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THE IMPACT OF LEADERSHIP TRANSITIONS ON SCHOOL CHANGE

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Abstract

The Impact of Leadership Transitions on School Change

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In a time of increasing accountability, school leaders are besieged with challenges to improve student performance (Cosner & Jones, 2016; Day et al., 2016), build teacher capacity (Beteille et al., 2012; Miller, 2013), and develop a coherent school vision (Finnigan & Stewart, 2009; Hitt & Tucker, 2016) to better meet the needs of increasingly diverse student populations. Unsurprisingly, the stress of these and other challenges has led to a marked increase in principal turnover in recent decades (Snodgrass Rangel, 2018). These conditions necessitate an understanding of how schools navigate transitions in leadership and the impact changes in leadership can have on a school's ability to meet ever evolving challenges. Analyzing data from a seven-year study using a comparative case study approach (Bartlett & Vavrus, 2017), this paper considers the experiences of three different schools as a single Catholic school principal transitions between the school sites. Drawing on complexity thinking (Goldstein et al., 2011; Lichtenstein & Plowman, 2009), this study explores the extent to which the principal was able to impact each school's readiness for change through the interconnected processes of distributing authority, creating a common school vision, and fostering trust.

Dedication

Dedicated to my incredible husband, David Dunphy. Dave, I cannot begin to thank you for everything you have done to make my life so wonderful- the list is never-ending. You do it all and you hold me and our family together. You have never wavered in your support of my pursuits and are always encouraging me to look forward. Your confidence in me has kept me going through this process and in everything else I do. You give so much more than you take and I am so lucky to have you by my side.

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Chapter One—Introduction

Rationale

In the complex environment of a K-12 school, the principal has a particularly significant role in shaping the outcomes experienced by all members of the school community. As a primary authority in instructional and organizational decision-making, the principal can influence various conditions that may help or hinder the growth of a school. Through direct and indirect avenues for change, principals have been found to have a statistically significant role in student outcomes and other measures of school improvement (Hallinger & Heck, 1996; Supovitz et al., 2010; Waters et al., 2003). Research has shown that principals' influence and responsibilities extend to a range of different areas, including student performance (Cosner & Jones, 2016; Day et al., 2016), social justice (Cambron-McCabe & McCarthy, 2005), hiring effective teachers (Baker & Cooper, 2005), and setting a vision for the school (Finnigan & Stewart, 2009; Hitt & Tucker, 2016). As a result of the taxing nature of the job, principal turnover is common, stunting the very progress principals are in the best position to help schools achieve. Research is needed to better understand the change process in order to identify ways to empower principals to be effective in their roles regardless of how long they are at a particular school.

Statistics on the rates of principal turnover in the United States are startling. Data from a recent national study of 86,000 public school principals reported an average turnover rate of 18% (Goldring & Taie, 2018). That figure included six percent of principals transitioning to new schools, ten percent leaving the principalship altogether, and two percent leaving their position for an unknown destination.

The trend in principal turnover has been consistent over the past decade in the United States (Battle & Gruber, 2010; Goldring et al., 2014). Smaller studies looking at principal turnover in particular regions of the country report similar findings, such as turnover rates of 30%, 20%, and 18% in Texas, Missouri, and Tennessee, respectively (Bartanen et al., 2019). The reported statistics on turnover vary depending upon the demographics of the subjects, such as a staggering 50% rate of turnover among new principals in Texas within their first three years in the role (Branch et al., 2009; Davis & Anderson, 2020). It can be expected that, on average, public schools in the United States may lose anywhere from 15 to 30% of their principals each year (Beteille et al., 2012).

Trends in leadership turnover among Catholic schools mirrors the rates identified in public schools. Though national statistics on Catholic school principal turnover are unavailable, smaller studies, such as a study of one Midwestern diocese, identified a 30% turnover rate for principals (Durow & Brock, 2004). Identifying ways to support and empower principals in the Catholic school context is particularly important in the current educational climate where high rates of principal turnover are associated with a lack of available and interested administrators (Boyle et al., 2016; Canavan, 2001), an aging leadership population (NAIS, 2010), and increasing job demands (Fraser & Brock, 2006). Principal turnover consistently surfaces as a major issue in U.S. K-12 schools, regardless of region or type of school, and the high rate of leadership turnover is not without significant consequences.

Research in both public and private schools reveals that there is no single cause of principal turnover and the reasons principals leave vary based on many factors and in different contexts (Snodgrass Rangel, 2018). Though there are some actionable areas that

district leaders and policy makers can address to improve working conditions for principals, such as reducing conflicts with district leadership (Durow & Brock, 2004; Fraser & Brock, 2006) or refining accountability policies (Clotfelter et al., 2007; Li, 2015), it will be difficult to implement a solution or solutions that will dramatically reduce the current rate of principal turnover on a large scale. Given that principal turnover is likely to be a persistent problem in education, it is important to understand the consequences of principal transitions and identify ways leaders may be more immediately effective in their new roles.

Snodgrass Rangel's 2018 review of research proves useful for its synthesis of the consequences of principal turnover. The studies reviewed covered consequences including student achievement, school climate and culture, and teacher turnover. In regards to student achievement, principal turnover was found to be associated with decreased student learning (Branch et al., 2009) and smaller achievement gains (Beteille et al., 2012).

Studies of school culture found negative consequences related to principal turnover as well. Turnover served as a source of tension for staff, who were concerned about interrupted initiatives, new priorities, shifts in philosophy, and instability that new leadership would bring (Burkhauser et al., 2012; Mascall & Leithwood, 2010). Trust is an integral component in school climate and culture and was found to play a role in staff perceptions of school culture during principal turnover (Burkhauser et al., 2012; Mascall & Leithwood, 2010). Teacher turnover is yet another area in which research has documented the negative consequences of principal turnover. Principal turnover has been

found to increase rates of teacher turnover, which, in turn, can have negative impacts on student achievement (Beteille et al., 2012; Miller, 2013).

Principal transitions can greatly impact school growth (Beteille et al., 2012) and in some cases induce setbacks (Branch et al., 2009). The phenomenon of principal transitions deserves scrutiny to determine how best to support principals to foster progress during times of change. The goal of this study is to understand how principals can navigate those transitions effectively by applying their leadership skills to their systems. The problem at the heart of this study is:

In an ever changing, complex system, such as a school, how can the person in the most advantageous position to promote growth and improvements be better positioned to do so within the reality of frequent principal turnover?

If we can better understand the nature of the change process in schools, we can limit the negative impacts of leadership turnover and provide principals with the skills and resources to influence lasting change, despite potentially short principal tenures in K-12 schools.

Research has shown that it can take a minimum of five years to create lasting school improvements (Fullan, 2001). If a significant number of principals leave their position within the first few years at a new school, then educational leadership research and practitioner programs may be helpful to promote understandings and skill development that address this tension. Operating from the assumption that leaders may be temporary could position leadership programs to provide principals with the skills and resources necessary to be effective within this shortened timeframe. This means finding ways to support principals to quickly identify the structural and cultural elements they

can leverage within the system to foster lasting, meaningful change. We should also consider the role of others in the educational system, such as teacher leaders and those at the district level to determine how they might support change during a time of principal transition. The leadership for adaptive change framework (Heifetz et al., 2009; Kershner & Mcquillan, 2016), applied to this research, provides a sense for the primary mechanisms leaders and other stakeholders can leverage to support instructional change and innovation. These factors include attending to arrangements of distributed leadership and communication, developing a shared cultural vision through which stakeholders can unite, and fostering trust to enhance relationships and strengthen system ties. Drawing from complexity thinking, the framework focuses on schools as complex systems and can be utilized by researchers and practitioners in an effort to identify patterns that support instructional growth and encourage the application of conditions that will contribute to system transformation. Applying this framework allows for an exploration of the whole system during times of change to identify the elements needed to foster and maintain transformational change.

Research Questions

In this longitudinal case study, I explored the degree of impact principal leadership had on the experiences of three Catholic schools led by the same principal. I sought to understand the change process each school underwent during her time as principal and the extent to which structural and cultural change initiated by the principal yielded both intended and unintended transformations in the three schools. The following research questions guided this work:

- 1. To what degree did the principal enact leadership for adaptive change at the three schools she led?
- 2. In enacting adaptive leadership, how did the process of emergence compare at each school?

These questions served as my guide in shaping my evolving role as researcher. My experiences as both a researcher and educator help to explain the personal and professional importance of this work and provide my motivation in completing this study. In the interests of transparency, I turn now to a discussion of my experiences leading into and informing this research, in order to explain the impact my own prior experiences on the direction of this study.

Biography of the Researcher

Questions of educational change have permeated my life and career since before I even entered the classroom as a first-year teacher in 2006. Since then, I have surrounded myself with fellow educators as colleagues and friends. Dinners with friends devolve quickly into "teacher talk," much to my husband's dismay. These conversations may start benignly enough with comments on a new school initiative or state policy, but deeper conversation always follows. For me it has never been enough to know what is changing—I have always needed to know why, how, and to what ends educational change occurs.

As an undergraduate, I studied politics and history with an interest in working in government, but opportunities to work with students from area schools spurred my interest in education. Upon graduation I began a job teaching social studies at a suburban high school. Immediately, I began to have a lot of questions about education. Once the

idealized view of education I acquired in college wore off, I started seeing trends and practices that gave me pause. For example, I saw students in different sections of identical courses having vastly different experiences, both in terms of content and pedagogy. There were no universal expectations and strategies for student achievement. I saw talented, passionate colleagues lose their love of teaching, as a result of too many administrator-led initiatives that they viewed as superfluous to their work as teachers. Though I worked hard to be an effective teacher, I still question the judgment of the administrator that assigned me to teach two sections of psychology as a first-year teacher, when I had never taken a course in psychology myself. These concerns with the education system made me want to better understand the field. I returned to university for a master's degree in education, drawn to courses on educational change and the history that gave way to the modern landscape of policy and practice.

Graduate courses gave me the language and context for what my colleagues and I were experiencing. My coursework and professional experiences complemented one another. "Initiative overload" (Grigg, 2016) was not an abstract term, but rather the perfect reflection for how I was feeling at the very mention of a new state-wide teacher evaluation system. When my district implemented 1:1 devices for all students, I was able to compare my school's experience with research from schools throughout the world undergoing similar technology adoptions. Just as some of the language and ideas matched my experiences, other ideas seemed absent from my world as a teacher. I learned about important ideas such as sustainable leadership (Fullan, 2004), opportunity gaps (Milner, 2021), and intelligent accountability (Tolo et al., 2020), but I did not see lessons from the research reflected in my immediate environment as an educator. What

became apparent was that, most often, changes in my school did not reflect best practices identified in the research. This insight gave rise to a new drive to not only study the research on education but conduct research and make recommendations of my own.

My doctoral studies are where my interest in educational change and my professional aspirations coalesced. As a graduate assistant, I was grateful to accept a position as one of the managing editors of the *Journal of Educational Change*. On a daily basis I read and discussed the work of other researchers who were actively pursuing research-informed solutions to the problems of educational change. I was drawn to the complications associated with efforts at globalization (Carney, 2009; Steiner-Khamsi & Stolpe, 2006), scaling educational change (Datnow et al., 2002), and sustainability (Hargreaves & Goodson, 2006). Researchers were routinely studying the topics that I cared most about and had experienced first-hand.

It was at once comforting and disquieting to know that researchers were looking into all of the problems I faced as a teacher but were still working on the answers. I left teaching to pursue my doctorate and after my first years in the program took a job as a project manager in a school district's curriculum office, hoping that I could have a greater impact at the district level. In my new position I planned and coordinated district professional development, led teacher leadership teams, evaluated teacher-developed curriculum, and implemented state policies. As a leader responsible for driving change throughout a district, I was now positioned to apply research-identified best practices in my own approach to change. Despite my desire to foster change, however, my actions alone were not sufficient to create lasting change. The distinction between directed and emergent change became significant. Though I saw much evidence of directed change in

the form of teacher evaluation measures, graduation policies, and discipline procedures, emergent change in the form of system transformation and adaptability was rare.

I found the language to think about tensions within these change processes in the field of complexity theory. Viewing the school as a complex system alleviated some of the misunderstanding I had related to the role of the leader. While much of the reading I had done up to that point about educational leadership and change was incredibly valuable and informative, it often positioned the leader as the dominant subject under study, subsequently relegating teachers, students, and other members of the school community to the background. Within a complex system the leader is but one agent working toward transformation. Leaders are important, but they alone cannot mandate emergent change. In my professional work, I began looking more closely at the structures and interactions that could assist or hinder my own efforts.

One important district initiative I organized during my time as project manager was the adoption of a new elementary reading program. This program was implemented district-wide across four elementary schools with expected vertical alignment with the middle and high schools. Teacher support for the program was essential, but tensions surrounded the adoption. Among the four schools, we identified over 50 reading programs currently in use by teachers in grades K-6. Some of these teachers had been using their preferred reading program for ten or more years. Other teachers had already experienced one or more new reading program adoptions, making this effort just another new requirement from the central office. Concerns were raised about the program's efficacy, cost, inattention to phonics instruction, and relevance of the student texts. With so many concerns being raised by various stakeholders, it was difficult to see how the

program could be installed successfully. However, the current state of instructional disparities could not continue. Some students were receiving expert reading instruction, but with dozens of reading programs in use, and a similar number of assessment tools, it was impossible to ensure a universal standard of reading achievement for students without common language and expectations around literacy.

I began to view the obstacles facing this program adoption as opportunity tensions (Lichtenstein, 2009) rather than potential barriers. Moving past the status quo was essential for growth, and I was in a position to help others navigate the tensions. For example, I coordinated professional development with the publishers and built in time for teachers to work with the program and identify issues. I was able to work closely with the teacher leadership team to communicate the positive aspects of this new program to their respective teachers, creating a two-way dialogue that gave teachers space to articulate problems that arose. I was able to contribute to the development of a district-wide literacy committee that was tasked with evaluating progress and making future recommendations into other areas of literacy. My shifts in thinking about the nature of systems and the role of the leader led to an appreciation for the importance of distributed leadership and the need for networks to foster change.

What I saw happen during this time was not a simple program adoption. I witnessed and was a part of system transformation. There was a coming into being of new structures to support reading in the district. In addition to the district literacy committee, the teacher leadership teams began to function more effectively and had new shared goals. The common language that was established in the district endured a shift in culture took place. There was less emphasis on the differences between the four

elementary schools, with an interest among teachers and administrators in finding commonalities and promoting a common student experience based on best practices learned from other schools. The literacy program adoption was not without difficulty, but in overcoming these obstacles I better understood the potential the district had going forward—that we could leverage the new structures and shared culture we created to foster change when future needs arose. All of these lessons have followed me during the course of this research.

The origins of this study predate my addition to the team. The research project on public, charter, and Catholic school principal graduates of Boston College's Lynch Leadership Academy (LLA) had been underway for two years before I began to participate in data collection. As a graduate assistant, still working in the central office, I began site visits at different schools conducting observations and interviews trying to unpack the change process in those contexts. I was drawn to the case of one of the principals in particular, a young Catholic school principal named Katherine. I had reviewed the data from her previous school and knew of the difficulties she had faced there. She had many ideas for how to improve her school but faced resistance to even the smallest changes. I participated in an interview where she described her new school context and reported a much more positive experience in her first year as principal. I was curious to understand what was different. How did the change process differ between these two schools? I jumped at an opportunity to conduct a site visit at the principal's new school in Maryland where I spent three days observing classes, meetings, and school activities and conducted interviews with the principal, teachers, and parents. The data were rich, providing many dimensions on which to compare the two school sites.

