The Sustainability of Distributed Leadership

by

Max Klink

BFA, Rhode Island School of Design, 1999

MFA, Indiana University Bloomington, 2001

MSED, Walden University, 2011

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This dissertation was presented

by

Max Klink

It was defended on

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and approved by

Dr. Mary Margaret Kerr, Professor, Administrative and Policy Studies

Dr. John DeFlaminis, Adjunct Professor, Graduate School of Education, University of

Pennsylvania

Dissertation Advisor: Dr. Diane L. Kirk, Clinical Associate Professor, Administrative and Policy

Studies

The Sustainability of Distributed Leadership

Max Klink, EdD

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School based leadership is an increasingly complex task that requires leaders to find ways to spread responsibility throughout organizations to achieve goals. This dissertation research is an exploratory study in the field of sustainability of distributed leadership at Capital High School, a large urban high school. Exploring the sustainability of the Annenberg Distributed Leadership Project (DL Project) the author assessed the practices still in use at a single school site to determine what had caused the distributed leadership management structure to sustain and thrive in an environment of budgetary restrictions and staff reduction.

The researcher contacted eighteen participants from the DL Project. Ten participants maintained administrative or teaching positions at Capital High School and eight participants had received DL Project training for use at other schools. The participants from Capital High School were asked to complete a survey with open-ended questions and the others were asked to complete open-ended questions and participate in follow-up interviews. All participants from Capital High School responded to the survey (n = 10 reported for survey), seven of the additional participants responded to the open-ended questions (n = 17 reported for open-ended questions), and three participants (n = 3) engaged in follow-up interviews. All participants had completed a master's degree and five had completed a doctoral degree. Respondents had an average of 29.4 years in the field of education.

The overall results of the study indicated that relational trust between teachers and the principal and a highly functional leadership team where participants felt safe to voice their

opinions were the causes of sustainability. Respondents indicated that participating in the Annenberg Distributed Leadership Project had a lasting impact on their leadership by showing them how to utilize distributed leadership to encourage buy-in, increase productivity, and teacher retention. Further research utilizing the survey tool could provide knowledge about the sustainability of distributed leadership in other schools or organizations.

Table of Contents

List of Tables

List of Figures

x

Preface

To my wife, Chau, who supported and stood by me through the years of coursework and research that have gone into this study. Without your unconditional love and encouragement, I would not be the person I am today. I am forever grateful for your support and love.

For my bright, energetic, and thoughtful children, Myles and Landra, who endured countless trips between Philadelphia and Pittsburgh to make this a reality. It is my hope that you will be educated in environments where distributed leadership is embraced and actualized. I am also grateful to my mom, Sandra Klink, who has given me a lifetime of endless support, encouragement, and reassurance, and my sister, Sacha Klink, who sustained this endeavor with weekends full of childcare.

A special note of gratitude to Linda Carroll for teaching me how to be a person of generous spirit and a distributed leader. Thanks to Diane Scott who saw my potential as an educator, Debbie Wei for seeing that I had the potential as an educational leader and allowing me the opportunity to be an administrator and to witness distributed leadership in action. Appreciation also to Ed Harris and Steve Dash who encouraged me to pursue this degree, my advisor Diane Kirk for supporting and guiding me through the dissertation process, and Mary Margret Kerr for feedback to improve my practice. Finally, I owe a great debt of gratitude to John DeFlaminis for his friendship, support, and trust.

1.0 Problem of Practice

Distributed leadership is the process by which leadership is "stretched over" (Diamond & Spillane, 2016, p. 1) or shared within a school. This practice provides a pathway to invest teachers in a school's success. The overarching goal of distributed leadership is to empower the staff within the school to take on formal and informal leadership positions and responsibilities separate from the school leader to improve organizational and student outcomes.

Research has shown that distributed leadership increases school leadership teams' effectiveness and a positive culture of learning leading to positive outcomes on school change initiatives. The purpose of this study is to explore how the practice of distributed leadership was sustained over time in terms of effective leadership team functioning, school leaders' sense of efficiency, trust levels among and between team members, teachers, and principals, perceptions of school influence, teacher satisfaction, and leadership opportunities.

1.1 Context

My career in education has taken a number of twists and turns. These experiences have led me to have a unique perspective on the educational landscapes where I have worked. I completed my undergraduate work at the Rhode Island School of Design with an emphasis on Illustration and received an MFA from Indiana University, Bloomington in Painting. Shortly after

graduating, I found myself teaching a first-grade class of English Language Learners (ELLs) in a large urban school district. From this first teaching position, I developed a strong bond and love for the education of ELLs and ensuring equity for students from diverse population. I also had my first experience with a top down management system where there was little teacher buy-in to student achievement and success. I followed this experience by working in the charter school spectrum, first as a teacher and then as the Assessment, Intervention, and Accountability Manager at a small urban charter school. The school was driven by a social justice focused mission and created by a group of individuals who saw that the immigrant community had been disenfranchised by the public education system. Their desire was to provide an enriching and exemplary education for immigrant students, the children of immigrant students, and newcomer ELLs. Given that the school was founded in a mission of social justice, the school leadership and board of trustees were fully invested in distributed leadership practices. My experience working with a dedicated staff and administration has had a long-term effect on my perspective of what is possible in schools when leadership is shared, common goals are agreed upon, and teachers are invested in outcomes.

I followed this experience by working in the central office in a large urban school district as a manager of English Language Learner Programs. I experienced working in a large bureaucracy as well as being present in fifty-seven high schools and observing how their organizational management systems were enacted. After a year as an elementary charter school assistant principal, I moved on as an executive coach for principals focusing on utilizing the Charlotte Danielson Evaluation Instrument. I worked with thirteen principals and witnessed their management structures as well as their evaluation competencies. I was then appointed as an Assistant Principal at Capital High School.

All but three of the seventy-one schools I became familiar with utilized a traditional chain of command leadership structure. This structure positioned the leader above and apart from the work teachers were expected to complete. The principal was central to making all key decisions in a school with little to no solicitation of buy-in from the staff. This practice contributed nothing to create a working environment where teachers were invested in the overall success of the school.

Teacher investment in a school's success is the key component to change. It is difficult, if not impossible, to obtain this in a top down leadership system. The top down leader is one who gives orders and expects them to be followed. Subordinates are not supposed to question or push back given the perception that the leader is the one that knows what is best for the organization. This management structure is commonplace in school districts and schools that do not move the needle on student performance or outcomes. In my experience, it is a common practice in public and charter schools alike.

The cause of the perpetuation of this management style can be linked to the school leadership and human capital pipelines that exist within districts. School leaders who only have experience with the top down leadership structure mentor teachers who move into school leadership roles. To no fault of their own the mentors' and, in turn, mentees' experiences inform their practices. These experiences may even supersede what is taught and learned through leadership preparation programs. This creates a cycle of leadership failures due to the lack of exposure or experience with different leadership styles. Given the high turnover and churn rate of administrators at the district and central office level of urban school districts, this cycle is a predictable recipe for system failures and, in turn, student failure.

In my experience the administrators in the central office I observed initiatives that were developed and designed which would then be disseminated to schools. This was done without

outreach to administrators or teachers in the field to obtain any feedback about the viability of the initiative achieving any stated goal. These goals usually revolved around improving student academic achievement, student behavior, school climate, or community involvement. The expectation was that the predetermined initiative would then be replicated in every school regardless of contextual understanding of the settings.

The structure of this type of initiative development and roll out is not necessarily the fault of large urban districts. These districts do the best with the financial resources and personnel that are available. It can be said that if they had more resources the process would be better. Although without a contextual understanding within the professional developments, the school principals delivered the pre-packaged information to the teachers. The actions of the central office were then simply replicated by the school principals with their instructional staff. The implied message was if the initiative is completed, the expected result will follow. In many cases, this was not the result and, in turn, school leaders were held accountable for not completing a task to the desired result. School leaders then took the frustration of failure out on the staff explicitly, implicitly, or through inference that the teacher must improve their practice or face the consequences on their formal or informal evaluation rating instrument or assigned roles within the school.

Out of seventy-one schools, only the small urban charter school where I worked, one small magnet public high school with a criteria-based entrance, and Capital High School (Capital) utilized a different management structure. This study focused on Capital, whose name I have changed for privacy purposes. My experience working at the small urban charter school allowed me to recognize that distributed leadership was employed to empower and gain buy-in by teachers. The difference was that at the small urban charter school the distributed leadership was driven by the social justice mission and was an organic part of the school leader's personality and

dispositions for decision-making. These dispositions were rooted in her involvement in community organizing. I had the same impression when I visited and worked with the principal at the small urban magnet high school. At Capital, distributed leadership had been operationalized through participation in the Annenberg Distributed Leadership Project (DL Project).

This study focused on uncovering the factors and practices that sustained the DL Project at Capital after direct support for the project concluded in 2010. The project continued in practice through the 2018 school year due to the successes the school leaders experienced in action. The purpose of this inquiry was to explore the state of distributed leadership practices at Capital to determine what and how the distributed leadership organizational structure and practices have been maintained and sustained. By identifying the factors and practices, conclusions can be drawn to understand the how distributed leadership can be effectively implemented and sustained at other schools and school systems.

The DL Project was conducted in sixteen schools from 2006-2010 and supported through a five-million-dollar grant provided by the Annenberg Foundation. The purpose of the project was to introduce and implement distributed leadership practices in schools with the purpose of improving organizational structures and student outcomes. The project was designed and led by Dr. John DeFlaminis at the University of Pennsylvania Center for Educational Leadership. This inquiry is a follow-up to Supovitz and Riggan's *Building a Foundation for School Leadership* (2012). Supovitz and Riggan's evaluation was based on a randomized experimental design and evaluated the DL Project for the University of Pennsylvania Consortium for Policy Research in Education (CPRE). The DL Project was replicated in the nineteen Archdiocese of Philadelphia schools from 2010 to 2014 and then eight schools in the School District of the City of York beginning in 2015. The DL Project and Archdiocese projects were the focus of DeFlaminis,

Mustafa, and Yoak's *Distributed Leadership in Schools: A Practical Guide for Learning and Improvement.*

The research questions are focused on sustainability and effective practices of distributed leadership practices at Capital High School.

1.2 Inquiry Questions

Research Questions:

1. How has the practice of distributed leadership been sustained over time at Capital High School?

2. What distributed leadership practices have been most effective and helped school leaders sustain distributed leadership under difficult conditions for ten years?

2.0 Literature Review

The purpose of this literature review is to define, delineate, and examine the functions of distributed leadership theory and sustainability by school leaders to improve organizational structures. This exploration is important because the role and function of public school leaders, specifically principals, in the past two decades, has shifted from building management to student achievement driven by instructional leadership. This shift has been driven in part by politicians seeking to justify a return on investment in education funding. In this literature review, I explore the terminology of distributed leadership in educational contexts, the theoretical framework of distributed leadership, research-based findings on the effects of distributed leadership, the operationalized practice of distributed leadership, the outcomes of an operationalization organizational structure, and the sustainability of distributed leadership.

2.1 The Terminology of Distributed Leadership

For the past decade, distributed leadership has been a popular term within the framework of educational management and leadership (DeFlaminis, Abdul-Jabar, & Yoak, 2016; Gronn 2006; Hargrove, 2016; Hartley, 2007; Harris & Spillane, 2008; Heck & Hallinger, 2010; Spillane, 2006). The wide use of the term distributed leadership in the literature has led to a consistent definition and has made it possible to quantify and compare results of studies. Within the literature reviewed

there were six definitions used by ten authors. See Table 1 for a list of authors and definitions of distributed leadership.

Table 1. Definitions of Distributed Leadership

Author(s)	Definition
Gronn (2000)	"[The] division of labour is the principal driver or generative mechanism for the structuring of work and workplace relations" (p. 333).
Spillane (2006)	"Leadership refers to those activities that are either understood by, or designed by, organizational members to influence the motivation, knowledge, affect, and the practice of other organizational members in the service of the organization's core work" (p. 11-12).
Harris (2006)	"Distributed leadership means multiple sources of guidance and direction, following the contours of expertise in an organisation, made coherent through a common culture" (p. 258).
McRel (2005, as cited in DeFlaminis, 2013b)	"[Distributed leadership] is a shared responsibility for achieving collective/organizational goals regardless of positional or organizational authority; acknowledging that increasing levels of positional authority yield greater impact in an organization. Leadership is accomplishing together what individuals cannot accomplish alone."
Heifetz, Grashow, & Linsky (2009)	"In which everyone, as a citizen of the organization, seizes opportunities to take initiative in mobilizing adaptive work in their locale. In other words, adaptive leadership generates leadership so that people routinely go beyond their job descriptions" (p. 169).
Abdul-Jabbar (2013)	"It is more about identifying leadership activities, diagnosing where it is, and reflecting on how it influences the motivation, knowledge, affect, and practice of other organizational members in the service of the organization's core work" (p. 47).

An analysis of the definitions indicates a consistent academic definition of distributed leadership. Distributed leadership is the practice of equally sharing leadership functions across an organization. There is consensus on a definition and a consistent understanding of the term.

There does appear to be slight confusion in the definition of distributed leadership in practice because it has been co-opted by practitioners without consideration of the intended academic meaning. This is similar to confusion between a scientific theory and a nonprofessional's theory. A scientific theory is research and evidence-based and the other is a speculative idea that may lack factual evidence. Second, given that meaning and application often go hand in hand, the confusion is understandable. The meaning demands that the term be defined within context and means of application. The source of divergence within the literature is not focused on what distributed leadership means but rather the means employed to accomplish distributing the leadership within an organization.

Even with a well-defined conceptual application of the term, one encounters "conceptual elasticity" (Hartley, 2007). This elasticity revolves around the means by which distributed leadership was enacted. There is a lack of a consistent implementation because the application of distributed leadership is not a prescriptive activity (DeFlaminis, Abdul-Jabber, & Yoak, 2016). Every situation where distributed leadership theory is employed will be driven by its own set of unique contexts that demand a different application of the theory. There is no guidebook or specific application that will work in every situation. The activities within the school function as a unit of analysis and context drives the application of a distributed leadership framework. The basis of the results of implementation are not quantifiably comparable. This will be a constant despite existing within the same theoretical framework.

2.2 Theoretical Framework of Distributed Leadership

Distributed leadership theory offers a shift in the way leadership in schools is traditionally viewed. Traditional leadership is viewed as "top down." In the most simplistic terms, the principal will tell teachers what needs to be done, and the expectation is that they will complete the given task. The traditional chain of command leadership is outlined in Figure 1.

Level 1: Traditional Chain of Command
Positions leader above and separate from the work team

The Leader
- Locus of leader command between the team and higher management
- Has sole authority for decision-making
- Set apart by role, title, and position
- Directs the organization's members in influencing the core work

Team Members
- Follow directions
- Work for the leader more so than with each other
- Have limited access to higher management. Provides information to leader as requested
- Limited communication with the leader (mostly around work)
- No direction of organization's members in influencing the core work

Figure 1. Traditional Chain of Command Source

Source: DeFlaminis, J. A., Abdul-Jabbar, M., & Yoak, E. (2016). *Distributed leadership in schools: A practical guide for learning and improvement*. New York, NY: Routledge.

The top down leadership model is rooted in the traditional industrial model for production of consumer goods. Within industrial production, workers are expected to follow the rules for production outlined and enforced by management. Through the mechanical means of production, the expected outcome is a product that is the same every time. Given that schools attempt to

replicate factories by placing students in large, box-like buildings every day to produce academic results, the structure of traditional school management is not very divergent from industrial management.

As illustrated in Table 1, multiple definitions for distributed leadership exist, but the underlying theory is "leadership is stretched over people across the organization" (Spillane, 2016 p. 147). Distributed leadership theory provides a pathway to changing the traditional leadership structure within schools. The theory views leadership as a practice instead of an action. The leadership practice aspect (see Figure 2) is a representation of moving beyond a single leader to many leaders who share an equal value within an organization. The distributed leadership practice aspect is illustrated in Figure 2 (Spillane, Halverson, & Diamond, 2004, p. 11).

Figure 2. Leadership Practice Aspect

Source: DeFlaminis, J. A., Abdul-Jabbar, M., & Yoak, E. (2016). *Distributed leadership in schools: A practical guide for learning and improvement*. New York, NY: Routledge.

2.3 Distributed Leadership Theory in Schools

As the principal's function has changed so has the role of leadership in schools. A wide range of changes has increased the federal and state demands on school districts and, in turn, school principals. These changes are tied to the accountability movement with the intent of improving student achievement. The demands are intrinsically intertwined with academic standards, mandated standardized assessment, and instructional leadership. To meet the demands to increase student performance, school principals can no longer view themselves as the sole driving force for the improvement. The process of instructional improvement is extremely demanding and it cannot be achieved through the individualistic fallacy of the principal being the sole instructional leader in a school (Fullan, 2005). As such, principals must empower their staffs to be integrated contributors to student achievement (Spillane, 2011). Leadership through this lens must be viewed as a practice rather than a role (Spillane & Diamond, 2007). The research shows that school principals have adapted to these changes by distributing duties among others stakeholders within the school community (Leithwood, 2006). Distributed leadership is a means to promote this decentralization of duties within a school (Harris, 2007).

With limited resources for district level support or professional development, a principal is required to draw on the experience and expertise on staff to propel the organization forward. Schools with the highest student achievement have been found to have principals who implicitly distribute sources of leadership across multiple sources including individual teachers, school teams, parents, and students (Harris, Leithwood, Day, Sammons, & Hopkins, 2007). The following section explains the theory for enacting distributed leadership in schools.

The school principal is instrumental in enacting distributed leadership theory. Principals set the tone to foster collaboration with the staff and support the idea that everyone can demonstrate leadership in the organization. Leadership is then built throughout an organization including individuals and teams (Gronn, 2003). This shift demands that organizational leaders no longer view themselves as having all the answers but as being reliant on others to gather information and data to inform the decision-making process.

2.4 More Significant Studies on Distributed Leadership in Practice

Within the literature, there were numerous studies and dissertations focused on distributed leadership. Five empirical studies, three dissertations, and two books focused on distributed leadership in practice stood out from the rest based on their depth, subject matter, and context. These studies ranged from large-scale research informed and research-based studies to smaller case studies. These findings are in contrast to Tien's (2016) assertion, in his meta-analysis of the literature, that a lack of a definition for distributed leadership "seemed to impede studies on both the conceptualization and application of distributed leadership" (p. 159). The findings of all the studies are positive, encouraging, and consistent with the value of distributed leadership in practice. It should be noted that many smaller case studies might have been completed and not discovered due to their publication in smaller, non-peer reviewed journals (Harris & DeFlaminis, 2016).

The research studies are identified in Table 2, evaluation in Table 3, dissertations in Table 4, and books in Table 5.

Table 2. Significant Research Studies on Distributed Leadership

Authors	Study Aims	Measurement Used	Findings
Harris et al. (2007)	1. What does the analysis of attainment, behavior, and attendance data at a national level tell us about effectiveness features and leadership of schools? 2. What are the variations in effective leadership practices in schools in different phases, in different socio-economic contexts, and with differential effectiveness? 3. How much variation in pupil outcomes is accounted for by variations in types, qualities, strategies, and skills of leadership? 4. Which variables significantly moderate the effects of leadership on both short- and long-term pupil outcomes? 5. Which variables significantly mediate the effects of leadership on both short- and long-term pupil outcomes? 6. What kinds of causal relationships exist between effective leadership and pupil outcomes? 7. How can findings inform work of NCSL, LEAs and schools, and suggest foci for subsequent fieldwork?	Case studies, questionnaires, surveys, interviews, student grades, and behavior records	Headteachers are still perceived as the main source of leadership by school key staff. Their leadership practice shapes the internal processes and pedagogic practices that directly result in school improvement especially for schools in challenging circumstances. Headteachers are adaptive in their leadership and management strategies, within a core values framework governed by principles of care, equity, and performance. Headteachers' expectations and aspirations emanated from a view of pupil achievement, which incorporated improved behavior, academic, personal, and social and affective dimensions. All headteachers distributed leadership, but the forms, purposes, and extent of distribution varied. Headteachers used a range of strategies in building the effectiveness capacity of the school. Schools which have improved from a low point (i.e., from low to moderate/high) have made the most changes. Effective headteachers employ different improvement strategies depending on their experience and time in post and their perceptions of the need for change in their school. There were differences between the leadership practices and influence of primary and secondary headteachers. There are relationships between the extent of the disadvantaged context of schools (FSM band) and the amount of change in leadership practice reported by primary and secondary heads.

