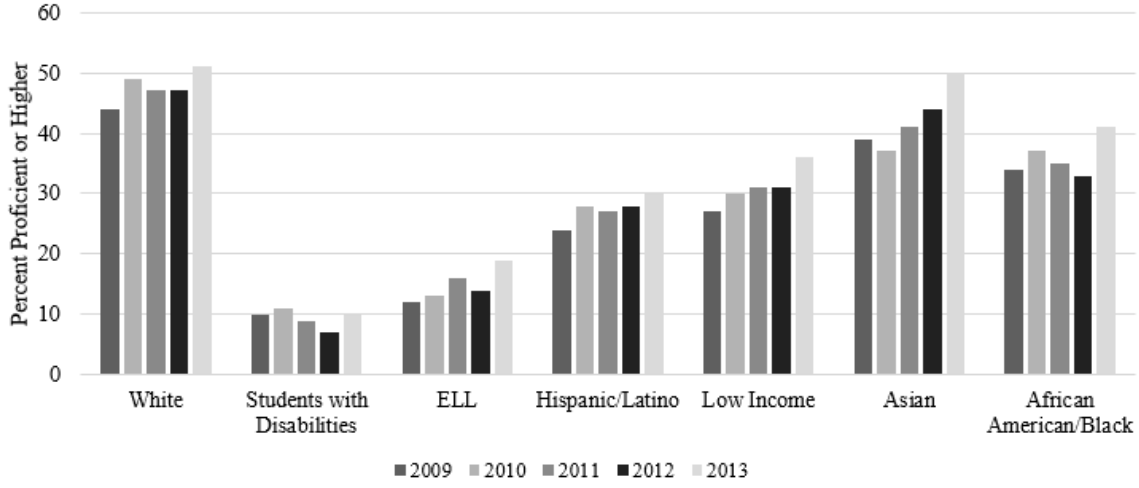


Figure 4.3. New Hope School District's Mathematics MCAS Results



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 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 compared to the graduation rates of other student subgroups.

Table 4.2.

Percentage of Students Scoring Proficient or Higher on the State Test

	Ken's Level 1 School									
	ELA Results					Math Results				
	2009	**2010**	**2011**	**2012**	**2013**	**2009**	**2010**	**2011**	**2012**	**2013**
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									
	ELA Results					Math Results				
	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
	Brian's Level 3 School									
	ELA Results					Math Results				
	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
Students w/ Disabilities	7	5	2	3	4	9	5	9	3	20

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.

Table 4.2. (continued)

Percentage of Students Scoring Proficient or Higher on the State Test

	Jayden's Level 2 School									
	ELA Results					Math Results				
	2009	**2010**	**2011**	**2012**	**2013**	**2009**	**2010**	**2011**	**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									
	ELA Results					Math Results				
	2009	**2010**	**2011**	**2012**	**2013**	**2009**	**2010**	**2011**	**2012**	**2013**
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
	Joe's Level 3 School									
	ELA Results					Math Results				
	2009	**2010**	**2011**	**2012**	**2013**	**2009**	**2010**	**2011**	**2012**	**2013**
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.

Table 4.2. (continued)

Percentage of Students Scoring Proficient or Higher on the State Test

	Jamie's Level 3 School									
	ELA Results					**Math Results**				
	2009	**2010**	**2011**	**2012**	**2013**	**2009**	**2010**	**2011**	**2012**	**2013**
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									
	ELA Results					**Math Results**				
	2009	**2010**	**2011**	**2012**	**2013**	**2009**	**2010**	**2011**	**2012**	**2013**
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.

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.

Table 4.3.

Four Year Graduation Rate

	Percentage Graduated				
	2009	**2010**	**2011**	**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**

In essence, "the SAT provides a trusted, 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					
	2009	**2010**	**2011**	**2012**	**2013**	**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**
	SAT Mathematics Scores					
	2009	**2010**	**2011**	**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 5: FINDINGS

Statement of Purpose

In 2002, the United States Government implemented the No Child Left Behind Act (NCLB). As a result, local, federal and state policies have demanded more accountability from district- and school-level leaders by focusing on high stakes testing of students in an effort to "level the playing field." As a result, there is a growing area of research discussing the best practices and general significance of how district- and school-level leaders use student data effectively to improve learning (Copland, 2003; Wayman, Cho & Johnson, 2007; Wayman & Stringfield, 2006). Our overall, broad research study concentrated on district- and school-level leaders who are addressing disparities in student performance related to race/ethnicity, class, and/or disability. The study addressed two specific questions:

1. How do district- and school-level leaders understand disparities in student performance related 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 related to race/ethnicity, class, and/or disability?

This portion of the study specifically examined which data analysis structures and routines district-and school-level leaders perceive essential in understanding and addressing disparities in student performance related to race/ethnicity, class, and/or disability, in order to promote students' opportunity to learn.

Historical Perspective

In 1865, Horace Mann wrote, "education then, beyond all other devices of human origin, is a great equalizer of the conditions of men" (p. 669). The United States' attempts to create a level playing field, or, in other words, provide learning opportunities for all students, regardless of race/ethnicity, class and/or disability, began in earnest in 1954 when the Supreme Court issued the landmark decision *Brown et al. v. The Board of Education of Topeka, Kansas*. This ruling provided a legal construct clarifying that education: "…must be made available to all on equal terms" (p. 4). The ruling ignited a chain of events and actions that spanned the last half of the 20th century and focused on improving and expanding educational opportunities for all.

The slow march forward to improve American public schools continued during the 1980s with a series of commissions and reports (e.g., National Commission on Excellence in Education, 1981; *A Nation at Risk: The Imperative for Educational Reform*, 1983; A Nation Prepared, 1986; Bjork, 1993; Linn, 1988). *A Nation at Risk* (1983) caused significant debates that led to various policy initiatives. For instance, in one debate, then Secretary of Education, William Bennett, labeled the public school education bureaucracy a "blob" that resisted reform by using up precious resources (Walker, 1987). Then, in 1990, President George H.W. Bush and the nation's governors created eight National Education Goals for the year 2000 (Stripling, 1992). Ravitch (1995) further concluded that educators as well as the public would expect that these changes, once implemented, would alter how district- and school-level leadership functioned.

Changes in Leadership Roles. Historically, the superintendent of schools served as a schoolmaster appointed to make all decisions pertaining to the education of children.

During the 20th century, "hierarchical bureaucracies and scientific management principles continued to dominate the roles of superintendents into the 1980s and beyond" (Alsbury & Whitaker, 2007, p. 154-155). However, in the 1980s, the role of district-level leadership began moving from a stagnant bureaucratic affair toward a system that connected administrative performance to overall district performance (Coleman & LaRocque, 1988). For example, numerous studies revealed that during the 1990s, *both* district- and school-level leaders were capable of implementing successful results (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005; Leithwood & Jantzi, 2008; Marzano, Waters, & McNulty, 2005; Robinson, Hohepa, & Lloyd, 2009; Silins, Mulford, & Zarins, 2002). However, with dwindling resources available to district leaders, schools were not capable of being everything to everyone. As a result, local, federal and state policies have demanded more accountability from district- and school-level leaders by focusing on high stakes testing of students.

Distributed leadership. Evidence-based practices should be thought of as organizational routines and structures that are used to distribute leadership (Spillane, 2006). Indeed, recent studies of successful school districts have shown that there is a range of strategies and tools that are considered routines and structures which can be put in place by district-level leaders to build stronger intra-organizational ties (Chrispeels, 2004; Honig, 2004; Togneri & Anderson, 2003). Also, it is important to note that distributing leadership is not simply charting the course from above and letting others do the work. Rather, true distributed leadership travels within the organization (Barnard, 1968; Harris, 2008; Spillane, 2012).

Effective district leadership has far reaching effects that have been shown to play a critical role in guiding an organization in developing tools and routines to ensure a planned alignment strategy with a vision and mission (Harris, Leithwood, Day, Sammons & Hopkins, 2007; Waters & Marzano, 2006). Those school organizations demonstrating effective institutionalized leadership practices with a distribution of leadership via principals, department heads, teacher leaders, and other players have been identified with experiencing school success (Murphy & Hallinger, 1988; Leithwood et al., 2004; Marzano et al., 2005).

Five specific district-level actions that district- and school-level leaders should engage in to accomplish increased accountability using a model of distributed leadership were delineated by Marzano & Waters (2009):

- Ensure collaborative goal setting
- Establish nonnegotiable goals for achievement and instruction
- Create board alignment and support of district goals
- Monitor achievement and instruction goals
- Allocate resources to support the goals for achievement and instruction (p. 6).

A distributed leadership model focuses on the leadership goings-on within the district. It also ensures that leadership roles and practices are "distributed over leaders, followers, and their situation and incorporates the activities of multiple groups of individuals" (Spillane, Halverson, & Diamond, 2004). Lashway (2003) described distributed leadership as "a conceptual framework that incorporates leadership, instructional improvement and organizational change" (p. 3).