Originally, it was my expectation that this study would conclude after my trip to Maryland. There was so much data to analyze and two school sites to compare, it seemed I had a plethora of data to consider. However, in the midst of analyzing those data, the subject changed schools, and the opportunity arose to ask deeper questions about the change process. For instance, I wanted to understand how Katherine developed as a leader despite the interruptions to her school context. The data thus far helped me to ask questions related to Katherine's impact on the school during her time there, but now I had an opportunity to revisit those schools and see what changes endured after she left. I continued to conduct interviews with teachers and staff at the first two school sites, checking in with Katherine for interviews periodically and planned a site visit to her third school. During this time, I was wrapping up my course requirements and preparing my portfolio for licensure as a K-12 school principal. The questions that I was asking in my research led me to want to understand how to effectively foster change as a school leader.

Three years ago, I left my position in the central office for a job as assistant principal of an intermediate school. I had felt too far removed from the student experience, and I am grateful to again be working with students and teachers on a daily basis. Despite being happy in my current position and having no intention to leave, as a building administrator, I have a renewed appreciation for the reasons leaders leave their positions. I am lucky to be in an environment with a wide network of supports and clear and consistent accountability measures, and I share a similar philosophy of education with my principal.

However, many of my peers do not enjoy the same supports as I do and choose to change schools or move on to different positions altogether with a frequency similar to

that reported in the literature. They also report feeling disheartened when they seek to promote changes they feel are needed in their schools and those efforts do not take hold. Often, they are unsure of how to engage the system in the change process or what the change process even looks like.

This research draws upon my experiences and those of many of my peers—educational leaders who want to make a difference but do not understand transformational change. They rightly suspect that they cannot foster and sustain change without support from the whole school community, but they do not know how they can impact the structures and culture of a school to meet their goals. Even experienced leaders who have participated in educational change before may not fully appreciate the role trust plays in the change process. They may be surprised when, in a new school context, they do not have the impact they anticipated. By studying change through the lens of the school as a system, and the principal as only one part within this larger network, this research aims to contribute in new ways to our understanding of the role of the educational leader in change processes.

Introduction to Theoretical Framework

This long-term study explores many elements to determine the degree to which the same principal was a successful leader in three different schools. Using complexity thinking, I explore cultural and structural elements and evidence of trust as a means to understand the change process. To that end, this research applies a dual lens of complexity thinking and adaptive leadership to unpack how the change process unfolded at each school and to then theorize about what this means for our understanding of educational change and leadership.

I use the framework of adaptive leadership to identify the factors present at each school that were elemental to the change process. First, adaptive leadership requires a shift in power from a traditional hierarchical model to one that distributes power and authority throughout the system (Heifetz, 1994). Through the development of new networks, a distributed model of leadership fosters communication and collaboration. Second, adaptive leadership attends to the culture and values of the system that make change possible. As structural supports for change emerge, shared vision and culture provide a common foundation for new networks. Shared values and collective efforts to enrich school effectiveness assist members of the system in establishing the trust necessary to sustain transformational change. New networks connect individuals who may lack familiarity. Trust becomes key to developing group cohesion and the development of shared knowledge, collaborative decision-making, and opportunities to share expertise all serve as potential drivers to enhance trust in a system (Bryk & Schneider, 2004; Díaz-Gibson et al., 2017). Leadership for adaptive change addresses both the structural and cultural needs of the system during a period of transformation.

I use complexity thinking as a complementary theoretical framework to adaptive leadership as a means to explore the change process further and theorize about how the change process informs our understanding of educational leadership. This study utilizes the model put forth by Goldstein et al. (2011) to understand the leader's impact on the system. The authors conceptualize the emergence process as four overlapping phases: (1) disequilibrium—disruption to the status quo; (2) amplifying actions—new ideas and innovations are amplified in response to disequilibrium; (3) recombinations—changes in structures support new innovations and help them spread; and (4) stabilizing feedback—

new innovations that were earlier amplified are institutionalized throughout the system. For Goldstein et al. (2011), the emergence process occurs when complex systems, such as schools, come to alter their practices and structures in response to new sources of strain and thereby become more prepared to adapt to future challenges. The leader can guide the organization through the emergence process. Emergence is the result of the overlap and interaction among the four phases. Using these phases of emergence and recognizing the cyclical nature of the emergence process (McQuillan, 2014), I examine the extent to which emergent order and adaptability was achieved in each school. While leadership for adaptive change focuses on leaders' actions relative to particular interconnected dimensions of systems change, complexity thinking and the emergence process provide a lens by which to explore the related processes and broader impact of adaptive change.

Overview of the Study

In Chapter One I have described the rationale for this study, the significance of the problem of principal turnover, and my personal interest in addressing problems of change in education. In Chapter Two I review the literature from the fields of educational change and educational leadership, highlighting a gap in the field in which complexity offers a rich theoretical lens by which to view the change process. Chapter Three provides the methodology of this study, providing a description of the principal and the three school sites, and an explanation for how the research was conducted and how the data were analyzed. Chapters Four, Five, and Six are dedicated to the findings from each school site. Data were collected and categorized using the themes of adaptive leadership followed by an application of the emergence framework from the field of

complexity. Chapter Seven provides a cross-case analysis of the findings and a discussion of the practical and theoretical implications of this work.

Chapter Two—Literature Review

The overarching problem being explored in this study is the uneven impact of principal leadership in various school contexts and understanding the factors that lead to such outcomes. There are several bodies of literature that are significant to understanding the breadth of this problem—they include literature relevant to educational change, educational leadership, adaptive leadership, systems change, and Catholic education. Within the field of educational change, I will explore how complex change occurs, with a particular focus on the elements necessary for successful change, resistance and challenges to change, sustainability and transferability of innovations, and the role of various actors in the change process. Focusing in on the role of the principal, I will review literature that explores educational leaders' contribution to change and leadership challenges specific to the Catholic school setting. Importantly, literature within these fields can be incomplete at addressing the complex interplay of factors that impact change in school environments. They can also can be limited in their ability to explain how those factors might yield different outcomes, particularly across different school sites or over a lengthy period of time. I will conclude this review with a discussion of the theoretical framework underlying this work—that of complex adaptive leadership and the role of the emergence process, which can address gaps in the existing literature in the fields of educational change and leadership. This review will reveal the importance of the role of the leader in fostering complex change and highlight an important gap in traditional research in the field of educational change that can be supported by research applying a dual lens of complexity thinking.

Elements for Successful Educational Change

Much has been written about the significance of educational change for students (Lee, 2020; Leithwood & Seashore-Louis, 2011), teachers (Kim et al., 2013; Priestley et al., 2011), and the profession at large (Hargreaves & Fullan, 2012). Changes have reflected trends of inquiry in the field such as those related to standardized testing, databased decision making (Schildkamp, 2019), accountability measures (Lillejord, 2020; Tolo et al., 2020), professional collaboration (Daly & Finnigan, 2010; Stoll et al., 2006), and educational technology (Ertmer, 1999; Kim et al., 2013). At the core of the literature on educational change, there is an emphasis on identifying those elements needed for successful change and the means by which successful change may be replicated, transferred, taken to scale, and expanded (Fullan, 2011; Hargreaves & Shirley, 2012; Mehan et al., 2005).

Distilling findings from across the scope of this literature, the elements needed to foster successful change can be placed in one of two major categories. The first of these elements includes efforts at shaping the values, attitudes, and beliefs of individuals in the organization to respond positively to the proposed change. In a school, this might be achieved by naming shared values, providing time for teachers and students to voice anxiety related to proposed changes and ensure administrators respond to those concerns, and creating explicit connections between new change and existing values and priorities.

The second element for successful change requires that the organization attends to structural features that may promote change. In a school environment, these features may include distributed leadership through teacher leadership teams, professional learning communities, or new networks of support. Trust underlies and links these other main

elements, ensuring successful communication of values connected to change and garnering support for any potential structural adjustments that will be necessary.

The significance of structural and cultural elements on the change process is wellestablished in the educational change literature. A thorough review of studies exploring these dimensions establishes the foundation for the theoretical framework being used in the present study. As explored below, studies from the field of educational change have revealed the importance of attending to school structures (in the form of distributed leadership and enhanced communication networks) and promoting shared values and a common school vision. Complexity thinking, examined in detail later in this chapter, then adds to these findings from the field of educational change by expanding the scope of what is studied and providing a framework for examining all of these elements holistically. It emphasizes the importance of an iterative study of elements throughout the system, at different levels and across time, to further understand the change process. We turn now to a deeper exploration of the structural and cultural factors contributing to successful change endeavors that will help to inform the findings for this study and support the need for an enhanced theoretical framework to understand the complexities of school change.

The Role of Values, Attitudes, and Beliefs on the Change Process

Though the field of educational change has evolved over time, a central consideration has always been on the role of teacher values, beliefs, and attitudes towards new initiatives and reform (Garcia-Huidobro et al., 2017). Researchers have sought to understand not only the role that values, attitudes, and beliefs have on the change process, but how to overcome resistance tied to those values, including how to shift staff thinking

to positively embrace change. Effective change will reflect teachers' existing priorities or include mechanisms by which beliefs and attitudes towards education can be shifted and the reform can be met with little resistance (Fullan, 2011). Despite the established importance of attending to teacher values and beliefs, research continues to uncover examples of change efforts in schools that are met with teacher resistance, in large part due to a misalignment in perceived priorities (Kin et al., 2018; Priestley et al., 2011). Fortunately, there are ongoing efforts at identifying new and nuanced ways to shape and honor teacher beliefs to yield a more positive response to change (Branson, 2008; Lee, 2020).

The Importance of Teacher Beliefs and Attitudes. Both qualitative and quantitative research have sought to explore the link between teachers' attitudes and beliefs and the success of various change initiatives (Branson, 2008; Kin et al., 2018; Mellom et al., 2018; Pettit, 2011; Priestley et al., 2011). Findings from these studies indicate that change agents should identify mechanisms by which to account for teacher attitudes and beliefs before and during the change process so as to mitigate any potential resistance and to enlist teacher support for a collective effort based on shared values.

In an analysis and discussion of survey results from 936 teachers, Kin et al. (2018) found that teacher beliefs and attitudes towards change are directly linked to teacher behavior that supports change. This indicates that teachers with a supportive attitude and beliefs towards a change will engage in behavior that will lead to success of the change initiative. The authors surveyed teachers throughout Malaysia to determine important leverage points for government educational change efforts. Results indicated that teachers' attitudes toward change are shaped by their own observations as well as by

information received from outside sources. Significantly, principal competencies related to change directly impact teachers' beliefs about change and are also a greater influence on teacher attitudes towards change than individual influences such as teacher beliefs.

From a cultural perspective, when determining strategies for success, change agents should emphasize teacher beliefs and attitudes as primary sources of support or antipathy. School leaders can have a great impact on shaping attitudes and beliefs, if those elements are prioritized in the change process before teachers have the opportunity to become entrenched in their own views of the change.

Priestley et al.'s (2011) qualitative findings from a study of teacher networks among Scottish schools similarly found a connection between successful change and teachers' beliefs. Five subject-specific teacher networks, termed Associated Schools Groups (ASGs), were studied to determine the factors that may be important to sustaining change. The research team observed meetings of the ASGs, conducted focus groups with participants, and created case studies from interview data. Findings from these case studies indicated that teacher beliefs strongly influenced the change process. The ASGs provided space for like-minded teachers to convene and discuss their feelings relative to the proposed curriculum changes. They were able to collaborate, plan, and mediate any concerns they had prior to bringing those ideas back to their individual schools. The ASGs provided space and time for teachers to shape their beliefs and consider the benefits and implications of the change outside of their normal working day. Based on the positive outcomes generated through that experience, the authors advocate creating collaborative spaces and finding time as two crucial factors to ensure success for any initiative. Additionally, the authors cite enthusiastic leadership open to innovation and

experimentation as another important factor in shaping teachers' beliefs during times of change. Curricular change, which can be very personal and specific to a particular teacher, will undoubtedly be met with resistance if teachers do not believe it to be in the best interest of their students. Establishing collaborative teams for encouragement and granting teachers time to incorporate change will go a long way to shape teachers' beliefs in support of change by allowing teachers to clarify the nature of the proposed changes and consider the implications for themselves and their students, as well as from their colleagues' points of view.

Technology integration has experienced a surge in many schools throughout the world in the past two decades and demonstrates the significance of the role of teacher attitudes and beliefs on large-scale change. The changes associated with incorporating educational technology in the classroom can have both curricular and pedagogical implications for instruction and are therefore closely tied to teachers' beliefs and attitudes towards technology as well as to professional change in general. Kim et al. (2013) developed their study in order to explore the role that epistemological beliefs have on a teacher's use of technology. The authors argue that fundamental beliefs about the nature of knowledge and learning play a critical role in a teacher's decision to integrate technology in their teaching. As a means to verify the validity of this argument, 22 teachers were selected from poorly performing rural K-8 schools from southeastern states that received new technology and training through a previously funded program. A questionnaire was used to measure teacher beliefs, which were then confirmed through recorded interviews. Results from this study support the conclusions of similar studies into teacher beliefs regarding technology integration—namely, that beliefs about teaching affect technology integration (Palak & Walls, 2009; Waring, 2010; Zhao, 2007). However, Kim et al. take this investigation a step further by teasing out the specific beliefs that provide a barrier to technology integration, finding that teachers' fundamental beliefs about the nature of knowledge and learning determine their conceptions of teaching, and thus, technology integration. Change agents might naturally respond to these findings by seeking strategies to shift teacher beliefs about technology.

Interestingly, Kim et al. provide a note of caution about the ethical implications involved in seeking to change teacher beliefs. They determine that ethical issues can be minimal as long as changes build upon fundamental beliefs to improve student learning rather than targeting changes towards more specific beliefs that contradict teachers' understanding of the nature of learning (Kim et al., 2013).

Research into the role of teacher attitudes and beliefs on the change process reveals that teachers are unlikely to support a change initiative if their attitudes or beliefs do not align with the proposed change. Drawing upon this literature, we are able to consider teacher attitudes and beliefs in other change contexts. Teacher attitudes and beliefs play a significant role in the present study in terms of the degree of support the principal experienced as she implemented changes across the three schools.

Understanding how attitudes and beliefs impact the change process informs which strategies may best address problems that arise. We turn now to an exploration of the literature that has sought to find strategies for understanding and altering teacher beliefs to be more aligned to proposed changes.

Strategies for addressing values, attitudes and beliefs during the change process. In reviewing the research associated with teacher values, attitudes, and beliefs,

it becomes clear that change efforts can be stymied by misalignment with existing priorities and values. The question then becomes how change agents can account for this potential barrier. Researchers have identified specific ways in which teachers, administrators, and teacher educators can create a dialogue to first identify competing beliefs and then overcome any differences. The results of the strategies identified in this research offer the potential for less resistance to change tied to misalignment of values, beliefs, or attitudes.

Doing work to understand how differences in cultural values impact change in schools, Lee (2020) has conducted studies of professional learning communities (PLCs) working to adjust their teaching practices in Chinese Singaporean schools. Focusing on pedagogical change, Lee found that traditional Chinese values on education conflicted with Western values when teachers were tasked with establishing mixed-ability student groups in their classrooms (2020). The pedagogical aims of these teachers tended to reflect what Lee termed a "hyper-examination culture" that sought to focus on the success of high achievers and teacher-centered instruction (2020). This view contrasts with the expectation of Western educational ideals that prioritize respect for diversity among learners. To address the persistent educational and social mobility gaps between students of varying abilities, the Singaporean government encouraged a shift to more holistic learning practices. PLCs were tasked with implementing mixed ability learning groups in their classrooms.