Table 2 (continued)

Coldren & Spillane (2007)	What is the source of influence on teacher practice?	Case studies, interviews, and observational data	Showed that instructional leadership practice—which is stretched over the leader, teachers, and tools—can connect with and influence classroom practice.
Scribner, Sawyer, Watson, & Myers (2007)	1. What factors contribute to or interfere with team decision-making? 2. What discursive patterns are associated with leadership within teacher work teams? 3. What organizational conditions foster or impede leadership within teacher work teams?	Qualitative study used constant comparative analysis and discourse analysis Video records and field notes	Three constructs emerged that informed the understanding of collaborative interaction within each professional learning team: purpose, autonomy, and patterns of discourse. Purpose and autonomy, manifest as organizational conditions, largely shape patterns of discourse that characterize the interaction of the team members. We argue that the nature of purpose and autonomy within a teacher team can influence the social distribution of leadership.
Camburn, Rowan, & Taylor (2003)	1. Ask whether the CSR schools in our sample have a greater number of formally-designated leadership positions than schools in our sample that are not participating in the CSR program 2. Explore how a variety of leadership functions—including instructional coordination and improvement, building management, and boundary-spanning functions—are distributed across the formally-designated leadership positions in these schools 3. Explore whether schools participating in the CSR programs under study display the kind of widely distributed and redundant pattern of instructional leadership that previous research on distributed leadership suggests promotes successful programmatic change and instructional improvement.	Improvement data come from two instruments: the School Leader Questionnaire (SLQ), which was sent to 503 elementary school leaders, and the School Characteristics Inventory (SCI), which was given to principals in 114 schools (28 schools in the Accelerated Schools Project, 31 in America's Choice, 29 in Success for All, and 26 "comparison" sites). A total of 407 leaders completed the SLQ for an overall response rate of 81%.	Distributed leadership teams are typically small, ranging from three to seven people, and typically very heterogeneous with respect to the predominant leadership functions performed by each team member. Staff development may provide a relatively more effective means of encouraging instructional leadership than merely defining role expectations.

Table 3. Evaluation of the Annenberg Distributed Leadership Project

Research Questions	Measurement Used	Findings
1. How effective was the DL project in recruiting, training, and supporting DL teams?	Mixed Methods Questionnaire- teacher and principal	Highly effective in finding and training Distributed Leadership team members
2. How well did the DL team members work together? What did they focus on and what challenges did they face?	Interviews with teachers and administrators, case studies	Teams coalesced and focused on instructional improvements
3. How did team members, including principals and teachers, conceptualize and enact their roles within a distributed leadership framework?		Team members effectively engaged with DL team members in effective ways
4. In what ways did DL team members choose to make instructional changes in their schools? What challenges did they face and what were the effects of their efforts?		DL team members were effective in engaging and influencing other faculty members
5. To what extent did reforms supported by DL teams influence instructional practice and student achievement?		Unable to detect growth in student achievement

Note. Evaluation from Supovitz, J., & Riggan, M. (2012). Building a foundation for school leadership: An evaluation of the Annenberg distributed leadership project, 2006-2010. *Consortium for Policy Research in Education*. University of Pennsylvania, Philadelphia, PA.

Table 4. Dissertations on the Replications of the DL Project

Author	Study Aims	Measurement Used	Findings
Abdul-Jabbar (2013)	1. How do leadership behaviors of a distributed leadership team influence relational trust between members of that team? 2. How do leadership practices of a distributed leadership team at a specific school influence norms of trust, innovation, and collaboration amongst the greater faculty in the school?	Case study, surveys, interviews	Changes in faculty meetings in regards to professionalism and established new connections with staff Action planning and successful implementation of an iPad technology plan, improving instructional capacity and the generation of teacher's capacity lists allowed for faculty meetings to become "engines of innovation"
Yoak (2013)	1. How do teacher leaders and administrators learn leadership within the context of the DL Program and their school-based leadership practice? 2. How do leaders experience and make meaning of their own learning? 3. What characterizes the (a) cognitive, (b) psychological, and (c) social processes of leadership learning? 4. What factors support or constrain the development process?	Case study, surveys, individual interviews	Deep change in leadership among participants was seen to involve both discomfort and a willingness to engage that discomfort. Learning did not unfold in a linear pattern. All program participants reported positive outcomes in terms of their individual learning and school-based practices. Factors that were widely shared across participants were present in much more highly individualized forms. Leadership practice and learning is the extent to which the work of leadership is personal, adaptive, and social.

Table 4 (continued)

Larrain Rios (2017)	1. How, if at all, does the DL Project implementation change trust on the team and in the school? 2. How did the experience of doing an evidence-based project, within the DL Project, contribute to the changes in trust on the team over time?	Case study, surveys, individual interviews	The implementation of the distributed leadership project positively changed trust over the time. However, negative changes were perceived because of the complexity of the site and the short period during which the scope of this research was focused on. Routines like the evidence-based project seemed to contribute to the development of trust among the project's participants.

Table 5. Books Focused on Distributed Leadership

Authors	Study Aims	Measurement Used	Findings
DeFlaminis, Abdul-Jabbar, & Yoak (2016)	Comprehensive guide to implementing distributed leadership through professional development	Survey, interviews, case studies, trend analysis, field notes	The principal's support was essential to success.
			The central office was not essential to continuing success of a DL team.
			Agreements with unions supported success.
			A DL focus on instructional improvement required the district had coherent curricula, instructional plan, authentic literacy, and assessments in place.
			Action plans were useful to crystallize the DL team's knowledge and intent, and to monitor progress.
			Trust was critical component in advancing and speeding up a leadership team's progress in a school improvement project.
			Distributed leadership teams can be operationalized successfully in randomly selected, urban schools, including high schools.
			The best professional development happens within the context of schools.

Table 5 (continued)

Spillane & Diamond (2007)	Examination of the day-day practice of leadership and management. Understanding how, why and when school leaders lead and when they manage	Multi-site cross-case analysis, case studies, semi structured interviews with school leaders, interviews with teachers, observations and shadowing school leaders, classroom observations, document reviews, questionnaire, social network survey, videos of school leadership activities	Understanding school leadership and management necessitates attention to both the designed organization and the lived organization. The distributed perspective acknowledges the importance of multiple leaders it does not negate the critical role of the CEO. There is no optimal number of leaders. If one person can perform a particular routine effectively, involving more people may be a waste of human resources. A distributed perspective applies to situations where leaders have different or contrary goals as easily as it does to situations where leaders are aimed at a common goal.

The research studies can be divided into two distinct sections. The first is the discovery of distributed leadership being used within organizations and the effect that distributed leadership has on the organizational outcomes. The studies by Harris et al. (2007), Coldren & Spillane (2007), Scribner, Sawyer, Watson, & Myers (2007), and Camburn, Rowan, & Taylor (2003) identified preexisting distributed leadership within schools and explored its effectiveness. Second are the studies and case studies that examine the effects of distributed leadership in action and deliberately planned operationalized distributed leadership in organizations and the organizational outcomes.

The book by Spillane and Diamond (2007) focuses on a multi-site analysis of distributed leadership in action in Chicago schools. They conclude, based on the case studies presented in the book, that distributed leadership is an important practice that can increase student outcomes and provide direction to researchers seeking to connect theory to practice. The evaluation by Supovitz and Riggan and the dissertations by Abdul-Jabbar, Yoak, and Larrain Rios explored and researched the effects of a formalized application of distributed leadership within schools through the Annenberg Distributed Leadership Project in the School District of Philadelphia from 2005-2010 and in the Archdiocese of Philadelphia from 2011-2013. Larrain Rios's dissertation is focused on the replication of the Annenberg Distributed Leadership Project during the first year of implementation in the School District of the City of York. The book by DeFlaminis, Abdul-Jabbar, and Yoak (2016) is focused on operationalizing and developing Spillane's theory of distributed leadership in sixteen schools in the School District of Philadelphia and ten Archdiocese of Philadelphia schools.

The differences between the studies are predictable. Studies that discovered distributed leadership in practice and explored the effects of distributed leadership theory found that distributed leadership was effective in changing student outcomes. Other case studies examined

how the distributed perspective worked in action. The last group of studies focused on operationalized distributed leadership. Supovitz and Riggan, Abdul-Jabbar, Yoak, and Larrain Rios are intrinsically intertwined because they all explore the application and outcomes of the Annenberg Distributed Leadership Project and subsequent replications of the DL Project. The DL Project was the first large-scale effort to operationalize distributed leadership theory. The DL Project and the two replications are the only times that distributed leadership has been purposefully operationalized through professional development and coaching found in the literature. The DL Project has been replicated twice to date in the Archdiocese and School District of the City of York Public Schools.

The DL Project was first implemented in sixteen elementary, middle, and high schools. All schools involved in the project operationalized deliberately implemented distributed leadership theory and received training, coaching, and mentoring to accomplish the operationalized project. Each school formed distributed leadership teams made up of teachers, principals, and assistant principals from each school site. Despite the differences in the contexts, all the studies analyzed found distributed leadership to have a positive effect on organizations in terms of organizational outcomes related to teamwork and the creation of formal and informal leadership roles within schools. The following section outlines the basis and outcomes found in those studies.

2.5 Operationalized Distributed Leadership

Distributed leadership has only been formally operationalized by the Center for Educational Leadership (CEL) at the University of Pennsylvania in the DL Project first in The

School District of Philadelphia, and then replicated in Archdiocese of Philadelphia schools and School District of the City of York. This is the only formally operationalized effort found in the literature to date. The work within The School District of Philadelphia DL Project was subject to rigorous evaluation and study before, during, and after the programmatic training concluded.

Central to the DL Project was the logic model (see Figure 3). The logic model was the pathway to creating and implementing distributed leadership theory within the participating schools. Implementation was accomplished through a series of professional development trainings and leadership coaching.
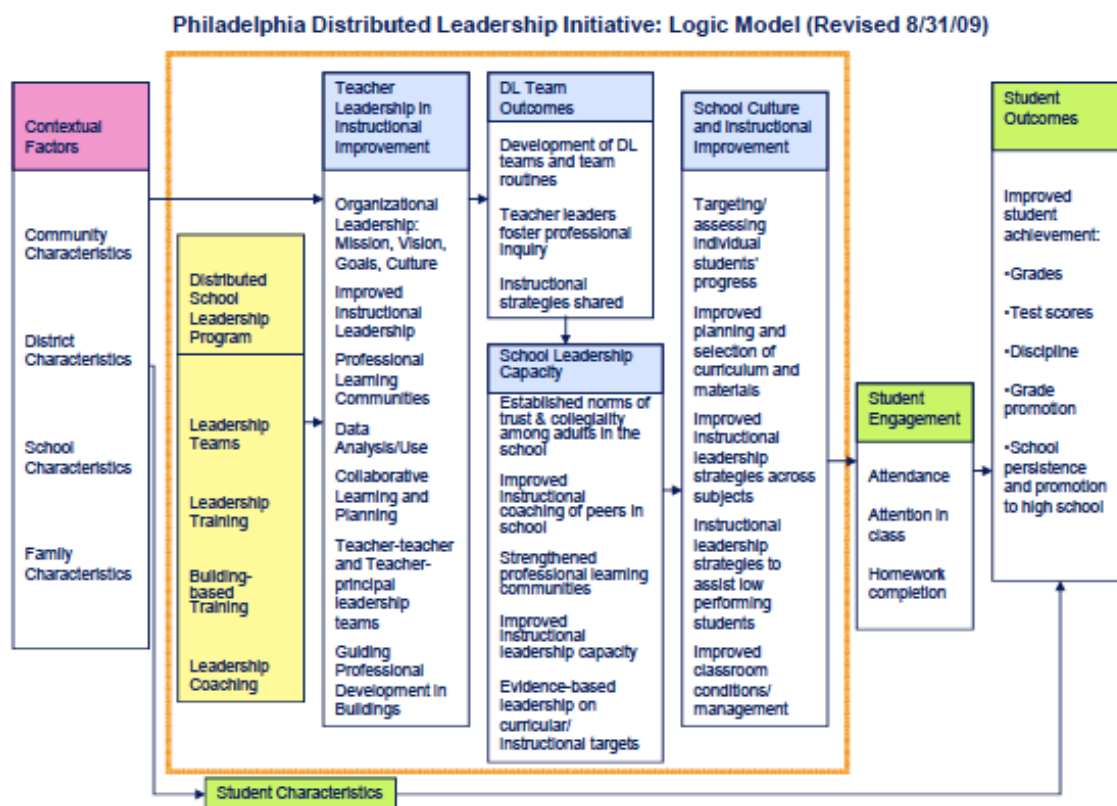
Figure 3. DL Project Logic Model

Source: DeFlaminis, J. A., Abdul-Jabbar, M., & Yoak, E. (2016). *Distributed leadership inschools: A practical guide for learning and improvement*. New York, NY: Routledge.

The logic plan drove the operationalized distributed leadership structure used in the DL Project. The logic plan is essentially the global view of the project. According to DeFlaminis, Abdul-Jubar, and Yoak (2016), participants of the first DL Project "posed many questions about what the development of teams and teacher leaders would look like" (p. 195) in practice. To address these questions, a checklist and flow chart were developed to visualize the process and to draw explicit distinctions between the role of the team members and leader in each step of the process. Level 1 was displayed in Figure 2. Levels 2 through 6 are displayed in Figures 4, 5, 6, 7, and 8.
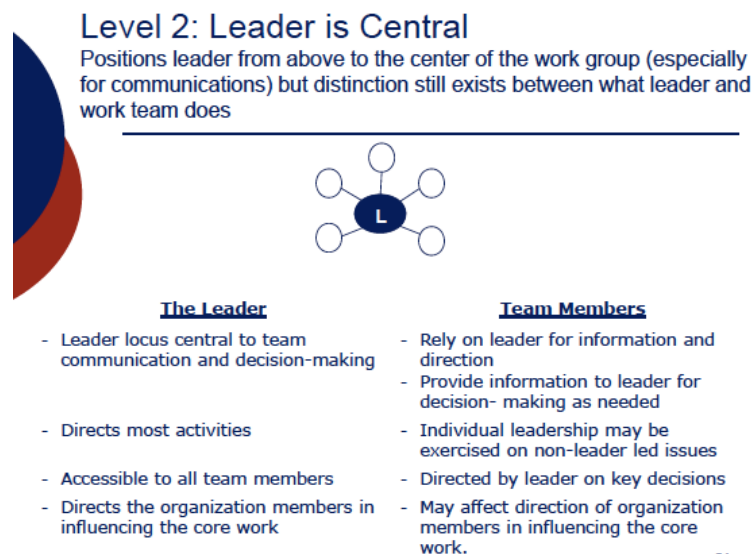
Figure 4. Level 2 of Distributed Leadership

Source: DeFlaminis, J. A., Abdul-Jabbar, M., & Yoak, E. (2016). *Distributed leadership in schools: A practical guide for learning and improvement*. New York, NY: Routledge.
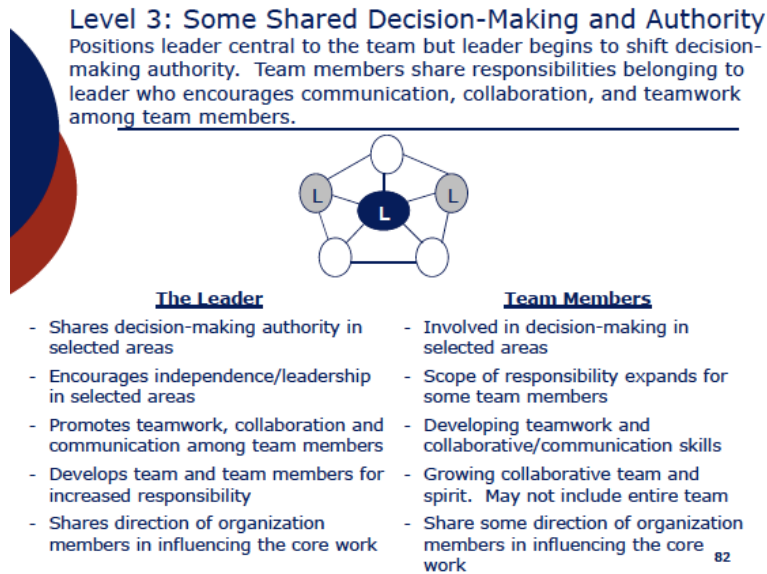
Figure 5. Level 3 of Distributed Leadership

Source: DeFlaminis, J. A., Abdul-Jabbar, M., & Yoak, E. (2016). *Distributed leadership in schools: A practical guide for learning and improvement*. New York, NY: Routledge.
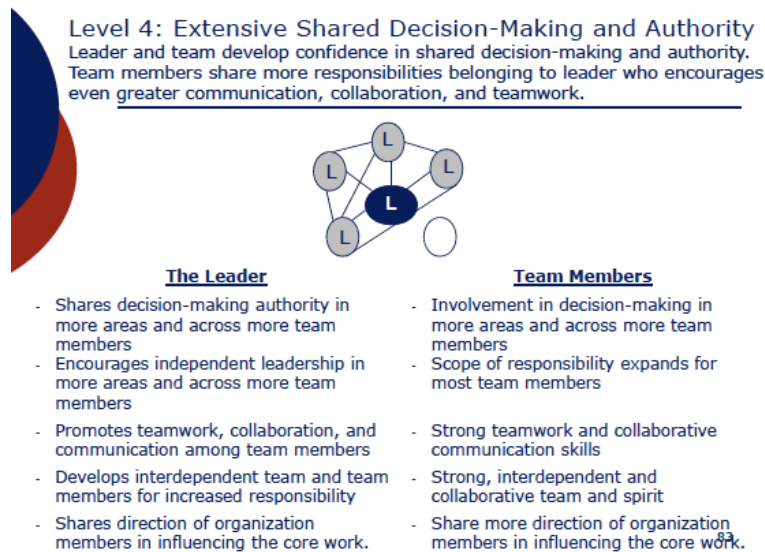
Figure 6. Level 4 of Distributed Leadership

Source: DeFlaminis, J. A., Abdul-Jabbar, M., & Yoak, E. (2016). *Distributed leadership in schools: A practical guide for learning and improvement*. New York, NY: Routledge.

Figure 7. Level 5 of Distributed Leadership

Source: DeFlaminis, J. A., Abdul-Jabbar, M., & Yoak, E. (2016). *Distributed leadership in schools: A practical guide for learning and improvement*. New York, NY: Routledge.

Figure 8. Level 6 of Distributed Leadership

Source: DeFlaminis, J. A., Abdul-Jabbar, M., & Yoak, E. (2016). *Distributed leadership in schools: A practical guide for learning and improvement*. New York, NY: Routledge.

These visualizations illustrate the logic model as a roadmap for transformation at schools. They outline the process and describe the roles of the leader and team members as movement is made from the leader being central, to leadership being distributed among and between the staff. Of particular note within the visualizations is the position of the leader represented by L in the figures. Within Level 1 and 2, there is only one leader identified as an L in a dark circle. In Levels 3 and 4 there are multiple leaders represented by L in a light grey circle, showing that leadership is being taken on by other staff and being shared with school staff. In Level 5, the school leader is no longer central to the team, allowing increased authority by other team members. In Level 6, the team members become self-directed entities taking on issues independently, and the school leader has focused their attention on the other issues, becoming a consult to the team members when needed.

The implementation of the distributed leadership model required the schools to move away from a traditional leadership model. This was accomplished by forming distributed leadership teams in schools that consisted of staff members with prior leadership experience, an interest in school-wide instructional improvement, a willingness to work with colleagues, and established influence in the school. The distributed leadership team members then received one to two years of professional development consisting of 77 hours of customized professional development delivered in 13 modules. Often sites added additional, special focused professional development targeting instructional and other school needs critical to building level achievement and success. The modules are listed in Table 6.

Table 6. Distributed Leadership Professional Development Modules

Module	Title
0	The Distributed Perspective
1	Developing Professional Learning Communities
2	Mission and Direction: Shared Vision, Values, and Commitments
3	Emotional Intelligence
4	Building School Leadership Teams
5	Teamwork and Conflict Resolution
6	Building Bridges and Connections
7	Evidence-Based Leadership Using Data to Guide School Improvement
8	Leadership for Literacy Teaching and Learning
9	Motivation: The Key to Effective Leadership
10	Fostering Leadership in Mathematics
11	Collaborative Learning Cultures
12	Developing Evidence-Based and Shard Decision-Making

Note. From DeFlaminis, J. A., Abdul-Jabbar, M., & Yoak, E. (2016). *Distributed leadership in schools: A practical guide for learning and improvement*. New York, NY: Routledge.

The modules primarily focused on the foundation for implementing distributed leadership in the schools. The modules also focused on academic improvements for literacy and math. At the time the project was conceived and operationalized, the state standardized academic assessment was focused on measuring student achievement in reading and math. This was emphasized in Module 8 and Module 10.

2.6 Distributed Leadership, Relational Trust, and Influence

The DL Project had many unique modules that were focused the changing leadership within a school setting. Two components within the training modules stood out in overall importance. The first was Module 4 focused on Emotional Intelligence. This training focused on different aspects of team functionality, including goal setting, communication, trust building, and interpersonal dynamics. The second was Module 9, Motivation: The Key to Effective Leadership. This training focused on influencing others within a group. Together these components allowed a school leader to encourage teacher buy-in to the distributed leadership theory, open up the possibility for teachers to take on leadership roles within the school, and enable the principal to influence the choices the teachers make to achieve the desired organizational and academic outcomes.