Moreover, distributed leadership is more than shared leadership; it incorporates a collective leadership throughout an organization but is more than "multiple leaders in a school sharing responsibility for leadership activities" (Spillane, 2006, p. 13). One form of distributed leadership is co-principals within a school (Gronn, 2003; Grubb & Flessa 2006). Another is building level leaders and teachers who mentor new teachers, supervise paraprofessionals, and plan and provide professional development.

Ensuring accountability. Finally, effective district leadership puts a focus on increased accountability for all students by developing systems to collect student data (Wohlstetter, Datnow, & Park, 2008; Farley-Ripple, 2012; Wayman, Cho, & Johnson, 2007). These student data collection systems that have been put in place are considered organizational structures and routines (Spillane, 2006). District-level leaders who develop structures and routines with high expectations for all students tend to be effective in promoting students' opportunity to learn (Skrla, Scheurich, & Johnson, 2000). The local, state, and federal policies that mandate standards and test-based accountability are firmly entrenched in our public schools. This increased level of scrutiny to improve student learning was specifically noted in the U.S. Department of Education's data reporting guidelines which state, "the accountability provisions included in the No Child Left Behind Act of 2001 (NCLB) significantly increased the urgency for states, local educational agencies (LEAs), and local schools to produce accurate, reliable, high-quality educational data" (U.S. Dept. of Education, 2006). More recently, the U.S. Department of Education reiterated this data requirement by echoing that districts and schools should be using assessment data to respond to students' academic strengths and overall needs (American Recovery and Reinvestment Act of 2009). These federal policies have caused

significant shifting to occur with respect to how data is consumed and employed at the district and school levels.

As a result, high-stakes district accountability measures have caused district- and school-level leaders to focus on being instructional leaders and less on being managers (Alsbury & Whitaker, 2007; Bredeson & Kose, 2007; Theoharis, 2007). Embracing the concept of accountability, the public expects school districts to sustain a culture of constantly improving by using data to inform decisions (Goldring & Berends, 2009; Hawley & Sykes, 2007). Furthermore, research shows that district- and school-level leaders have significantly increased their use of student data to inform their practice (Anderson, Leithwood & Strauss, 2010; Marsh, McCombs, & Martorell, 2010).

Thrust into this current climate of data-driven results, district- and school-level leaders are gathering data from a "range of sources of 'evidence,' 'data,' and 'research' in order to ground a host of decisions" (Honig, 2007, p. 580). Consequently, district- and school-level leaders have (a) immediate access to computerized student information systems that provide opportunities to review both real time and longitudinal data disaggregated by individual student, classroom, grade-level, disability, or other demographic factors, and (b) the potential to calculate future student performance on evaluations (e.g. Aarons & Gewertz, 2009; Brunner et al. 2005; Wayman, Cho, & Shaw, 2009).

All of this access to data can be positive. However, there are reasons to be cautious, as Love (2009) indicated:

> Without a systemic process for using data effectively and collaboratively, many schools, particularly those serving high-poverty students, will languish in chronic

> low performance in mathematics, science, and other content areas-no matter what the pressures for accountability. Or even worse, abuses of data-drilling students on test items; narrowing the curriculum; tutoring "bubble" students while failing to improve instruction; instituting practices that further exclude, label, or discriminate against students of color-will leave underserved students even worse off (p. ix).

In other words, district- and school-level leaders must establish structures and routines that enhance staff use of data so that data-based decisions are made consistently and with regard for the needs of all students (Wohlstetter, Datnow, & Park, 2008; Knapp, Swinnerton, Copland, & Monpas-Huber, 2006; Wayman, Jimerson & Cho, 2012).

Defining data. The recent educational policy phenomenon of raising student test scores has led district and school-level leaders to design organizational structures and routines that collect, interpret and disseminate student data for the purpose of improving educational practices (Hallinger & Heck, 2002; Sherer & Spillane, 2011). As a result there have been numerous studies examining how district- and school-level leaders use data to improve practice (e.g., Anderson, Leithwood, & Strauss, 2010; Wayman & Stringfield, 2006; Copland, 2003; Lachat & Smith, 2005; Marsh, McCombs, & Martorell, 2010).

For instance, district- and school-level leaders often use data in order to target a problem and then set strategic goals (Goldring & Berends, 2009: Halverson, Kelly & Kimball, 2004; Hallinger & Heck, 2002). In this case, typical sources of data that district- and school-level leaders use are: student test scores, dropout rates, socio-economic status and attendance rates.

Embedded in all strategic goal setting are efforts to improve instruction. Tucker (2010) portrays student information data systems as having the greatest potential to improve daily classroom instruction:

> With a couple of mouse clicks, classroom teachers can now get such data as interim test scores, subject grades, attendance records, and English language learner status on a single computer screen. Thanks to [this system], a high school instructor who may have a student for just one period a day can now see how that student is progressing across all courses, and can identify students at risk of academic failure (p.2).

There are more organic data sources that district-and school-level leaders create to help close the achievement gap. One such example is "The Five Week Assessment Routine" which is written about extensively by Zoltners-Sherer and Spillane (2011). Designed at the Adams School in Chicago, this specific routine was developed for the purpose of better comprehending what students were learning. At Adams School:

> Every five weeks, all K–8 students at Adams took a math, reading, and writing assessment. The reading and writing assessments were written by the literacy coordinator and distributed by her assistant. Teachers administered the assessments and returned the student work to the literacy office where the literacy coordinator and her assistant scored the student work, analyzed the data, compiled reports, and shared them with the teachers, principal, and assistant principals (Zoltners-Sherer & Spillane, 2011, p. 620).

The above example, similar in some respects to Response to Intervention, illustrates how data can be developed and used to improve instruction. It also reinforces that data can

include “any information that helps an educator know more about their students” (Wayman, Jimerson & Cho, 2012, p. 160).

For this portion of my study, data will be defined using Bernhardt’s (2003) four unique categories of data that district and school-level leaders often analyze: student learning, demographics, school process, and teacher perceptions. Bernhardt’s definitions are as follows:

> *Student learning* data include a variety of measurements—norm-referenced tests, criterion-referenced tests, standards assessments, teacher-assigned grades, and authentic assessments.
>
> *Demographic* data describe the students, the school's staff, the school, and the surrounding community.
>
> *Perceptions* data—gathered through questionnaires, interviews, and observations.
>
> *School processes* data include the school's programs, instructional strategies, assessment strategies, and classroom practices (Bernhardt, 2003, p. 26).

According to both Kennedy (2003) and Schmoker (2003), analyzing these categories of data often reveals some of the most basic challenges district- and school-level leaders face.

Defining structures and routines. Structure and routines are fundamental to any organization, but each of us views these through different lenses, leading to disparate levels of understanding (Feldman & Rafaeli, 2002). A logical starting point is to provide the reader clear definitions of structure and routine, as the following indicates: school districts have formal hierarchical structures that act as blueprints of each district’s bureaucracy. These structures are put in place to accomplish the goals of leading,

teaching and learning, and to assist the individuals within the organization and those on the outside to understand the official structures that guide the organization.

Structure. There are different definitions of structure. Structure can be considered "the patterns of organizing and allocating time, space, staff, students, curriculum, and learning resources that directly affect student opportunities to successfully learn what is essential" (Schwahn & Spady, 2002, p. 98). It can also be framed using Spillane, Mesler-Parise and Zoltners-Sherer's (2010) definition: "Formal structure refers to the designed organization including formally designated positions, chains of command, departments, programs, and formal organizational routines" (p. 588).

Indeed, structure is more than just a linear model of who is responsible for what, and who supervises whom; structure can also be less tangible. Therefore, for the purpose of this study, the definition of structure will be Spillane's (2006) fluid description: "go-betweens in our interactions with others in and on the world" (p. 75). Using this fluid definition for structure builds on previous literature that discusses how structure is yet an abstract idea or concept. However, when coupled with a specific person, at a defined time, in a specific location (school or district), with a specific task/activity, it becomes less abstract (Bourdieu, 1977, 1990; Feldman & Pentland, 2003; Giddens, 1984).

Routine. In theory, a public school system is made up of people working for the common good. The general coordination of these activities within the school district could be considered a routine (Feldman & Rafaeli, 2002; March & Simon, 1958; Nelson & Winter, 1982). However, there is a voluminous amount of research regarding organizational routines, and a large number of competing definitions of what constitutes a routine (March & Simon 1958, Nelson & Winter, 1982; Spillane, 2012). For instance,

organizational routine may look different depending upon an individual's experiences within the organization (Pentland & Feldman, 2005). March and Simon (1958) suggest that an organizational routine is similar to a computer program. Contrary to this definition, which neglects the personal elements of what a routine is within a public school system, is that proposed by Feldman and Rafaeli (2002): "organizational routines are recurring patterns of behavior of multiple organizational members involved in performing organizational tasks" (p. 311). Similarly, Feldman and Pentland (2003), from a more humanistic point of view, defined routine as "a repetitive, recognizable pattern of interdependent actions, involving multiple actors" (p. 95). Also, the articles and books about distributed leadership produced by Spillane (2006; 2012), and Spillane, Zoltners-Sherer and Parise (2010; 2011) support this definition of routine. Therefore, Feldman and Pentland's definition was used for this study.