The author found that PLCs composed of culturally homogenous teachers reaffirmed each other's traditional views of education, thereby restricting the scope of the proposed change in student groupings. In culturally diverse teams, even teachers who

individually valued more traditional educational strategies were swayed by their colleagues and experienced a shift in values towards mixed-ability learning groups. As Lee explains:

The more culturally homogeneous a team is, the more likely the members are to adopt conservative strategies to achieve group consensus. The more culturally diverse a team is, the more likely the members are to adopt progressive strategies to achieve group consensus. (2020, p. 291)

Findings from this study help researchers understand the importance of values in the change process. Values can become a barrier to change if teachers retreat to the status quo. To overcome this obstacle, a change initiative should include mechanisms for collaboration among culturally diverse teams that can challenge one another's values and assumptions about teaching and learning.

While collaboration has been recognized as a helpful strategy to overcome differences in values among teachers (Lee, 2020), the specific mechanisms for successful collaboration have been explored elsewhere in more detail (Branson, 2008). Branson offers a framework for values alignment through which members of an organization reflect on their own values and the values of the organization in order to reach common understandings. Members of a school community in Australia engaged in reflection on nested elements of organizational culture, including the school's core mission, success indicators, operational values, and guiding beliefs. Elements were discussed and the negotiated final product was recorded to provide a definition of the school's values to staff. This framework offers specific collaborative steps that a school leader may integrate into the change process, thereby linking values alignment with structural

changes. An emphasis continues to be placed on dialogue, collaboration, and communication as important mechanisms for altering teachers' values, attitudes, and beliefs, including in the professional development forum.

Professional development has been studied as a potential strategy for shaping teacher beliefs amidst pedagogical change. As a result of shifting population demographics, some teacher educators have found it necessary to utilize professional development to attend to prejudiced teacher beliefs related to their own students (Mellom et al., 2018). In many areas of the United States, including states in the south, the population of culturally and linguistically diverse learners has grown in recent years. The increasingly diverse student population stands in contrast to the predominantly white teacher population who have little experience working with students who are not Englishonly speakers, readers, and writers. Mellom et al. (2018) conducted a mixed methods study aimed at understanding how successful a new pedagogy was at raising test scores of diverse learners while also unpacking how teachers' beliefs evolved over the course of the implementation of the new pedagogical initiative. Half of the study participants incorporated the new pedagogy in their classrooms without any professional development, while the other half of teachers participated in periodic professional development experiences. All participants submitted bi-weekly questionnaires about their attitudes and beliefs towards their culturally and linguistically diverse students. The authors found that, for many of the educators, prejudiced beliefs remained throughout their participation in the pedagogical initiative:

For educators and researchers concerned with the well-being of ELL students, particularly in the New South, these findings present something of a mixed bag.

Whether manifested as a deficit mentality towards ELLs, benign neglect regarding their language needs or passive acceptance of home language use in the classroom, the findings here have outlined the degree to which cultural assumptions and prejudices still have a strong influence on many teachers' attitudes towards English Language Learners in the New South. (Mellom et al., 2018, p. 105)

However, the authors also highlighted that educators who participated in the professional development courses reported much more supportive beliefs and attitudes towards their students. Though it is unacceptable that any students should be subjected to teachers who hold prejudiced beliefs towards them, it is helpful to understand that researchers are identifying methods to shift teacher beliefs related to large-scale change. Pedagogical change, coupled with professional learning opportunities, was able to shift teacher beliefs from a deficit mindset to one that places value on the experiences and knowledge of culturally and linguistically diverse students.

Beliefs, values, and attitudes are both important to the change process and difficult to shift. It can take time for leaders to determine how to address these factors at the onset of new change initiatives. Conducting research in the Thai context, Hallinger and Kantamara (2000) found evidence of teacher and student resistance to change in schools transitioning to more modern styles of teaching and learning. This resistance was grounded in a misalignment between the change initiative and existing beliefs and values of members of the school community. For instance, the teachers felt the modern style of instruction challenged traditional cultural notions of hierarchy in schools. The authors recommend that concerns are brought to the surface and examined in advance of

implementing new changes; it is possible that school leaders may want to adjust their planning based on particular areas of concerns that are exposed. The authors also point to the possibility that people may seemingly agree with a leader's proposed changes out of deference only to express strong concerns at a later date. Delayed resistance can stop an initiative before it gains momentum. In extreme instances of cultural misalignment, a leader may believe they have the support of their staff where no such support exists. By intentionally exposing differences in values, attitudes, and beliefs, leaders can address any issues head-on rather than experience surprise if disagreements arise.

Despite the importance the research has placed on the role of values, beliefs, and attitudes to foster successful change, we now know that there is not one particular type of school vision that will ensure successful change (Mehta & Fine, 2015). Rather, it is through a coherent vision that is aligned to structural mechanisms and supported by a trusting environment that successful change is promoted. Mehta and Fine studied two schools with very different visions. The first, a no-excuses charter school, incorporated a vision that reflected the importance of a top-down hierarchy in all things. The curriculum was developed by administrators, taught by teachers, and learned by students. The school day was broken into short segments, all accounted for by administers and teachers. Students were expected to follow rules without question, and teachers were expected to operate in an environment of constant oversight. In contrast, the second school's vision of empowerment for all required collaborative structures whereby students and teachers developed the focus of the curriculum, and learning was a peer-to-peer endeavor. Project-based learning was supported in the school, where there were no bells or lockers and students directed the majority of their day. The authors emphasized that the school

was organized around a very specific vision for education, even though at an initial glance a visitor might find the environment chaotic. Mehta and Fine's findings indicate that despite such different purposes, each school was successful in achieving change because six different elements were in place in both contexts. These elements included granularity (a common picture of what good instruction looks like), thickness (a theory of adult learning), transparency (the visibility of teacher and student work), symmetry (the learning experiences of teachers and students looked similar), collective identity (a shared commitment to what made the school unique), and coherent organizational design (all the previous elements were tied together as one) (Mehta & Fine, 2015). The authors report that the values that each school promoted were not the sole factor that determined the success of their change initiatives, but rather, it was a combination of the underlying structures in place that contributed to the possibility for success by promoting those values. This article reveals how a shared vision for teaching and learning can be reflected in the structural supports of a school in order to foster successful educational change.

These studies examining the role of school culture on the change process have implications for the present study, in which the principal attempts to shift the culture and values at each school through a variety of mechanisms directly reflected in the research explored above. Some of her attempts at cultural change prove more successful than others, and unpacking why she experienced varied success and how cultural change impacted the rest of the system became revealing of the ways in which the change process can unfold. Cultural change alone cannot sustain lasting change. Cultural considerations should be paired with structural supports to promote the diffusion and saturation of a change (Mehta & Fine, 2015). The following section offers an exploration

of the structural supports that, when paired with attention to school values and culture, provide the mechanisms to support enduring change.

The Role of School Structures on the Change Process

In addition to the organizational elements identified by Mehta and Fine (2015), other researchers have done work to uncover structural elements that can support change efforts in schools; included among these are distributed leadership, professional learning communities, and networks of support and accountability. In sum, these organizational devices seek to address the power relationship present in education and provide avenues for increased participation in the decision-making process. These strategies attend to the concern raised by Sarason (1993) in which he cautions change agents not to neglect the power relationships that exist prior to introducing a new change:

Schools and school systems are political organizations in which power is an organizing feature. Ignore relationships, leave unexamined their rationale, and the existing system will defeat efforts at reform. This will happen not because there is a grand conspiracy or because of mulish stubbornness in resisting change or because educators are uniquely unimaginative or uncreative (which they are not) but rather because recognizing and trying to change power relationships, especially in complicated, traditional institutions, is among the most complex tasks human beings can undertake. (Sarason, 1993, p. 7)

By creating organizational devices that share power and authority, change agents reveal existing relationships and determine strategies for altering those dynamics in ways that will promote change.

In the sections that follow, I explore three structural mechanisms studied in the educational change literature that have been found to provide support for change initiatives: distributed leadership, professional learning communities, and networks of support and accountability. These three mechanisms are relevant to the present study in that the principal engages them each, to some degree and with varying success, at the three schools. Exploring the literature that has studied these structural strategies in detail provides an understanding for how this study can investigate changes in power and authority in schools.

Distributed Leadership. The concept of distributed leadership in schools goes beyond the assumption that most decision-making authority is nested within the principal's office. Theoretically, distributed leadership finds that leadership is not so much shared as *stretched* over the school environment (Spillane et al., 2004). Different individuals have different agency in the decision-making authority, and if one seeks to implement change, they first must understand how that authority flows throughout the system. Distributed leadership does not suppose that power resides solely in the hands of the principal to be shared in a hierarchical fashion with trusted subordinates. Rather, authority over different aspects of the school exist among a range of individuals and understanding the interaction of these various individuals will reveal how leadership is distributed and important leverage points for change. Harris (2007) provides the following normative definition of distributed leadership in order to explain how the theoretical construct is applied to the school context:

[Distributed leadership] is a form of concerted action which constitutes the additional dynamic that occurs when people work together or that is the product

of conjoint agency. It is a form of lateral leadership where the practice of leadership is shared amongst organizational members and where decision-making is governed by the interaction of individuals. (Harris et al., 2007, p. 339)

Researchers such as Harris et al. (2007), Spillane (2001), Struyve et al. (2014) and Leithwood et al. (2007) have used the concept of distributed leadership to investigate optimal strategies of sharing authority in a school system so as to foster positive responses to change.

In their 2007 review of research on distributed leadership, Harris et al. found that certain configurations of leadership distribution can have a positive impact on change efforts. Notably, the interactions brought about through a pattern of distributed leadership provides for capacity building among leaders, since collective expertise is shared. In addition to enhanced leadership competencies, distributed leadership has been tied to improved student outcomes (Harris et al., 2007). In terms of the best way to structure leadership in a school, Harris et al. recommend first determining which individuals within the school can apply their expertise most effectively to promote student learning, and second, that whatever configuration is selected is planned in advance rather than designed in the midst of a change effort. As the authors explain, distributed leadership rejects the assumption that a single leader is capable of transforming schools:

The hope of transforming schools through the actions of individual leaders is quickly fading. Strong leaders with exceptional vision and action do exist but unfortunately they do not come in sufficient numbers to meet the demands and challenges of today's schools. An alternative conceptualization is one where

leadership is distributed and understood in terms of shared activities and multiple interactions. (Harris et al., 2007, p. 345)

Though more research is needed into the efficacy of particular configurations, distributed leadership is considered potentially more effective than relying on a single leader at promoting successful change in schools.

In keeping with the findings from Harris el al.'s (2007) broader review of the literature, Spillane et al. (2001) similarly report benefits from a distributed form of leadership in schools. Drawing from their four-year longitudinal study of leaders in 13 Chicago elementary schools, Spillane et al. found that leadership responsibilities were often stretched to include principals, assistant principals, curriculum leaders, and classroom teachers. The authors provide additional methodological guidance on how to understand leadership practice as distributed throughout a school by distinguishing between espoused and enacted leadership practice. They advocate for research capturing a combination of what the school leader actually does in practice with what they strive to accomplish through reflections on practice. This perspective assumes that individual self-reporting may not fully align to leadership activities. To acquire these data, researchers must look to a multitude of sources including artifacts, tools, and language. Spillane et al. encourage a broader interpretation of leadership that empowers multiple individuals throughout the system to engage their expertise in the change process.

[T]he distributed perspective also suggests that intervening to improve school leadership by focusing exclusively or chiefly on building the knowledge of an individual formal leader in a school may not be the most optimal or most effective use of resources. (Spillane et al., 2001, p. 27)

The distributive perspective's emphasis on studying leadership activity and thought using several data sources to advance the entire system engages more points of leverage for change than theories of leadership reflecting a more traditional "heroic leader" model (Manz & Sims, 1991).

Reporting on teacher leaders from Flemish elementary and secondary schools, Struyve et al. (2014) found that increasing opportunities for teachers to engage in leadership roles increased interactions throughout the school. These teachers took on additional responsibilities beyond their instructional duties, including mentorship, special education, and curriculum coordination tasks. Interviews from 26 participants indicated that those in the teacher leader role experienced advantages as well as drawbacks from their new positions. Specifically, teachers reported dissonance with how their colleagues and they themselves perceived their new role. It became difficult for some to navigate their relationships with other teachers, given the altered power dynamic in place. As a result, teachers reported feeling lonely; they did not feel part of the teaching staff, but neither did they feel like administrators. Further research is needed to determine how best to help teachers navigate the politics of their positions as leaders. Teacher leaders provide an important bridge between the teaching force and the administration, thereby improving the potential for communication and collaboration. Despite the potential social consequences, the authors reported that teacher leadership is both efficient and effective as a means to increase interaction among colleagues working toward change (Struyve et al., 2014). For the present study, investigations of teacher leadership are critical to unpacking the change process in each school and contribute to our understanding of the potential sustainability of change over time.

Leithwood et al.'s (2007) in-depth exploration of distributed leadership in the school context included teacher leaders and principals, as well as district administrators such as superintendents, curriculum directors, a consultant, and a board chair. The district was specifically chosen as a site to investigate patterns of distributed leadership because the district leadership team had a reputation of committing to distributed leadership in substitution of a more hierarchical model. Teacher leaders were identified through peer surveys, and their behaviors and activities were analyzed in a series of interviews. The leaders took part in what the authors describe as four primary categories of leadership functions: setting direction, developing people, redesigning the organization, and managing the instructional program. Though formal district-level leaders and teacher leaders both engaged in all four categories of leadership, the teachers and district leaders often engaged in different behaviors in each category. For example, district leaders were responsible for identifying the vision of the districts and schools while non-administrative leaders were responsible for creating high performance expectations based on the vision (Leithwood et al., 2007). Additionally, findings indicated that planned and aligned patterns of distributed leadership only emerged when the principal directed leadership opportunities to the staff. There was no evidence that patterns of distributed leadership emerged spontaneously, meaning that even in a distributed system, a focused leader still has an important role (Goldstein, 2011; Lichtenstein, 2009). This dynamic meant the researchers observed an increased demand on expectations for leaders:

Our evidence as a whole indicates that distributing leadership to others does not seem to result in less demand for leadership from those in formal leadership positions. However, it does produce greater demand: to coordinate who performs which leadership functions, to build leadership capacities in others, and to monitor the leadership work of those others, providing constructive feedback to them about their efforts. (Leithwood et al., 2007, p. 63)

Though perhaps more taxing on the part of the administrator, the commitment to distributed leadership was still found to have had a positive impact on high priority change initiatives and provided opportunities for teachers to develop their leadership capacities.

Despite the encouraging findings from the previous studies, distributed leadership has not been without criticism. Among the critiques are that conflicting priorities may arise (Storey, 2004), colleagues may not treat other teachers with as much respect and deference as they would a formal leader with traditional authority (Timperley, 2005), and distributed leadership could be used as a more palatable way of implementing what is still essentially a top-down reform (Hargreaves & Fink, 2009). Going so far in her criticism as to compare distributed leadership to a virus, Lumby (2016) expressed concern that the hybridization of distributed leadership increases its adaptability but also allows the theory to evade necessary scrutiny. For example, as distributed leadership moves from theoretical to normative in the empirical research cited above, there are instances where the distribution of leadership roles is directed wholly by administrators (Leithwood et al., 2007) and not as much "stretched" as conceived by Spillane (2001). Though there has been criticism of distributed leadership as a strategy to promote change, generally it has been found that methods for improving communication and collaboration are superior to

the historically identified trap of isolation as a factor plaguing the teaching profession (Lortie, 1975).