According to DeFlaminis (personal communication, 2018), many school leaders raised trust concerns during Module 9, Motivation: The Key to Effective Leadership. As a result, he developed and added a trust module entitled "Building Trust: A Leadership Imperative for School Success." In addition, he also did trust development work and trust building with schools that requested support, including Capital. The trust development included the creation of a trust agreement between all staff. This improved trust in most schools where the work was undertaken.

For the implementation of the DL Project in the Archdiocese schools, a module on building trust was added to the training. Together the modules were identified by Abdul-Jabbar (2013) as key to building relational trust for participants. Abdul-Jabbar conducted his case study within the context of the Archdiocese of Philadelphia schools in the DL Project. He found that teachers and administrators viewed themselves as equals due to relational trust. This promoted the change

process and allowed the teachers to take the lead in developing action plans, leading meetings, and through professional development sessions.

Abdul-Jabbar also found that professional regard was stimulated when teachers and administrators were being promoted as equals, working collectively towards a change process. He uncovered that trust was a critical component in advancing and speeding up a leadership team's progress in a school improvement project (p. 66). Trust and respect among colleagues propelled the project to success within Archdiocese of Philadelphia schools.

2.7 Outcomes of Operationalized Distributed Leadership

Riggan and Supovitz (2010) found that the DL Project was successful in recruiting participants and focusing on instructional improvements. The DL project verified the importance of the principal as the catalyst for change. The DL Project failed to show an increase in student achievement and parental involvement. DeFlaminis, Abdul-Jabbar, and Yoak (2016, pp. 35–37) attribute this failure to be based on shifting district priorities through the course of the project and the district's failure to build curricula, assessments, and the instructional strategies across schools. Parental involvement was not a focus of the DL Project or the training modules, so the lack of increase in involvement was not surprising. Abdul-Jabbar (2013), Yoak (2013), and Larrain Rios (2017) found similar outcomes for organizational change and student outcomes.

These findings may be a result of standardized test scores being the metric examined to indicate an increase in student achievement. Standardized testing is a commonly used metric for student success at the local, state, and national levels. The scores serve as affirmation or rejection

of the expenditure of tax dollars to ensure and increase student achievement. They have also been used to promote charter school growth, privatize education through vouchers, and as a means to limit the power of teacher unions' negotiations for wage growth and improvement of working conditions.

The use of standardized test scores is also rooted, in part, in replicating business practices in the social sectors. Although it is a common metric, it is not necessarily sound, good, or accurate in low income, underfunded, and under resourced urban and rural schools and districts. These schools are handicapped from the onset with no recourse to appeal the contextual surroundings of poverty and institutionalized racism reflected in a lack of adequate funding, resources, and personnel. Collins states, "We must reject the idea- well-intentioned, but dead wrong- that the path to greatness in the social sectors is to become "more like a business" (p. 1). Thus, student achievement scores do not always represent student or programmatic success. Existence proofs may serve as a better metric to examine the impact of distributed leadership on a school's outcomes given the right conditions and supports.

Harris (2008) argues that under the right conditions, distributed leadership can be a strategy for securing and sustaining better organizational outcomes. The emphasis here is the right conditions, not any conditions. Harris does not specify what the right conditions are, although conditions in schools revolve around organizational management and instructional management at the district and school level. Internal or external stakeholders direct the conditions within districts or schools. The outlier in success was that of a consistent increase in student achievement. Supovitz and Riggan attribute this to the lack of control the DL Project had over the curriculum used in the schools.

The idea of the "right conditions" proposes that distributed leadership is not some random by-product of an effective organization but conversely is a powerful contributory factor in improved organizational performance when it is purposefully operationalized. There is evidence within the literature that some academic growth occurred at some sites during the implementation through professional development and coaching of the DL Project. This can be attributed to the fact that the "right conditions" may exist outside the locus of control in some organizations. For example, curriculum is a factor that schools may lack control over choosing or implementing. The academic curriculum can, in some cases, be chosen by an individual school but in SDP and the Archdiocese of Philadelphia, it was generally given as a top down directive from the central administration. Instructional strategies may be improved upon in the classroom, but if the content is not aligned to the state standards that are being assessed or there is no allowance for remediation for struggling learners, there may not be a noticeable immediate difference in student performance on state standardized assessments. Additionally, remediation for below level students may not be apparent on standardized assessments for years depending upon how far behind students are academically.

The lack of school-based control of the curriculum appears as a key obstacle to the overall success of student outcomes in all three implementations of the DL Project. This was apparent in the replication of the DL project in School District of the City of York. During the first and second years of the implementation in York schools, the project purposely built curriculum, assessments, and instruction in all schools, and leadership was provided by the DL teams in implementing this in all schools. Coupled with the professional development and coaching support in implementing distributed leadership in school, student achievement began to improve. The results of this change were reflected in seven out of eight York City Schools making progress on the Pennsylvania

School Performance Profile (SPP) in 2017. This was the first increase in the SPP for York since the inception of the measure in 2013 and the first significant movement in achievement scores in thirteen years for the district. This success illustrates that operationalized distributed leadership is successful when all components are enacted with fidelity.

2.8 Sustainability

There was no evidence in the literature reviewed of any research studies to date focused directly on the sustainability of distributed leadership in schools as defined by Spillane (2006). This may be attributed to the scope of scholarly research on distributed leadership or the relatively recent emergence of distributed leadership practices in school settings. There is, however, literature focused on the sustainability of leadership practices in organizations and within education.

Sustainability differs in meaning depending on the applications of context used to describe micro and global scales ranging from such disparate contexts as business, education, and the environment. The United Nations Commission on Environment and Development states that "sustainable development is development that meets the needs of the present without compromising future generations to meet their own needs." Through this lens, sustainability in education can be viewed as developing practices that ensure success in the present and can be continued in the future for continued success.

Within the context of education, Fullan (2005, p. 14) identified eight elements for sustainability. These elements include public service with a moral purpose, commitment to

changing context at all levels, lateral capacity building through networks, intelligent accountability and vertical relationships, deep learning, dual commitments to short-term and long-term goals, cyclical energizing, and the long lever of leadership. Taken as a whole these are the elements that make schools work for children, educators, and administrators. When applying these elements to sustaining distributed leadership practices the long lever of leadership stands out as the most important factor.

The long lever of leadership is the act of fostering and promoting the development of other leaders with an organization. Fullan (2005) defines this as empowering leadership to widen their influence. In his view, school leaders widen their influence when more individuals are aware of the opportunity for leadership within the school and are exposed to formal and informal leadership opportunities within the system. When leadership systems are distributed, the ideas of what leadership means and that anyone can be a leader is spread among the members of the organization. This is in line with distributed leadership theory where the staff is empowered to take on leadership roles.

Pounder and Chow state that "schools must do away with outdated or ineffective roles" and "need to reconceptualize and redesign the role of principal so that candidates enter the job and sustain their commitment over time" (p. 5). In order to sustain practices that work in schools, school districts must first identify what works in practice and theory to drive student achievement forward and then create pipelines to recruit and retain school leaders focusing on what works. They suggest that one strategy is to more fully embrace and implement the concept of distributed leadership in school administrative work (p. 5). This means moving away from the heroic top down management model of leadership and into an inclusive distributed model where the staff is empowered to take on leadership roles. To accomplish this effectively may "involve a shift in a

principals' self-confidence and competence" (p. 5). This may prove difficult for some principals, but it is not an insurmountable challenge given support through coaching and training to garner buy-in for implementation.

The concept of spreading leadership across an organization promotes the continuation of systems in place when the leader departs. Hargrave states that "sustainable educational leadership and improvement preserves and develops deep learning for all that spreads and lasts, in ways that do no harm to and indeed create positive benefit for others around us, now and in the future" (p. 17). It is much harder to take away empowerment than implement it within a school. In any school, leadership will inevitably change. The old adage of "if it is not broken don't fix it" may not always apply to rethinking what needs to be changed and what should stay in place in a school. To stay current with changing trends, a continuous assessment of how children and adults learn with available resources and innovative practices must be completed and analyzed to determine the best course forward for the greatest benefits for all learners.

2.9 Context for Area of Study

From 2015-2018, I was an Assistant Principal at Capital (Capital). Capital participated in the DL Project from 2007-2010. Distributed leadership theory is the central tenet of the organizational structure that is in place within the school. Despite the lack of documentation in scholarly studies, the application and sustainability of distributed leadership at Capital has garnered the interest of other districts and organizations. This was due to the school's reputation among education professionals as being a distributed leadership school. Representatives from the

Gates Foundation visited Capital in October 2016 as well as principals from the School District of the City of York visiting in April 2016. The purpose of these visits was to observe a distributed leadership structure in action that had been sustained and probe the staff about what they had done to accomplish the sustainability. The practices were observable but the reasons for sustainability were more elusive for the staff to articulate. Distributed leadership was so ingrained into the school that the answer staff would give was that it was just how the school worked. My interest in exploring Capital was to answer the question of how sustainability was accomplished in order to draw insights into how the structure can be created, sustained, and improved upon in other schools and educational settings.

2.10 Summary, Implications, and Discussion

Distributed leadership is a term that has a consistent definition within the academic literature. In practice, there is a misperception of the term due to the lack of specificity the meaning has in contextual applications. The application of distributed leadership theory drives the interpretation of the term. Distributed leadership theory is an organizational construct that empowers individuals within an organization to take on formal and informal leadership positions to improve organizational outcomes. Two distinct types of studies have been completed to date. Studies that have examined the effects of either informal or formal operationalized distributed leadership. The distinction between the two is that formal operationalized distributed leadership is deliberate, planned, and supported within systems, and informal operationalized occurs without a formal design and support system. Distributed leadership has been conclusively proven in the

literature to be an effective system to organize schools and empower teachers through leadership opportunities. There are indications that distributed leadership is an effective practice in schools, and Sopovitz and Riggan (2012), DeFlaminis (2016), Abdul-Jabar (2013), and Yoak (2013) have shown that formalized operationalized distributed leadership is achievable.

There is a need for additional case studies and longitudinal surveys to measure the effectiveness of distributed leadership in formal and informal applications. The publication of case studies in peer-reviewed journals will add validity to the case for the implementation of distributed leadership practices in schools. There is also a need to measure the sustainability of distributed leadership after the training, coaching, and mentoring has been completed. This continued research must be rooted in the long-term effects and applications of distributed leadership within the contextual setting. This study seeks to understand the outstanding question concerning how distributed leadership survives over time given transitions of personnel, the changes in top district leadership, and the priorities of a school board of trustees. Further research will be able to identify factors that allow distributed leadership to be sustainable over time.

3.0 Methodology

This research used a mixed methods approach that included a survey with closed and open-ended questions and follow-up interviews to measure the effectiveness of the DL Project ten years after the initial implementation of the training and coaching support. This is a descriptive research study. The objective of the survey was to determine what aspects of distributed leadership remain in place at a single school site in the intervening decade. The survey provided quantitative data from the closed-ended questions. This allowed me to numerically describe the views of the participants' experiences. The open-ended questions and follow-up interviews provided the qualitative data. The participants from Capital and participants of the DL Project who were at other school sites that participated in DL training answered the open-ended questions. Interview participants were staff from Capital. This allowed participants to describe the effect that distributed leadership training and implementation has had on their professional lives. The interviews allowed for further probing and more in-depth answers based on the open-ended responses.

3.1 Research Participants

Research participants were teachers, administrators, and coaches who participated in the SDP DL Project training from 2006-2010. Ten participants were from Capital and had retained their positions, administrative and teaching, at the school since the end of the training through the

2018 school year. Seven participants participated in the DL Project leadership training and were at other schools during the training. These participants currently serve in a variety of roles including superintendents, principals, coaches, and consultants.

3.2 Data Collection Instrument

This is a descriptive study employing an online survey with fifty closed-ended questions and three open-ended questions. Interview questions further probed answers to the open-ended questions. Qualtrics was utilized to distribute and collect data online. Qualtrics allowed for easy and secure participant access to the survey, reduced the respondent burden of returning surveys by mail, and minimized errors compiling data from paper survey responses. Tableau Software was used in tandem with Excel for analysis and data visualizations of survey responses.

The survey was designed by Supovitz and used in the *Building a Foundation for School Leadership* (2012) evaluation and dissertations by Abdul-Jabbar (2013) and Yoak (2013). The open-ended responses are a modification of the original survey. All respondents had some familiarity with the survey instrument, as they answered the survey yearly during their participation in the DL Project from 2006-2010. Due to privacy concerns, the results of the original survey responses were not available. The open-ended responses and interviews shed light on the effect DL had on the participants' careers.

The survey was designed for both teachers and administrators. The survey encompasses participants' background, information about the school, teaching practices, and leadership practices. Participants only completed the teaching practice section if they were currently teachers,

leadership practices if they were school-based administrators or currently in a school-based leader

role such as a department head, small learning community leader, or dean of students. In total,

there were 50 questions with 1-18 sub-items. This resulted in 181 sub-items. The answers for the

questions were either multiple-choice or based on a Likert scale. The survey design is outlined in

Table 7.

Table 7. Survey Design

Questions	Topic	Type	Participants
1-10	Background	Multiple choice	All participants will complete
11-18	About Your School	Multiple choice Likert	Capital HS participants will complete
19-24	About Your Professional Relationships	Multiple Choice	Capital HS participants will complete
25-40	Leadership Practices	Multiple choice Likert	Only Capital HS leadership will complete
41-50	Teaching Practices	Multiple choice Likert	Only Capital HS teachers complete
51-53	Distributed Leadership Effects and Improvements	Open Ended Questions	All participants complete

The Likert questions provided options to answer questions with four to six options

depending on the survey question and category. The open-ended questions focused on the effects

the DL Project training has had on participants' careers, views on leadership, and organizational structures. All participants were given these questions, but they were not required to answer every question. The interview questions allowed participants to expand on their written answers and articulate their experiences.

3.3 Respondent Burden

The estimated time to complete the survey was thirty minutes. The collection of data was done through Qualtrics. Participants received a link to the survey and a link to the open-ended questions. Participants were contacted through email to request that they participate in the research. After seven days the participants who did not complete the survey were contacted a second time through email. Interview participants were contacted through email to request participation.

3.4 Data Analysis

The purpose of the survey was exploratory with the intent of determining the factors driving sustainability based on the importance of collective responsibility, reflective dialogue, principal instructional leadership, peer collaboration, teacher trust, outreach to parents, school commitment, district programs, district leadership around teaching and learning, leadership preparation, leadership teams, leadership roles, and professional learning communities. I used the

codes so each survey question is associated to an aspect of DL Training. The scale code is outlined in Table 8. The data from the survey was used to determine the importance of each factor.

Table 8. Scale Code for Survey

Number	Scale Code	Scale Description	No. of Items
1	BACKGROUND	Background and Demographic Questions	10
2	CONTEXT	School Context	9
3	COLR	Collective Responsibility	16
4	T- TRUST	Trust- Teacher	16
6	L-ROLE	Leadership Role	42
7	D-PROG	District Programs	21
8	L-TEAM	Leadership Team	13
9	L-PRAC	Teacher Practices	16
10	T-DEV	Teacher- Professional Development	26
11	T-COLR	Teacher Collaboration	12

3.5 Qualitative Analysis

The qualitative feedback provided added insight into the effects distributed leadership training and practice has had on the participants' practices and careers. Interviews were recorded and transcribed. This feedback was coded and classified based on the responses. Semiotic analysis was utilized for analysis.

3.6 Quantitative Analysis

Excel was used for the primary quantitative analysis of the survey data. Ordinal data from scale items and nominal and ordinal values were obtained through the analysis. Analysis yielded ordinal and nominal data from the fifty survey items. Ten items provided classification data about the participants' backgrounds. These statistical data were reviewed to uncover results about the effect that DL training continues to have on Capital High School and the participants.

3.6.1 Ordinal data

Each of the forty closed-ended survey items provided a number ranging from zero to six depending on the question. Corresponding numbers were attributed to the closed-ended selection. Corresponding numbers began at zero and ended at two, three, four, five, or six depending on the question and selection option. For example, the following attribution was utilized for a Likert selection of six options: 1- Strongly Disagree, 2- Disagree, 3- Somewhat Disagree, 4- Somewhat Agree, and 6- Strongly Agree. The actual difference between each interval was considered significant and was analyzed as such.

3.6.2 Describing the data

Frequencies and measures were examined for each survey item and scale code. The Annenberg DL Teacher Survey Code Book and Item Linking developed by Supovitz was utilized to for the code description of the findings.

3.6.3 Researcher's role

The selection of the participants had limitations based on factors I could not control in the study. As an Assistant Principal at Capital High School, I was an active participant in the distributed leadership organizational structure on a daily basis. This experience allowed me to witness how administrators and teacher leaders made leadership decisions. I attended leadership and teacher meetings whenever possible and established relational trust with some of the participants. My role came with inherent risk of bias. To mitigate this bias, I developed relationships that were rooted in mutual respect and confidence in each other. These relationships were integral to the collection of data but may have hindered completely honest responses given my role. I made every effort to safeguard confidentiality and provisions for anonymity to the participants by not tracking respondents by name or IP address. I attempted to mitigate my familiarity with the district, the school, and some of the participants by looking at the data in isolation and drawing conclusions based on the ordinal data and responses. It is my hope that future researchers can use the results and this study as they examine the short and long-term effects of the sustainability of distributed leadership.

4.0 Findings

The closed-ended survey was designed by Supovitz and administered every year to DL participants at Capital High School from 2008 and 2010. The same survey was used for the purposes of this study. The initial purpose of the survey was first to determine the baseline within the participating schools. The subsequent administrations were used to determine the effectiveness of DL Project professional development. The purpose of the present administration of the survey was to determine what factors of DL persisted within the school, to what degree the factors were important, and to summarize the factors that sustained the organizational structure for eight years after the DL training and coaching concluded.

The survey evaluated ten areas of distributed leadership based on the training. These areas included context, academic pressure, relational trust, collective responsibility, leadership team, instructional leadership, teaching practices, professional development, use of data, school improvement priorities, and outreach to parents. The open-ended questions were administered to participants at Capital High School and other participants of the DL Project. The focus of the questions was to determine the impact the DL Project had on participants' views on leadership, professional practice, and the aspect of the DL Project training that has been most effective in professional practice. The findings are presented to explain sample characteristics, context, the primary and secondary causes for the sustainability of distributed leadership at Capital High School based on the qualitative survey, followed by the open-ended and interview responses.

4.1 Sample Characteristics

Of the ten teachers and administrators contacted to complete the survey and open-ended questions at Capital High School, all ten responded. An additional eight participants who participated in DL Project training were also identified. Seven of the participants responded to the open-ended questions. Three participants agreed to, and participated in, interviews. All participants from Capital High School completed the entire closed-ended survey and open-ended questions within one week of receiving the invitation by email. Five of the additional participants responded within three days, and two additional responses were received after a follow-up email was sent. Three participants were interviewed after the survey was completed. All participants combined had an average of 29.4 years of experience in education. Participants from Capital High School had an average of 24.2 years of experience. Participants from Capital High School had been on staff for an average of 16.5 years. All of the participants had a Master's degree and 29% had earned a doctorate. All were certified in the areas in which they worked.

4.2 Capital High School Context

To frame an understanding of the context of Capital, participants were asked to evaluate the structural context of the school. For the nine items related to school context, participants were asked to rate the degree to which identified areas were problems within the school. Response selections included 1- Serious problem, 2- Moderate problem, 3- Minor problem, 4- Not a problem. All items being equally weighted, the overall average score was 2.57 (SD = 0.87, min = 1.70, max

= 3.44). The data indicate school problems are generally in the range of minor to moderate. The standard deviation indicates all participants closely shared the view of the problems within the school. See Figure 9 for score distribution.