Methods

Case study. Through the lens of a distributed leadership model, this study specifically examined which data analysis structures and routines district- and school-level leaders perceived essential in addressing disparities in student performance related to race/ethnicity, class, and/or disability in order to promote students' opportunity to learn Whereas the methodology outlined in the overarching study was followed, the subsequent sections further detail information more specific to this portion of the 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). The qualitative case study method is

appropriate for this section of the study for two reasons: it will result in both a greater understanding of the data analysis structures and routines within the district and also the determination of how they are utilized for leadership (Creswell, 2012; Merriam, 2009; Salkind, 2006). Creswell (2009) suggested the use of qualitative research because it provides a detailed view of the topic. Accordingly, this qualitative case study analysis was in New Hope School District, an urban, K-12 district in Massachusetts, as described in Chapter III.

Sample and Participant Selection. As previously outlined, 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.

Data collection. Simmons (2006) describes interviews as the most common form of data collection. Therefore data for this portion of the study was collected by the entire research team primarily through individual semi-structured interviews using a protocol developed by the research team.

Interviews. According to Stake (1995), interviews are a valuable way to uncover multiple facets within a case study. Therefore, a limited number of district- and school-level leaders were interviewed in order to understand their perceptions of the evidence-based practices within the district. Interviews were conducted in-person on site within the school district setting, in each interviewee's office. Confidentiality was a consideration in deciding the location to ensure the session was uninterrupted. 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 questions were developed using the theoretical distributed leadership framework and are outlined in Appendix (A) whereas Table 5.1 shows the specific interview questions for this portion of the study.

Document analysis. Spillane, Diamond and Jita (2003) used the term "collective leading" as a way to illustrate distributed leadership and described it by stating, "when two or more leaders work together to co-enact a particular leadership task" (p. 538). When district- and school-level leaders collaborate, as is the case in distributed leadership, documents are often generated that illustrate the decisions made. These organizational documents "have been a staple of qualitative research for many years" (Bowen, 2009, p. 27). More specifically, in widely circulated distributed leadership books and studies, the resulting documents, available for review, usually include the following: (a) meeting agendas, student assessments, scheduling protocols, staff procedures (structures/routines) (for student data review); and (b) the strategic plan (Vision/Mission) as it relates to data, structures and routines (Spillane, Halverson, & Diamond, 2001; Spillane, Parise, & Sherer, 2011; Harris, 2002; Harris, 2004).

Analysis and review of multiple documents is widely supported: Creswell (2012) and Merriam (1998) recommended the use of documents, as did Yin (1994) who advocated for the collection of multiple data sources such as documentation and archival records. Stake (1995) stated that using a variety of data sources such as archival documents would reduce the potential for misinterpretation and help produce greater reliability. Bogdan and Biklen (2003) suggested, "the qualitative research approach

Table 5.1.

Research Questions

OTL: Understanding and Addressing Educational Inequities Overarching Research Questions	OTL: Structures and Routines 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 student performance related to race/ethnicity, class, and/or disability?	Which data analysis structures and routines do district- and school-level leaders perceive essential in understanding and addressing disparities in student performance related to race/ethnicity, class, and/or disability, in order to promote students' opportunity to learn?

demands that the world be examined with the assumption that nothing is trivial, that everything has the potential of being a clue that might unlock a more comprehensive understanding of what is being studied" (p.6).

Therefore, in this portion of the case study, an interview probe was used to help identify and locate district- and school-level archival documents. By using an interview probe, it was possible to draw upon multiple sources of evidential data (interviews and documents) collected by multiple researchers conducting the study. This helped validate and triangulate the data (Denzin, 1978; Miles & Huberman, 1994; Merriam, 2009; Yin, 1994). A sample of the following documents was examined from the 2011-2013 school-years to the present:

- district- and school-level routines, and structures that the district uses to support analysis of data;
- district- and school-level improvement plans;
- district- and school-level benchmark student data and assessment schedules;

- district policy as it relates to student data and use of data as it relates to student performance pertaining to race/ethnicity, class, and/or disability;
- district strategic vision as it relates to student data, and use of data as it relates to student performance pertaining to race/ethnicity, class, and/or disability; and
- documentation of the types of professional development offered to district- and school-level leaders.

This researcher acknowledges the limitations that document analysis presents. The district documents were produced by individuals with biases, interests, and values that have the potential to impact the credibility of those documents (Hammersley & Atkinson, 2007; Hitchcock & Hughes, 1995). An additional concern is that they also reflect the language and orientations of the research participants instead of being actual or somehow definitive. However, since public schools are bureaucratic entities that use documents as the primary means to guide staff to carry out policies, procedures, and protocols, formal document analysis is important to perform despite the inherent limitations.

The primary goal of document analysis was to assist in confirming or invalidating the interview responses regarding data structures and routines. The data collected during interviews was divided into two separate categories: district-level leaders and school-level leaders. By analyzing documents that district- and school-level leaders referred to in the interview process, the researcher was able to cross-check and verify responses in order to gain further insight into which student data structures and routines the respondents perceived to be essential in addressing existing disparities in student performance.

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

Which data analysis structures and routines do district-and school-level leaders perceive essential in understanding and addressing disparities in student performance related to race/ethnicity, class, and/or disability, in order to promote students' opportunity to learn?

Data reduction continued throughout the analysis utilizing the coding process. Prior to entering New Hope School District, this researcher created a "start list" of codes based on the study's theoretical framework and research questions as described in Chapter 3 (Merriam, 2009; Miles, Huberman & Saladaña, 2014). Coding is the process of conceptualizing the data and moving from description to formulation of the data. Creswell (2012) 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). Correspondingly, Saldaña (2013) defines a code in qualitative inquiry as being "most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). 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.

Data displays. Creating a data display involved displaying the data in an organized fashion to allow for conclusions to be drawn (Miles & Huberman, 1994).

Conclusion drawing and verification. The final component of data analysis, conclusion drawing and verification, involved 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).

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 research team consisted of four doctoral level candidates who were all working as administrators in public school districts that were attempting to address disparities in student performance. Each of the 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).

Results

Structures and routines. The structures and routines that district- and school-level leaders use to analyze student data are crucial to understanding how leaders try to improve students' opportunity to learn. Accordingly, student data analysis organizational structures and routines comprise the framework within which school leaders monitor student progress. Planning and implementing the necessary structures and routines in New Hope School District involved a conscious decision by the district- and school-level leadership (Zoltners Sherer, & Spillane 2011).

The following section, divided into two parts, presents the findings and discussion that emerged from the analysis of interviews and documents in response to my research question. The findings are organized and presented with the purpose of specifically examining which data analysis structures and routines district- and school-level leaders perceive essential in understanding and addressing disparities in student performance related to race/ethnicity, class, and/or disability, in order to promote students' opportunity to learn. The analysis showed that structures and routines were: (a) a mandate for public display of student data using data war-rooms and student data walls, (b) a traveling cabinet for the purpose of ensuring uniform review of student data, (c) mandated plans for individual school improvement and (d) implementation of school-based instructional coaches created opportunities for student data review. Furthermore, this researcher recognized that the Level 3 status of the district influenced the implementation of these organizational structures and routines.

Overview of the New Hope Public School District including Massachusetts performance ranks. Massachusetts assigns performance ranks 1-5 (accountability and assistance) to its school districts and each of the schools within the districts. Level 1 means highest performing, and level 5, lowest performing. Districts are assigned a level based on that of their lowest performing school. New Hope, ranked level 3, is among the 20 percent lowest performing districts in Massachusetts (Massachusetts Department of Elementary and Secondary Education, 2013a). Table 5.2 shows the pseudonyms of the district- and school-level leaders as well as their years in their respective roles and their school's state performance rankings. Interviews were conducted with all district-level leaders and all but two of the school-level leaders.

A mandate for using data war-rooms and student data walls. Much of the work of central office administration leadership requires putting in place structures and routines that individuals within the school organization can enact and follow. Routines and structures within an organization evolve over time and external factors contribute to those changes (Zoltners- Sherer, 2006; Feldman & Pentland, 2003). In 2012, the superintendent of schools in New Hope School District, along with the other district-level leaders, mandated that school-level leaders analyze student achievement data in an effort to close the achievement gap. Throughout all of the interviews, district- and school-level leaders identified Special Education students and English Language Learners (ELL) as the two groups for which the district deliberately analyzed student data. Figures 5.1 and 5.2 illustrate that the greatest performance differences in New Hope, as measured by the state test, are experienced by Students with Disabilities, ELL students, Hispanic/Latino students, and Low Income students. Similar discrepancies in performance are evident in both English language arts (ELA) and mathematics for the students in these subgroups.