Professional Learning Communities. Professional learning communities (PLCs) offer another structural mechanism by which schools can organize ideas, learning, and collaboration, thereby contributing positively to change. Typically comprised of a group of educators, PLCs meet periodically to collaborate in learning on a variety of topics. Stoll et al. provide the following definition of PLCs in their 2006 review of the literature: "[PLCs are] a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way" (2006, p. 223). The goal of PLCs is capacity building through learning and collaborating with colleagues (Stoll et al., 2006). Increased capacity among teachers has been shown to have a positive impact on change efforts. Stoll et al. identify five characteristics necessary for enacting a successful PLC: shared values and vision, collective responsibility, reflective professional inquiry, collaboration, and promoting group as well as individual learning (2006). Distributed leadership has been found to be elemental to the collaborative work of PLCs (Stoll et al., 2006), indicating that structural mechanisms established in schools do not act on the system in isolation, but rather interact with other system elements and together contribute to emergent outcomes. Empirical researchers such as Philpott and Oates (2017), Owen (2014), and Wells and Feun (2013) have explored PLCs throughout the world to understand how they can engage in and contribute to the change process.

Philpott and Oates (2017) explored PLCs in Scotland, finding them to be a potential source of empowerment for teachers. At the four schools that implemented

PLCs tied to Learning Rounds, the collaborative groups observed one another's practice and had regular meetings to discuss and develop plans for change. There were several obstacles to change identified by the authors, but the collaborative nature of the PLC enabled a space to overcome those obstacles. One such obstacle emphasized by the authors is the lack of an expressly identified purpose for the work of PLCs. This should encompass both a theory of action and a theory of practice. A clearly defined theory of action will help move the system away from the status quo, as Philpott and Oates explain: "Leaving theories of action implicit reifies mandated practice" (2017, p. 231). Just as criticisms of distributed leadership are concerned about the structure being usurped in an effort to maintain top down dominance of leadership, there is a similar concern that this can happen in PLCs. Philpott and Oates explain that theories of practice, once established, can be used by teachers to reflect, improve, and take ownership of PLCs (2017). The second obstacle identified by the researchers was a narrow focus, limiting the scope of change. Again, the PLC becomes useful to overcome this obstacle because it offers teachers the opportunity to expand their scope of understanding by learning from others with different points of view and thus widening their focus related to instructional difficulties. As Philpott and Oates outline, PLCs can positively contribute to the change process as a forum for intersecting ideas, but it is important to establish guidelines at the outset so that collaborators can have a sense of expectations by which to guide their efforts.

In her 2014 exploration of PLCs in Australia, Owen similarly found that PLCs fostered important change in the three schools under study. Each school established PLCs which were given the flexibility to determine their own area of focus. One school

was focused on action research, and PLCs participated in conference and site visits to other schools. The second school had PLCs comprised of classroom teaching teams who had opportunities for ongoing collaboration and peer observations on a daily basis. PLCs in the third school focused on curriculum development and derivatization of practice through peer observation. Autonomy was cited as a key element for the success of the PLCs. Teachers were given the power to direct their own learning and therefore were more successful in reaching objectives they had a hand in crafting. In addition to increased professional learning, findings indicated that student outcomes also improved as a result of teacher participation in PLCs. Different PLCs were found to be at different stages of maturity in their practice. Some PLCs were still negotiating their learning outcomes, and individuals were less focused on peer learning and more focused on student learning. More mature PLCs had recognized the importance of peer learning in contributing to change and had begun to take responsibility for their role in collaborative learning. From these case studies, Owen offers insight into the factors necessary for PLC success. In addition to teacher autonomy, findings from the three schools indicate that time, resources, and a clear direction are crucial elements to the success of the PLC work (Owen, 2014). Leadership was found to have an important role in the success of the PLCs by setting up the conditions necessary for teachers to have the time and resources needed to complete the important changes they identified in collaboration with their colleagues.

In the United States, Wells and Feun conducted a mixed methods study to investigate the success of implementation between PLCs at different schools, finding that similar factors impacted the success of the PLCs at each location. They conducted their

research at eight middle schools across two districts (four from each district).

Quantitative data from surveys confirmed by qualitative interview data indicated that one district was successful in implementing a learning culture around the work of PLCs whereas, in the other district, teachers reverted to a culture of privacy and did not feel comfortable discussing their work with colleagues. The implementation of the PLCs differed greatly between the two districts. One district rejected the structure and one embraced the opportunity for collaboration. These differences are significant because they highlight the factors that can result in successful PLC implementation and thus the increased likelihood of successful change. The successful district invested in time and training for teachers to learn about the work of the PLC and the work related to student learning that the PLC would be engaged in. Teachers were familiar with and valued the work being done before starting their time in the PLCs. In learning districts, the PLCs promoted a culture of change where teachers were compelled to share their practice. Even if they did not report learning new skills or strategies, their colleagues reported that the PLC's conversations indicated that they were learning something. The other district remained largely stagnant. Teachers felt they were not given the time or resources to commit to the work required. They felt they were being forced to engage in work they did not agree with, such as common assessments. Trust appears as a major theme in the findings, indicating that the success of collaborative structures in schools is tied to the trusting relationships formed among colleagues as well as with building and district leadership (Wells & Feun, 2013). Consistent with Owen's (2014) findings, Wells and Feun found that leadership has a large impact on the success of the work of PLCs by supplying the time, tools, and guidance necessary for implementing change.

Despite considerable enthusiasm for PLCs as a potential lever for change, there have been notes of caution in the literature. For example, Talbert (2009) expresses her concern that, if not properly established, PLCs can actually alienate teachers by forcing them into mandated work with a narrow focus that gives teachers little latitude to explore their work without extensive oversight. This stands in contrast with the purpose of PLCs, which is to allow space for teachers to collaboratively critique and grow their own practice. PLCs work best if there is a diversity of ideas and not simply an echo chamber and pattern of groupthink (Lee, 2020). Additional researchers have concerns that leadership mandates can negatively impact teacher collaboration. Hargreaves and Dawe caution that without space for collegial relationships to form, teacher collaboration can devolve into a state of *contrived collegiality* (1990). As with distributed leadership, we find that more opportunities for collaboration in schools have a positive impact on change efforts, but it is worth considering the factors that promote successful collaborative environments prior to initiating changes in the structures of schools.

Networks. Networks in education can include those within the school system, such as district leaders, administrators, teachers, and specialists, as well as organizations and individuals connected to but apart from the school system, such as parents, consultants, and local associations. Researchers studying both inter- and intra- organizational networks focus on the interaction between individuals rather than the characteristics of those individuals, such as their personal knowledge, beliefs, and values. The emphasis is on the strength of network ties and their resultant impact on the system. Though weak ties can be helpful when seeking to share information across a system, stronger ties are necessary to effect change. As Finnigan et al. explain:

Enhancing the strengths of ties between horizontal levels within an organization is critical to building an organization's capacity for change. Intraorganizational interaction and communication, for example between schools in a district or between divisions in central office, is important for the diffusion of new ideas and the facilitation of knowledge transfer and innovation. (Finnigan et al., 2013, p. 480)

Capital comes from one's position within the network—those with increased opportunities for interaction have more information, social capital, and decision-making capital, thereby having more influence on the change process (Bjorklund et al., 2020). Enhancing networks offer another structural opportunity for schools to promote change through the assistance and capacity of additional individuals. This review is interested in both research into networks within schools (Daly & Finnigan, 2010) as well as between schools and other organizations (Díaz-Gibson et al., 2017; Johnson et al., 2016) which offer a sense for how networks can contribute to change initiatives.

In a 2010 study, Daly and Finnigan used social network analysis to analyze networks among district and building leaders. District leaders' relationships with school-based principals have been found to be especially important to the change process.

Setting expectations and plans of action, district leaders work with building leaders to execute plans and implement change initiatives. Communication between the two groups is important to ensure that change efforts are successful. Tracking over 3,000 potential network ties, the authors found that only a small portion of those ties (22%) occurred at a high frequency. This indicated that opportunities for communication and collaboration were being greatly underutilized. Consequences of the weak network ties were

illuminated in the study's findings. Researchers found a combination of sparse ties in school-to-school connections and a highly centralized network of communication, signifying steady communication within the district level leadership team but weaker connections between individual schools. This is significant, because while weak ties can support the conveyance of simple information, stronger ties are required to support problem solving and the communication of complex knowledge. Equally important is the researchers' finding that network ties can become stagnant over time. As networks become entrenched in certain patterns, it becomes more difficult to affect change. Threat rigidity is also a potential consequence for weak tie networks that do not allow for the inclusion of divergent ideas. The organization may retreat to past practice and comfortable ideas reinforced by those central to the network. Charting a network's pattern of communication and identifying opportunities to shift the network's structure is an important step in the change process both to open the network to new ideas and possibilities as well as to create patterns for sharing complex knowledge and promoting change. These researchers explain the importance of network ties within the school system and how variation in strength impacts the change process (Daly & Finnigan, 2010). The present study similarly investigates the role of networks in supporting change efforts. We turn now to related work conducted to expand our understanding of how networks can promote change efforts facilitated by schools in coordination with outside organizations.

Johnson et al. (2016), similar to the work by Daly and Finnigan, studied networks and their relationship to the change process. Differing from Daly and Finnigan, Johnson et al. expanded the scope of the network to include individuals not employed by the

school. All participants in the study were taking part in a year-long curriculum initiative to create and adapt a digital STEM curriculum. Participants from the school included high school algebra teachers and curriculum specialists who were working in conjunction with a team of university researchers and an engineering team focused on the curriculum's online repository. The curriculum was intended to be co-designed by researchers and teachers and this study investigated the tensions that arose within the network and what level of success they experienced. Findings indicated that by positioning teachers as co-designers of the curriculum, they became stakeholders in the process. Rather than receiving a top-down mandate for change, they participated in the creation of the curriculum and had more of an interest in its success. The change effort was not without tensions. Researchers and teachers shared a common vision, but at times, their expectations differed. Researchers met this challenge by exposing the tensions and seeking compromise. This process led to continued momentum of the curriculum design process, but at times stunted teachers' eagerness, as a result of delays in the process to address tensions. The researchers report that addressing tensions was imperative to the continued success of the work of the co-design team. Exploring relationships within a diverse network revealed that networks comprised of members outside of the school building can provide a level of expertise that has a positive impact on teachers' professional development and the change process, because they can bring new ideas into this context.

Partnerships between schools and community networks have also been found to have a positive impact on the change process. Díaz-Gibson et al. (2017) studied Educational Collaborative Networks (ECNs) across Barcelona, Spain. Their

investigation of 18 ECNs focused specifically on the experiences of a network of leaders from the ECNs (essentially a network of leaders originating from 18 individual networks), each with relationships to their own organization and a distinct relationship within the network. Results indicated that building collaborative relationships across ECNs was challenging because each leader came from an organization with its own culture. Relational trust was an important factor to enhance collaboration. The authors recommend the following drivers to enhance trust within a network: (1) space and time to develop shared knowledge; (2) opportunities to learn together as a team and share similar levels of expertise; and (3) engagement in collaborative decision making (Díaz-Gibson et al., 2017). These strategies for establishing a successful network mirror the essential aspects needed for building relational trust outlined by Bryk and Schneider (2004) creating space to demonstrate one's competence, sincerity, and reliability. The ECN leadership network was designed to bring leaders together to share ideas and innovation. Therefore, it was less concerned with individual responsibilities and task completion. Generally, the authors found that networked leadership was a successful strategy for ECN innovation. Leaders came together to share ideas and brought those ideas back to their ECNs for implementation. The one potential hindrance to networked leadership as a viable strategy for network innovation highlighted by the authors is a lack of trust, and using the specific steps outlined in this article could help networks overcome that obstacle in the future.

Work studying the significance of the contributions of outside networks on school change is important to the present study because the principal engaged with outside organizations to promote change in her schools. Additionally, broadening the scope of

what is studied in the field of educational change is important to enhancing our understanding of the complexity of the change process in schools.

Networks have a lot to offer but are only one structural strategy among many. Speaking about networks of community organizers, Shirley cautions to not hold one strategy of educational change as the ultimate solution:

Education is also far too complex and nuanced of a field for any single political perspective or even the most gutsy and determined activists to attain an exclusive purchase on the many problems of reform. When adapted and infused into a broader repertoire of change strategies, however, community organizing has much to offer for the way ahead. (Shirley, 2009, pp. 235–236)

Networks can face obstacles to change from the entrenched bureaucracy of many schools and districts. Additionally, it is often difficult to reach consensus in a networked system that brings diverse individuals and interests together (Gold et al., 2002). Despite these difficulties, the research into educational networks reveals that, when applied in conjunction with other structural supports, networks provide another viable strategy to promote educational change.

The organizational strategies reviewed above, distributed leadership, PLCs, and networks are among other means by which schools can improve collaboration and share decision-making responsibilities. They are important to this study because each was a strategy employed by the principal in at least one of the three schools that she led. Additionally, these structural arrangements contribute to the professional capital teachers experience by contributing to their human, social, and decisional capital (Hargreaves & Fullan, 2012). By enhancing the knowledge and collaborative potential within schools,

any of these strategies can be used to positively affect the change process. However, structural elements alone cannot guarantee positive or lasting change. Teachers, and indeed any individual involved in a collaborative network or community, will not readily participate if they do not trust others involved. Trust can be established if the individual feels valued and respected. Leaders can address this potential source of tension by establishing norms and expectations that team members may disagree with, but only through respectful exchanges (Bryk & Schneider, 2004). Bryk and Schneider emphasize the role of choice in organizations to promote trust and contribute to change. If teachers feel they have the choice as whether to participate in different collaborative teams, they are more likely to trust their association with the school and school leader (Bryk & Schneider, 2004). They also need opportunities to do something of importance with their colleagues to generate relational trust (Bryk & Schneider, 2004). A trusting dynamic within educational structures is more likely to contribute to lasting change. It is the combination of structural and cultural considerations, augmented by relational trust, that promotes enduring change.

The Importance of Addressing Both Structural and Cultural Considerations

Cultural and structural considerations in the change process are sometimes researched as independent concerns, but often they are viewed as overlapping elements that should be addressed simultaneously (Datnow et al., 2002; Mehan et al., 2005). Though change efforts may lead with a focus on structural, cultural, or technical change, they must inevitably address all factors or risk the success of the effort (Datnow et al., 2002). Reformers misidentifying the changes they seek to make as technical rather than adaptive changes may not address the cultural and structural elements that require

adjustment for the change to be successful. Many educational reforms are adaptive in the sense that they require attention to the beliefs and culture of a system, though leaders may find it easier to address technical aspects associated with the change effort. Technology-driven change is one example of an adaptive change with technical elements that requires technical as well as structural and cultural changes to foster success.