Item Number	Questions	Score
11a	Student absenteeism	2.1
11b	Lack of parental support	2.3
11c	Teacher absenteeism	2.4
11d	Physical conflicts among students	2.6
11e	Robbery, theft, or vandalism at school	2.7
11f	Students' use of drug or alcohol	3
11g	Verbal abuse of teachers	2.8
11h	Conflicts between students and teachers	3
11i	Parents' low education level	2.3
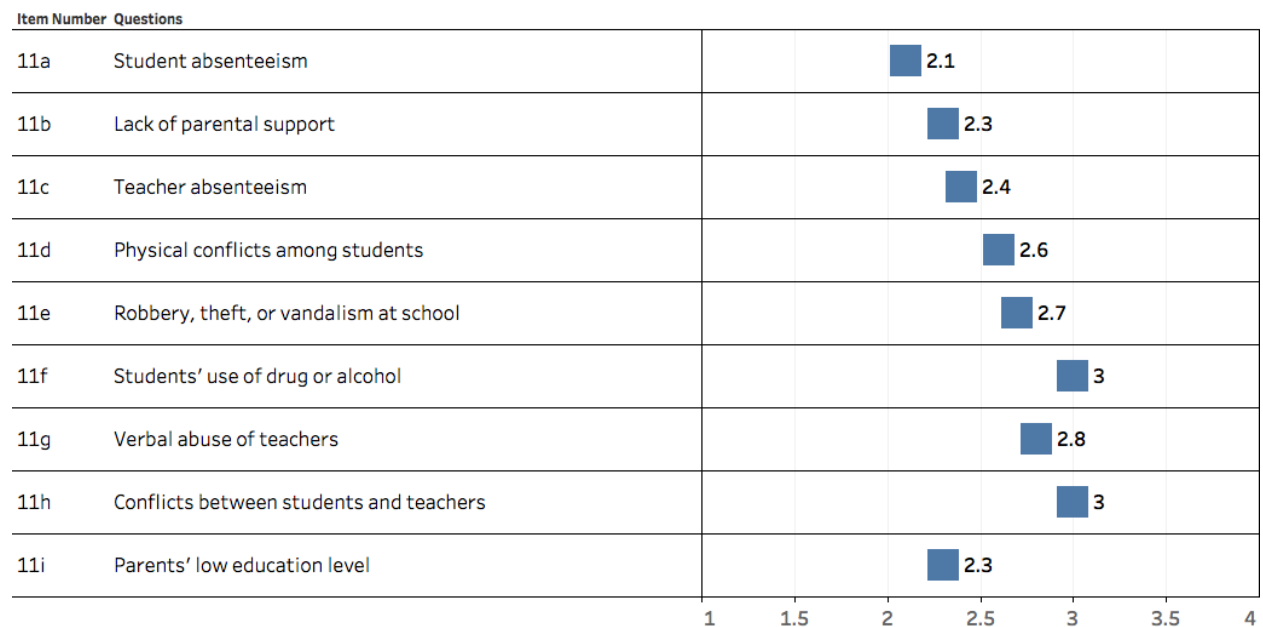
Figure 9. Context of Capital High School in 2017-2018

Student absenteeism, teacher absenteeism, and lack of parental support were viewed as moderate problems. Student absenteeism in 2017-2018 was high. The average daily attendance was 89.1%; 48% of the students were chronically late, and 26% of the students were chronically truant (having 10 or more unexcused absences). Only 54.5% of the students attended more than 95% of the time. Teacher absenteeism was not publicly available. During my experience working as an administrator at Capital, there were on average 15 teacher absences per day or 11.5% of the staff. The identification of physical conflicts among students, robbery theft or vandalism, and student use of drugs or alcohol was seen as a moderate to minor problem. This was reflected in

the rate of students receiving one out of school suspension at 10.5% with 2.9% of students receiving two or more out of school suspensions.

The parents' low level of education was also identified as a moderate problem. This finding was not surprising given that 78% of the student population is classified as being Title 1 eligible and living at or below the poverty line. The high level of poverty coupled with an immigrant English Language Learner population of 22.5% with an additional 28% of the student identified as an ELL during their education. The student population reflects a parent population that is perceived as having a low level of education. No problem was identified as a serious problem. The remainder of the problem areas in the school were identified as being a minor problem or not a problem.

4.3 Academic Pressure

Directly related to the context of Capital was the perception of academic pressure. There were four items focused on academic pressure related to teacher expectations. Response selections ranged from six options: 1- Strongly Disagree, 2- Disagree, 3- Slightly Disagree, 4- Somewhat Agree, 5- Agree, and 6- Strongly Agree. See Figure 10 for score distribution. All items being equally weighted, the overall average score was 4.87 (SD = 0.78, min = 4.09, max = 5.65). These data indicate the perception of a moderately high level of academic pressure on students through teacher expectations and support. The standard deviation indicated that participants closely shared similar views. See Figure 10 for score distribution.

Item Number	Questions		
12a	Teachers in this school expect students to complete every assignment.		5.1
12b	Teachers in this school encourage students to keep trying even when the work is challenging.		5.0
12c	Teachers in this school set high expectations for academic work.		4.6
12d	Teachers in this school think it's important that all students do well in their classes.		4.8

1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0

Figure 10. Perception of Academic Pressure

The responses reflect a high level of professionalism and commitment to student learning by the staff. Teachers and school leaders indicated they have high academic expectations for students at Capital High School.

4.4 Relational Trust

It is important to understand that relational trust was found to be the factor that influenced sustainability above any other. For the eight items related to relational trust regarding the principal, the responses tended towards the upper middle section of the response set. Of the 1-6 response scale, response selections ranged from six options: 1- Strongly Disagree, 2- Disagree, 3- Slightly Disagree, 4- Somewhat Agree, 5- Agree, and 6- Strongly Agree. The responses' four items fell between "Slightly Agree" and "Agree" and four items fell on "Agree" and "Strongly Agree." See Figure 11 for average score distribution. All items being equally weighted, the overall average score was 4.95 (SD = 0.88, min = 4.07, max = 5.83). These data indicate a high level of relational

49

trust among the staff with the principal. The standard deviation indicates the responses did not vary greatly outside the average. See Figure 11 for score distribution.

Item Number	Questions		
17a	It is OK in this school to discuss feelings, worries, and frustrations with the principal.		5.3
17b	The principal looks out for the personal welfare of the faculty members.		5.3
17c	I trust the principal at his or her word.		4.9
17d	The principal at this school is an effective manager who makes the school run smoothly.		4.3
17e	The principal places the needs of children ahead of his or her personal and political interests.		5
17f	The principal has confidence in the expertise of teachers.		4.9
17g	The principal takes a personal interest in the professional development of teachers.		4.7
17h	I really respect my principal as an educator.		5.2

1   1.5   2   2.5   3   3.5   4   4.5   5   5.5   6

Figure 11. Relational Trust

Questions 17 a-h focused on relational trust with the principal and had an average score of 4.95 out of 6.0 with a standard deviation of 0.88. These results indicate that the principal has invested time in establishing the bonds of relational trust with the staff. Tschannen-Moran (2014) argues, "trust greases the machinery of an organization, working as a lubricant to facilitate the communication and improve the efficiency of the people" (p. 18). In essence, trust is the most significant factor to organization functionality. Given the response average for the question and the low standard deviation, it is evident that the principal established and maintained relational trust within the school. These results speak to the value of respect and trust in the school and drive the conclusion that these factors form the cornerstone of sustainability of distributed leadership.

Relational trust was the essential factor for the success and sustainability of distributed leadership at Capital. Based on a standard deviation of .88, the responses were similar by all respondents. The respondents indicated that the principal was "open to discussing feelings, worries and frustrations with staff" as well as "looking out for the welfare of the staff," and was "respected as an educator." This indicates that the staff felt safe at school. This perception of safety was created by the principal through her actions and responses to questions and crisis, as well as her interactions with and between staff. The importance of safety has also been found by Rozovsky, as quoted by Duhigg (2016), to be the key driver of successful groups at Google, indicating that it is a factor outside of the educational context.

Responses for the principal being an effective manager who makes the school run smoothly fell between the "Slightly Agree" and "Agree." The response was not surprising due to the size of the school and the operational management tasks that were delegated to other staff members based on importance, priority, and ability. Three of the Assistant Principals were tasked with the most visible building management responsibilities including teacher sign in and payroll, financial transactions, and compliance for evaluations.

For the two items related to decision-making, the responses tended towards the upper section of the response set. Of the 1-6 response scale, the responses for four items fell between "Slightly Agree" and "Agree." See Figure 12 or average score distribution. All items being equally weighted, the overall average score was 4.45 (SD = 1.35, min = 3.1, max = 5.8). These data indicate a somewhat high level of teacher involvement in important decisions and informal opportunities to influence what happens in the school. See Figure 12 for score distribution.

Item Number	Questions		
12e	Teachers are involved in making the important decisions in this school.		4.4
12f	Teachers have a lot of informal opportunities to influence what happens here.		4.5
		1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0	
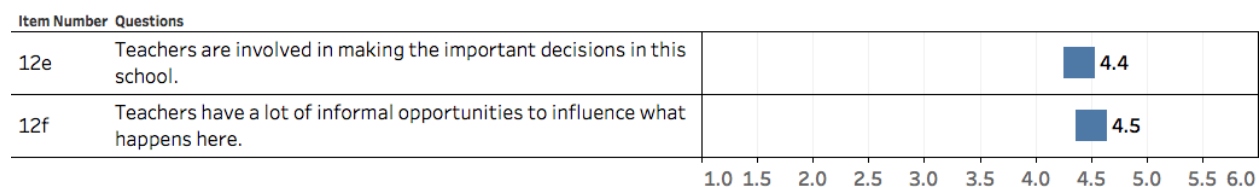
Figure 12. Teacher Involvement and Influence on Decision-Making

The view of being involved in decision-making and influence is important because it is a reflection of the distributed leadership model at work in the school. Since leadership responsibilities were spread across the school, teachers felt as though they were involved in the decision-making process. This may have been a result of the DL Project training inclusive of the "Building Trust: A Leadership Imperative" module and the "Developing Evidence Based Shared Decision-Making" module that focused teams on investment in decision-making. The impact of these trainings was evident on the open-door policy that all administrators in the building adhered too.

The most interesting finding in the questions showed that relational trust was based on respect. The two items related to respect trended towards the lower section of the response set. Of the 1-4 response scale, the responses both fell between "Some" and "A great deal." See Figure 13 for average score distribution. All items being equally weighted, the overall average score was 3.7 (SD = 0.31, min = 3.39, max = 4.0). These data illustrate that teachers feel respected by other teachers in the school and by the principal. The standard deviation was the smallest of any response in the survey. See Figure 13 for score distribution.

Item Number	Questions									
16a	Feel respected by other teachers at this school.								3.7 ■
16b	Feel respected by your principal.								3.7 ■
		1.0	1.5	2.0	2.5	3.0	3.5	4.0
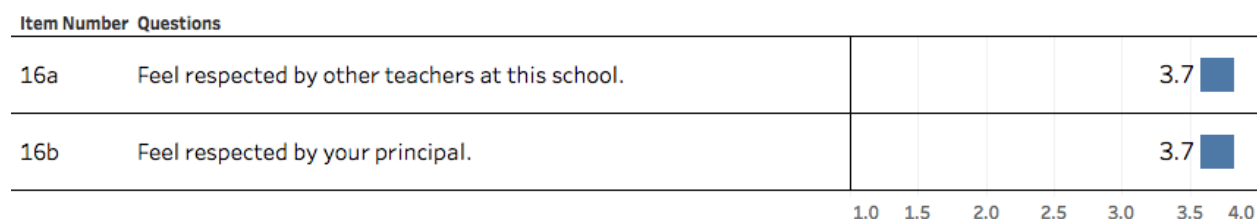
Figure 13. Respect

Questions 16 a-b focused on respect for each other and the principal. The responses had an average score of 3.7 out of 4.0 with a standard deviation of 0.3. This was the highest average score and smallest standard deviation of any survey question.

The results for Respect, Teacher Involvement in Decision-Making, and Relational Trust point to the primary causal factors for the sustainability of distributed leadership at Capital. Taken together these questions can be viewed though a lens of emotional and professional safety in the school environment. It can be speculated that this safety was created by the principal and then replicated and embraced by the staff.

4.5 Collective Responsibility

There were nine questions focused on collective responsibility of the staff within the school. Response selections ranged from six options: 1- Strongly Disagree, 2- Disagree, 3- Slightly Disagree, 4- Somewhat Agree, 5- Agree, and 6- Strongly Agree. See Figure 14 for score distribution. All items being equally weighted the overall average score was 2.1 (SD = 0.84, min = 1.26, max = 2.94). The standard deviation indicates the responses did not vary much among the participants. The data indicate teachers have higher expectations for themselves but are not willing

to take risks to improve the school or willing to try new things. When examined with Question 12c "Teachers in this school set high expectations for academic work" it brings up the question of why the teachers have higher expectations for students than they do themselves. The answer to this question is not found in the survey data but may be found in the context of the school at the time the survey was administered. It can be speculated that teachers did not set high expectations for themselves because the school administrators did not push them to have high expectations. When this survey was distributed, the school was focused on functioning at a basic level without necessary fiscal or personnel resources, and the burden of focusing on academics was beyond the scope of the administrator's time and priorities. See Figure 14 for score distribution.

Item Number	Questions		
13a	Help maintain discipline in the entire school, not just their classroom.	1.6	
13b	Take responsibility for improving the school.	2.2	
13c	Set high standards for themselves.	2.6	
13d	Are eager to try new ideas.	2.3	
13e	Feel responsibility to help each other do his/her best.	2.2	
13f	Are willing to take risks to make this school better.	1.7	
13g	Feel responsible that all students learn.	2.3	
13h	Are eager to try new things.	1.8	
13i	Are really trying to improve their teaching.	2.3	

Figure 14. Collective Responsibility

When asked to identify collective responsibility focused on improving the school or themselves the responses diametrically contrasted with the academic expectations the staff had for the students. Respondents identified that between "none" and "some" teachers maintain discipline

in the school outside their classroom, are willing to take risks to make this school better, or are eager to try new things. Although between "some" and "about half" of the teachers set high standards for themselves, are eager to try new ideas, feel responsible that all children learn, and are really trying to improve their teaching. These results were surprising because they show the staff expects less of themselves than they do of the students.

4.6 Leadership Team

To measure the effectiveness of the leadership team functionality, participants answered eight questions. Eight of the ten participants from Capital High School responded to the questions. The first six questions focused on functionality and the remaining two questions verified the validity of the responses. The 1-6 response scale ranged from options 1- Strongly Disagree, 2- Disagree, 3- Slightly Disagree, 4- Somewhat Agree, 5- Agree, and 6- Strongly Agree. All items being equally weighted, the overall average score was 4.73 (SD = 1.28, min = 3.45, max = 6.00). See Figure 15 for score distribution.

Item Number	Questions		
38a	Members of the leadership team openly express their professional views during meetings		4.9
38b	Members of the leadership team are willing to question one another's view		4.9
38c	We do a good job talking through views, opinions, and values		4.9
38d	Members of the team work together closely to lead this school		5.1
38e	Power to make decisions is equally shared among members of the leadership team		4.3
38f	The team usually tries to come to consensus when making decisions		4.4
38g	A few people in the team seem to dominate the decision making process		3.3
38h	I am not usually involved in the decision making process		2.1

1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0

Figure 15. Leadership Team Functionality

The responses for four items fell between "Slightly Agree" and "Agree." The remaining two items fell between "Agree" and "Strongly Agree." The final two questions verified the validity of the responses. These data represent a relatively high level of functionality among and between leadership team members. Responses indicated that participants felt as though they could openly express their professional views, question one another's view, and talk through views points. It was then reflected that members work closely to lead the school. Participants also indicated that few people dominated the decision-making process and disagreed that they felt they were not involved in the decision-making process. These views reflect the culture of distributed leadership established for the school leadership team. This prevalent view signifies a culture cultivated and promoted by the principal in the years since the DL Project support ended. This was made possible through the safety respondents expressed in the results concerning Relational Trust (see Figure

11). The effects of the DL Project modules on "Building School Leadership Teams" and "Developing Evidence-Based and Shared Decision-Making" are also still apparent in this finding.

Interestingly participants only slightly agreed that decision-making was equally shared among members of the leadership team. This may be due to the level of decision-making in which they were included. The teacher leaders were not always included in the decision-making process for fiscal matters or staff selection that were outside the purview of their positions. Administrators and teachers would also not have been involved in district level fiscal decisions that impacted the number of teachers allocated for the school. The perception of the teachers may have been that administrators had control of centralized teacher allocations for staffing purposes. The social studies department head would not be involved in selection of a sports related coaching position if he had no knowledge of the sport. These results may also reflect how respondents viewed the fidelity to which their opinions were valued in the decision-making process in which they were involved.

It is important to note that participants felt included in the decision-making process, which is the cornerstone of the distributed leadership process. This conclusion is drawn by the responses to Question 38h, "I am not usually involved in the decision-making process." The response of 2.1 was the lowest of any question and verifies that participants were involved. If they were not involved, the expected result would be much higher.

For the two items related to leadership team meetings, the responses tended towards the upper section of the response set. Of the 0-4 response scale, response selections ranged from five options: 0- Never, 1- Few times throughout the year, 2- A few times per month, 3- 1-2 day per week and 4- More than 2 days per week. The responses for the two items fell between a few times

per month and 1-2 days per week. All items being equally weighted, the overall average score was 2.43 (SD = 0.91, min = 1.52, max = 3.34). See Figure 16 for average score distribution.

Item Number	Questions		
39a	In formally scheduled meetings	1.7	
39b	In informal meetings (for example, stopping by each other's classrooms or catching each other in the hallway between class..	2.4	

1.0   1.5   2.0   2.5   3.0   3.5   4.0

Figure 16. Team Meetings

These data indicate meetings were more informal than formal. Informal meetings may have been more frequent due to the overall functionality of the leadership team. There was a leadership meeting consisting of the principal and assistant principals every Monday to review priorities and areas of concern throughout the school. Cabinet meetings consisting of department heads, SLC coordinators, the dean of discipline, the head counselor, and school leadership were scheduled every other Thursday. These meetings were conducted as scheduled although, due to staffing and substitute teacher fill rates, not all members were able to attend every meeting. Other meetings throughout the week occurred informally.

4.7 Instructional Leadership

For the eight items related to observation, the response selections ranged from five options: 0- Never, 1- A few times per year, 2- A few times per month, 3- 1-2 days per week, 4- More than 2 days per week. All items being equally weighted, the overall average score was 1.53 (SD = 1.01,

min = 0.52, max = 2.54). The responses for the seven items fell closest to "A few times per year."

Providing administrative support for a school program was seen as occurring "A few times per

month." These data indicate that instructional leadership may not have been seen as a priority by

the school leadership or the teachers and ultimately the school district. See Figure 17 for score

distribution.

Item Number	Questions	Score
26a	Provide administrative support for a school program	2.3
26b	Demonstrate or model instructional practices	1.1
26c	Observe classroom instruction	1.4
26d	Examine and discuss student student work with teachers	1.6
26e	Examine and discuss standardized test results of students in a teacher's class	1.3
26f	Monitor classroom instruction to see that it reflects the school's goals	1.4
26h	Evaluate teachers using criteria directly related to the school's improvement efforts	1.5
26i	Praise, publicly recognize, and/or provide tangible rewards to teachers whose instructional practices support the school's im..	1.9

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Figure 17. Instructional Leadership

The finding of an absence of instructional leadership is substantial and directly linked to

the district control of leadership and curriculum at the onset of the DL Project (DeFlaminis, Abdul-

Jabbar, & Yoak, 2016, p. 35). The finding was reflected when participants were asked how often

they observed another teacher, a teacher leader, or the principal. This was a priority that the district

took control of initially and never followed up on consistently from 2005 through 2018. A

conclusion can be made that consistent instructional leadership has always been a problem for and

within the school district. In my own experience working as a teacher and an administrator in the district on and off for 17 years, I cannot recall instructional leadership being supported in a sustained manner. For example, targeted support was provided to principals on how to evaluate and support teachers based on instruction one year, but it was not followed up in subsequent years. It is also clear that instructional leadership was not a factor for the sustainability of distributed leadership at Capital. If it had been, the responses would have been in the 3-4 range.

For the four items related to observation, the response selections ranged from five options: 0- Never, 1- A few times per year, 2- A few times per month, 3- 1-2 days per week, 4- More than 2 days per week. The responses again trended towards the lower section of the response set. All items being equally weighted, the overall average score was 1.53 (SD = 1.01, min = 0.52, max = 2.54). See Figure 18 for score distribution.