Figure 5.1. New Hope School District's ELA MCAS Results

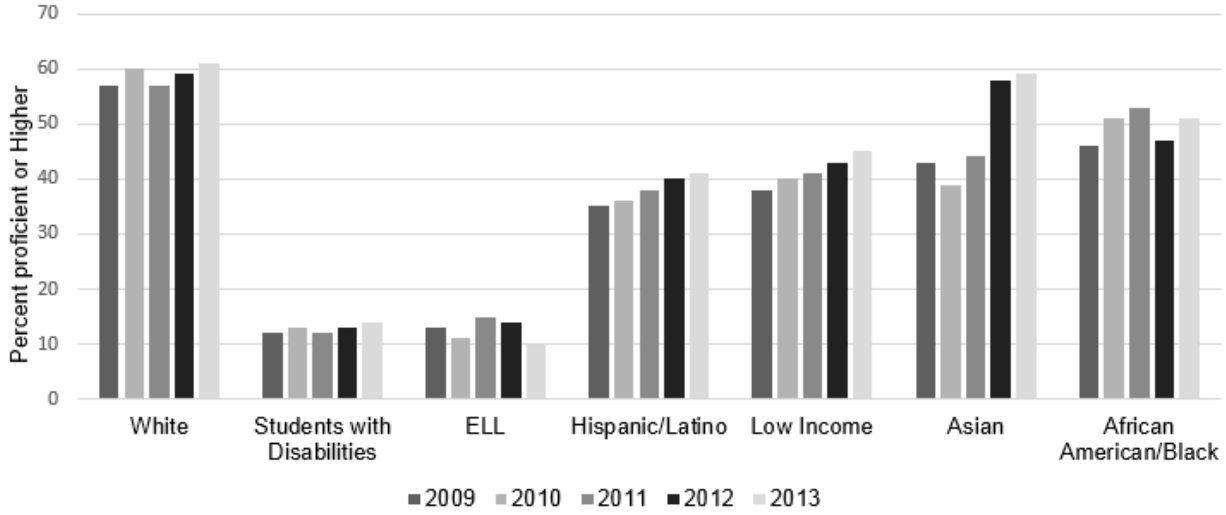
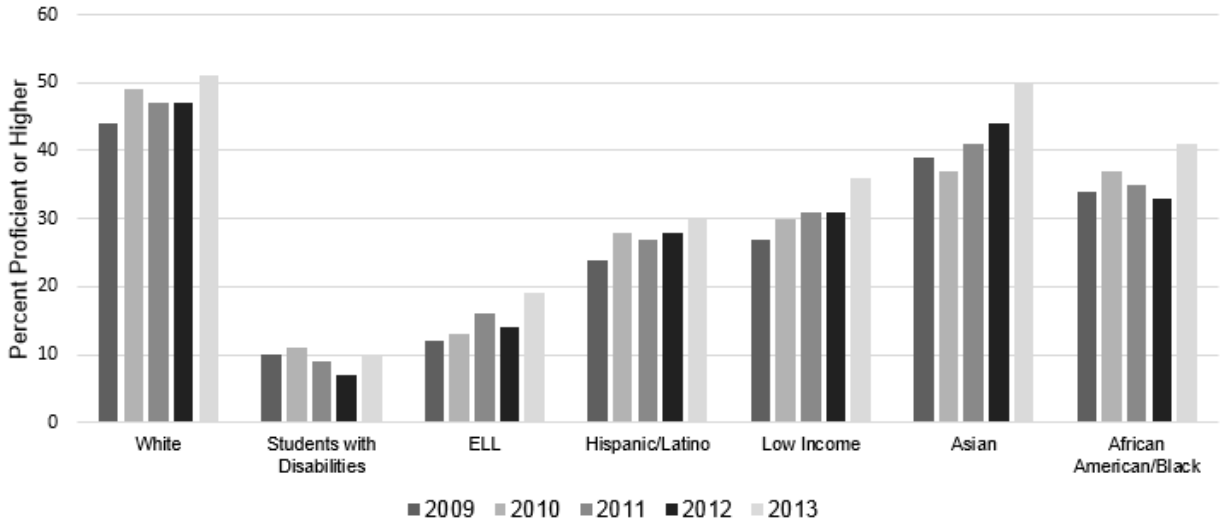


Figure 5.2. New Hope School District's Mathematics MCAS Results



When Adrianne, a senior district-level leader, was asked to describe the gaps in student performance the district is focusing on eliminating, she responded, "Well, that would be special education and ELL students, English as a second language, that's probably our two biggest populations that we have the biggest gap in, and a majority of it is special education students." Veronica, another district-level leader, also reported that New Hope was working on the gap "among and between students with disabilities at just about every age and every grade level in every content area, so I would say that's the most

persistent." Jayden, a school-level leader stated, "To get specific on your proficiency gap, we're targeting the subgroups of English language learners, special education." Jamie, a school-level leader identified the gaps persisting in the "SPED [Special Education] demographic group." Sean, a district leader said that "we're looking at a lot of the same gaps that a lot of urban [districts] are looking at…Special Education and ELL." Finally Brian, a school-level leader reported that, "if you talk about gaps, specifically with my subgroups, the gaps with my specific subgroups would definitely be my English language learners, my low income, and my SPED."

To address the achievement gaps the district targeted, it adopted new structures and routines. One such specific structure/routine that district- and school-level leaders perceived as an essential tool in analyzing student data was what Sean referred to as "data war-rooms" and "student data walls." Sean said the primary factor contributing to the newly mandated structure/routine was the fact that the Massachusetts Department of Elementary and Secondary Education identified the district as being Level 3. Sean's comments provided his initial rationale for providing a mandated structure/routine in each building with the following statements:

> Up until like June I had data walls here [central office], I had them up in here trying to basically model what it is, but I found that I actually stopped doing it because it was more like a pro forma kind of showy thing. This is used as a conference room, nobody's really analyzing the data here that much, so whereas for the schools it's the place where the data teams meet and they're actually using the raw data every day.

In other words, Sean envisioned that intentional, regular use of formative and summative assessment data would help school-level leaders and teachers determine their students' proficiency. Therefore, Sean mandated the "data walls" and "data rooms." The intent of these data exhibitions was to help guide the specific interventions for each student as well as provide opportunities for collaboration and sharing of resources. Sean further described the purpose of the mandated format that each school was to follow:

> So one of the mandates for me was that every school would have a data room, refer to it as the data war room, and on the walls are the academic, where all the students are individually to the point where a lot of the schools use the red, yellow, and green way of marking where students are, red being in need of remediation, yellow being on their way, and green being at the grade or above. So that most of the schools have charts where they actually have little cards with every student's number and dates and picture to really make this all very personal, this is about every student, knowing where every student is academically in different subject areas and the goal being to move them up from red to yellow to green.

Essentially, central office leadership positioned the use of student data as a top priority throughout the New Hope School District. Sean reported the district mandate:

> The goal being that at one point it was central office [who] need[ed] to know the data, then it was really central office and the principals need[ing] to know the data, and then there are data people who need to know the data, and now it's every teacher needs to know the data. And really the schools that are having the

> biggest success…every student…knows their own data, that's the goal, to have every student have ownership of their data.

In fact, all of the school-level leader participants confirmed that central office administration, and particularly the superintendent of schools, had placed an importance on mandating the use of publicly displaying and analyzing student data. "There's certainly a lot of conversation around data and presentation of data…..the standardization, every school in some shape or form has had data walls, there's a requirement to have it," said Jayden, a school-level leader. School-level leaders perceived the importance placed on student data and adhered to the mandate of displaying student data via data war-rooms and data walls.

The prevalence of publicly posting student data throughout the district was evident, as Bill, a school-level leader, reported:

> So, what started as this philosophy around posting, publically posting it [data]….we took it to a different level when we said we don't just want to have it on the wall. We want the kids to know it. We want the kids to be able to interact with it. So, like in our interventions when they do their progress monitoring, they'll get a marker and they'll walk up to their data sheet, and they'll color in their little bar graph that shows what their fluency was today versus what it was two weeks ago, and they can come back and say, 'Geez it went up 5 words, and I only made one mistake. That's, I'm really making gains towards my benchmark.' And that's the level we want to get to. So, I think the greatest change is looking at our use of it, but then making it so public and so internalized by the children that they can understand it.

Further, Jamie, a school-level leader, described that her staff decided to implement the data display mandate in multiple ways. For instance, they displayed daily student attendance rates on the school entrance doors, office doors, classroom doors and hallways throughout the school. At another school, the school-level leader dedicated a conference room as a "data-room." At Jayden's school there was a conference room dedicated as a "data-room" in an effort to adhere to the structure/routine mandate from the superintendent of schools. Jayden described the data in the room as follows:

> We track in this room, we based it off our assessments so we don't necessarily track the subgroups; we're addressing skills. But one of the things we do delineate here in monitoring the gap is that these cards actually represent students and their programs are identified. So as we place them based on the skills and the proficiency that we're seeking, we're able to also look at programming what they may fall under and what those are. So we do that. This is the language arts, the mathematics is behind you and that's how we look at skills, but then within that is looking at proficiency gaps that are subgroups. And with the delineation in MCAS it makes it quite neat to compare high needs to no needs to non-needs. So we look at that as a holistic group but then we can also break that down into the categories.