Studies of technology-driven change have found that teachers often face a mix of first order (external) and second order (internal) barriers to change (Ertmer, 1999; Park & Ertmer, 2008). Though leaders can more easily address first order barriers such as expanding technology infrastructure or providing time for teachers to develop technical skills, it is more difficult to tackle second order barriers which often require a shift in teachers' beliefs toward technology. Shifting teachers' attitudes and beliefs regarding technology integration would require leaders to develop and share a vision for technology use that turns the focus from the technical aspects of the technology to thinking about how they can leverage the technology to grow as an educator (Ertmer, 1999). A study by Park and Ertmer (2008) of a technology-enhanced project-based learning model included a survey and observations of teachers and administrators at the middle school level. The authors found that members of the school system reported differently on which barriers of technology integration were most significant. For instance, teachers cited a lack of feedback from administrators as a barrier to adopting the PBL model because they did not have a sense as to whether or not they were on the right track. In contrast, administrators thought a tool provided to teachers for self-evaluation was an adequate mechanism for feedback and growth. Despite these differences, lack of a shared vision was reported as the primary barrier to technological change:

A major finding of this study was the disparity and uncertainty about the vision for this specific effort. Specifically, faculty members emphasised teachers' pedagogical change through the use of PBL, while school administrators emphasised teachers' uses of technology. This led to confusion among the teachers regarding what they should accomplish. (Park & Ertmer, 2008, p. 641)

These findings emphasize the cultural dimensions of change, the role of values and beliefs, throughout the process. The findings reveal the importance of communicating a clear, shared vision during the change process as well as attending to structural shifts that will allow teachers to share in decision-making.

In a 2013 study of change in the government schools of the United Arab Emirates, Ibrahim et al. (2013) found that teachers resisted change on multiple dimensions that had both cultural and structural dimensions. Their survey of 255 teachers revealed that teachers resisted change for psychological, personal, and cultural reasons. Included among the concerns were the taxing impact simultaneous change had on teachers and that teachers frequently felt left out of the change process. Of all the concerns cited, teachers highlighted the importance that change not interfere with the existing cultural priorities of the teachers and school: "The most distinctive factor for resistance that was evident in the UAE context is that teachers were worried about their cultural values and norms, which might be jeopardized by the new curriculum created mostly by foreign consultants" (Ibrahim et al., 2013, p. 34). This sentiment is important because often changes in education are developed in one region and applied to a different school context without regard for the cultural factors that contributed to the initiative's success in the first location (Hargreaves & Shirley, 2012; Nieto, 1998). Successful change initiatives will

anticipate potential cultural resistance and identify ways to incorporate teacher input when developing their plan for change.

Resistance to educational change can be difficult to overcome, particularly when an instructional change deviates greatly from traditional instructional methods. This was the case in Mexican middle schools that adopted the Program for the Improvement of Educational Achievement (PEMLE) a framework for transforming instructional strategy in which students became instructors for other students and adults and likewise learned from their peers (Rincón-Gallardo & Elmore, 2012). Elmore and Rincón-Gallardo report on this framework as part of a larger Learning Community Project (LCP) change initiative that has now spread to thousands of schools throughout the country. They found that to think of the LCP as a social movement, in addition to an educational change, reveals different leverage points needed for successful implementation of the model in an increased number of schools. By attending to motivations, mobilizing structures, and political opportunities, leaders of the LCP constantly revised different aspects of the program when entering new contexts. For example, in community meetings, leaders and educators would negotiate school visit protocols or expand professional development time to meet the wishes of the local community. There was a focus on finding ways to adapt the program with local communities to increase support. The LCP model itself seeks to foster understanding among and between learners, unlike a traditional teacher-driven learning structure. Similarly, as a policy, LCP integrated mechanisms by which local communities could have influence over the change, in contrast with many top-down reforms:

[T]he distinctions between teacher and student and between policy and practice are blurred. Instead, teaching and learning and policy and practice are conceptualized and performed as dialectical and horizontal relationships of mutual influence. As a practice, LCP blurs the boundaries between teacher and student... As policy, LCP blurs the borders between policy and practice by keeping a strong link between design and implementation, whereby any participant in the program, regardless of his formal role in the educational institution, is expected to master and model the practice of tutorials. (Rincón-Gallardo & Elmore, 2012, p. 485)

The goals of the LCP integrate elements of cultural and structural change to shift the framework of teaching and learning and mobilize commitment to the program.

Cultural and structural elements comprise two main obstacles to successful change as well as two strategies for improving change efforts. Often, both need to be addressed for a particular change to be successful. These concerns are central to one oftcited goal of educational change research—to identify best practices for growing and expanding change. Patterns of growth are central to this study, both within each school and in growth in leadership practices accumulated by the principal throughout each school transition. To better understand the importance of this goal of change, we turn now to an exploration of the literature specifically concerned with expanding change efforts.

Growing Change in Education

In addition to uncovering the factors that contribute to or impede the success of change efforts, researchers in the field of educational change often report on the ways in

which positive change can be expanded. Expansion or growth may include transferring an initiative or policy from one context to another (Mehan et al., 2005; Steiner-Khamsi & Stolpe, 2006) or scaling the effort from a single school to multiple schools, districts, or states (Datnow et al., 2002; Fleisch, 2016). Through growth and expansion, change agents hope that their policies or reforms will have a similar positive impact in a new setting. Researchers studying transferability, sustainability, and scalability of change have noted the importance of attending to structural and cultural dimensions of the system to promote change in education. Research in the area of growing change is important to the present study because a greater understanding of the change process should reveal ways in which to make change more successful, including applying lessons learned in new contexts.

Transferability of Change

Transferring change from one setting to another requires a similar level of planning as did the initial change effort. As in all complex systems, there are cultural, structural, political, and technical dimensions that will impact success. Even among what might be considered smaller transfers, such as from one grade level to another, these factors exist and need to be addressed. Mehan et al. (2005) studied a district-wide literacy reform in San Diego Schools in the mid-1990s. The reform focused on enhancing literacy instruction and student outcomes among elementary students, later transferring the initiative to the local high schools. Teacher professional development was seen as central to the efforts on improving student learning. Teachers were positioned as communities of learners themselves to learn with their peers and adopt best practices that would move the reform forward. Though the initial initiative was

successful—there was documented growth in student literacy scores among elementary students—shifting the program to the high school level proved difficult. The authors found that the literacy program was not easily transferable to the high school level because the literacy learning paths of elementary students differ from those of high school-aged students. In addition, high schools are organized differently than schools in the lower grade levels so the reform could not be implemented in the exact same way. The findings from this research support findings from previously mentioned studies that attention to the cultural and structural elements within a district are paramount to the success of a change initiative. District leaders found that distributed leadership, rather than a top-down approach, was more effective at supporting change and updated their theory of action to reflect that idea. Additionally, due to the variety in school cultures, it was important that each school was able to adopt the reform within their own school's identity.

In a larger scale case of transfer in educational change, Steiner-Khamsi and Stolpe (2006) studied global market-oriented reforms in Mongolian schools. The authors' findings emphasize a large gap between "policy talk and policy action" (Steiner-Khamsi & Stolpe, 2006, p. 186). Despite what reformers perceived as important international trends in educational standards, such as student-centered learning, outcomes-based education, or vouchers, the enacted policies differed greatly when applied to schools in Mongolia and indeed differed between schools within Mongolia as well. In many cases, local versions of global education reforms were already in place, rendering their application moot. The authors found that few reformers considered the needs of the schools, focusing instead on the perceived importance of global trends in education. The

authors caution educational change agents to consider the likelihood that transferability from one context to another is not easy and the outcomes may vary. Many elements must be considered when transferring change—political, structural, cultural, and technical aspects of both contexts. Simply assuming that a change is best, perhaps for political or economic reasons, neglects the needs of the local or regional context. There are many potential obstacles to the transfer of educational reforms, and only by addressing the structural, cultural, and technical elements related to the new and original contexts might the reform have a chance at success.

Scaling Change

Many are interested in replicating successful change, and one way to do so is to scale change for a larger impact. Datnow et al. (2002) report on seven reforms brought to scale from one school or classroom to anywhere between 500 and 2,000 schools. Many of the reforms were focused on curricular changes and efforts to improve student outcomes. Synthesizing data and findings from studies on each reform movement, Datnow et al. find similar themes recurring in each effort to bring the reform to scale. One common theme arising in each study includes the importance of accounting for power relationships and educator beliefs when devising a plan for change. Each school and context will be different, so change agents must anticipate the impact those differences may have when introducing the change. While bringing the change effort to scale, the roles of team members will evolve as will their attitudes, values, and beliefs. In turn, initial outcomes of a reform may not be easily replicated at a greater scale. Educators were found to have as great an impact on the implementation of the reform as the reform had on the educators. The reforms were shaped and modified by educators to

suit their needs and contexts; thus, implementation looked different in different schools. Though external reforms can reflect best practices and research-based innovation, scaling change will always require that reformers navigate new contexts with unique educators and learners.

Also researching the scalability of change, Fleisch (2016) conducted a study of literacy and numeracy reform in South Africa. The Gauteng Primary Language and Mathematics Strategy (GPLMS) was implemented in the South African province of Gauteng between 2010 and 2014. International testing and comparison had revealed a weakness in instruction in primary education, and reformers set about addressing the deficiency. Through a combination of standardized testing, instructional coaching, new materials, and scripted lessons, GPLMS sought to improve instruction and raise student outcomes. Beginning first in Grades 1-3, GPLMS was scaled a year later to include Grades 1-7. Reporting on the impact of the reform, Fleisch found that assessment data indicated a steep improvement in student outcomes. Additionally, quantitative data from intra-year student assessments from students taking part in the program and students not participating indicated that the reform did have a significant impact on shifting instruction. The success of the reform hinged on a combination of prescriptive and individualized elements. Scripted lessons were coupled with individual coaching so that educators could adapt to the new model with assistance and support. This form of distributed leadership mediated the top-down nature of the new instructional expectations. Informal networks of teachers (not associated with the program) began to circulate GPLMS lesson plans, providing further evidence of teacher buy-in and support for the program. By attending to power relationships and teacher attitudes, GPLMS was able to yield positive outcomes in the years under study.

Sustainability of Change

Too often, reforms focus on scaling change or devising ways to transfer a program or initiative to a new location, thereby testing and validating the program's effectiveness. Though widening the impact of a positive reform is an important goal, as we will see in this study and others like it, sustainability is not an easy feat, and it can be context specific (Hargreaves & Goodson, 2006). Additionally, reforms should account for differences in language, culture, or race (Nieto, 1998). Nieto outlines the specific problems that come from ignoring these differences, including tailoring change to meet the perceived needs of the dominant culture at the expense of other students; expectation for assimilation; and a failure to understand students' linguistic, cultural, and experiential backgrounds as resources to enhance learning. In order to successfully promote and sustain change in different contexts, it is essential that change agents place social justice at the forefront of all efforts. As the core value in a theory of change, this would ensure that reformers take other important actions as part of their planning process, including rejecting a strategy of assimilation and shifting the reform so all aspects of school life are impacted such as the curriculum, pedagogy, school norms, and staff attitudes and behaviors.

Nieto's work reveals an important challenge that change initiatives face within the school context to which they are applied. This challenge is particularly important to address when attempting to grow and sustain change. As supporters of a change seek to expand their efforts to new schools, districts, or countries, transferability will be similarly

impacted by attention, or lack of attention, to cultural differences. For change to be sustainable, reformers must account for all potential side effects to their efforts, including any potential negative impacts (Zhao, 2017). By anticipating all outcomes, change agents are better prepared to determine the best approach to a problem.

Often the focus of educational change is introducing new change, growing, or expanding reforms rather than sustaining and perfecting what is already there. Sustainability of educational change takes time; it is one resource that is often in short supply (Mehan et al., 2005). However, sustainability should be an important goal in education where professionals frequently lament the barrage of reforms that come their way (Payne, 2008). Sustainability and incremental change are an important part of the change research, and through their study, we will better understand how to implement lasting change that will have a positive impact while limiting potential negative side effects (Zhao, 2017). As Daly explains below, researchers are aware of a pattern in the change literature that when a change effort fails, it will then resurface under a different name, perpetuating the potential for future failure because nothing really changed to address the initial conditions that led to failure in the first place:

A wonderful idea is presented, a few passionate individuals champion that effort, and then the strategy fails to be sustained, becoming yet another layer of sediment in the sea of change. Not surprisingly, in the ever-shifting tides, a strategy once long buried may resurface, under a different name and propounded by a different expert. (Daly, 2010, p. 2)

Yet, we continue to focus more on short term change and implementation rather than focusing on sustainability and evolving an idea over time so that it becomes institutionalized into the system and the system becomes more adaptable.

One reason sustainability of change is difficult to study is because it requires a great deal of time to understand. It can take several years or more before the outcomes of a particular reform are revealed. Fortunately, this research makes use of seven years of data that provide an in-depth understanding of the factors contributing to change and impeding change as well as iterative and recursive aspects of the change process.

Lessons Learned from the Educational Change Literature

The literature reviewed above emphasizes the importance of attending to the cultural and structural dimensions of the change process. This research will take seriously the need to explore structural and cultural elements of the change process. Change agents can enhance the possibility for success by incorporating beliefs, attitudes, values, and structural concerns into their theory of change from the outset. Additionally, there are other key takeaways from this body of research that contribute to our understanding of the change process. These include a rejection of top-down reforms (Daly & Finnigan, 2010; Hargreaves & Fink, 2009; Rincón-Gallardo & Elmore, 2012), the need for time to grow and sustain change, and the threat of initiative overload. Top-down reforms imply mandated change without a mechanism for collaboration and adaptability to the local context. Researchers such as Rincón-Gallardo and Elmore (2012) have demonstrated how collaborative efforts at the local level can enrich a program proposed at the state or national level. Several of the change efforts described above emphasize the important role time plays in the success of educational change

(Datnow et al., 2002; Mehan et al., 2005). Although many reformers are eager for change to occur and outcomes to be measured, lasting change takes time and longitudinal studies are most revealing of the lasting impact of change, as expressed by Hallinger and Kantamara:

We emphatically restate the cautions of other scholars against the tendency to believe that change in cultural processes can be achieved quickly, even in the presence of the most skilled leadership.... Schools were never designed with the goal of rapid change, and the transformation of schools into 'modern' organisations will require a long-term perspective and persistence. (Hallinger & Kantamara, 2000, p. 202)

Lastly, new initiatives in schools are common. Though change is important, it is easy to fall into a pattern of successive change that may drive teachers to a state of initiative overload (Fullan et al., 2006). Literature that spans the fields of educational change and educational leadership is helpful to understanding the role leaders can play in steering change efforts on a more successful course and combat potential problems in the educational change process (Hallinger, 2011; Hallinger & Kantamara, 2000; Kin et al., 2018; Leithwood et al., 2007).

Educational Leadership and Change in the Catholic School Context: Unique Challenges, Unique Solutions

There is a wealth of literature exploring the contribution educational leaders make to the change process (Datnow et al., 2002; Fleisch, 2016; Hargreaves & Fink, 2009).

Indeed, there is a rich cross-section of research in the fields of educational change and educational leadership focusing primarily on the impact of school leaders in times of

change (Hallinger, 2011; Kin et al., 2018; Leithwood et al., 2007). As previously explored, two important interrelated dimensions of change that can be greatly influenced by educational leaders are structural changes, such as shifting leadership roles within the school, improving communication methods, or establishing specialized teacher teams, and enacting changes in the culture of the school through common language, shared vision, and collective values. Much of the research described in this review thus far is derived from studies in various international school settings such as private schools, public schools, and charter schools at every grade level. Catholic schools in the United States comprise a unique research setting with a specific historical context that differs greatly from those studied in the larger body of research in educational leadership. In the Catholic school context, structural and cultural change can be influenced by the resources and challenges specific to Catholic schools. Though Catholic schools face a unique set of challenges to their growth and improvement, the context also offers a forum in which unique solutions may be applied that would not necessarily be available in a public school setting.