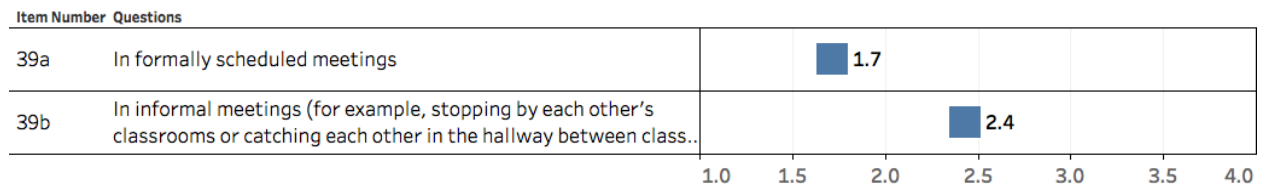| Item Number	Questions		
27a	Another classroom teacher		1.4
27b	A teacher leader (coach, facilitator, mentor teacher)		1.1
27c	The principal		0.5
27g	Share information or advice about classroom practices with a teacher		2.1
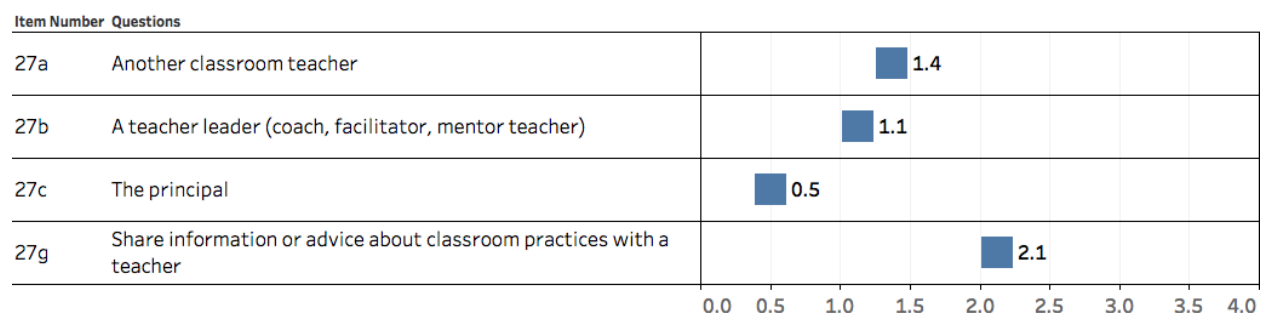
Figure 18. Teacher Feedback

The lack of instructional leadership is mirrored in teacher feedback. Classroom observations and instructional leadership are intrinsically intertwined and there were not adequate resources in terms of staffing for feedback to occur on a consistent basis. There was a slight perception that teachers were participating in sharing information or advice about classroom

practices. This indicates that teachers were willing to discuss instructional practices with each other and grow professionally even if was on an infrequent basis. The perception that building management occurred over instructional leadership was prevalent within the survey.

For the fourteen items asking how often participants were instructional leaders or building managers, the response selections ranged from five options: 0- I don't do this, 1- A few times per year, 2- A few times per month, 3- 1-2 days per week, 4- More than 2 days per week. All items being equally weighted, the overall average score was 1.60 (SD = 1.17, min = 0.43, max = 2.77). See Figure 19 for score distribution. The data indicate that administrators were more focused on issues of building management and climate than instructional leadership activities, and neither were a contributing factor to the sustainability of distributed leadership practices.

Item Number	Questions	Value
31a	Supervise clerical, cafeteria, and maintenance staff	0.6
31b	Monitor public spaces, such as cafeteria, hallways, playgrounds, etc.	3.6
31c	Work with students and their parents on discipline/ attendance issues	2.6
31d	Demonstrate instructional practices and/or the use of curricular materials in a classroom	1.1
31e	Observe a teacher who was trying new instructional practices or using new curricular materials	1.1
31f	Examine the school's overall progress towards its school improvement goals	1.6
31g	Frame and communicate broad goals for school improvement	1.8
31h	Examine the school's overall progress towards its school improvement goals	1.1
31i	Set explicit timelines for instructional improvement	0.9
31j	Clarify expectations or standards for academic performance with students	1.6
31k	Plan the staff development for the school	1.1
31l	Personally provide staff development	1.1
31m	Work on plans to improve the teaching of specific curricular units or objectives	1.4
31n	Monitor the lessons used in classrooms to see that they reflect the school's improvement efforts	2.1
31o	Monitor classroom instructional practices to see if they reflect the school's improvement efforts	2.2
31p	Maintain programs for special education students	1.6

Figure 19. Function of School Leadership

Question 31b, "Monitor public spaces, such as cafeteria, hallway, playground etc." stands out in the responses to questions about leadership roles. It had an average response of 3.6 trending close to 1-2 days per week on average. Given that the school leadership was more occupied with monitoring public spaces than instructional leadership fully illustrates where the school and essentially the district priority resided. The decision was made to keep the school climate under control.

The focus was clearly on school climate. The second most prevalent action reported in question 31c was "Working with students and parents on discipline/attendance issues." "Improving instruction, demonstrating best practices, and professional development" were done "A few times throughout the year." To achieve effective instructional leadership the practices of observation, feedback, and coaching must be daily actions by school leaders. In turn, school improvement initiatives are then reinforced, discussed, and supported to be effective. There is no evidence that this was a priority, but focusing on instruction is within the purview of school administrators' job description. So why were the staff involved in management over school improvement?

The answer comes down to resources. At Capital High School, the school climate personnel positions had been used to monitor hallways, entrances, and the lunchroom. These staff were stripped of all benefits and reduced to a 29-hour workweek to avoid having to pay for health insurance under the Affordable Care Act and an overall cost saving for the district. These low paying positions had been enticing to applicants due to the benefit package. Without the benefit option, Capital High School and the district at large was not able to fully staff these positions from 2014-2018. This resulted in the need to use administrators and teacher leaders to monitor hallways and the lunchroom.

In tandem, the district suffered a budget shortfall due to a reduction in state funding and local tax revenue collection. The school district budget shortfall directly affected all aspects of school staffing. This included administrators, teachers, non-teaching assistants, secretaries, and school support personnel to name just a few of the affected positions. School staffing was reduced to the bare minimum number of staff needed to function. The local school board also suspended the teachers' collective bargaining agreement. This caused the school to function as though it was

in triage and shifted the focus to building management over instructional leadership. Although the budget and staffing improved from 2014 to 2018, it did not return to pre-2013 levels. Regardless of the lack of resources, distributed leadership was sustained. A conclusion can be drawn that instructional leadership did not sustain distributed leadership. It was the trust that had been developed within and between the staff and administrators that sustained distributed leadership.

4.8 School Improvement Priorities

For the nine items related to School Improvement, the responses tended towards the lower section of the response set. Of the 1-3 response scale, the responses for six items fell closest to "in our plan but not a top priority." Improving student attendance, improving the mathematics program, and improving the reading/language arts program were seen as items closer to being a top priority. All items being equally weighted, the overall average score was 1.74 (SD = 0.69, min = 1.05, max = 2.79). The standard deviation indicates the responses did not deviate greatly. See Figure 20 for average score distribution.

Item Number	Questions		
28a	Improving the school's facilities	1.4	
28b	Improving school climate	1.8	
28c	Improving parent participation	1.8	
28d	Improving student attendance	2.1	
28e	Improving the health and welfare of students	1.5	
28f	Improving the reading/language arts program	2.1	
28g	Improving the mathematics program	2.1	
28h	Improving the school's library, technology, or media	1.4	

1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0

Figure 20. School Improvement Priorities

These data indicate that the school leaders were aware of the school priorities for the 2017-2018 school year. These priorities were outlined in the comprehensive plan and shared with staff on a regular basis. These were also the district priorities for high schools for the 2017-2018 school year. It must be noted that sharing priorities is not actualizing the priorities. Question 28h concerning improving the physical condition of the building facilities, libraries, or media is outside of the purview of the school budget and allocated centrally.

4.9 Use of Data

For the eight items related to the use of data, the response selections ranged from four options: 0- Data not used in this way, 2- Used minimally, 3- Used moderately, 4- Used extensively. All items being equally weighted the overall average score was 1.76 (SD = 0.69, min = 1, max =

3). The responses trended towards the lower section of the response set. See Figure 21 for average score distribution.

Item Number	Questions	
29a	Identifying individual students who need remedial assistance	2.4
29b	Setting learning goals for individual students	2.0
29c	Tailoring instruction to individual students' needs	2.1
29d	Developing recommendations for tutoring or other educational services for students	2.0
29e	Assigning or reassigning students to classes or groups	2.1
29f	Identifying and correcting gaps if the curriculum for all students	1.5
29g	Encouraging parent involvement in student learning	1.8
29h	Identifying areas where teachers need to strengthen their content knowledge or teaching skills	1.9

Figure 21. Use of Data for Student Improvement

Question 29a indicates that data were used mostly to identify individual students for remediation. Data were least likely used to correct curriculum, encourage parent involvement, or celebrate school achievement. These finding were somewhat interesting since the school district has a student achievement data repository that teachers can access electronically. Administrators and teachers received recurring yearly training on how to access and interpret the data. The apparent lack of the use of data may have been driven by data usage not being a priority, high student volume, or the inability to meet deficiencies due to a lack of resources. Students entering comprehensive high schools in the district can have deficiencies in reading and math skills. The course design sequence for graduation and staffing did not allow for remediation classes. This propels students into courses that they are not prepared for and might ultimately fail.

4.10 Teacher Practices

The survey questions focused on teacher practices were answered by five participants. The participants were all active teachers with between three and five classes taught per day. For the eight items related to the perception of other teachers' practices, response selections ranged from six options: 1- Strongly Disagree, 2- Disagree, 3- Somewhat Disagree, 4- Somewhat Agree, 5- Agree, and 6- Strongly Agree. See Table 22 for score distribution. All items being equally weighted, the overall average score was 4.13 (SD = 1.59, min = 2.53, max = 5.71). These data indicate a moderately high level of belief in making the changes within the school and motivating students. See Figure 22 for score distribution.

Item Number	Questions	
44a	I am capable of making the kinds of changes expected in this school	5.0
44b	The kinds of changes expected in this school are helping my students reach higher levels of achievement	4.8
44c	The kinds of changes expected in this school require me to make major changes in my classroom practice	3.6
44d	I strongly value the kinds of changes expected in this school	5.0
44e	If I try really hard, I can get through to even the most difficult and unmotivated students	4.8
44f	I am uncertain how to teach some of my students	3.0
44g	My students' peers influence their motivation more than I do	3.4
44H	Most of a student's performance depends on the home environment, so I have limited influence	3.4

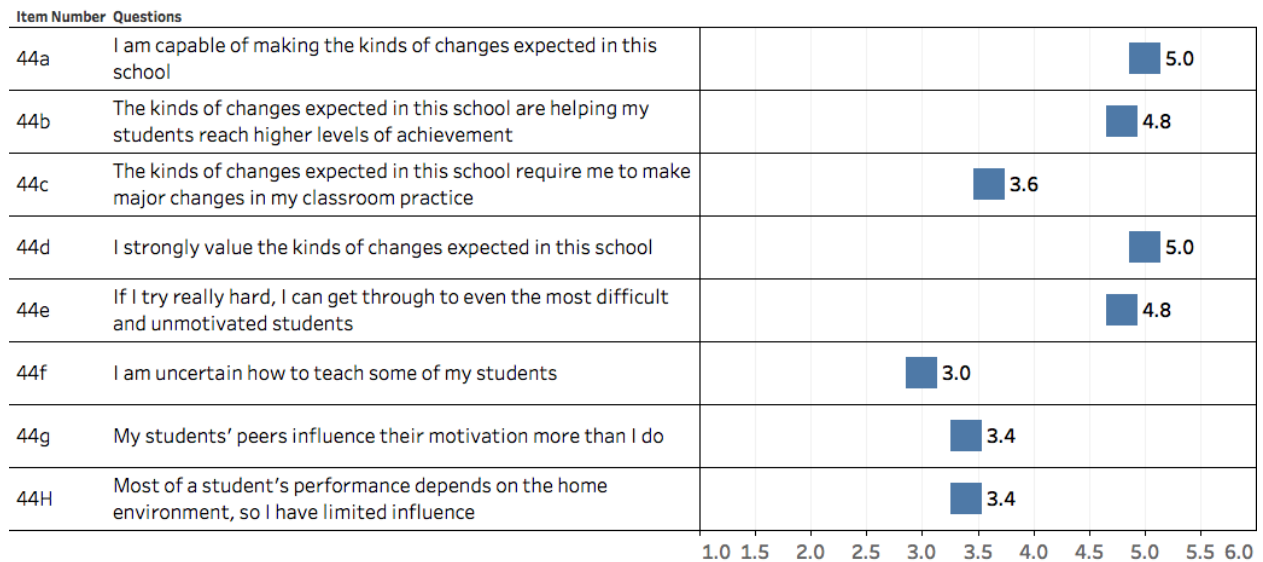1.0 1.5   2.0   2.5   3.0   3.5   4.0   4.5   5.0   5.5 6.0

Figure 22. Teacher Perspectives of Professional Practices

The responses show that the teachers are confident in their ability to instruct students to achieve academically. Teachers also indicated that they are capable of making the expected changes at the school although they do not view alterations as being required in classroom instructions. This indicates that the teachers are adept at making changes although the changes made are not very rigorous or demanding.

These results point to a causal factor for the sustainability of distributed leadership. Respondents felt capable due to the DL Project training to make changes and valued the changes expected in the school. These responses speak to how the staff was empowered to make changes. This empowerment is directly linked to the relational trust and safety that was established and sustained distributed leadership at Capital.

4.11 Professional Development

For the eighteen items related to professional learning experiences for the past school year, response selections ranged from six options: 1- Strongly Disagree, 2- Disagree, 3- Somewhat Disagree, 4- Somewhat Agree, 5- Agree, and 6- Strongly Agree. See Table 23 for score distribution. All items being equally weighted, the overall average score was 4.12 (SD = 1.59, min = 2.53, max = 5.71). These data indicate a moderately high level of satisfaction in being given the opportunity to improve their teaching practices. See Figure 22 for score distribution.
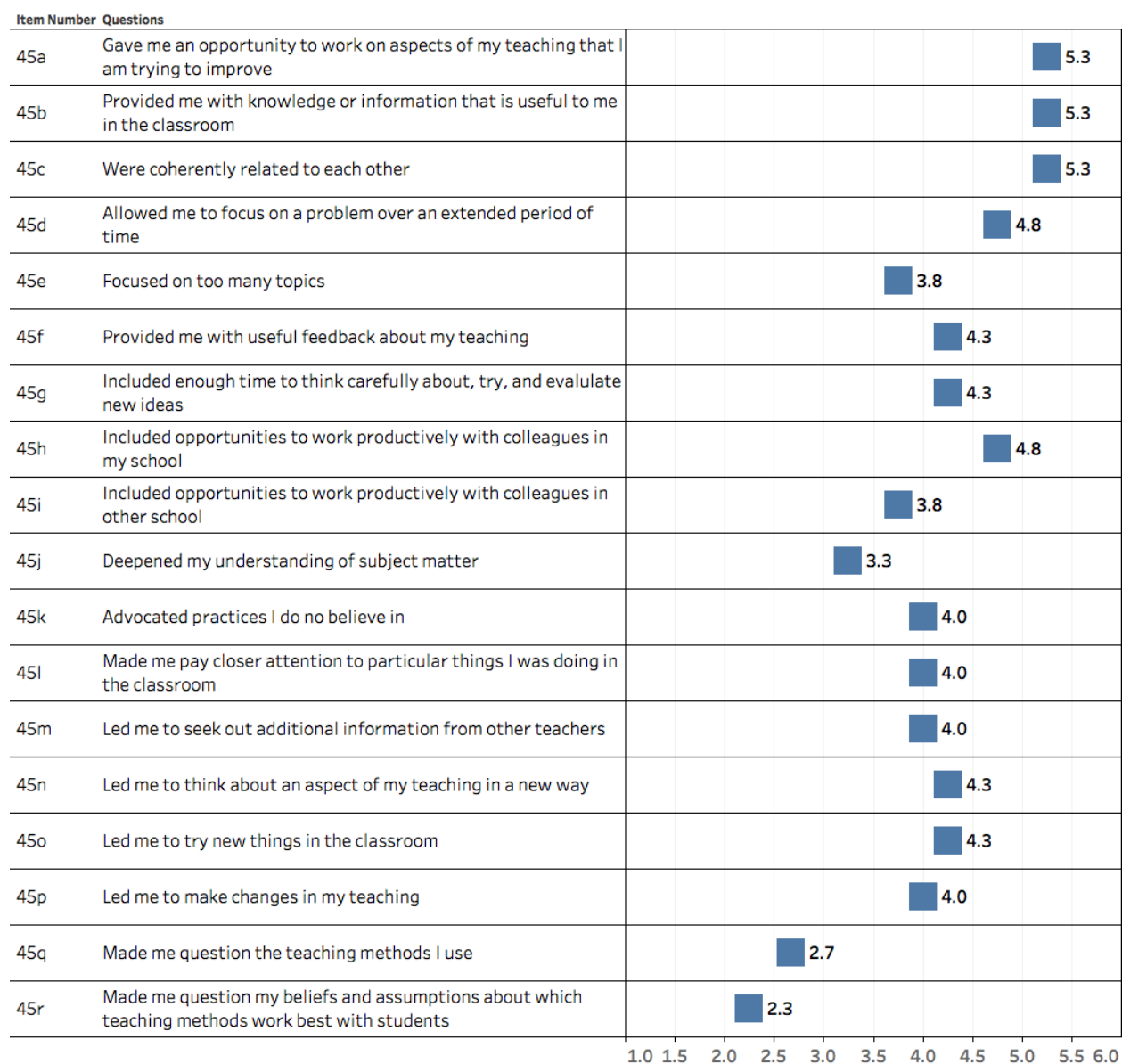
Item Number	Questions		Value
45a	Gave me an opportunity to work on aspects of my teaching that I am trying to improve		5.3
45b	Provided me with knowledge or information that is useful to me in the classroom		5.3
45c	Were coherently related to each other		5.3
45d	Allowed me to focus on a problem over an extended period of time		4.8
45e	Focused on too many topics		3.8
45f	Provided me with useful feedback about my teaching		4.3
45g	Included enough time to think carefully about, try, and evaluate new ideas		4.3
45h	Included opportunities to work productively with colleagues in my school		4.8
45i	Included opportunities to work productively with colleagues in other school		3.8
45j	Deepened my understanding of subject matter		3.3
45k	Advocated practices I do no believe in		4.0
45l	Made me pay closer attention to particular things I was doing in the classroom		4.0
45m	Led me to seek out additional information from other teachers		4.0
45n	Led me to think about an aspect of my teaching in a new way		4.3
45o	Led me to try new things in the classroom		4.3
45p	Led me to make changes in my teaching		4.0
45q	Made me question the teaching methods I use		2.7
45r	Made me question my beliefs and assumptions about which teaching methods work best with students		2.3

1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0

Figure 23. Professional Development

Responses indicated a high level of satisfaction in the professional developments. The high level of satisfaction indicates that the teachers found the professional development to be aligned with their needs as teaching professionals. The administration of the survey during the DL Project attempted to measure the effectiveness of the DL Project professional development

69

sessions.   Survey participant responses measured the effectiveness of the professional developments participants had been a part of during the 2017-2018 school year. During the 2017-18 school year, the professional development was either designed by small learning community (SLC) and departmental teacher leaders or provided by a third party.   The SLC professional development session focused on the needs of the SLC. The third-party provider focused on writing across the content areas.   Eleven teachers at Capital were chosen to participate in monthly development sessions and then charged with turning around the training to the remainder of teachers within their departments. Some of these teachers participated in this survey.

The staffing and budget shortages from 2013 to 2016 severely limited professional development opportunities and time for teachers to meet productively as departments and SLCs. The priority of building management has already been shown to impact instructional leadership. An interesting outlier in the perception of the professional development were the responses for 45q "Made me question the teaching methods I use" and 45r "Made me questions my beliefs and assumptions about which teaching methods work best with students." The responses fell within the "Disagree" to "Slightly Disagree" range. This indicates that the professional development sessions did not push teachers to think about their teaching methods, or it simply reiterated their preconceived assumptions.   This could be because, with the exception of the third-party professional developments, the majority of the professional developments that were presented were developed in the central office. It could also indicate that the teachers felt strongly about their own practices and did not value the new method presented, or it was a reiteration of practices with which they were already familiar. Regardless, it is apparent that teachers recognized the professional development opportunities from 2016-2018 addressed improving professional

practice. The professional development opportunities may have had an impact on sustainability but that conclusion is not necessarily supported, based on the broad scope of the question.

4.12 Outreach to Parents

The survey does not ask any questions directly related to outreach to parents due to the overall DL Project program design, which was focused on improving the organizational design and teacher leadership within a school. There is evidence in the DL Project materials that parental involvement was touched upon, though it was not a priority focus of the project. Given that parental outreach or involvement was not a formalized focus, it is not surprising it was not included.

It should be noted that the school culture at Capital High, and perhaps urban highs schools in general, are not ones that invite parental outreach or parental participation. This was evidenced in the low turnout for parent teacher meetings where teachers generally met with less than 10% of their students' parents throughout the year. This was reflected in parent teacher association meetings where participation generally ranged from eight to ten parents monthly.

4.13 Open-Ended and Interview Responses

Sixteen of the seventeen participants responded to the open-ended questions. All participants answered the three questions asked. The interview responses were transcribed from the audio recordings. The responses for the open-ended questions and the interview questions

were analyzed utilizing semiotic analysis. Semiotic analysis was utilized to analyze, understand, and interpret patterns found in responses. They are presented together given they are intrinsically linked.