The above examples exhibit the ways that school-level leaders adhered to the mandate set by the superintendent. This demonstrates the importance district-level and school-level leaders placed on the judicious use of student data to improve students' opportunity to learn.

Upon reviewing and coding transcriptions from the district- and school-level leaders' interviews, another bit of peripheral evidence, revealing the significant importance of student data, was uncovered: how often district- and school-level leaders used the term "data" during each interview. The eight central office district-level leaders used the word "data" an average of 24.5 times per one hour interview whereas the school-level leaders used the word "data" an average of 34.5 times per interview. Most striking, however, was the difference between how often Jayden, a school-level leader used the word "data" during the one-hour interview: 81 times; and how often Joe, a school-level leader, used it, only 10 times. This level of discrepancy among school-level leaders demonstrates the potential inconsistency of how individuals perceive the importance of data.

A traveling cabinet ensures uniform review of student data. One specific district-level structure/routine that all but two interviewees recognized as important was the "traveling cabinet." In 2010, the district developed the Accelerated Improvement Plan (AIP) in an effort to increase student performance by having district- and school-level leaders analyze student data more effectively. In 2012 district leadership implemented the "traveling cabinet." A review of the AIP document showed that the "traveling cabinet" initiative required the central office administrative cabinet to meet every two weeks at a different school for the purpose of analyzing student data. Further review indicated that the traveling cabinet practice was intended to engender openness and communication between district- and school-level leaders and to demonstrate and model how important district-level leaders valued student data analysis. During his interview, Sean, a senior district leader, described the traveling cabinet as follows:

> 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.

Sean further reported that four of the principle goals of the "traveling cabinet" were to ensure that:

> Data is shown in a very public way. Building-level leaders and staff know that central office administration is using the student data to make informed decisions. Data is tied to the teacher evaluation system and analyzing student data is an essential part of the work. Prior to the 2012-2013 school year, the cabinet had met weekly at central office, in isolation, without the participation of school-level leaders.

By traveling to the different schools and allocating substantial time and resources, district and school-level leaders were demonstrating that collaboration was a high priority. From the perspective of Sean, the "traveling cabinet" also helped teachers see how the cabinet analyzed data. In addition, it provided an opportunity for teachers to collaborate with district level-leaders in their own school and with their own students' data. Cote, a central office administrator, discussed what the traveling cabinet had recently seen while visiting a school:

> We were at a meeting at a middle 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 …growth related to math, and then what interventions are going on. And then there was talking about sharing that information with the kids so the kids kind of had an understanding of, oh well, 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.

The traveling cabinet supported the superintendent's mandate of ensuring that school-level leaders implemented structures and routines to use student data in their efforts to increase students' opportunity to learn. Adrianne, a district level leader, described the cabinet this way:

> We have a traveling cabinet every other Monday with the schools, and his [superintendent's] major priority is to be in their data room to say we need to see the data, we need to see what's going on. Because that's 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 justified having a traveling cabinet initiative by saying:

> Their issue [school-level leaders] was, there need[ed] to be some non-negotiables because I'm more, like, bringing people along because my experience is there's power and there's authority. Power lasts while the people are in the room with you; authority lasts when they leave. And my approach has been you want to gain authority and not just have power.

During interviews with building level-leaders, there was strong evidence that the traveling cabinet was addressing the need to analyze student data in a uniform approach. Joe, a school-level leader, said, "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." A document review of two school-level leaders' Power Point presentations that had been made to the traveling cabinet revealed that both of the presentations were comprised of various student data, including the following areas: MCAS, Demographic, Attendance, Disciplinary, Literacy and Math.

Mandated plans for individual school improvement. Comprehensive district school improvement and reform comes in many different methodologies and iterations; using student data to make data-based decisions has been seen in various school districts (Datnow, 2005; Datnow, Park, & Wohlstetter, 2008; Knapp, Swinnerton, Copland, & Monpas-Huber, 2006) and it is evident in New Hope School District. Educational leaders must guide reform through an increasingly complex policy environment, curriculum standards, and other outside pressures. A review of standards based assessment documents from the Massachusetts Department of Elementary and Secondary Education accountability data (2013a) revealed that over a five-year span from 2009-2013, there was a significant gap in performance between student subgroups and White students in the New Hope District. For instance, the advanced and proficient performance of White students surpassed that of the student subgroups in English language arts by fifty-nine percent. In Math, it was a forty-eight percent gap.

Analysis of interviews and district documents showed that in 2013 district leadership in New Hope had mandated specific school improvement structures and

routines to increase student achievement. The superintendent of schools developed a structure/routine where every school principal had to develop either (a) a sustained improvement plan demonstrating continued student growth, or (b) if the school had not made sufficient progress, an accelerated improvement plan. These specific organizational structures and routines were deemed key mechanisms for the district improvement process through which leaders augmented district goals.

A review of the New Hope website revealed that New Hope School District had a District Improvement Plan (DIP) for the years 2011-2014. The plan stated that the district was "engaged in using data driven improvement practices throughout the district, and has provided technical assistance in utilizing a data analysis process to each school." While the superintendent of schools deemed it necessary to have a district Accelerated Improvement Plan, the Massachusetts Department of Elementary and Secondary Education did not formally require Level 3 districts or schools to have one (Massachusetts Department of Elementary and Secondary Education, 2013b, p.1). In fact, only those school districts that were designated Level 4 by the Massachusetts Department of Elementary and Secondary Education were required to "operate under Accelerated Improvement Plans [in order] to address systematic challenges" (Massachusetts Department of Elementary and Secondary Education, 2013b, p.1).

However, Sean, the New Hope district leader, justified the decision to implement a district accelerated improvement plan as well as individual school plans by saying, "The approach used to be, throw everything against the wall and hope something sticks, and if you have fairly good demographics enough would stick to get by. Those days are over."

Sean also explained that during the 2012-13 school year, 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 (2013c), "in accordance with state law, the Department of Elementary and Secondary Education (DESE) annually classifies the lowest performing 20 percent of schools into level 3" (p.1). Sean reported that because the New Hope School District was a Level 3 school district, they were given priority for receiving DSAC support. Sean went on to say, "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)."

Sean further explained his decision to align the mandate for internal school improvement plans and accelerated improvement plans with the DSAC system:

> [It was] a model that they're [principals] familiar with and [can] replicate that model at the school level instead of inventing something new, so that's very heavily data driven. And that's what we're hearing from all of our principals that are presenting that have had success it's been about data-data-data.

Sean implemented a formal structure/routine that incorporated components of the state compliance model for schools because it incorporated analysis of student data.

In addition, another structure and routine associated with the school improvement plans was a provision unique to New Hope. In an effort to help further support the analysis of student data, each school was assigned a central office cabinet liaison. Sean said, "In a district with over 5,000 students in seven schools, it's easy to just forget them [students]." The central office cabinet liaison meets with the principal and continues the

data dialogue with an emphasis on supporting the school. Sean is liaison for Jamie, a school-level leader; Veronica, is liaison for Joe, a school-level leader; Adrianne is liaison for Mary, a school-level leader; and a contracted retired principal works with Brian, a school-level leader. Research by Fullan and Stiegel-bauer, 1991; Miller, 2004; and Whitaker, 1996, support central office administration being the individuals who support school-level principals.

Further document analysis of the New Hope school improvement plans and accelerated improvement plans showed that significant emphasis was being placed on student data; also, there was a level of uniformity among the plans.

School-level leaders indicated different views regarding the plans. For instance, Joe, a school-level leader, said there was limited usefulness in creating an improvement plan:

> We have school improvement plans and accelerated improvement plans and after a while it's just words on paper. Like exercising compliance, you know, you have to get this done. This is what you have to say, you know, you got to do, so you do it but it's not particularly meaningful to somebody.

Jayden, a school-level leader, described his dissatisfaction with the improvement plan in the following way:

> And of course the requirement for us to have an improvement plan is now thirty-five pages. I just went through it and I'm like, really? We're supposed to be able to accomplish – we can't. The research has been very clear, those who focus, so that's why our focus is writing and we're going really deep in writing, but if we do well, you know, right now we're about 50 percent across the board, open

> response and long comp, well, we're going to get it to 75 and then watch our scores go up. But there are a thousand things out there to improve scores. I can show you where I can improve scores in 25 percent in less than a year. That's been one of the reasons why this school was a level three and now in one year is a level two. Our goal in the second year is to be a level one.

Jayden also expressed frustration that while the district had mandated increased student data collection, there was a lack of training on how to best use that data, he reporting:

> 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. One example that I can say that I believe empirically that's not, is a sixty-five page district improvement plan.