Research in U.S. Catholic schools must be understood in the context of the specific challenges and circumstances framing the Catholic school experience. Once comprised of 5.2 million students in nearly thirteen thousand schools throughout the United States, Catholic schools are now facing myriad challenges to future success (McDonald & Schultz, 2020). Among the biggest challenges facing Catholic schools are declining enrollment, changing student demographics, and competition in the school choice marketplace (McDonald & Schultz, 2020). Early expansion of Catholic schools in the 19th century was buoyed by an increase in immigration of Catholic populations.

Additionally, during the founding era of the Common School Movement, some Catholic families sought out Catholic schools as an alternative to the Common School link to Protestantism (McDonald & Schultz, 2020). In the 20th and 21st centuries, enrollment continued to rise until it reached a high in 1965 with a subsequent steady decline in recent decades. In the past ten years, overall student enrollment in U.S. Catholic schools has declined 18.0%, with a net school decrease of 12.8% (accounting for school consolidation or schools reopening as new and rebranded schools). This number was even higher in urban archdioceses, with elementary school enrollment declining by 24.1% (McDonald & Schultz, 2020). In the 2020-21 school year alone, Catholic schools experienced a 6.4% enrollment decline, which is the largest single year drop in nearly 50 years (McDonald & Schultz, 2021). The decline marks a stark contrast from the 1960s, when Catholic school enrollment was at its peak. Catholic schools have had to contend with threats of closure, inducing job insecurity among school staff and forcing reorganization within schools as enrollment trends shift, factors that will impact the cases explored in this study.

In the decades since the peak enrollment of the 1960s, the demographics among Catholic school students has changed markedly in terms of racial and ethnic diversity, religion, and students with special needs. Particularly in urban Catholic schools, the percentage of culturally and linguistically diverse learners has increased substantially. As of 2020, racial diversity among students in Catholic schools is reported at 21.8%, and 18.5% of students identify as Hispanic/Latino (McDonald & Schultz, 2020). Enrollment of non-Catholic students has grown from 2.7% in 1970 to 19.1% in 2020. Students with special needs, once educated predominantly in separate Catholic school settings, now

more often learn in inclusion settings with their peers (Burke & Griffin, 2016). In 2020, students with special needs comprised 5.4% of the total student population in U.S. Catholic schools (McDonald & Schultz, 2020). In sum, changing student demographics have necessitated wide-ranging curricular changes to the Catholic school program (Dees et al., 2020).

In conjunction with declining enrollment and the challenges associated with an increasingly diverse student body, Catholic schools must now compete with other educational options available to parents. Catholic schools began as the preferred private school option for many parents. As reported in survey results by Trivett and Wolf (2011), Catholic schools continue to be a desirable option for parents seeking high quality education and religious instruction, regardless of a family's specific religious affiliation. In recent decades, charter schools, virtual schools, voucher programs, and school lotteries have, in some cases, expanded the educational options for families. Seeking to reverse enrollment trends, Catholic educational leaders have honed in on the social justice mission of Catholicism, intentionally reaching out to students in urban areas and likewise taking advantage of voucher programs (Trivitt & Wolf, 2011). Catholic schools have had to compete for students in this changing marketplace, and consequently, school leaders have found their roles changed to include a focus on marketing and branding their educational offerings.

In response to these challenges, Catholic schools have employed various strategies to address operational efficiency, academic quality, the promotion of Catholic values, and original programming (Fuller, 2018). Catholic school leaders have engaged in this work to improve their schools in an environment of competing pressures.

Research into the strategies employed by these principals reveals the complexity of the work of Catholic school leaders.

Organizational Change in Catholic Schools

The decision-making process in Catholic schools is unique in the sense that Catholic school principals have different constituencies and pressures than their public school counterparts (Nelson, 1994). Polka et al. (2017) analyzed 121 principals' responses to a survey about their decision-making process. There was general consistency among principals from both the United States and Ontario, Canada about their most common approaches to problem solving. A "garbage can" or "hope chest" approach was used most often among participants, in which the principal would strategize a solution to a new problem by reviewing problem solving strategies used in the past and identifying a best fit to the emerging problem. These findings differed from findings in an earlier study by the lead author published in 2014 (Litchka et al., 2014). In that study of school superintendents, the authors found incremental and classical problem-solving approaches were used most frequently. Their findings suggested that a leader's context is particularly influential on the approach to problem-solving they choose to employ. Superintendents were thought to have more time and flexibility to consider various options, whereas school principals were often constrained by the need for immediate decisive responses. These findings are particularly significant in light of the pressures and consequences associated with growing principal turnover in Catholic schools.

Tamir and Grabarski (2018) unpacked the decision-making process among principals further by seeking to understand why garbage can decision-making is so

common among school principals. Results from their qualitative study indicated that constraints such as short timelines and pressure from higher level administrators require quick decision making in which principals rely chiefly on past experience rather than superior evaluative methods of problem solving. It is not surprising that Catholic school principals may be particularly susceptible to an over-reliance on this form of decision making, given the range of challenges they contend with on a daily basis. Consequently, these findings indicate that principals may have less flexibility to seek out the opinions of other staff members and include consensus building regularly in the decision-making process. Research into the change process specifically in the Catholic context is important when endeavoring to evaluate a Catholic school principal's approach to navigating complex change.

Instructional Change in Catholic Schools

A primary role for Catholic school principals is that of instructional leader. It is significant to look at and understand instructional decision-making in terms of a principal's attitude and perception because of the autonomy that some Catholic principals have over curriculum and instruction. Whereas their public and, at times, charter school counterparts have a legal obligation to service students with special needs, Catholic school principals often have no such mandate. However, Catholic schools also do not receive federal funding to provide services to special education students that the school does enroll. Therefore, the decision to provide inclusion services in their schools is at the discretion of the principal, and their personal beliefs play a potentially significant role in whether they decide to do so. In their 2018 investigation into principals' beliefs about the inclusion of students with special needs, Boyle and Hernandez found that a principal's

experience with special education was an important factor in shaping their beliefs about serving special needs students. On average, the 54 principals that completed the authors' survey had a more positive than negative attitude toward inclusion. Over 90% of principals reported having integrated differentiated instruction into staff training indicating a commitment to serving students of differing abilities.

Instructional change played a role in the principal's change efforts at the three schools in this study. Significantly, these changes included those related to providing students with special education services. The findings above reveal that in addition to attending to the attitudes and beliefs of teachers, studies in the Catholic school context should also investigate the role of the principal's attitudes and beliefs to better understand the change process.

Operations in Catholic Schools

Another area of Catholic school principals' responsibility is that of school operations. Research has sought to understand how different schools and leaders approach this work. Dygert (2000) reported on the president-principal structure that has grown in favor among Catholic schools in the United States. In this arrangement, a school's leadership responsibilities are divided among two individuals—the president and the principal. Results from a survey of 204 school leaders found that most often, principals were responsible for activities such as supervising instruction and evaluating learning, whereas presidents were responsible for fundraising and developing partnerships with businesses. A hierarchy exists within the principal-president model, with principals reporting to presidents. Dygert concluded that the increased use of this model points to the need for more help for the traditional Catholic school principal who

can no longer meet the responsibilities of a growing job description. As the job description for Catholic school principals has grown, leaders have had to share decision-making responsibilities with other staff members. This transition has necessitated an increased emphasis on the role of school culture to develop a common language and values by which a school can unite and emphasized the importance of sharing power and authority among stakeholders.

Cultural Change in Catholic Schools

In a 2013 survey of over 3,000 Catholic school teachers and administrators, Convey found that over 90% of participants felt that the school's culture was of central importance to the Catholic identity of the school. This far exceeded the emphasis teachers and administrators placed on the number of people (students and staff) that identified as Catholic in the school (Convey, 2012). This signals the importance of school culture among Catholic administrators as a point of focus for change efforts.

A 2010 study by Hobbie et al. unifies the various themes of leadership explored thus far (organizational, instructional, operations, and school culture) and seeks to understand their explanatory power when looked at together. The authors conducted a survey of 1,225 teachers to assess Catholic identity, organizational leadership, and school vitality. Each of the three sections of the survey incorporated approximately 30 Likert scale questions in which teachers were asked about their experiences in their school and to reflect on the success of the school's leader. Findings indicated that teachers perceived themselves to be more flexible and effective when they believed their school and principal to be mission-focused and collaborative. The authors conclude that using a combined evaluation measure that accounts school culture, organizational leadership, and

school vitality helps understand school achievement and mission alignment (Hobbie et al., 2010). The present study will likewise take this holistic approach when exploring the change process in three different school contexts. To achieve a fuller understanding, it will be necessary to apply a complex tool of analysis that accounts for the myriad ways Catholic school leaders impact their schools while contending with the specific challenges of their leadership context.

Catholic school leaders should focus on both structural and cultural change strategies to tackle their innumerable roles as leaders and meet the specific challenges facing Catholic schools in the United States. The complexity of the problems educational leaders encounter in Catholic schools requires a theory of change that accounts for the multicausality of change within schools, change on multiple levels within a system, and change as an iterative, recursive process. Complexity thinking offers one such theory of change that incorporates the many systems level factors acting on the educational change process offering us a deeper understanding of how educational leaders can promote change within their schools (Rosenhead et al., 2019).

The Process of Emergence and the Role of the Leader

"Creativity and learning occur when emergence forms a previously unknown solution to a problem or creates a new, unanticipated outcome" (Uhl-Bien et al., 2007, p. 303).

Experienced leaders likely have an awareness of the inevitability of change and may have sought ways to prepare their organization for unknown challenges.

Organizations prepared to face whatever changes might arise should experience more success than those organizations entrenched in past practices. The emergence process developed by complexity researchers offers a framework to evaluate a system's readiness

for change. The focus of this study exists at the intersection of leadership and change—specifically, the impact of leadership on the emergence process. The change process in many organizations is complex, with limited predictability. Despite not being able to guarantee certain outcomes, the leader still has influence over different organizational elements that may inform the change process. In this section, I highlight the ways in which the process of emergence can enhance our understanding of the role of leadership in educational change.

From within the larger body of research applying complexity thinking to the field of education, this study attends more narrowly to applications of complexity thinking that focus on the role of the leader/leadership within schools and systems of education during the change process. This can be understood by drawing on the tenets of emergence, that is, "the reformulation of existing elements to produce outcomes that are qualitatively different from the original elements" (Uhl-Bien et al., 2007, p. 308). Structures and processes change in ways that cannot be entirely anticipated from the initial conditions of the system (Gallagher & Appenzeller, 1999). When enacting systems emergence, the structures and processes that come into being as a result should be more adaptive and sustainable than traditional top-down directives, because they have been influenced by agents throughout the system in addition to being guided by the leader (Goldstein et al., 2011). Therefore, emergent phenomena are often an extension of the work of many organizational features, rather than being enforced by a single person acting upon the system without a holistic, robust understanding of the needs at every level and within every interaction of the system.

It is important to note that despite the frequent emphasis on self-organization in the complexity literature, current research does not expect that emergence is only possible in a leaderless, unstructured environment. Goldstein (2011) terms this misunderstanding as one of several "folklores" of complexity science. "Although selforganizing processes play a role in emergence, a wider and more general conceptualization of emergent order generation is needed that can include the varied and special types of constructional operations involved in the emergence of new order" (Goldstein, 2011, p. 72). In exploring the process of emergence and adaptive change in the school setting, a principal or headmaster is often tasked with overseeing different types of change, including instructional, curricular, and managerial. Therefore, it is helpful to apply an emergence framework that accounts for the role of the leader to explore change in schools (Goldstein et al., 2011; Lichtenstein & Plowman, 2009). Below, I will explain the phases of emergence that help to understand the role of a leader in the change process. A detailed explanation of these phases will provide the framework for analysis of the data collected in this study.

In the model put forth by Goldstein et al. (2011), the authors conceptualize the emergence process as four overlapping phases: (1) disequilibrium; (2) amplifying actions; (3) recombinations; and (4) stabilizing feedback. For Goldstein et al. (2011), the emergence process occurs when complex systems, such as schools, come to alter their practices and structures in response to new sources of strain and thereby become more prepared to adapt to future challenges. The leader can guide the organization through the emergence process. Emergence is the result of the overlap and interaction among the four phases.

The first phase of the emergence process is disequilibrium. Disequilibrium is experienced when there is a disruption to the system. "[A]n environmental jolt in the ecology can knock a system out of its normal equilibrium dynamics" (Goldstein et al., 2011, p. 83). Normal patterns and behaviors no longer adequately address new situations, and the system must begin the process of adaptation. While a school leader may introduce new innovations or designate leadership responsibilities among staff members, the school community may experience discomfort. Newly minted instructional leaders may feel unclear about their role, teachers may push back about new initiatives, or, in the extreme, staff members may quit. Retaining a top-down structure is one way organizations evade change and innovation, thus avoiding some sources of tension. The traditional leadership structure ensures new ideas and practices are vetted by those at the top before they have an opportunity to influence the thinking of different levels of the system. For a leader to adopt a complexity thinking approach to their practice requires a willingness to embrace distributed leadership. The uncertainty stemming from disequilibrium is temporary, but it marks an important shift from remaining entrenched in the status quo to potential adaptation and growth.

Amplifying actions marks the second phase of emergence when stress on the system caused by disequilibrium requires agents to amplify new ideas and innovations that adequately respond to those environmental stressors (Goldstein et al., 2011). In a school, a new curriculum may signal a source of disequilibrium and put strain on teachers and staff who need to learn new material, implement different lessons, and buy new resources. This is systems intensification. Common planning time, previously used to review long-taught lessons and grade papers, may now be needed to create scope and

sequence documents or plan lessons. Using this relational space allows teachers to share ideas and amplify those that will best respond to the new needs of the system.

Lichtenstein and Plowman (2009) noted that leaders who embrace novelty will increase the likelihood that innovative ideas are amplified by creating space for agents to interact and supporting collective action. This process may also allow for the cultivation of trust among colleagues who previously have not had opportunities to demonstrate their competence around their subject matter. Leaders who promote opportunities for new ideas to be shared and amplified contribute to relational trust and help ready the system for adaptation (Bryk & Schneider, 2004).

Important to responding to disequilibrium and amplifying new ideas is the potential for flexibility and diversity within the system. Goldstein et al. (2011) point to differences within the system as a value to exploit. "Generative leadership focuses on facilitating, supporting, and harnessing the right kind of differences, and by extension risk, so that something novel and unexpected emerges" (Goldstein et al., 2011, p. 105). Davis and Sumara (2010) explain the simultaneity of diversity and redundancy in a complex system. Diversity is necessary for new ideas and systems to emerge. However, within any complex system, redundancies will also exist. In order to maximize the potential for growth, a system cannot be entirely diverse or entirely redundant. Davis and Sumara provide an example from their work with concept study in which they worked with teachers across various grade levels and studied their approach to teaching multiplication. In each grade students are introduced to new concepts that support their understanding of multiplication, and some teachers reinforce concepts that were previously taught. This harmony between diversity and redundancy was required for

students to learn mathematical concepts related to multiplication. Both diversity and redundancy are necessary for system change and they must work in harmony.