4.13.1 How did distributed leadership change participants' thinking about leadership?

In response to the question "How did distributed leadership change how you think about leadership," a theme emerged in the responses made by participants that school leadership cannot be done by a single leader in a school. Most of the comments were similar to this participant's statement:

> Leadership cannot be done in isolation. You need your team to truly create your vision. Distributed leadership helps the leader identify team members' talents and skills and capitalizes on them to move the work forward.

The DL Project effectively dispelled the concept of the "heroic leadership" where the principal was responsible for and had the ability to accomplish school initiatives independent of staff buy-in. Participants recognized and leveraged the skills that the staff had to offer in order to make improvements at their schools. Another comment by a principal dispelling heroic leadership was reflected in this comment:

> I used to think I had to do everything myself. I couldn't ask for assistance because it would be seen as a weakness because I could not do everything. Now I know there are teachers in my building who want to take on more responsibilities, and the community is better because of it.

The use of distributed leadership allowed this principal to see asking for assistance as a tool to improve the school instead of a perceived weakness that the staff would use for judgment of the principal's ability. By seeking assistance, the school and the community could improve. Working alone as a silo in school is part of the top down management structure where the leader has all the answers. Overcoming working in isolation and sharing responsibilities was another recurrent theme in the responses. A principal remarked:

> I had to trust the process and the competent school-based leaders around me. This was a challenge because I was used to doing it all myself in isolation. There was more buy-in and willingness to support initiatives, on the part of faculty, parents, students, and community stakeholders, when what was going on was made public and visible.

This principal saw that distributed leadership allowed for buy-in and support that had not existed at the school previously. Spreading the leadership over people was not seen as a weakness but instead a strength that could be used to leverage to increase buy-in and productivity. One way to accomplish this was through transparency with all the stakeholders.

A principal saw the power distributed leadership has as a lever for transformation of her school through the empowerment of the staff. She stated:

> When I was a teacher, I had a principal who was into shared decision-making. Your thoughts and opinions mattered, and it empowered us as teachers. When I was introduced to distributed leadership, it took me back to when I was a teacher, and I knew that it was something that could help our school move forward. It was a guide that could help me transform a high school into something very different than any other high school I had known. It was impossible to be the only leader in an enormous school. Distributed leadership got everyone on board and developed a lot more leaders within the building.

73

In a follow-up interview, I asked a principal how she identified the leaders in the school. It was apparent that she did not have set criteria or center in on specific people but wanted to empower everyone on staff. Leaders emerged from the staff and she obtained their buy-in to distributed leadership by listening to them. She stated:

First and foremost, I wanted to hear what they had to say. I believe that most people wanted to be there, but they didn't know how to get in. I believe listening to them and recognizing their fears and building from their strengths was what helped move our school. We had people initially who were totally against what we were trying to do. They wanted to stay the course, but listening to their fears and anxiety and getting their thoughts on how they would move it made a huge difference. I just had to listen; I had to build that trust. It took time; it doesn't happen overnight, and sometimes we would be moving in the right direction and we would go backwards. But when you know distributed leadership you know there are going to be disruptive times. When you understand change takes time you are not afraid. You know you need to just have to keep moving forward despite the disruption.

The act of listening was how she helped the staff confront their fears about change and garner buy-in to transforming the school and moving it forward academically and socially but also allowing the staff to take on leadership roles. The buy-in and development of other leaders in the building was seen as being necessary to move the culture of the building forward to meet the stated goals and school improvement. The buy-in also allowed more staff to be familiar with the distributed leadership practices.

In a follow-up interview, I asked a principal why she chose to sustain distributed leadership at her school. The principal responded:

Initially when I came to my school as an assistant principal, I was a system leader. But when I became the principal, I wanted a way to involve everyone in moving the school forward. I knew that I couldn't do it alone; I knew I needed to have my staff involved. I started by empowering teachers by taking their input, but when I had the opportunity to be part of the Distributed Leadership Project it defined exactly what I wanted to do. After being involved and learning all the aspects and components of the program, it moved the school tremendously. Even though the grant ended, I knew I was on to something, I knew it was something I had to sustained because I created a culture where people wanted to be part of the school. People didn't want to go anywhere else. The main reason was they felt they were part of something. In fact, in the time I was there only three teachers asked for transfers to another district school and two of them asked to come back to my school a year after they left.

Embracing distributed leadership practices moved the school forward. The decision to sustain the practices after the DL Project coaching ended was driven by the understanding that the new culture made the staff feel as though they were part of something bigger than themselves and, it can be speculated, a better place for students to learn. The high staff retention in a large urban school system is also evidence to how effective the principal was in building relational trust and implementing distributed leadership practices.

A DL Project coach saw sustainability being driven in schools even after new leadership joined the organization. The coach stated:

Principals in schools where I was a coach wanted to share success in their successes after the training. For years after and even when a new principal came to the school, they called and asked if I would help with the process so that it could continue at their school.

Given the DL Coach would be contacted years after the training gives validity to the importance of developing leaders and systems to be successful. Distributed leadership was not a practice that was intuitive to many school leaders. School leaders often follow the leadership style they are exposed to as a teacher and during a principal internship during a school leader preparation or certification program. A principal's leadership style is not necessarily a reflection of the principal's leadership competencies but rather a replication of what they are familiar with in terms of leadership. Exposure to distributed leadership buttressed by the success of the practices caused staff to want to continue. This desire for a staff to want to continue speaks to the overall effectiveness of the distributed leadership.

4.13.2 How did distributed leadership make a difference in participants' professional practice?

In response to the question "how did distributed leadership make a difference in your professional practice," the responses spoke to the profound impact distributed leadership had on how school leaders viewed their relationships with other people in building regardless of position or duties. A principal stated:

> Another difference distributed leadership made in my practice is the value of building authentic relationships with everyone at the school – from the school cafeteria workers to the roster chair. Many staff members were always willing to help me because I took the time to get to know them. Over time, a culture of a school community was palpable. As I worked with school staff, I learned the value in listening to them, too. For example, I

learned that teachers are appreciative and feel respected when they are told ahead of time about deadlines or a change in schedule.

Discovering that relationships could be forged in the school simply by listening to someone was a common theme in the responses. This is directly linked to relational trust. A principal commented, "It taught me how to listen and respect others' opinions. I learned to balance the desire to want to take control by respecting others and listening to their opinions and not personalizing other people's opinions." The idea of listening to understand appeared to be a form of letting go of the perceived control they believed was needed in the school. By sharing leadership responsibilities, school principals were more open to change initiatives and collaboration with and among the staff. Another principal stated:

> Distributed leadership taught me there is no one answer to any problem; there are a lot of smart people, and collectively we could get more done. I could pick people who would complement me as a leader. It makes you look inward and determine your strengths and weaknesses so you can surround yourself with people who will enhance you.

Utilizing others to solve problems was a recurrent theme in answers to what aspect of distributed leadership was most effective in practice. A principal remarked about the difficulty of sharing decision-making responsibilities but the necessity of doing so. "I've learned to reflect on my actions and not to take decisions that affected my students or teachers personally. Now when individuals make a decision that I disagree with, I remind myself that I only know part of their perspective." By soliciting other perspectives there is an inherent responsibility to seek to understand another viewpoint even if it is in contrast to your view.

Another principal spoke to overcoming the difficulty of sharing leadership responsibly by trusting the school-based leaders. The principal stated:

I had to trust the process and the competent school-based leaders around me. This was a challenge because I was used to doing it all by myself. There was more buy-in and willingness to support initiatives, on part of the faculty, parents, students, and community stakeholders, when what was going on was made public and visible.

Another principal echoed this sentiment:

You have to be reflective, and you need to be aware of other people's reactions. You have to ask yourself if it is for the good of the school or yourself. Asking others to share ideas that are different than yours is how you understand others' thinking. You cannot personalize others' decisions. You need to be comfortable with their decisions. That comfort comes from the development of trust and by working together.

Trusting the process and trusting the people involved was essential to achieving a distributed leadership structure. Part of this trust consisted of stepping back and looking at other perspectives. For some principals this took reflective practice to embrace. The struggle to do this is understandable given many principals were coming from a traditional top down leadership model where they worked alone. It is far easier to give orders than build relationships based on respect and trust.

School principals can have almost completely unchecked power within a school. Many principals were told or perceived they were the best teachers in a school before moving into leadership. It is not a far stretch for them to then take the idea of being the best teacher to being the only person who can do everything to propel a school forward. They were successful with a classroom of students, so why not in a building of teachers too. This is false and flawed heroic leadership in action. The responses are evidence that DL Project helped participants overcome this barrier and become better leaders due to the changes they made in their leadership.

An interesting remark came from a former DL coach who remarked that when they enter a school, they assess the readiness of the school to practice distributed leadership. Many schools that he visits have suffered in this area due to the culture of data driven accountability. This response poses an interesting question about how data driven achievement metrics can disrupt the organizational structure of a school's formal and informal leadership structure. It raises questions about how school leaders can mitigate the pressure of data driven accountability with leadership practices that empower teachers and their abilities as professionals.

4.13.3 What aspect of distributed leadership is most effective in practice?

Responses for the most effective aspect of distributed leadership all centered on making schools better places for teaching and learning to occur. One administrator remarked, "I cannot imagine anything in my career more important than learning how to ensure that people want to be in a school. Distributed leadership taught me how to accomplish that dream." In order to accomplish this, school leaders commented that they needed to have the staff buy into the vision. Another administrator stated:

> Distributed leadership got people to buy into the school's vision. Distributed leadership practices sustained the school through difficult financial times, it retained teachers, encouraged high teacher attendance, and resulted in high student satisfaction. We have more students enrolled today when high schools across the district are losing students to charter schools.

The development of and buy-in to the collective vision was viewed as a cornerstone of the effectiveness of the implementation of distributed leadership structure. These structured practices

then sustained and helped the school grow through difficult times. Another administrator reflected:

> The most effective aspect of distributed leadership was developing the school's vision with the staff and use it drive you. It is important that everyone is on the same page and following the same agenda. When you empower people to make their own decisions, they can choose to do what they want and are good at doing.

The importance of the vision was a repeated theme among respondents. The DL Project professional development module "Mission and Direction: Shared Vision, Values, and Commitments" almost certainly contributed to this theme. It is not surprising given that vision drives the school's mission. Creating the vision with the staff allowed teachers to have a voice in the creation and thus ownership. It is also important to note the recognition that people are better at doing things they are good at and have an interest in doing.

Another administrator spoke to the "urgency of now" to begin implementing change in a school. The administrator stated:

> The most effective aspect of distributed leadership that I learned is that leaders cannot wait for people to "get on board." When administration required Small Learning Community coordinators to lead common planning time, I was surprised by the reluctance of some of the teachers to participate in protocols that looked at lesson plans or student work. When I met with my mentor, he told me to ignore the naysayers and to put them together in one group. Soon many of them wanted out of the group and wanted to be in a group with teachers who were on board.

This was an explicit practice taught in the DL Project modules. If a leader waits for everyone to participate, nothing will ever get done. By leveraging teachers who have bought into

a practice, this teacher leader was able to increase buy-in from others. Clustering the "naysayers" removed them from the pool of invested teachers and prevented them from slowing momentum. It also encouraged some participants to "get on board." Having a team that works together to reach a common goal allows the team to achieve the goal.

A principal remarked about changing the power dynamic to influence change and get people on board. They stated:

> As a principal, I learned that I had to give up the power to the staff in order to gain buy-in. If I gave up some power to teachers, I found that I got it back ten times more when they bought into the school's vision. The teachers were more willing to give their all to initiatives they created than they were to the initiatives I had created on my own.

Getting people on board was the key to a successful initiative. The most successful initiatives are those that teachers design themselves because they have intrinsic buy-in to their own ideas over the initiatives they are told to implement. In a follow-up interview with a principal, I asked her to describe a successful initiative that was teacher led. The principal responded:

> Our AP scores. I had no involvement in changing the AP programing. Teachers took it upon themselves to say, "We need to do something here. We need to create some system to raise our AP scores." And that is what they did. They got together a group of people. But they felt empowered to do so. They redesigned the courses and how they were taught, the selection criteria for admittance, and the support for the students through after school and lunch tutoring. Within a couple of years, the school received a Bronze Medal from US News and Report for student success on the AP Exam.

She had given power to the teachers and then embraced a teacher designed and led initiative that was ultimately successful. It is difficult to speculate how the initiative would have turned out

if it was a mandate was given by the principal or the central office. Would teachers have worked as hard to accomplish it?

The perception of power and relinquishing power was a recurrent theme in the responses. This indicated an awareness of the power position principals wield in their schools and speaks to the difficulty principals can have in giving up power to subordinates. A principal continued:

I learned to respect other opinions and contain the tyrant within myself to take control of a meeting or situation. I had to learn that I was not always right or had the best ideas. Instead, I was surrounded by a group of very smart people with ideas that were better than mine, and I had to listen to them and respect their perspectives. Most importantly, I learned that talking through disagreements would lead to a solution. When there was a problem we had to just keep talking, if we stopped talking, we could never reach consensus or a solution.

Understanding that the "tyrant within" can overtake the process of consensus building is a very important recognition of the fragility of the distributed leadership process if one chooses to disrupt the process in the name of expediting decision-making. Taking the time to understand other points of view and reach consensus is a required component of distributed leadership.

To reach consensus all parties need to cooperate. Cooperation within the distributed leadership structure is rooted in trust. Shea (1984) states that, "trust is the social survival mechanism that allows us to cooperate for mutual benefit." When groups work together to improve schools every stakeholder benefits. A principal summed this up by stating, "It is about constantly moving forward and overcoming the obstacles that get in the way of the work. I believe this is done TOGETHER."

4.14 Limitations

Capital High School is a unique school site given the context and size. Being a single school site study limits the findings to be generalizable to other school sites that utilized distributed leadership. The district's extended period of fiscal crisis and significant change in upper leadership and priorities also inform the limitations of the application of the findings.

A limitation to the survey tool is assigning value to levels of familiarity. Although most questions offered four to six value options, there is subjectivity in the familiarity between response options. Responders may have different opinions between "slightly disagree" and "slightly agree." Without a firm definition of "slightly" the perception is not fully captured or explained. Slightly could be perceived as 60% or 30%.

5.0 Conclusions

The following section highlights and reviews the significant findings of this study.

5.1 Context of Capital High School

Understanding the context of Capital High School is necessary to frame the findings in Chapter 4 of this study. Capital High School maintained the same principal, two assistant principals, and seven of the teachers who were trained in the initial DL Project cohort. This is no small feat and certainly an outlier in an urban school district with high staff turnover. The school and surrounding community had gone through a number of social changes and hardships from 2010 to 2018 driven by the great recession and changing immigration trends. The Title 1 population grew from 49% to 76%. The English Language Learner population more than doubled to 704 students in 2018 from 328 in 2010.

The continual problems of time and money are indicative of the issues the district had in making authentic academic progress for students. From 2012-2017, the teachers had their collective bargaining agreement suspended and went without a pay raise or a step increase for pay. The district underwent a substitute teacher shortage in 2015 after privatizing the substitution service. At Capital High School, this resulted in a 17% substitute teacher coverage rate from September through December 2015. Teachers lost three out of five preparatory periods a week in order to cover classes that did not have a substitute teacher. The number of teacher class coverages

that were needed for absent teachers resulted in small learning communities and departments having difficulty meeting on a regular basis or at all with a full complement of teachers. Additionally, the school funding had been reduced to cover the cost of teachers leaving only $15,000 in discretionary spending for nearly 3,000 students in 2015. The school was woefully short of technology evidenced by interactive smart boards in 70% of the classrooms and less than 400 working laptops and desktop computers for more than 3300 students.

Despite the substitute teacher shortage resolved in 2016, the teacher collective bargaining agreement settled in 2017, and increased funding in 2018, the long-term impact on district and school progress was apparent. This was reflected at Capital High School in a loss of academic progress. The core high school English and math curricula were updated, centrally allocated, and revised in 2016 to bring them in alignment with the Pennsylvania Common Core and College Readiness Standards and the state-based assessments for high school students. Budgetary constraints and teacher shortages in science and math resulted in a drop in student achievement on the state standardized assessments.

Even in the face of these obstacles, there were signs of continued growth in teacher retention, student enrollment, and the cohort graduation rate. Although over eighty new teaching staff were hired between 2016 and 2018, only one teacher a year on average requested a transfer to another school within the district. Staff departures were driven primarily by retirement, career advancement, or change of life status. Welcoming teachers as partners instead of subordinates was key in teacher retention. This occurred due to distributed leadership practices that made teachers and administrators feel valued through respect and a voice in the decision-making process.

The principal did not allow the fiscal hardships or staff turnover to affect the relational trust that had been established. The relational trust was extended to the new staff as it had been with

the existing staff. The act of treating all the staff equally undoubtedly had a positive effect on the staff morale and the sustainability of distributed leadership.

Student achievement on the state assessment fluctuated. Student matriculation continued to increase while other comprehensive high schools declined. Enrollment grew from 2804 students in 2013 to 3378 in 2018. Given the high mobility rate of low income and immigrant students, the school served a total of 3704 students for the 2018 school year. The four-year cohort graduation rate increased from 76% in 2013 to 87% in 2017 with 68% of students matriculating in a college or vocational school in the September after graduation. Although not explicitly explored in the survey, connections and conclusions can be drawn to connect the distributed leadership practices with student achievement outside standardized testing through an existence proof of student success that is not adequately captured.

My research was conducted with a full understanding of the obstructions that the school faced. Even as funding, adequate staffing, and academic supports were non-existent, the school continued to survive and grow. My conclusion is that this occurred due to the implementation of a sustained distributed leadership organizational structure built on relational trust with and between the school leader and the staff. Relational trust is the keystone to the sustainability of distributed leadership practices and was inclusive of respect among and between administrators and teachers, teacher involvement in decision-making, and a work environment that was safe to discuss feelings, worries, and frustrations. The practice of leadership team functionality served as a secondary factor in sustainability.

This research focused on how the structure was sustained in the face of these hardships. Previous studies identified relational trust as the lever to implement the DL Project. The same was true at Capital High School. Relational trust and a highly functional leadership team were the

primary factors in sustaining the DL Project over time and being the driving factor for success and sustainability.

5.2 The Sustainability of Distributed Leadership

The keys to the sustainability of distributed leadership identified within this study including trust and respect between and among teachers and administrators. Fullan's Eight Elements of Sustainability were chosen as the criteria to evaluate the sustainability of distributed leadership at Capital. Fullan (2005, p. 14) has outlined eight elements of sustainability of reform efforts in education systems. The following explains Fullan's criteria for sustainability and evidence supporting sustainability of distributed leadership at Capital.

5.2.1 Public service with a moral purpose

Fullan describes public service with a moral purpose of being inclusive of three criteria: "(1) Raising the bar and being inclusive of student learning; (2) Treating people with demanding respect (moral purpose is supportive, responsive, and demanding, depending on the circumstance); and (3) altering the social environment for the better" (p. 15).

All aspects of this element were met. Evidence for raising the bar and being inclusive was reflected quantitatively in the increased graduation rate, college acceptance, and attendance. Treating people with respect was evidenced in the answer to survey question 17 and from the Capital principals that the DL Project "taught me how to listen and respect others' opinions. I

learned to balance the desire to want to take control by respecting others and listening to their opinions and not personalizing other people's opinions." Altering the social environment for the better was reflected in student success and teacher respect.

5.2.2 Commitment to changing context at all levels

Fullan states that "changing whole systems means changing the entire context within which people work" (p. 16). This was evidenced in Capital moving from a top down leadership structure to being transformed to a Level 6 Highly Distributed leadership model (see Figure 4). The Capital principal's commitment to distributed leadership over a decade is evidence to changing the context of the school culture and student outcomes.

5.2.3 Lateral capacity building through networks

Fullan states that lateral capacity building across peers is a "power learning strategy" (p. 17). Teachers at Capital were empowered to take on leadership roles through inclusive decision-making evidenced in survey question 12 focused on teacher involvement and influence on decision-making and survey question 27g focused on sharing information or advice about classroom practices with another teacher.

5.2.4 Intelligent accountability and vertical relationships

Sustainability by Fullan's (2005) definition requires "continuous improvement, adaptation, and collective problem solving in the face of the complex challenges that keep arising" (p. 22).

The Level 6 model of highly distributed leadership (Figure 8) was in place. This model can be attributed to supporting the school through years of difficult times due to minimal funding.

5.2.5 Deep learning

Deep learning is defined by Fullan as a method to "drive out fear; set up a system of transparent data gathering coupled with mechanisms for acting on the data; make sure all levels of the system are expected to learn from their experiences" (p. 22). It can be said that deep learning occurred given that participants felt safe and supported by professional development evidenced in survey question 45.

5.2.6 Dual commitment to short-term and long-term results

Fullan suggests that "over time, as system gets stronger, and fewer severe problems occur they are premeditated by corrective action sooner rather than later" (p. 25). At Capital, the system stayed in place after the implementation of the DL Project and participants were included in decision-making evidenced in survey questions 12e and 12f.