However, other administrators found the school improvement plans beneficial. For instance, Jamie, a school-level leader, said, "Our school improvement plan, which is on our website, I think that has a lot of stuff that's pertinent. We're using it. It's not just a cyberspace dust collector." Veronica, a central office administrator, reported, "I'm not sure that it's a cohesive district thing, although maybe at the superficial level it looks that way, but the strength is still at the school level and that's almost better." When Veronica was asked if the collaboration was genuine, she responded:

> That collaboration is genuine, strong and deep; school to school not so much. It looks similar, it looks like there's a through line, all of that's true, and some of our schools are stronger collaborators with each other than others. Some of our elementary [schools] are very strong, but it's really still leadership and personality driven.

In addition, Kaydence, a district level-leader, saw value in the plans:

> [The] superintendent and the assistant superintendent provide guidance on what needs to be included in the improvement planning. Some of it is compliance. We're a Title I district. Except for our high school and alternative high school, we're all school-wide Title I, so some of those things were required. But then it's kind of interesting, they're required for a reason, because it's really good practice, I mean overall, and I think that's what you end up seeing when we start doing this type of stuff and have some kind of early wins on.

School-based instructional coaches. The work of district- and school-level leaders evolved over time. This finding demonstrated that the leadership in New Hope deliberately changed course on how the district analyzed student data by implementing an instructional coach structure/routine. During the interview with Sean, he explained that throughout the 2012-13 school year, New Hope School District had partnered with the Massachusetts District and School Assistance Center (DSAC) as a result of its Level 3 status. The Massachusetts Department of Elementary and Secondary Education (2013b) assigned a DSAC team to the New Hope School District comprised of a regional assistance director, a professional development coordinator, as well as others with expertise in the areas of data, math, and literacy. The basic premise of the DSAC team was to "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). During the preliminary review by the DSAC team, Sean reported that the team said he was not "hierarchical" enough and he commented:

> I was kind of cited on by the advance, by the team, that came to review this, that I wasn't hierarchical enough basically to say something like this. Basically they said you're too collaborative, and I thought, hmm, everything that you recognize for being what you expect in charter schools about encouraging the teachers, letting them take ownership, I do it and you criticize me for it, but they do it and it's the best thing since sliced bread. I mean it was a pretty ugly conversation.

Sean went on to say that he was in his eighth school year (2012-2013), the district had not been making progress, and "things needed to change":

> Last year at this time nothing had happened. All of our schools were flat, the scores weren't going up, and I was like oh, my gosh, this is awful. So now I've told them [school-level leaders] all my goal is to make this a level one school district, so if you have a school that's a level three and you're not doing anything to move it up that's not going to work because we will always be the level of our lowest performing school, so now the flames been turned up and you got to deliver. But we'll provide everything you need, you know, just tell us what you need.

Sean reported that during several meetings with other members of the district leadership team, including several principals, they all brainstormed about ways to improve. The general theme that emerged was that there was too much data for individual schools, teams and teachers to use effectively. Sean described the problem this way, "It was as if teachers were drinking out of a fire hose and by instituting instructional coaches the principals could have a cadre of people to help have professional learning team leaders to help review school and student data."

As a result, district-level leaders in New Hope decided to rebuild the instructional coaching structure/routine, which had begun in 2009 with the premise that instructional coaches would support frequent student data review, perform classroom observations, and present varying teaching methods in language arts and math. Essentially, the district leaders attempted to create a structure/routine that supported school-level leaders' and teachers' practice of analyzing student data. Prior to the 2012-2013 school year, which was when the district instituted full-time literacy and mathematics coaches at all of the schools, the Title 1 director oversaw different programs intended to support students and staff. Sean described this old model of support in this way:

> The Title I director here had four secretaries when I came, so the resources were really apportioned to an old model. We had no coaches; now we have full time math and ELA coaches in all of the schools, so we've shifted a lot. Upstairs, the special education department had six secretaries and two assistant directors and the director, and now there's the director, two assistant directors who are almost never in their offices, they've all been assigned schools, and one secretary. So it's because we've moved a lot of the work into the schools.

By assigning instructional coaches to each building, there was the appearance of more consistency created to review student data. As documented in the New Hope District Improvement Plan, the instructional coaches were not only supposed to help work with student data, but also "provided embedded professional development, modeling, peer-coaching, and mini-content workshops" to help address district and school goals (New Hope District Improvement Plan).

The district changed from an old model to a new uniform plan of action with the

goal of helping students achieve at a higher level. Kaydence, a district level leader, described her role in the instructional coach structure/routine as the following:

> We have a pretty significant coaching initiative in the district and that started with math coaches, so those were kind of both between myself and the assistant superintendent in charge of curriculum. That coaching initiative is a pretty significant part of my role here as well I oversee that.

Kaydence went on further, describing how she saw the positive changes that central office had implemented using data via coaches this way:

> We at the central office are out helping them analyze their benchmark data, and then the coaches are working, they do coaching cycles and part of that is kind of an intensive nine-day coaching cycle that they're involved with so that they're doing on demand coaching but under that nine-day they're working the instructional model which is launch, explore, summarize type of thing, but then how the formative assessment's embedded in that.

Joe, school-level leader, described the new model, saying the following:

> Yeah, I have full time math and literacy coach. They've added some district level, like curriculum people do that, so I think there's definitely a movement towards less autonomy more of a uniform reports like a lesson plan, lesson plan template, standards-based classroom, what should that look like, what does it sound like. I think there's definitely been more movement towards that. I think teachers are actually too inundated with data to actually make sense of it all in a meaningful way to influence instruction.

The strength of the instructional coach routine/structure was the ability to help

teachers use student data to inform instruction. Bill, a school-level leader, emphasized how data and the accompanying accountability put more responsibility on the teachers to change instruction so that students were better able to learn:

> Teachers now look at [data] and the progress monitoring piece of that, and it impacts my instruction and my responsibility because it's so, it's so obvious of where we need to make gains, or where potentially we really want to make gains, um, and then having that, and I don't want to say that accountability piece as an negative, but that accountability slash assessment piece provides you with that information that you can look at and say, 'Geez, you know, my children are making great gains, or I'm a little frustrated that Johnny and Susie aren't making the gains so maybe we can go back and change something within my instruction.' So that use of data has made it, I think increasingly clear for teachers around their practice.

The instructional coach structure/routine also led to some cultural challenges. Joe, a school-level leader, discussed how instructional coaching presented challenges affecting the culture in his building:

> The coaches help some. A coach will cover class so this one [teacher] can go watch [another] one. But then you run into, so you want me to go watch so-and-so; are you saying that so-and-so is a better teacher than I am that's why? And then the teacher that, you know, well, I don't want anyone to think that I think I'm teacher of the year so why are you having people come watch me. So that's why I think that collaboration piece, when you're doing lesson planning together, if you have two sixth grade math teachers that are planning their lesson together, all

> right, I'll go watch you teach it Thursday and you come watch me teach it Friday, that sort of stuff, so it takes like the whole competition type of thing out of it.

However, all but one school-level leader expressed that although there was a great deal of collaboration in the district resulting in leaders' understanding of barriers, central office was not actually supporting school-level leaders and the work that was being done at the building level. Clearly, the instructional coaching model was embedded into the New Hope School District K-12. However, just how the instructional coaches functioned in each building appeared to be slightly different.

For instance, Sharon reported that her staff used coaches, but her school did not have full-time formal literacy and math coaches assigned. Rather, they had to access coaches via the regular high school:

> Yeah, we have coaches as well. And then you have—it is central office, but out there right now is [a] Special Education [coach], working with our Special Education teacher. There has to be collaboration. Again, data is critical because of our clientele.

Jayden, another school-level leader, stated there is "not enough nuts and bolts from central office, the umbrella is there but the nuts and bolts is not." Jayden went on to describe the coaching model this way:

> Yeah, there's coaches…and they're coming in working with us and so, you know, that's a plus. But those are new systems so they're not quite integrated completely, and I think because of lack of standardization it's a little hard to come across with a – although you want to keep the individuality so it's a balance, sometimes it's hard.

Responding to a question of how does central office support building leaders analyzing student data, Joe stated: "I don't think they do support it. I think central office has their own issues, and I think a lot of times they solve them at the school level and think, well this problem is solved so it's gone, it's off my plate, now it's down there."

This theme that the structure/routine of instructional coaches provided by central office was not helping was echoed by Brian who, in response to an inquiry regarding whether or not central office supported him as he attempted to address resistant teachers at his school, stated, "Oh yes, absolutely." However, when asked if central office supported him with initiatives at the building level such as his efforts surrounding the use of data, he boldly replied, "No" and went on to say: "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."