Recombinations is the third phase of the emergence process. As new ideas are amplified, structures are arranged and changed to allow for those new ideas and practices to be tested and spread further through the system, though the nature of these changes is not necessarily totally unlike what existed before—it is a recombination. Network interactions are crucial to this process, and the leader can play a role in the success of innovations. The leader can aid in recombinations by reallocating resources for the spread of new ideas. For example, new state math curriculum standards may perturb a school system. Various grade level teacher teams may begin to experiment with different lessons and curricula. Once some of the best practices around the new curriculum standards are amplified, the recombination process allows for new structures and ideas to emerge, leading to a spread of implementation. The leader has an important role in guiding the recombination process, as they can identify which amplified experiments in novelty will best address the needs of the system and the leader can apportion resources to ensure success in spreading the innovation.

The final stage of the emergence process, termed stabilizing feedback, results as the new innovations that were earlier amplified are institutionalized throughout the system. The system is transformed in the sense that what has emerged could not have been anticipated from the elements previously in existence. The role of the leader in this final phase is to determine the parameters for the newly emerged phenomena. A principal may set the expectations by which a new initiative is implemented. There is also a cultural component to these expectations in that the principal can act to reframe or

expand the culture of the school to reflect the change. In the case of a curricular change, this may include changing a school motto or slogan to encompass the goals of the new curriculum. Stabilizing feedback is not a permanent state, and although it is discussed as the final stage of the emergence process, emergence is ongoing. As new sources of disequilibrium are introduced, the iterative process of emergence continues to transform the system over time. The current elements of system transformation addressed previous sources of disequilibrium, but future change will require future adaptation. The cycle of emergence will then begin anew as agents address new sources of strain on the system.

The four phases of emergence described above do not necessarily occur in order, nor must they occur one at a time. There can be overlap and interaction between the four phases. As one part of the system may be experimenting with recombinations to address a change, a new source of disequilibrium may be acting on another part of the system. One of the strengths of this framework lies in its potential to attend to change throughout various aspects of a system overtime. In this way, the emergence framework complements the methodological approach articulated by Bartlett and Vavrus in which systems are simultaneously studied at the micro, meso, and macro levels and inquiries into the different system interactions are revealed (2017). These phases of emergence offer a robust framework for application in the research of educational change where variability can be explored and different contexts can be compared.

Past Research Utilizing the Emergence Process Framework

Previous research applying the emergence framework to change processes has largely existed outside of the field of education (Goldstein, 2011; Goldstein et al., 2011; Lichtenstein, 2014; Lichtenstein & Plowman, 2009). In the organizational change

literature, this work is mainly conceptual, refining the particular conditions and leadership behaviors helpful to foster emergence within a system.

Lichtenstein and Plowman (2009) use a series of vignettes from earlier empirical work to reveal the phases of emergence in various types of organizations, including the business community of Branson, Missouri, a church, and three technology companies. Their Complex Adaptive Systems Theory (CAST) framework is used "for explaining the emergence of system-level order that arises through the interactions of the system's interdependent components (agents)" (Lichtenstein & Plowman, 2009, p. 618). CAST focuses on the role of agents to uncover how leadership manifests not only within but also between different system actors. What emerges from these interactions cannot be predetermined and can be greater than the sum of the initial conditions inherent in the system. For example, drawing on a case study of the theater district in Branson, Missouri, the authors found that amplifying actions exemplified by the encouragement of experimentation led to pioneering theater owners' success. The owners encouraged one another's ideas, and a larger network of theaters and owners emerged (Chiles et al., 2004). Through these case studies of leadership, Lichtenstein and Plowman were able to determine specific behaviors related to each emergent condition that could be used by leaders to generate emergence in their organization (2009). Table 2.1 illustrates how the leadership behaviors described in the CAST framework complement the phases of emergence described by Goldstein et al. to contribute to generating emergent order (2011).

Table 2.1

Phases of emergence and corresponding leadership behaviors

Phase of Emergence (Goldstein et al., 2011)	Definition	Leadership Behaviors (Lichtenstein & Plowman, 2009)	Definition
Disequilibrium	The system experiences a change to the norm and must begin the process of adaptation to address the shift.	Disrupt existing patterns	Embrace uncertaintyCreate controversy
Amplifying Actions	System agents amplify new ideas and innovations that adequately respond to new environmental stressors.	Encourage novelty	 Allow experiments Encourage rich interactions
Recombination	Structures are arranged and changed to allow for new ideas and practices to be tested and spread further through the system.	Sense making and sense giving	 Foster shared understanding of change through the use of language and symbols Recombine resources
Stabilizing Feedback	Earlier amplified innovations are institutionalized throughout the system.	Stabilizing Feedback	• Integrate local constraints

First, to create a disequilibrium state, leadership for emergence behaviors would include embracing uncertainty and creating opportunity tensions (Lichtenstein, 2009). Leaders would seek to disrupt previous patterns of organization and reconfigure leadership interactions. They may intentionally stir up controversy by naming existing conflicts among team members and decline to chart a clear path forward. In their example of Mission Church, Lichtenstein and Plowman (2009) explained how the church's leaders created tension in their organization by inviting controversial speakers

and opening the church to the public. In a school, this may include the principal conducting a school climate survey and releasing the results publicly, reorganizing or disbanding instructional leadership teams, or assigning teachers to new classes. All of these actions have the potential to create controversy and force teachers (agents) with the school to reexamine their practice and begin to prepare for change. In Catholic schools, the consistent threat of school closures has served as an ongoing source of tension and disequilibrium. The expectation is that conditions emerge which require actors to somehow address new sources of tension and that the ensuing uncertainty will create conditions requiring novel solutions.

Second, Lichtenstein and Plowman recommend leaders amplify actions and embrace novelty (2009). In the disequilibrium state, a time of uncertainty, small changes to the organization can have a large impact. Often, these actions can become self-reinforced and amplified (Lichtenstein & Plowman, 2009). New system dynamics and relationships create an increased likelihood that changes will grow. "Dis-equilibrium states allow information to jump channels, become amplified, and move quickly through the system. In so doing, small changes can escalate in unexpected ways" (Lichtenstein & Plowman, 2009, p. 620). Leaders can promote amplifying actions by allowing experiments, encouraging rich interactions, and supporting collective action (Lichtenstein & Plowman, 2009). From their example in Branson, Missouri, Lichtenstein and Plowman described a theater owner who experimented with the types of acts he booked. Over time, other theater owners replicated his ideas and Branson grew into a tourist destination known for celebrity entertainment. In a school, amplifying actions might include the principal allowing teachers to generate new curriculum based on shared

themes, creating school data teams to analyze student test scores, or allowing teacher teams to determine strategic plan objectives.

Third, as new change emerges, leaders can help the organization make sense of the change and incorporate new ideas and behaviors into the organizational culture. The creation of new norms can occur symbolically through the language used by leaders with their staff or the addition of new traditions. From Lichtenstein and Plowman's (2009) example of the technology company ServiceCo, managers avoided layoffs even as the company ended one of its large projects. Instead, the managers retained those employees and changed the office spaces to open floor plans with the potential to foster increased interaction among employees that had previously worked on different projects. Applying this behavior to a school setting, a principal may incorporate new change into the culture of the school by modifying the school's mission statement or slogan, create new meeting protocols, or emphasize new values. As leaders determine that new actions are benefiting the organization, they can recombine resources to perpetuate whatever is helpful to the staff. That might include adding staff members to different teacher teams, providing money for professional development that supports a teacher's instructional learning, or fighting for a higher salary for hard-working staff.

The fourth and final condition for emergence is stabilizing feedback (Lichtenstein & Plowman, 2009). Stabilizing feedback is the process by which the leaders and members constrain new change through locally determined parameters so that change has a degree of constancy. In their case of theaters in Branson, Missouri, Lichtenstein and Plowman (2009) describe theater owners' expectations that all new theaters reflect the "Branson" style and values, meaning that theaters should be wholesome and friendly.

For the theater district, this meant that the entire community could flourish as a tourist destination that reflected a common purpose, while remaining constrained by those expectations. A principal may offer similar stabilizing feedback to their school by implementing values by which personnel are expected to embrace and model. If a school implements a new curriculum, the principal may expect that teachers alter their own curriculum to align with the new standards.

In Lichtenstein and Plowman's (2009) model, complex change is shaped by the behaviors of the leader who reflects one agent within a multi-level system. The process of emergence, though not entirely determinable, can be impacted by those behaviors and this research takes seriously the impact of the leader in transformational change. By impacting the conditions for emergence, the leader can thereby influence emergent outcomes.

Emergence in the Field of Education

Within the field of education, additional conceptual work has been done to understand how theories of emergence can inform leadership practice with schools, universities, and specialized departments. For example, Fidan and Balci (2017) describe the need for flexibility in school leadership. In their work, schools are conceptualized as complex adaptive systems, ever changing, unpredictable environments. Whereas traditional managerial instruction focuses on control and order in stable environments, leadership for emergence would infuse elements of flexibility, such as distributing authority and encouraging innovation. The authors call for school leaders to be trained in applying this adaptability to school management. They make the case that shared decision-making will empower teachers and school culture will be strengthened by the

use of metaphors and personal narrative. Though the authors lay out the various reasons why flexibility in leadership is important, they fall short in extrapolating the specific strategies school leaders should apply in their organizations, leaving that work to future empirical studies.

Similar to Fidan and Balci (2017), Borrego and Henderson (2014) explain how theories of emergence can be applied to education, specifically within the field of STEM education. Seeking to fill a gap between STEM higher education practitioners and research into the change process, this article explores how STEM instructors and administrators can apply different perspectives on change to improve programs and instruction. The authors analyzed eight different change strategies, including the theory of complexity leadership developed by Lichtenstein and Plowman (2009). They conclude that the change perspective practitioners employ should match the specific circumstances of the environment. When discussing the specific advantages of complexity leadership theory, the authors cite the example of Mission Church highlighted by Lichtenstein and Plowman (2009). Church leaders' use of a commitment to shared values around homelessness and a common vision based on heuristics such as "What Would Jesus Do?" resonated with Borrego and Henderson as strategies that could be transferable to STEM instruction. Leaders could develop a shared vision to promote transformational change. The authors conclude by posing a final caution to the field:

Transformation is currently in vogue, likely due to dissatisfaction with the rate of undergraduate STEM instructional change. But not every change effort should aspire to be transformational. Small-scale changes and incremental improvements

are important steps toward long-term goals of changing undergraduate STEM instruction for the better. (Borrego & Henderson, 2014)

While change theories such as complexity leadership can be helpful in leveraging transformational change, incremental change is likewise important for improvement.

Also writing from the perspective of higher education, McClellan (2010) explored how complexity theory can be used to improve leadership in college advising programs. McClellan cautions that for college advising programs to embrace leadership strategies based on complexity theory would require a paradigm shift, as many university programs are rooted in traditional leadership hierarchies. Mutual decision-making between members of a program is not typical but could be valuable to determine how best to serve students. McClellan posits that many changes in communication would be required to increase interactions between program members, perhaps facilitated by technology, pointing to the need for new investments to modify existing practices. A shift of this magnitude would require not only that interactions among program members change, but programs would also need to change their selection methods for leaders, choosing advisors with the capacity to share power and the ability to facilitate a collective vision for progress. College advising programs are a particularly interesting case study for applying complexity leadership, because their current processes do not align with complexity strategies, and McClellan (2010) described the ways in which they would need to shift practices, including distributing authority and enhancing communication.

These examples of conceptual research from the field of complexity leadership in education emphasize the need for flexibility in school leadership. Rejecting a top-down leadership hierarchy, the authors propose establishing shared decision-making processes

coupled with a common vision for improvement. Importantly, they all include mention of the need for more empirical research to discover how complexity strategies can be applied under different circumstances and what outcomes leadership for emergence could yield. This study will fill the gap in the literature by utilizing an emergence framework to understand the impact of leadership on complex change processes.

Principal Transition as Disequilibrium. "Emergence is complexity science's term for the creation of organizational processes, structures, and practices that add greater functionality and adaptability in the face of an increasingly turbulent environment" (Goldstein et al., 2011, p. 77). Using this definition as a template, this research will seek to identify instances of emergence through the changes in practices and structures at each of the three schools under study. Disequilibrium accompanied the transition of a new principal in each of the schools. As explored in Chapter One, principal transition causes strain on schools as new initiatives, new policies, or new priorities can cause system imbalance. Often, principal transition results in both incidents of turbulence and perturbance. Beabout (2012) offers a distinction between the two similar phenomena by defining turbulence "as the perception of potentially disruptive forces in an organization's environment or operating conditions and perturbance as a social process in which people respond to turbulence by considering organizational practice" (p. 17). As new principals join a school, the staff may or may not collectively respond to the ensuing change. System responses to both turbulence and perturbance are equally informative in understanding the emergence process.

The complexity of pressures and problems leaders encounter during a period of disequilibrium requires leaders to create a more adaptive system, one in which a school leader disrupts the status quo, distributes authority to expand networks, and promotes collaboration so the school system can adapt to changes that arise, using many of the strategies identified in research from the field of educational change. In order to fully appreciate the leader's role in the emergence process, this research will adopt a second lens of leadership for adaptive change, which will allow for the examination of the specific behaviors the principal and staff engaged in to determine progress as it relates to the emergence process.

Linking Adaptive Leadership Practices with Complexity Thinking

Complementing the application of complexity thinking and the emergence process, this research draws on the notion of leadership for adaptive change as a means of conceptualizing changes to system operations guided by the principal at each of her school sites (Heifetz et al., 2009; Kershner & Mcquillan, 2016). Adaptive leadership practices attend to changes in people's beliefs and habits to address challenges and develop new capacities through system transformation (Goldstein et al., 2011). Through these efforts, leaders are "creating the conditions in which successful transformation can occur" (Macintosh & Maclean, 1999, p. 306) Specifically, in building an adaptive system, leaders attend to three interrelated dimensions of change: creating a shared school culture, promoting structures of distributed authority, and, through related systemic interactions, generating enhanced relational trust.

First, adaptive change requires a shift in where power rests, and thus adaptive leadership seeks to distribute power and authority throughout the system (Heifetz, 1994). When effective, leadership for adaptive change enhances system interactions, "replacing hierarchy and formal authority with organizational bandwidth, which draws on collective

intelligence" (Heifetz et al., 2009, p. 68). As interactions shift, new networks emerge and, properly balanced, the system becomes more responsive to changes in context. Distributed leadership can contribute to experimentation and innovation through recombinations and new substantive interactions (Goldstein et al., 2011). In distributing leadership, finding a balance between autonomy and redundancy becomes significant, where individuals within the system have opportunities to demonstrate and apply their expertise, allowing for a rich flow of ideas that may complement or challenge one another. A focus of leadership for adaptive change therefore is to enable opportunities for interactions among individuals and encourage novel outcomes arising from these new structural conditions (Davis & Sumara, 2010). Distributed leadership is significant to the emergence process, contributing to changes in the status quo, encouraging rich interactions between individuals, and increasing system capacity for new ideas and practices.

Second, leadership for adaptive change confronts another key leverage point for systems change—that of changing values that develop during system transformation (Meadows, 1997). As the adaptive system becomes more decentralized through the process of distributed leadership, shared values provide a measure of control for ongoing action (Axelrod & Cohen, 2001). A common school culture serves as an attractor, a force that provides a measure of predictability to the process of shaping teachers' beliefs and practices (Gilstrap, 2005). The shared values also provide a lens to consider how emerging ideas and innovations complement existing and desired school priorities. As system agents become increasingly empowered to contribute to the decision making process, the school leader can contribute to a school vision that provides context and

boundaries for the emergence of transformative practices. The emergence process is shaped by the presence or absence of common values that contribute the foundation upon which new ideas and practices might take hold.