5.2.7 Cyclical energizing

Fullan defines cyclical energizing as the "combination of full engagement with colleagues, along with less intense activities associated with replenishment" (p. 25). This is essentially avoiding participant burnout and plateauing success. Over a period of changing school demographics and funded resources, student outcomes in terms of graduation and college

placement increased and staff retention at the school was evidenced by three teachers asking for transfers to another district school.

5.2.8 The long lever of leadership

Fullan states that for a system to be sustainable "we need a system laced with leaders who are trained to think in bigger terms and act in ways that affect larger parts of the system" (p. 27). To this end, over the course of the implementation and continuation of distributed leadership at Capital, the principal remained in place but twelve assistant principals cycled through Capital. Eight of those assistant principals went on to lead schools as principals in public and public charter school setting. The administrators who were trained in distributed leadership left Capital and were able to lace their experience and leadership throughout the district.

Using Fullan's criteria matched with evidence from the survey results and evidence proofs, this study has found that distributed leadership was sustained at Capital for ten years. This finding is evidence that distributed leadership is a sustainable leadership practice.

5.3 The Importance of Relational Trust in the Sustainability of Distributed Leadership

The quantitative data from the survey primarily indicated that relational trust and respect with and between the school principal and the teaching staff is the primary driver of sustainability. The secondary sources of sustainability based on the quantitative data are a highly functional leadership team and inclusive decision-making, which were rooted in trust and respect. These

findings were determined by analyzing the overall average scores and standard deviations of the survey questions completed by the school leaders and teachers at Capital High School.

According to Bryk and Schneider (2002), there are four dimensions of trust: competence, respect, integrity, and personal regard. Respect is explicitly evaluated in the survey in question 16. The results are evidence that trust and respect had been established and maintained at Capital. The importance of the trust the staff had in the administration, which was reciprocated, cannot be understated in importance to the sustainability of distributed leadership. DeFlaminis, Abdul-Jabar, and Yoak (2016) found that distributed leadership teams were "key vehicles for fostering trust" (p. 102). These findings reinforce the previous finding.

It is important to recognize that that even without resources the school continued to grow in terms of student population, graduation rate, and an increase in the number of students attending college. This data was not adequately represented in the state School Progress Profile or the school district School Progress Report. Those reports disproportionately focus on student achievement on standardized testing. Capital High School accomplished this growth, in part, through the sustained practice of distributed leadership that promoted empowering the staff to have a voice and make decisions that aligned to the school's vision.

An aspect of the motivation to sustain distributed leadership at Capital that cannot not be discounted was the principal's drive to continue the practice for ten years. At any time, the principal could have decided to go down another path for system management. Staff and administrators changed, but the practice remained because it was a proven management system for the school. The principal's evidenced-based faith in distributed leadership and determination to stay with a system that works speaks to the power of distributed leadership, the principal's leadership, and the buy-in from administrators and staff.

5.4 Impact of Distributed Leadership on Participants' Leadership

Distributed leadership had a positive impact on participants' leadership and their actions as school leaders. The participants' viewed distributed leadership as a way to share leadership responsibilities, encourage buy-in, and increase productivity with their staff. The responses indicated that by practicing distributed leadership they began to place increased value on others' opinions.

There was also recognition of the power a principal wields in a school and the temptation to embrace top down leadership decision-making because it is perceived to be an easier or a faster means to an end. But as the DL Project professional development module "Developing Evidence-Based and Shared Decision-Making" teaches, it may be faster but research shows that it is not more effective and does not achieve buy-in or commitment. Containing the "tyrant within" is essential to being a distributed leader and it takes reflective practice, discipline, and an understanding that the process for authentic buy-in is worth the time and effort.

Adherence to authority figures is part of the teaching profession. Within a traditional school structure, a teacher expects students to do what is asked of them and is reflective of a principal's expectation for teachers to do what they are told to do. The vast majority of teachers adhere to this practice without direct pushback. When there is pushback, it is generally silent and reflected in the amount of effort they are willing to invest in accomplishing the task of teaching. Without a solid investment in effort, the return is guaranteed to be minimal.

The principal who is a distributed leader understands this dynamic, is willing to change the leadership structure, and relinquishes some of their power so they can improve student outcomes. This comes with the knowledge that soliciting ideas, seeking different opinions, and

supporting teacher-developed initiatives will increase buy-in and outcomes. Teachers will be more invested in decisions they have a voice in and when given the freedom to create initiatives than being told what to do.

5.5 A Reflection on Leadership Structures and Student Outcomes

In the past, American education reflected the need to prepare students to be workers in the active production of consumable products. The mass production of products by human workers on the assembly line had the intent and expectation of producing the same merchandise without flaw. Education in schools reflected the need for standardization on the assembly line. The factories where this occurred utilized top down management. Factory management was again reflected in the schools. Principals, like factory managers, were seen as being the sole person responsible for operating the organization. This was then reflected in the classroom through top down instruction. This is represented by the class lecture where the teacher talks and the students take notes and are then tested on the regurgitation of information on an assessment. In this environment, there is little development of critical thinking skills or discussion of the content for deep understanding or application.

The industrial model for educating students in America is an outdated reflection of top down leadership. It is still persistent in many schools, especially those in low-income areas with a majority of minority students due to a lack of material resources, human capital, and high teacher turn over due to poor working conditions and the lack of supports for teachers and administrators

to be successful. The employment that this form of education is preparing students for no longer exists.

The Department of Labor has made the determination that automation will eliminate 49% of the current jobs in America by 2036. The progressive industries that drive the American economy, which is rooted in science, technology, engineering, math, and art (STEAM), are aware of this change. They have made changes in their own organizational structures and cultures to embrace employees with these expectations. In progressive classroom environments, teachers have replaced lectures with student-centered activities, group work, and project-based learning. All of these methods are required by students to navigate individual tasks and relationships with their peers.

District and school leaders would be best served by taking note of these changes in the workforce and reflecting them in their organizational structures and classroom instruction. In turn, if students are being asked to pair up for group work and distributing the leadership responsibilities among each other to advance their learning, school administrators should mirror this practice within their leadership structures. Distributed leadership is a pathway forward in this regard.

The more students witness actions around them, the more likely they are to internalize the actions and integrate them into their thinking and lives. When students see that a school leader can share leadership functions and responsibilities across an organization through trust, respect, teamwork, active listening, collaboration, and compromise, the more likely they are to understand and apply those concepts. Students need to witness these actions, and schools need to be less of a system that says, "obey my instructions" and more of a system that says "imitate my actions." To imitate is to say follow my leadership, improve on my leadership, develop your own capacity to

lead, and encourage others' leadership. Students will also be more likely to demand those concepts in their lives and from their future employers.

Living through a time when it often feels as if the qualities of respect and compromise are less frequent in discourse, it is important to remember that a society is judged on how well people work together instead of drive each other apart. The effects of what we show and expect from children now will not be fully understood for decades. The effects outlast a daily news cycle, an election, or a political appointment that is driven by shifting allegiances and whims.

The practice of top down leadership that separates people no longer applies to an economy where low-level jobs are automated and skilled labor requires teamwork and collaboration. Old practices must be abandoned to embrace the urgent realities of a known future that will require an increasingly skilled labor force for even menial employment. Distributed leadership is an alternative that can promote and prepare children to work together in an economy that will demand teamwork and leadership to advance.

5.6 Distributed Leadership at Capital High School: Lessons Learned and Beliefs Confirmed

Having served as an Assistant Principal at Capital, I knew that distributed leadership worked for the school given its context. It continues to be one the largest high schools in a chronically underfunded school system. The growing student population, along with the continued and increasing success for graduates, illustrated the overall success of the school. What I did not know or understand was why it worked. Through this study, I learned lessons about the factors

for sustainability of distributed leadership. This study also confirmed beliefs I had about distributed leadership in action—beliefs I developed over the course of my career.

Lessons Learned:

1. Distributed leadership is a complex solution to the complex issues within school leadership.

2. Relational trust and respect between and among teachers and within the leadership team were the key sustainable factors for distributed leadership at Capital High School.

3. The school principal's desire to embrace and continue distributed leadership was a driving factor in sustaining the practice of distributed leadership

4. Welcoming teachers as partners and taking time to understand other points of view, reach consensus, and cooperate led to long-term buy-in by the staff

5. Distributed leadership created a school culture where the staff wanted to be part of the school, leading to high staff retention.

6. Distributed leadership practices supported the school through a difficult financial period.

7. Central Office support was not needed to sustain distributed leadership.

Beliefs Confirmed:

1. Operationalized distributed leadership can be sustained at a school site over ten years.

2. Distributed leadership practices dispel the false and flawed heroic leadership model.

3. A school staff will sustain initiatives they help create.

5.7 Recommendations for Future Research

The exploratory study was done with a very small sample size, given the decade that passed from the initial DL Project training to the present and the limited number of participants who could be contacted. Nevertheless, the findings can be used by any school leader to understand the factors that sustain distributed leadership in a single school. This study and the survey have been utilized in five research projects to date and could be used to identify the existence of distributed leadership practices and measure effectiveness. Larger sample sizes would allow for more in-depth statistical analysis. For example, the survey could be used to determine baseline data within a district to identify schools and baseline schools to begin DL Project training and implementation. The researcher encourages contacts from investigators seeking de-identified data from the current study for the purpose of comparison with newly acquired data.

5.8 Conclusions

The management of a school is a complex and increasingly difficult endeavor. The demands placed on school leaders are compounded by fiscal constraints and access to resources. To accomplish effective change within a school, the school leader needs to draw upon and rely on the staff on site. One way to accomplish this is to utilize a distributed leadership structure to build and share leadership responsibilities across a school. Distributed leadership empowers teachers to design and lead initiatives, increase buy-in and productivity, and aid in teacher retention.

This study aimed to determine the factors that sustained distributed leadership practices taught through the Annenberg Distributed Leadership Project at a single school site. The study determined distributed leadership was sustained based on Fullan's Eight Elements of Sustainability. Relational trust and leadership team functionality were the primary and secondary factors for sustainability. These factors allowed the principal to involve teachers and other school leaders in important decision-making and maintaining a highly functional leadership team that felt open to express their views and question each other. Contextual factors including the DL Project training, the principal's drive to maintain the distributed leadership organizational structure, participant personalities, and commitment to the students and the school as an institution of learning also played a role in sustainability. These findings mirrored prior research by Abdul-Jabbar (2013), DeFlaminis (2013b), Rios (2017), Supovitz and Riggan (2012), and Yoak (2013) that indicated that relational trust and respect were integral to the success of the DL Project implementation.

Education is a slowly changing enterprise in a rapidly changing world. In order for schools to remain relevant, they must be able to provide students with the tools and skills to be successful in the future. The so-called "soft skills" such as trust, teamwork, active listening, collaboration, and compromise are necessary for students to learn, understand, and utilize. To promote these skills students should see them modeled in management structures at schools, in teaching practices, and in action among themselves in classroom activities. Embracing distributed leadership in a school is a means to promote these learning goals.

Appendix A Informed Consent Form

Title of the Research Study: The Sustainability of Distributed Leadership

Protocol Number: PRO17090458

Principal Investigator:

Max Klink, Graduate School of Education, University of Pittsburgh

Emergency Contact:
You are being asked to take part in a research study. This is not a form of treatment or therapy. It is not supposed to detect a disease or find something wrong. Your participation is voluntary which means you can choose whether or not to participate. If you decide to participate or not to participate there will be no loss of benefits to which you are otherwise entitled. Before you make a decision, you will need to know the purpose of the study, the possible risks and benefits of being in the study and what you will have to do if decide to participate. The research team is going to talk with you about the study and give you this consent document to read. You do not have to make a decision now; you can take the consent document home and share it with friends, family doctor and family.

If you do not understand what you are reading, do not sign it. Please ask the researcher to explain anything you do not understand, including any language contained in this form. If you decide to participate, you will be asked to sign this form and a copy will be given to you. Keep this form, in it you will find contact information and answers to questions about the study. You may ask to have this form read to you.

What is the purpose of the study?
This study is a dissertation that is conducted on the basis of the sustainability of the Annenberg Distributed Leadership Project in The School District of Philadelphia. The purpose of the study is to learn more about how distributed leadership practices have sustained at Northeast High School and determine modification or additional modules needed for future implementation of the project.

Why was I asked to participate in the study?
You are being asked to join this study because you participated as a DL team
Member at Northeast High School or were a participant in DL Training. Those who are DL team members at Northeast High School qualify to participate because you have remained on staff since the DL Project support concluded in 2010. We have random selected ten additional participants from DL Project training from 2006-2010.

How long will I be in the study?

The study will take place over a period of three weeks. This means for that we will ask you to spend 45 minutes completing a survey and open-ended response questions. participating as an interviewee.

How many other people will be in the study?
There are 18 participants in the study.

Where will the study take place?
You will be asked to being complete the survey and open-ended questions online. A secure link will be provided to you complete the survey through the Qualtrics Survey system.

What will I be asked to do?
You are invited to questions about the distributed leadership's (DL) sustainability at Northeast High School. The type of questions that will be asked are focused on how DL continues to function and on your perception of improvements to training or additional modules needed for the DL Project in future implementations.

You will be asked to complete open-ended responses within the survey. To protect your identity, no one else will have access to the open ended responses and I will use pseudonymous for participants names. Probably, I will cite your own words for a better description of what they mean.

What are the risks?
The risks associated with this study are minimal. Your decision whether or not to participate in this study will not affect your employment.

How will I benefit from the study?
There is no benefit to you. However, your participation could help us understand the sustainability of the distributed leadership which can benefit you indirectly. In the future, this may help other people to improve their DL implementation or to the research on the field.

What other choices do I have?
Your alternative to being in the study is to not be in the study. If you choose not to be in the study the following are other treatment choices that you may want to consider.

What happens if I do not choose to join the research study?
You may choose to join the study or you may choose not to join the study. Your participation is voluntary.
There is no penalty if you choose not to join the research study. You will loose no
benefits or advantages that are now coming to you, or would come to you in the future.

When is the study over? Can I leave the study before it ends?

The study is expected to end after all participants have completed have completed the survey and open-ended questions and all the information has been collected.
You have the right to drop out of the research study at any time during your participation.

There is no penalty or loss of benefits to which you are otherwise entitled if you decide to do so.

How will confidentiality be maintained and my privacy be protected?

We will do our best to make sure that the personal information obtained during the course of this research study will be kept private. However, we cannot guarantee total privacy.
Your personal information may be given out if required by law. If information from this study is published or presented at scientific meetings, your name and other personal information will not be used.

To protect your identity, no one else will have access to the survey results, and I will use pseudonymous for participants names.

Who can I call with questions, complaints or if I'm concerned about my rights as a research subject?

If you have questions, concerns or complaints regarding your participation in this research study or if you have any questions about your rights as a research subject, you should speak with the Principal Investigator listed on page one of this form. If a member of the research team cannot be reached or you want to talk to someone other than those working on the study, you may contact the Office of Regulatory Affairs with any question, concerns or complaints at the University of Pittsburgh by calling (phone number redacted).

When you sign this document, you are agreeing to take part in this research study. If you have any questions or there is something you do not understand, please ask. You will receive a copy of this consent document.

_____
Signature of Subject

_____
Print Name of Subject

_____
Date

A.1 Approval for Research at Capital High School

I have reviewed Max Klink's approved IRB research proposal, including any letters of consent or assent, title "The Sustainability of Distributed Leadership." I understand what she is asking of individuals and grant her permission to conduct his study at Capital High School. I have the authority to do so.

If you have any further questions about this research study, I understand that Max can be reached at (phone number redacted) or via email at (email redacted). I also understand that if I have any questions regarding this IRB approval or the rights of research participants, I can contact (contact redacted).

Principal name and signature redacted
Principal
Capital High School

A.2 Letter to Participants

Dear Participant:

I am writing to let you know about an opportunity to participate in a research study about the sustainability of distributed leadership. This study is being conducted by Max Klink at the University of Pittsburgh's School of Education as part of an evaluation for the dissertation *The Sustainability of Distributed Leadership.* Dr. John DeFlaminis is serving as an advisor to this study.

You are being contacted because you were part of the Annenberg Distributed Leadership Project training from 2006 to 2010. This is a request for your participation by completing five open-ended questions. The purpose of this study is to learn about how school organization, classroom work environment and professional relationships influence the sustainability of distributed leadership over time. This will not be an assessment of you, your school or your district but rather an evaluation of the sustainability and effect of the Annenberg Distributed Leadership Project a decade after the initial implementation and training. All data from this survey will remain in the sole possession of the primary investigator. Your responses will be completely confidential.

If you choose to participate please use the link provided below to access the survey As you complete the survey please remember that there are no correct, preferred, or wrong answers. Please

be as open and candid as possible in reporting your experiences and perspectives on these issues. If there is a question you do not wish to answer or one that does not apply to you, you may skip it.

If you have any questions, feel free to contact me.

Thank you in advance for your time.

Sincerely,

Max Klink

Appendix B Survey Questions

1. **How would you describe your current role in your school?** (Mark the ONE that best describes your PRIMARY position).

   O Administrator
   O General Elementary Teacher
   O Mathematics Teacher
   O Language Arts/English Teacher
   O Science Teacher
   O Social Studies, History, Government Teacher
   O Reading Specialist Teacher
   O Vocational or Business Teacher
   O Physical Education Teacher

   O Special Education Inclusion Teacher
   O Special Education Teacher – Self Contained
   O ESL/Bilingual Teacher
   O Arts, Music or Drama Teacher
   O Computer or Technology Teacher
   O Foreign Language Teacher
   O Other:_____
   [Please write-in]

2. **If you answered 'General Elementary Teacher' in question 1, which of the following do you teach?** (Mark ALL that apply).

   o Reading/Writing/Language Arts   o Mathematics
   o Science   o Social Studies

3. **If you answered 'administrator' in question 1, how many years, including this year, have been an administrator?** _____

4. **If you answered 'administrator' in question 1, how many years, including this year, have been an administrator in this school?** _____

5. **Gender:**   Male O   Female O

6. **Do you describe yourself as:**

   O African-American   O Native American
   O Asian-American   O White, Non Hispanic
   O Hispanic   O Other:_____
                             [Please write-in]

7. **What is the highest level of formal education you have completed?**

   o Bachelor's degree   o Master's degree o Masters Plus   o Doctorate

8. **If you are a teacher, do you have a college major or minor in the primary subject that you teach?** o Yes o No

9. **If you are a teacher, are you certified to teach in the subject you selected in question 1?**   o Yes
   o No

10. **If you are a teacher, please mark the grade level(s) you teach this year. (Mark ALL that apply).**

   o Pre-K   o K   o Pre-1st   o 1st   o 2nd   o 3rd   o 4th
   o 5th   o 6th   o 7th   o 8th   o 9th   o 10th   o 11th   o 12th

11. To what degree are any of the following a problem in your school? Mark (X) EACH item.	Serious problem	Moderate problem	Minor problem	Not a problem
a. Student absenteeism	O	O	O	O
b. Lack of parental support or participation	O	O	O	O
c. Teacher absenteeism	O	O	O	O
d. Physical conflicts among students	O	O	O	O
e. Robbery, theft, or vandalism at school	O	O	O	O

AnnenbergEvaluation DesignExpansion_Mar_9_2007.docAnnenberg Distributed Leadership Program Evaluation Design   15

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongl Agree
f. Students' use of drugs or alcohol	O	O	O	O		
g. Verbal abuse of teachers	O	O	O	O		
h. Conflicts between students and teachers	O	O	O	O		
i. Parents' low education levels	O	O	O	O		

12. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongl Agree
a. Teachers in this school expect students to complete every assignment	O	O	O	O	O	O
b. Teachers in this school encourage students to keep trying even when the work is challenging	O	O	O	O	O	O
c. Teachers in this school set high expectations for academic work	O	O	O	O	O	O
d. Teachers in this school think it's important that all students do well in their classes	O	O	O	O	O	O
e. Teachers are involved in making the important decisions in this school.	O	O	O	O	O	O
f. Teachers have a lot of informal opportunities to influence what happens here.	O	O	O	O	O	O

13. About how many teachers in this school:

	None	Some	About Half	Most	All or Nearly /
a. Help maintain discipline in the entire school, not just their classroom,	O	O	O	O	O
b. Take responsibility for improving the school.	O	O	O	O	O
c. Set high standards for themselves.	O	O	O	O	O
d. Are eager to try new ideas.	O	O	O	O	O
e. Feel responsible to help each other do his/her best.	O	O	O	O	O
f. Are willing to take risks to make this school better.	O	O	O	O	O
g. Feel responsible that all students learn.	O	O	O	O	O
h. Are eager to try new things.	O	O	O	O	O
i. Are really trying to improve their teaching.	O	O	O	O	O

14. This school year, how often did you have scheduled meetings with other teachers in this school to discuss and plan curriculum or teaching approaches?