District leaders did not discuss whether the expertise of the instructional coaches was an issue. Roehrig, Bohn, Turner and Pressley, 2008 reported that those leaders who provide school-level leaders and teachers support should be skilled in content and pedagogy and should have structured opportunities to share relevant experiences and knowledge with those that they are coaching. Finally, in New Hope, the newly introduced instructional coaches structure/routine appeared to be an attempt by central office administration to provide greater support to school-level leaders. However, the school-level leaders indicated that that there continued to be a lack of meaningful collaboration.

Discussion

The research described in this dissertation was motivated by an interest in the structures and routines that district-and school-level leaders use to analyze student data.

This case study specifically examined which data analysis structures and routines district- and school-level leaders perceived as essential in understanding and addressing disparities in student performance. As reported earlier, those school organizations that demonstrate effective institutionalized leadership practices with a distribution of leadership via principals, department heads, teacher leaders, and other players have been identified with experiencing school success (Murphy, & Hallinger, 1998, Leithwood et al., 2004; Marzano et al., 2005). Sean, the New Hope School District superintendent, encouraged school-level leaders to accept responsibility for school success by supporting the idea that every school-level leader had an opportunity to demonstrate leadership in a distributed capacity. Honig et al. (2010) further conveyed that district leadership in coordination with school-level leadership plays a critical role in building school system capacity.

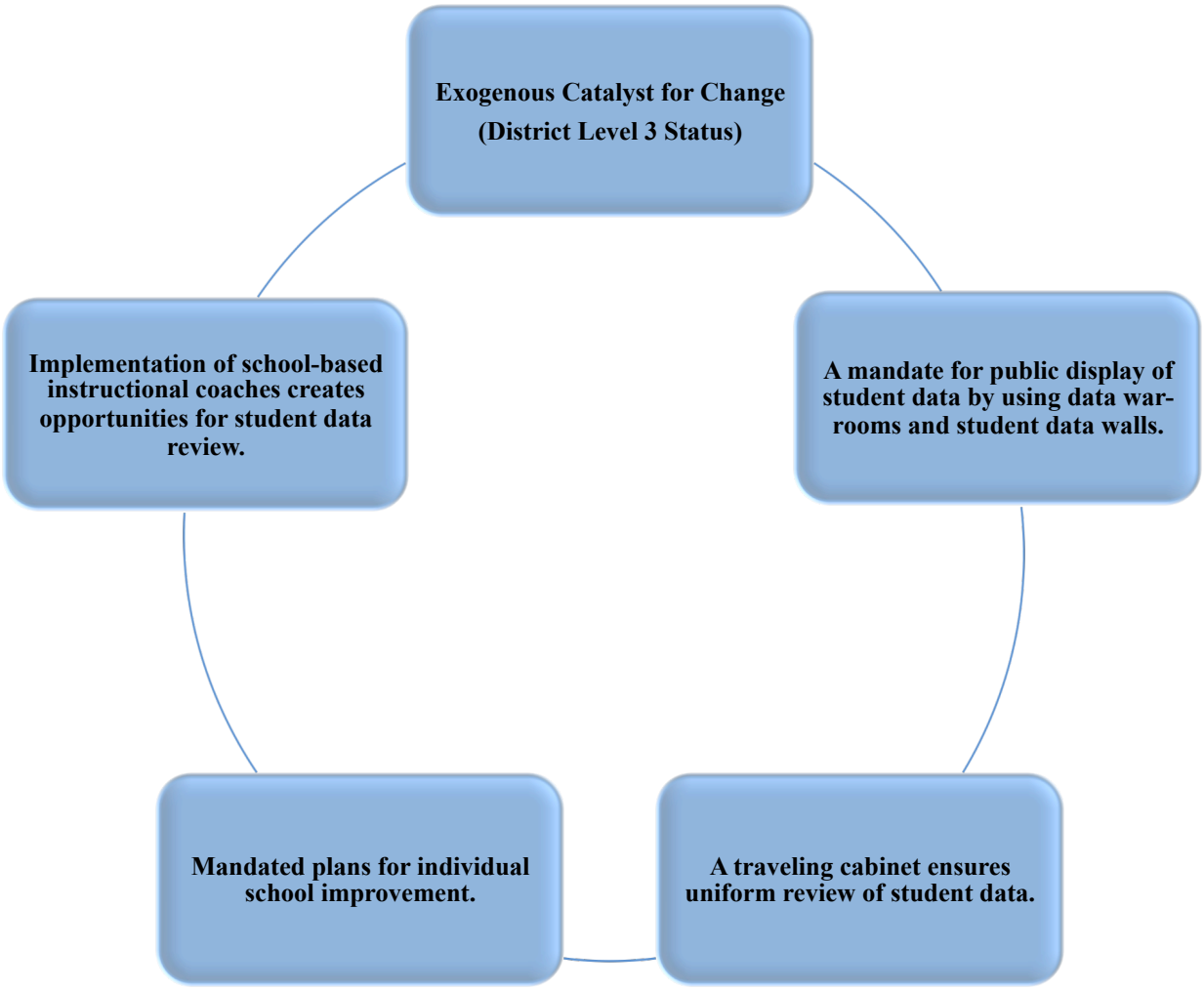
Effective district-and school-level leadership is important to educational organizations. The specific structures and routines that were implemented by district-level leadership in New Hope School District were explored by using (a) Spillane's (2006) description of structure: "go-betweens in our interactions with others in and on the world," (p. 75) and (b) Feldman and Pentland's (2003) definition of routine: "a repetitive, recognizable pattern of interdependent actions, involving multiple actors" (p. 95). Furthermore, the leaders' perceptions of structures and routines were explored using a distributed leadership lens in interview and document analysis (Spillane, 2006; Spillane, Halverson, & Diamond, 2001, 2004). Using the distributed leadership framework allowed the researcher to concentrate on the activity of leadership (structures and routines) rather than focus solely on the leaders.

Conclusions based on the findings showed that district- and school-level leaders in New Hope were working to provide students an equal opportunity to learn by putting a priority on the analysis of student data. In fact, Veronica, and Kaydence, both district leaders, spoke of book studies, with Kaydence sharing that “one of the very first book studies that we did was Nancy Love’s Using Data/Getting Results.” In addition, Sharon, a school-level leader recognized that central office had also trained administrators to work with teachers on how to use data. In effect, the findings specifically concluded that district leadership demonstrated that there was a priority placed on creating structures and routines, as evidenced by the following findings: (a) a mandate for public display of student data using data war-rooms and student data walls; (b) the traveling cabinet; (c) district mandated school accelerated/improvement plans; and (d) the implementation of instructional coaches.

March (1981) highlights the need to look at both stability and change in an organization: "Changes in organizations depend on a few stable processes. Theories of change emphasize either the stability of the processes or the changes they produce, but a serious understanding of organizations requires attention to both," (p. 563). This researcher’s analysis of New Hope School District revealed that the structures and routines that were enacted were due to the exogenous factor of the state mandated policy of accountability for adequate yearly progress. Specifically, it was revealed that the Level 3 status of the school district was a catalyst for change in New Hope. As a result of this Level 3 status assigned to the district, New Hope leaders were afforded an opportunity to work with a DSAC team to analyze systemic challenges related to students’ opportunity to learn.

This partnership with DSAC also led to the creation of an Accelerated Improvement Plan (AIP) that enhanced collaboration, organizational structures and routines, and professional learning. More specifically this catalyst for change resulted in actions that were purposeful, developmental, and aligned, ensuring that the catalyst stimulated the process for district wide change within all the schools. Furthermore, the new structures and routines resulting from the Accelerated Improvement Plan were implemented as a result of deliberate vision and creativity from within the district leadership system (Leithwood, & Riehl, 2003). Figure 5.3 highlights how the Massachusetts Level 3 status assignment prompted the New Hope School District's implementation of new structures and routines for improving student performance. By providing vision, focus, support and coordination of district wide improvement, these data analysis structures/routines prompted change within the district (Feldman & Pentland, 2003; Marzano & Waters, 2009; Sherer & Spillane, 2011). However, district-wide efforts to align formal goals and strategies fall short without substantial support from central office administration (Corcoran, Fuhrman, & Belcher 2001; Marzano & Waters, 2009).

Figure 5.3. New Hope School District's Catalyst for Change Model



Indeed, structure is more than just a linear model of who is responsible for what, and who supervises whom; structure can also be less tangible. In this instance, the institutional structures and routines implemented in New Hope were shown to help organize the district's goals. This was evidenced by how district- and school-level leaders used structures and routines to engage in analyzing student data on a regular basis. Moreover, a document review of the AIP and interview data revealed that leadership within the district had flattened, to a degree, by giving school-level leaders more responsibility for

their work (Harris, 2013). One example of this flattening of the leadership within the district was evidenced by the traveling cabinet, which shifted the focus away from central office administration analyzing student data in isolation to analyzing student data with school-level leadership participating. A practical benefit of implementing the traveling cabinet was that it enabled multiple individuals (district- and school-level leaders) within the organization to work collaboratively with one another (Spillane, Parise, & Sherer, 2011). For instance, the traveling cabinet structure also supported the routine of ensuring that district- and school-level leaders as well as teachers were regularly engaged in ongoing discussion and analysis of the same student performance data. This was evidenced by Jayden's explanation of how important looking at student data was:

> Teachers are understanding that it's a data-driven system, and that decisions have to be based on that data. What we're trying to find right now is—what data to drive our systems? And…that has helped us to collaborate….We've realized that if we're all going in the same direction, and we're all looking at—and working on and using that—we overcome barriers. We open up communication lines.

Furthermore, the study confirmed that leaders also perceive specific structures and routines as important when analyzing student data. Elmore (2000) states, "administration in education…has come to mean not management of instruction but the management of the structures and processes around instruction" (p. 6). Although, some may argue that data analysis structures/routines have the potential to stifle experimentation and can "contribute to mindless action, deskilling, demotivation, and inappropriate responses to problems (Feldman & Pentland, 2003). In New Hope School District the structures and routines developed to enhance student's opportunity to learn

helped improve the practice of analyzing student data by serving "various functions including enabling efficient coordinated action, reducing conflict about how to do organizational work, and storing organizational experiences" (Spillane, Parise, & Sherer, 2011). Spillane (2013) states that the advantages of organizational routines are that they "allow efficient coordinated action; [provide] a source of stability; and reduce conflict about how to do work". This was evidenced by how district- and school-level leaders were analyzing student data with uniformity district wide K-12.

The implementation of certain structures and routines within New Hope School District created a mechanism for engaging district- and school-level leaders in collaboratively reviewing and analyzing student data. The findings also indicate that implementing school improvement initiatives district wide has built district- and school-levels leaders' capacity and encouraged school-level leaders to accept responsibility for individual school success. This distribution of leadership also helps provide a broader base of support so that when new programs or initiatives are instituted, the likelihood of success is greater. Furthermore, by integrating distributed leadership practices within New Hope School District have become less likely to be impacted by the leadership practices of one leader working in isolation.

Staying the course while traveling through the rocky waters of system-wide district change is a struggle for district-and school-level leaders. The amount of questioning that occurs from outside forces, as well as those skeptics who reside within the organization, can be overwhelming at times. The following quote from Sean exhibited this sentiment:

There are all these different variables…it's kind of like trying to align the moon,

> the tide and the wind to get from A to B on a stormy night. Like I said, I'm encouraged by what I'm seeing, but then again I don't know?

The structures and routines that the New Hope District has implemented are: (a) a mandate for public display of student data using data war-rooms and student data walls, (b) a traveling cabinet ensures uniform review of student data, (c) mandated plans for individual school improvement and (c) implementation of school-based instructional coaches creates opportunities for student data review, offers building leaders oversight of student data and provides consistency across the district in terms of the use of data driven practices at the building level. Keeping these structures and routines intact increases the likelihood that knowledge and resources will continue to flow through the network of leaders, ultimately informing their practice (Daly & Finnigan, 2010).

Implications for Practice

Current public policy demands that district leaders use student data to make informed decisions. The use of organizational structures/routines that district- and school-level leaders institute to enhance the organization's mission have significant potential. Structures/routines are often thought of as non-innovative "inhibitors of change" (Spillane, Parise, & Sherer, 2011). However, both the review of the literature and research affirmed that school district leaders understand that there is neither a silver bullet nor a single quick fix approach to using structures/routines to analyze student data. As evidenced in this case-study, the opposite is true in that "organizational routines-multi-actor, interlocking, reciprocally-triggered sequences of actions-are a major source of the reliability and speed of the organizational performance. Without routines, organizations would lose efficiency as structures for collective action" (Cohen &

Bacdayan, 1994). Rather, consistent leadership with a clear focus has the best chance of producing opportunity for all. In fact, creating multiple pathways to ensure that student data is being used effectively is essential and in this time limited case-study the leaders have designed organizational routines in part due to the lack of district-wide student progress. With the current requirements of using student test-based achievement data in the forefront of district accountability, uniformity in data analysis structures/routines is necessary. A uniform organizational structure/routine to analyze such student data can contribute to stability, provide a common language, reduce potential conflict about which data is important, and help provide an overall framework of responsibility (Sherer, & Spillane, 2011; Cohen & Bacdayan, 1996; Feldman, 2000; Feldman & Pentland, 2003). While structures and routines do not guarantee improved student performance they should play an integral role in district- and school-level leadership in the 21st Century. The challenge for district leadership is striking an effective balance between requiring a certain level of structures and routines while allowing school-level leaders to operate with autonomy.

Study Limitations. Within any study, limitations exist. This research team consists of four doctoral candidates who are working as administrators in public school districts that are attempting to address disparities in student performance. Each of our districts has different approaches to this work. As a result, we bring different experiences and perspectives to the analysis process. Because of my own personal and professional background and viewpoints, it is important to note that I may have shared certain characteristics with participants.

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 try 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). The most significant threat to the internal validity of this portion of the study is that I also serve as a district-level leader. Because of this, the potential response bias includes the possibility of study participants altering their responses in order to provide information they believe the interviewer [would want] to hear (Miles, Huberman, & Saldaña, 2014; Saldaña, 2013). One way to counter this would have been to have subsequent interviews with participants.

Another significant limitation of the study was the fact that the research team was not able to interview two school-level leaders. Both school-level leaders who did not participate were afforded confidentiality. The research team went so far as to offer various interview options and methods for participation, allowing the participants to answer the questions via email. As a result of not having the interview data from these two individuals, there was a real limitation of the reported data. The study was also limited by the fact that teaching staff was not interviewed as part of this study further restricting the ability to generalize.

An additional limitation of this study was that the generalizability of the findings was limited because it was a study of one district at one point in time. Furthermore, it was too soon to get test data to know if improvements occurred over time as a result of these initiatives. Conducting future research involving multiple districts that are implementing the same structures and routines may prove to be a beneficial research topic, especially if

future research was able to look at longitudinal student achievement data to see if the structures/routines were having an effect on student performance.

CHAPTER SIX[5]: 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 (Allwarden, 2014; Potenziano, 2014; Talukdar, 2014; Zaleski, 2014) 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 (Allwarden, 2014).

[5] Chapter Five was co-authored by Ann F. Allwarden, Phillip J. Potenziano, Sujan S. Talukdar, and Karen J. Zaleski.

- 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).

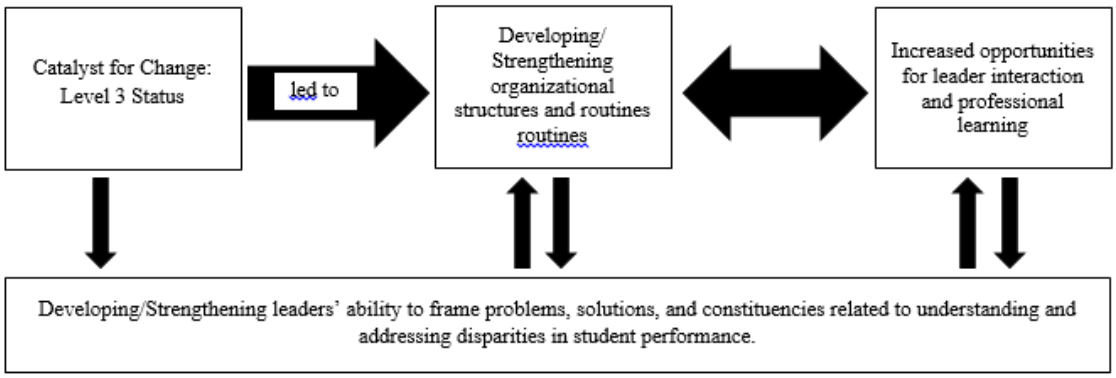
The following discussion synthesizes insights drawn from the four individual studies. These insights were gained by searching for complementary results based on the "complementarity model of triangulation" (Erzberger & Kelle, 2003, p.469). Applying the complementarity model of triangulation involved 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. 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. 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 district- and 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 development of organizational structures and routines, and the increased opportunities for leader interaction and professional learning. Figure 6.1 also illustrates the relationship

Figure 6.1. The Interrelationship of Elements Studied



between these three elements and leaders' ability to frame problems, solutions and constituencies related to disparities in student performance. 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 school-level 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. 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. 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. 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. 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. In addition, these structures allowed leaders to engage in ongoing professional learning. 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. 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. The action planning template and the AIP that leaders created in partnership with DSAC facilitated this understanding. 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. 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. 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. 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. 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.

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, 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.

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. 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. For example, to prompt shifts in thinking and practice among principals and school staff, district leaders fostered and leveraged professional learning activities. 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). 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.

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. 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.

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/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. 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. 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. 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. 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. 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. 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. 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. 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. 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 district- and 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. Additionally, the purposeful distribution of leadership work provides the opportunity to enhance collaboration and collective action. Conversely, without proper district-level leadership and leader distribution, effectively addressing disparities in student performance may be hindered.

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End Note

[1]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

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 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?