O More than once a week   O About once a week   O About 2-3 times a month   O About once a month   O About once every other month   O About once or twice a year   O Never

15. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongl Agree
a. Teachers in this school trust each other.	O	O	O	O	O	O
b. It's OK in this school to discuss feelings, worries, and frustrations with other teachers.	O	O	O	O	O	O
c. Teachers respect other teachers who take the lead.						

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
in school improvement efforts;	O	O	O	O	O	O
d. In this school, teachers have a "can do" attitude.	O	O	O	O	O	O
e. All teachers are willing to "stretch and grow".	O	O	O	O	O	O
f. In this school, teachers are continually learning and seeking new ideas.	O	O	O	O	O	O

16. Please indicate the extent that you:	None	A little	Some	A great deal
a. feel respected by other teachers at this school.	O	O	O	O
b. feel respected by your principal.	O	O	O	O

17. Please indicate the extent to which you agree or disagree with the following statements.	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
a. It is OK in this school to discuss feelings, worries, and frustrations with the principal.	O	O	O	O	O	O
b. The principal looks out for the personal welfare of the faculty members.	O	O	O	O	O	O
c. I trust the principal at his or her word.	O	O	O	O	O	O
d. The principal at this school is an effective manager who makes the school run smoothly.	O	O	O	O	O	O
e. The principal places the needs of children ahead of his or her personal and political interests.	O	O	O	O	O	O
f. The principal has confidence in the expertise of the teachers.	O	O	O	O	O	O
g. The principal takes a personal interest in the professional development of teachers.	O	O	O	O	O	O
h. I really respect my principal as an educator	O	O	O	O	O	O

18. How much influence do you think teachers have over school policy at this school in each of the following areas:	None	Little	Some	A Great Deal
a. Hiring new full time teachers.	O	O	O	O
b. Hiring a new principal.	O	O	O	O
c. Evaluating teachers.	O	O	O	O
d. Deciding how the school budget will be spent.	O	O	O	O
e. Determining the content of inservice programs.	O	O	O	O
f. Setting discipline policy at this school.	O	O	O	O
g. Setting performance standards for students at this school.	O	O	O	O
h. Establishing the curriculum at this school.	O	O	O	O
i. Selecting textbooks and other instructional materials.	O	O	O	O

III. ABOUT YOUR PROFESSIONAL RELATIONSHIPS

For part of this study we are interested in the professional communication networks that are established in schools between individuals. In other research, communication networks have been shown to reveal important characteristics of organizational functioning. For this reason, in the following section we ask you to identify both yourself and those who you work with in particular areas. These data will be used to map the connections between people in schools. Please be assured that no individual nor school will ever be identified in reports produced from these data.

19. Your First Name: _____ Last Name:
_____

NOTE: If you are a general elementary teacher, please answer questions 20-23 for English language arts. All other teachers should answer for the MAJOR subject that you teach.

20. During this school year to whom, in your school, have you turned for advice about planning and selecting curriculum materials and course content for the major subject you teach?	In this school year, how often have you sought guidance from this person regarding curriculum materials and course content?				How influential is the advice of this person regarding your selection and planning of curriculum materials and course content?			
Please list up to fifteen people; include both first and last names. You need not use all 15 spaces.	A few times a year	Once or twice a month	Once or twice a week	or	Not Influential	Slightly Influential	Influential	Highly
1.	O	O	O	O	O	O	O	O
2.	O	O	O	O	O	O	O	O
3.	O	O	O	O	O	O	O	O
4.	O	O	O	O	O	O	O	O
5.	O	O	O	O	O	O	O	O
6.	O	O	O	O	O	O	O	O
7.	O	O	O	O	O	O	O	O
8.	O	O	O	O	O	O	O	O
9.	O	O	O	O	O	O	O	O
10.	O	O	O	O	O	O	O	O
11.	O	O	O	O	O	O	O	O
12.	O	O	O	O	O	O	O	O
13.	O	O	O	O	O	O	O	O
14.	O	O	O	O	O	O	O	O
15.	O	O	O	O	O	O	O	O
O I do not seek advice from anyone in the school about **planning and selecting curriculum materials and content.**								

21. During this school year to whom, in your school, have you turned for advice about strategies to assist low performing students in the major subject you teach?	In this school year, how often have you sought guidance from this person regarding strategies to assist low performing students?				How influential is the advice of this person regarding strategies to assist low performing students?			
Please list up to fifteen people; include both first and last names. You need not use all 15 spaces.	A few times a year	Once or twice a month	Once or twice a week	or	Not Influential	Slightly Influential	Influential	Highly
1.	O	O	O		O	O	O	O
2.	O	O	O		O	O	O	O

3.	O	O	O	O	O	O	O
4.	O	O	O	O	O	O	O
5.	O	O	O	O	O	O	O
6.	O	O	O	O	O	O	O
7.	O	O	O	O	O	O	O
8.	O	O	O	O	O	O	O
9.	O	O	O	O	O	O	O
10.	O	O	O	O	O	O	O
11.	O	O	O	O	O	O	O
12.	O	O	O	O	O	O	O
13.	O	O	O	O	O	O	O
14.	O	O	O	O	O	O	O
15.	O	O	O	O	O	O	O

O I do not seek advice from anyone in the school about **strategies to assist low performing students.**

22. During this school year to whom, in your school, **have you turned for advice about** assessing your students' understanding of the major subject you teach?	In this school year, how often have you sought guidance from this person regarding assessing your students' understanding of the major subject you teach?				How influential is the advice of this person regarding assessing your students' understanding of the major subject you teach?			
Please list up to fifteen people; include both first and last names. You need not use all 15 spaces.	A few times a year	Once or twice a month	Once or twice a week	D. or a d.	Not Influential Influential	Slightly Influential	Influential	Highly
1.	O	O	O	(	O	O	O	O
2.	O	O	O	(	O	O	O	O
3.	O	O	O	(	O	O	O	O
4.	O	O	O	(	O	O	O	O
5.	O	O	O	(	O	O	O	O
6.	O	O	O	(	O	O	O	O
7.	O	O	O	(	O	O	O	O
8.	O	O	O	(	O	O	O	O
9.	O	O	O	(	O	O	O	O
10.	O	O	O	(	O	O	O	O
11.	O	O	O	(	O	O	O	O
12.	O	O	O	(	O	O	O	O
13.	O	O	O	(	O	O	O	O
14.	O	O	O	(	O	O	O	O
15.	O	O	O	(	O	O	O	O

O I do not seek advice from anyone in the school about **assessing my students' understanding of the subject(s) I teach.**

23. During this school year to whom, in your school, **have you turned for advice about**	In this school year, how often have you sought guidance from this	How influential is the advice of this person regarding classroom

classroom management?	person regarding classroom management?				management?			
Please list up to fifteen people; include both first and last names. You need not use all 15 spaces.	A few times a year	Once or twice a month	Once or twice a week	D or a d	Not Influential	Slightly Influential	Influential	Highly
1.	O	O	O	(	O	O	O	O
2.	O	O	O	(	O	O	O	O
3.	O	O	O	(	O	O	O	O
4.	O	O	O	(	O	O	O	O
5.	O	O	O	(	O	O	O	O
6.	O	O	O	(	O	O	O	O
7.	O	O	O	(	O	O	O	O
8.	O	O	O	(	O	O	O	O
9.	O	O	O	(	O	O	O	O
10.	O	O	O	(	O	O	O	O
11.	O	O	O	(	O	O	O	O
12.	O	O	O	(	O	O	O	O
13.	O	O	O	(	O	O	O	O
14.	O	O	O	(	O	O	O	O
15.	O	O	O	(	O	O	O	O

O I do not seek advice from anyone in the school about **classroom management.**

➡ **The following question will tell you where to go to next in this survey. It is intended to distinguish between classroom teachers and those who have formal leadership responsibilities in the school.**

24. Are you formally assigned to perform a leadership role at this school such as assistant principal, reform program coach/facilitator, school coach or content area coach, subject area coordinator or chair, master/mentor teacher, small learning community chair, or program coordinator (for example Title I Coordinator)?
Mark (X) only one.

O Yes (Continue)
O No (Skip to question 40)

IV. ABOUT YOUR LEADERSHIP

25. **Which of the following best describes your leadership position in this school?** (Mark the ONE that best describes your position).

O Principal
O Assistant Principal
O Special Program Coordinator (e.g. Title I)
O Small learning community coordinator/chair
O School Improvement Coordinator
O Master/Mentor Teacher
O Reading Specialist Teacher
O School Coach

O Whole School Reform Program Coach/Facilitator
O Reading, Literacy or English program coordinator/Chair
O Math program coordinator/Chair
O Science program coordinator/Chair
O Social Studies program coordinator/Chair
O Other subject area program coordinator/Chair
O Content area coach (Specify content area)

O Other:_____
[Please write-in]

26. How often do you engage in the following activities as part of your leadership role? Mark (X) EACH item.	Never	A few times per year	A few times per month	1-2 days/ week	More than 2 days/ week
a. Provide administrative support for a school program	O	O	O	O	O
b. Demonstrate or model instructional practices	O	O	O	O	O
c. Observe classroom instruction	O	O	O	O	O
d. Examine and discuss student work with teachers	O	O	O	O	O
e. Examine and discuss the standardized test results of students in a teacher's class	O	O	O	O	O
f. Monitor classroom instruction to see that it reflects the school's goals	O	O	O	O	O
g. Share information or advice about classroom practices with a teacher	O	O	O	O	O
h. Evaluate teachers using criteria directly related to the school's improvement efforts	O	O	O	O	O
i. Praise, publicly recognize, and/or provide tangible rewards to teachers whose instructional practices support the school's improvement efforts	O	O	O	O	O

27. This school year, how often did you observe any of the following people teach? Mark (X) EACH item.	Never	A few times per year	A few times per month	1-2 days per week	More than 2 days per week
a. Another classroom teacher	O	O	O	O	O
b. A teacher-leader (coach, facilitator, mentor teacher)	O	O	O	O	O
c. The principal	O	O	O	O	O

28. Please indicate the extent to which each of the following was an important priority in your school's improvement plan this year.	Not in our plan	In the plan but not a top priority	A top priority
a. Improving the school's facilities	O	O	O
b. Improving school climate (e.g., making school safer, fostering respect for others)	O	O	O
c. Improving parent participation	O	O	O
d. Improving student attendance	O	O	O
e. Improving the health and welfare of students	O	O	O
f. Improving the reading/language arts program	O	O	O
g. Improving the mathematics program	O	O	O
h. Improving the school's library, technology, or media	O	O	O
i. Improving another academic program or programs	O	O	O

29. To what extent do you use data for each of the following purposes?	Data not used in this way	Used Minimally	Used Moderately	Used Extensively
a. Identifying individual students who need remedial assistance	O	O	O	O
b. Setting learning goals for individual students	O	O	O	O
c. Tailoring instruction to individual students' needs	O	O	O	O

	Not Applicable	No Influence	Minor Influence	Moderate Influence	Major Influence
k. Plan the staff development program for the school	O	O	O	O	O
l. Personally provide staff development	O	O	O	O	O
m. Work on plans to improve the teaching of specific curricular units or objectives	O	O	O	O	O
n. Monitor the lessons used in classrooms to see that they reflect the school's improvement efforts	O	O	O	O	O
o. Monitor classroom instructional practices to see if they reflect the school's improvement efforts	O	O	O	O	O
p. Maintain programs for special education students	O	O	O	O	O

32. How much ACTUAL influence do you think each group or person has on decisions concerning establishing school curriculum at this school:

	Not Applicable	No Influence	Minor Influence	Moderate Influence	Major Influence
a. State Department of Education	O	O	O	O	O
b. School board	O	O	O	O	O
c. School district staff	O	O	O	O	O
d. Principal	O	O	O	O	O
e. Teachers	O	O	O	O	O
f. Curriculum specialists	O	O	O	O	O
g. Parent Association	O	O	O	O	O

33. How much ACTUAL influence do you think each group or person has on decisions concerning deciding how your school budget will be spent at this school:

	Not Applicable	No Influence	Minor Influence	Moderate Influence	Major Influence
a. State Department of Education	O	O	O	O	O
b. School board	O	O	O	O	O
c. School district staff	O	O	O	O	O
d. Principal	O	O	O	O	O
e. Teachers	O	O	O	O	O
f. Curriculum specialists	O	O	O	O	O
g. Parent Association	O	O	O	O	O

34. How much ACTUAL influence do you think each group or person has on decisions concerning determining the content of in-service professional development programs at this school:

	Not Applicable	No Influence	Minor Influence	Moderate Influence	Major Influence
a. State Department of Education	O	O	O	O	O
b. School board	O	O	O	O	O
c. School district staff	O	O	O	O	O
d. Principal	O	O	O	O	O
e. Teachers	O	O	O	O	O
f. Curriculum specialists	O	O	O	O	O
g. Parent Association	O	O	O	O	O

35. Does this school have a team of staff members that has responsibility for overseeing, managing, or coordinating instruction in the school? We refer to these staff as the "*leadership team.*" (Choose one)

O Yes   O No   (IF NO, SKIP TO QUESTION 40)

36. Are you a member of the school's leadership team?
     O Yes   O No   <u>(IF NO, SKIP TO QUESTION 40. IF YES, CONTINUE WITH QUESTION 37.)</u>

37. Please indicate which of the following staff are members of the *leadership team*.

	No	Yes
a. Yourself	O	O
b. Assistant principal	O	O
c. Regular classroom teachers	O	O
d. Reading/language or English specialist teachers	O	O
e. Math specialist teachers	O	O
f. Specialist teachers (Please specify) _____	O	O
g. Other staff (counselors, social workers, attendance officers, etc.) (Please specify) _____	O	O
h. Parents or community members	O	O

38. Please indicate the extent to which you agree or disagree with the following statements about the leadership team in your school:.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
a. Members of the *leadership team* openly express their professional views during meetings	O	O	O	O	O	O
b. Members of the *leadership team* are willing to question one another's views	O	O	O	O	O	O
c. We do a good job of talking through views, opinions, and values	O	O	O	O	O	O
d. Members of the team work together closely to lead this school	O	O	O	O	O	O
e. Power to make decisions is equally shared among members of the leadership team	O	O	O	O	O	O
f. The team usually tries to come to consensus when making decisions	O	O	O	O	O	O
g. A few people in the team seem to dominate the decision-making progress	O	O	O	O	O	O
h. I am not usually involved in the decision-making process	O	O	O	O	O	O

39. How often do you interact with other members of the *leadership team* in the following settings?

	Never	A few times throughout the year	A few times per month	1-2 days per week	More than 2 days per week
a. In formally scheduled meetings	O	O	O	O	O
b. In informal meetings (for example, stopping by each other's classrooms or catching each other in the hallway between classes)	O	O	O	O	O

40. Are you a classroom teacher in your school?
     O Yes   O No   <u>(IF NO, SKIP TO END OF SURVEY)</u>

➡ **If you are a classroom teacher, please continue, otherwise, please skip to the end of survey.**

V. ABOUT YOUR TEACHING

41. How many years, including this year, have you been a teacher? _____

42. How many years, including this year, have you been a teacher in this school? _____

43. This school year, how often have you had conversations with colleagues about the following topics? (If a question asks about a subject you do not teach, please check "Never") Mark (X) EACH item.

	Never	A few times per year	A few times per month	1-2 days per week	More than 2 days/ week
a. What helps students learn the best	O	O	O	O	O
b. Development of new curriculum	O	O	O	O	O
c. The goals of this school	O	O	O	O	O
d. Managing classroom behavior	O	O	O	O	O
e. Your reading/language arts or English instruction	O	O	O	O	O
f. Your math instruction	O	O	O	O	O
g. Content or performance standards in reading/language arts or English	O	O	O	O	O
h. Content or performance standards in math	O	O	O	O	O

44. How much do you agree or disagree with the following statements? Mark (X) EACH item.

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
a. I am capable of making the kinds of changes expected in this school	O	O	O	O	O	O
b. The kinds of changes expected in this school are helping my students reach higher levels of achievement	O	O	O	O	O	O
c. The kinds of changes expected in this school require me to make major changes in my classroom practice	O	O	O	O	O	O
d. I strongly value the kinds of changes expected in this school	O	O	O	O	O	O
e. If I try really hard, I can get through to even the most difficult and unmotivated students	O	O	O	O	O	O
f. I am uncertain how to teach some of my students	O	O	O	O	O	O
g. My students' peers influence their motivation more than I do	O	O	O	O	O	O
h. Most of a student's performance depends on the home environment, so I have limited influence	O	O	O	O	O	O

45. To what extent do you agree or disagree with the following statements about your professional learning experiences this year? Please consider both formal (e.g. staff development) and informal (e.g. working with colleagues) learning experiences. Mark (X) EACH item.

My professional learning experiences this year...	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
a. Gave me many opportunities to work on aspects of my teaching that I am trying to improve	O	O	O	O	O	O
b. Provided me with knowledge or information that is useful to me in the classroom.	O	O	O	O	O	O
c. Were coherently related to each other.	O	O	O	O	O	O

d. Allowed me to focus on a problem over an extended period of time.	O	O	O	O	O	O
e. Focused on too many topics.	O	O	O	O	O	O
f. Provided me with useful feedback about my teaching.	O	O	O	O	O	O
g. Included enough time to think carefully about, try, and evaluate new ideas.	O	O	O	O	O	O
h. Included opportunities to work productively with colleagues in my school.	O	O	O	O	O	O
i. Included opportunities to work productively with teachers from other schools.	O	O	O	O	O	O
j. Deepened my understanding of subject matter.	O	O	O	O	O	O
k. Advocated practices I do not believe in.	O	O	O	O	O	O
l. Made me pay closer attention to particular things I was doing in the classroom.	O	O	O	O	O	O
m. Led me to seek out additional information from other teachers, an instructional leader (e.g. coach), or some other source.	O	O	O	O	O	O
n. Led me to think about an aspect of my teaching in a new way.	O	O	O	O	O	O
o. Led me to try new things in the classroom.	O	O	O	O	O	O
p. Led me to make changes in my teaching.	O	O	O	O	O	O
q. Made me question the teaching methods I use.	O	O	O	O	O	O
r. Made me question my beliefs and assumptions about which teaching methods work best with students.	O	O	O	O	O	O

46. Please indicate how much you changed the following aspects of your teaching this year: Mark (X) EACH item.	Did not teach this subject	Not At All (1)	2	3	4	5	6	A Great Deal (7)
a. Student assessment	O	O	O	O	O	O	O	O
b. Student grouping	O	O	O	O	O	O	O	O
c. Materials used	O	O	O	O	O	O	O	O
d. The topics covered	O	O	O	O	O	O	O	O
e. The teaching methods you use	O	O	O	O	O	O	O	O
f. The kinds of work you have students do	O	O	O	O	O	O	O	O
g. The kinds of questions you ask students	O	O	O	O	O	O	O	O
h. Your understanding of the needs of individual students in your class	O	O	O	O	O	O	O	O

47. This school year, how often did you observe any of the following people teach? Mark (X) EACH item.	Never	A few times per year	A few times per month	1-2 days per week	More than 2 days/ week
a. Another classroom teacher	O	O	O	O	O
b. A teacher-leader (coach, facilitator, mentor teacher)	O	O	O	O	O
c. The principal	O	O	O	O	O

	A few times	A few times	1-2 days	More than

48. This school year, how often did the following people observe you teach? Mark (X) EACH item.

	Never	per year	per month	per week	2 days/ week
a. Another classroom teacher	O	O	O	O	O
b. A teacher-leader (coach, facilitator, mentor teacher)	O	O	O	O	O
c. The principal	O	O	O	O	O

49. This school year, how often did the following people give you feedback after observing you teach? Mark (X) EACH item.

	Never	A few times per year	A few times per month	1-2 days per week	More than 2 days/ week
a. Another classroom teacher	O	O	O	O	O
b. A teacher-leader (coach, facilitator, mentor teacher)	O	O	O	O	O
c. The principal	O	O	O	O	O

50. This school year, how often did you have in depth discussions about your teaching with any of the following people? Mark (X) EACH item.

	Never	A few times per year	A few times per month	1-2 days per week	More than 2 days/ week
a. Another classroom teacher	O	O	O	O	O
b. A teacher-leader (coach, facilitator, mentor teacher)	O	O	O	O	O
c. The principal	O	O	O	O	O

You have completed this survey.
Thank you very much for your time.

Please return the survey to the specified person.

B.1 Open Ended Response Questions

1. How has distributed leadership changed how you think about leadership?

2. How did distributed leadership make a difference in your professional practice?

3. What aspect of distributed leadership do you find the most effective in practice?

B.2 Follow-Up Interview Questions

1. Can you provide a specific example of how distributed leadership changed your thinking about leadership?

2. Why did you choose to sustain distributed leadership at your school?

3. How did you identify leaders within your school?

4. How did distributed leadership function as a lever for transformation in your school?

5. What initiatives where created by staff at your school due to distributed leadership?

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