By attending to these two dimensions, leadership for adaptive change addresses both the structural and cultural needs of the system during a period of transformation. Though the leader is charged with promoting change, they "must strike a delicate balance between having people feel the need to change and having them feel overwhelmed by change[;] leadership is a razor's edge" (Heifetz & Laurie, 1997, p. 127). Structural and cultural change will bring a measure of uncertainty to any system. Trust, defined here as a sense of mutual caring and respect that enables systems actors to share feelings, worries, and frustrations (Bryk et al., 1999), becomes a key factor in the emergence process, as it can promote risk-taking necessary for promoting systems change. Leaders cannot mandate or demand trust; it must develop organically through daily interactions (Bryk et al., 1999; Bryk & Schneider, 2004). However, leaders can facilitate trust by providing opportunities for individuals to interact around matters of substance and relevance, a key attribute of leadership for adaptive change.

Educational change and complexity thinking—Merging fields

This research merges ideas in the fields of complexity and educational change.

The change process as described by Fullan (2001) includes three phases: initiation, implementation, and institutionalism. This conceptualization reflects a similar process described by complexity theorists (Goldstein et al., 2011; Lichtenstein & Plowman, 2009). An important distinction is that a complexity perspective anticipates the potential for overlap and iteration of phases of change as cycles of emergence. Additionally,

educational change research often focuses on the end state of change and subsequent replicability, whereas a complexity perspective expects change to be an ongoing process that is not easily duplicated in another environment. Conducting educational change research using a framework of leadership for adaptive change (Kershner & Mcquillan, 2016) allows for a robust understanding of change and how leaders develop and apply the multidimensional skills required to lead in a complex system. This framework accounts for ongoing change from a holistic point of view and, though outcomes will be highlighted and analyzed, they will also be considered as snapshots within a longer change process.

The leadership for adaptive change framework provides a lens by which to analyze the degree to which a leader contributed to the conditions needed to foster adaptive change and compare that process across multiple schools. This research will specifically seek to identify leadership practices focused on shifting control away from the school principal as the central authority in the system (Harris et al., 2007; Spillane et al., 2001; Struyve et al., 2014). It will also analyze the degree to which the principal contributed to a common school culture and promotion of shared values at each site (Davis & Sumara, 2006; Kin et al., 2018; Priestley et al., 2011). Lastly, this framework illuminates the need to understand whether the leader was successful at fostering trust with others by generating opportunities to demonstrate her competence, sincerity, and reliability (Bryk et al., 1999; Kutsyuruba & Walker, 2015; Tschannen-Moran, 2014).

Evidence of the new conditions the principal generated through the practices of leadership for adaptive change then illuminates differences in the emergence process at each school. This research will identify evidence of the degree to which each school

experienced the various phases of emergence, linked to dimensions of leadership for adaptive change. For example, evidence of a common school culture can contribute to a sense of the degree to which the school experienced amplifying actions, the rich flow of ideas within the system. Similarly, evidence of distributed leadership can signal conditions necessary for recombinations, venues to test and spread new ideas throughout the system. Trust plays a role in enabling or constricting the other dimensions of leadership for adaptive change. In contexts with higher relational trust, disequilibrium and new patterns of leadership may be met with less resistance, while the absence of trust can signal a retreat to the status quo (Goldstein et al., 2011). Evidence, or the absence, of each phase of emergence provides a clear sense for the degree of change and adaptability each school experienced during the principal's tenure. Stagnating in the disequilibrium phase may signal that a school has experienced no emergence, while evidence of amplifying actions and recombinations can indicate that a school has experienced some emergence. Evidence of emergent order is reflected in those schools that reach the phase of stabilizing feedback. The framework of leadership for adaptive change provides a lens to understand how leadership practices can create conditions in which further change is encouraged and new phases of the emergence process may be achieved.

Chapter Three—Methods

Research Design

This longitudinal qualitative comparative case study (Bartlett & Vavrus, 2017) explored the change process at three Catholic elementary schools during the tenure of a common school principal, Katherine Corcoran. The study took place over a seven-year period as Katherine transitioned from a position at an urban K-8 school in the Northeast to a rural elementary school in Maryland and finally to a suburban K-8 school in the same region in the Northeast. Therefore, it is expected that this study will illuminate changes in the process of emergence at each school. In this chapter, I describe details of the cases as well as the data collection and analysis processes which were guided by the research questions first enumerated in Chapter One:

- 1. To what degree did the principal enact leadership for adaptive change at the three schools she led?
- 2. In enacting adaptive leadership, how did the process of emergence compare at each school?

Positionality

As the primary instrument of the research process, I had to reflect on my own positionality and the ways in which my experiences and biases might shape my work. The ongoing process of reflexivity revealed, at times, arduous self-scrutiny. Early on in this research, it was not yet apparent what limitations or revelations my positionality might provide. I was guided in my self-reflection by the work of other researchers, such as Bourke (2014), as to how to go about the process of establishing a sense of myself as researcher in this particular study. Throughout the course of this study I considered in

detail how my positionality may have influenced the research process, but there are two overarching components of myself as researcher that underlie the entirety of the research project. First, as a non-Catholic, my experiences with the religion as well as Catholic education are minimal. In the early stages of this project, I felt that was not a particular issue to my understandings of the cases. However, over time, I came to realize that as it related to issues of school culture, the role of Catholic values was significant, and my lack of knowledge was potentially at issue. This was particularly evident during an observation of a school-wide recitation of the Rosary at St. Anne's. A teacher handed me a set of rosary beads, and I was caught off guard. I spent a few minutes talking to the teacher about whether or not I needed the beads, feeling a bit self-conscious having them. Undoubtedly, in that instance, my attention was taken from other elements in the observation process. Though there were instances where my lack of familiarity with Catholic education perhaps had a negative impact on my work as a researcher, my relative ignorance provided me with fewer experiences on which to compare the cases. For example, when teachers would talk about certain traditions that are commonplace in Catholic schools, I had no context for their references. This happened at Fiorella when teachers would discuss second grade First Communion practice. Additionally, I had a keen sense of my limitations in terms of my knowledge of Catholic education, particularly the hierarchy within the school system, the role of the pastor, and the role of the diocese. Despite some areas of ignorance, my position as an outsider may have provided me with a fresh lens with which to view each case.

Time also became a key influence on my positionality as researcher in this project. At the start of my research, I was in the early stages of my doctoral studies,

attending classes full time. I had been a teacher for seven years prior to beginning my graduate program. During the course of the study, I completed my certification to become a school administrator, took a position in the curriculum office of a public school district, and, most recently, became an assistant principal at an intermediate school. Over the course of the seven years, I went from having relatively little experience in school leadership to having experience at both the building and district levels. My understandings of educational leadership were greatly impacted by my own experiences as a leader, and I began to compare my own experiences with those I was researching. The process of comparison provided me with additional opportunities to scrutinize my theoretical approach. I found that the theoretical lens I was applying to this study resonated greatly in my own work, where distributed leadership, culture building, and trust became cornerstones of my leadership style. I saw through the literature and analysis of these cases how important these elements were in the change process, a notion that was reinforced as my own school underwent intense changes associated with the COVID-19 pandemic – from transitioning to remote learning, through a year of hybrid instruction, and finally back to the return of in-person learning.

Context of the Study

It will be recalled that this study is positioned within a larger study of urban school principals who took part in the first two cohorts of the Lynch Leadership Academy (LLA) at Boston College. The focus of the LLA and cohort members' experiences with the program is significant to this study, because Katherine's participation in the program shaped her priorities as a school leader and thus shaped the change process at the schools she led. In particular, the LLA's central priority was that

"[s]chools will be held accountable for the academic, social, and emotional growth of all students." In attending to this matter as a focus of adaptive leadership, Katherine sought to promote adaptive change that helped the schools generate this outcome, the change being "adaptive" in the sense that since the status quo in the three school sites did not attend to the well-being of all students, new approaches were needed. Katherine sought to enrich teachers' skills and access to resources that would facilitate such an outcome and thereby contribute to a more adaptable system.

Members of the research team for the larger LLA study included the primary investigator, who is a professor at Boston College, and current and former graduate students of Boston College's Lynch School of Education and Human Development. The collaboration between researchers on this project yielded important insights and areas for further investigation, which are presently described as a means to expose the impact the larger study had on this research effort. First, the tenets of the LLA were collaboratively explored with members of the research team to determine the topics of inquiry for this study, such as distributed leadership, instructional leadership, and the creation of a common school culture. As other researchers conducted observations and interviews at different schools with other LLA fellows, experiences were compared and contrasted to test the limits of the developing framework.

Feedback from members of the research team also informed the interview and observational protocols used at each site. These protocols were shared and adapted in each context (see Appendix A for interview protocols). A previous member of the research team initially worked with Katherine at the first research site in 2011 and 2012. I did not join the research team until 2014; therefore, while Katherine was principal of

her first school, all data were collected under the direction of another researcher. Similarly, I contributed to data collection for another LLA fellow before the focus of my research shifted to the three schools where Katherine has worked as principal. Early research in the larger study greatly informed the framework and direction of this work. For additional information on the impact of the LLA on previous cohort members see Kershner (2018) and Kershner and McQuillan (2016).

Qualitative Comparative Case Study

This study employs the comparative case study methodology proposed by Bartlett and Vavrus (2017) to explore how three schools experienced leadership for adaptive change during the tenure of a common principal and compare the emergence process across the three sites. This approach to comparative study builds on previous methodological work by Charles Ragin (1992). Ragin (1992) challenged the traditional notion of case study research in favor of an approach that focuses on theoretical constructs as the unit of study. Bartlett and Vavrus refer to these constructs as "phenomena of interest" (2017, p. 6) and they may include ideas of concern such as policies, practices, or programs. This comparative case study approach (CCS) encourages the researcher to consider the boundaries of their case in new ways in terms of both scale and time. Rather than consider a case on a single level of analysis, Bartlett and Vavrus (2017) propose that cases trace across macro, meso, and micro dimensions. They argue that imposing too strict a boundary on a case can prohibit researchers from considering the relational impact other individuals, institutions, or policies may have on the case and the impact the case may have on others. CCS rejects traditional calls for defining firm boundaries of a case at the outset of the research process (Merriam, 2009;

Yin, 2009) and encourages an open examination of all related aspects of the study (Bartlett & Vavrus, 2017). In this way, the comparative case study approach complements a complexity framework in that all levels of the system are considered both independently and as part of the system as a whole, and relationships between all relevant elements are under scrutiny.

An initial challenge of establishing a working methodology for this study was determining what constituted the case or cases under study. Researchers have long written on the dangers of bounding cases in an effort to compare and contrast, when certain processes, policies, or procedures are not bound in any one place in time (Steiner-Khamsi, 2010). This caution becomes particularly relevant for the present study, where it was necessary to consider the three school sites as having some elements that transcend typical boundaries of space and time, namely their common principal, Katherine. Guided by the research questions, it became clear that the units of study for this research are the three schools and how each school experienced change during Katherine's principalship, constituting three unique cases. The school sites, which happened to share a common principal, offer a means for exploring how adaptive leadership practices can impact the emergence process, considering both the similarities and differences that characterize the change process in different settings.

Recognizing schools as complex systems required a holistic view of the experiences of the three schools in this case, attending to the multiple, interacting, and complementary features of the school "system" at each site. Therefore, it was necessary to include the experiences of students, faculty, administrators, parents, other institutions, and the school community at large. Additionally, over time, new elements revealed

themselves and were incorporated into the cases, a real benefit of the longitudinal research design. These elements constituted individuals, groups, ideas, and institutions, such as the naval base and cultural themes at Fiorella and the Director of Development at St. Anne's. In this way, this research is guided by a multi-sited, multi-scalar approach (Bartlett & Vavrus, 2017). Other researchers, such as Carney (2009), applied a similar approach when exploring "policyscapes" in three different countries. He traced three countries' process of policy reform (China, Denmark, and Nepal) at the general education, higher education, and teacher education levels (Carney, 2009). The CCS approach revealed the common threads and differences that existed among the different sites.

Bartlett and Vavrus (2017) expand on the value of comparisons by providing detail into how different levels and layers of comparison can complement and enhance the revelations of one another. They describe the three axes of comparison, horizontal, vertical, and transversal, used in their study:

[A] *horizontal* look that not only *contrasts* one case with another, but also traces social actors, documents, or other influences *across* these cases; a *vertical* comparison of influences at different levels, from the international to the national to regional and local scales; and a *transversal* comparison over time. (Bartlett & Vavrus, 2017, p. 14)

In this study, the horizontal axis will provide comparisons between and across the three sites. The vertical axis will allow for levels of comparison throughout the systems, including at the individual level and at the systems level. Lastly, the transversal axis will

reveal the comparison of experiences at the first two sites over time, as I was able to return to those participants for additional interviews after Katherine left the school.

The CCS approach assumes the emergence of change in phenomena over time. This has methodological implications for the role of culture in the research process. The CCS approach considers culture to be a fluid and ever-changing phenomena (Bartlett & Vavrus, 2017). The focus remains on the process of meaning making rather than attempting to reduce culture to a set of rules or values. For this study, that means that culture is seen as developed over time. Culture is unbound in the sense that it is impacted by and impacts those within and apart from the school community. One cannot assume the limits of those having an impact on the meaning making process. In keeping with the recommendation by Bartlett and Vavrus (2017) for researchers engaging with this framework, this research will "pay particular attention to language, discourse, texts, and institutions as important social and policy actors" (p. 12).

The CCS approach enriches the process of comparison between these three sites by tracing phenomena across the cases at several levels of inquiry. The call to unbound the cases provided the freedom needed to reconsider the boundaries of the case at each site as new phenomena emerged. Though each site is described using terms such as "school," "school community," and "system," those words are not intended to reduce or bound the cases, which are consistently reexamined throughout the course of this study. For example, as Katherine's network at Fiorella grew, the school community expanded to include neighboring Catholic schools, the naval base, and paraprofessionals. By remaining unbounded, this study remained flexible to the inclusion of new elements that emerged and required scrutiny.

Three Sites

It will be recalled that the units of analysis for this comparative case study are experiences of three different schools during the leadership of a common principal, Katherine Corcoran. Each site will be described both in terms of key features of her leadership practice described chronologically based on her dates of employment there. These sites are not bound within the traditional notions of a school or school community, though those terms are used as a means of describing elements that matter (McQuillan et al., 2009); rather, they encompass all of the elements inherent in a complex system.

St. Bernard's School

At the start of this study, Katherine was principal of St. Bernard's School (SBS), an urban, Catholic, K-8 elementary school in the Northeast United States. SBS had approximately 250 students, both male and female. School records reported that, on average, 90% of students are students of color, with students' families coming from many different countries, including El Salvador, Cambodia, Haiti, and others. Students at SBS were also linguistically diverse with experience in languages such as Vietnamese, Cambodian, Spanish, English, and Portuguese. Though the religious affiliation of SBS was Roman Catholic, some students identified as Protestant, Hindu, Buddhist, or Muslim. There was one classroom teacher for each grade level, with a student-teacher ratio of 22 to 1.

The building SBS occupied was built in 1912 and had a matching set of arched doors through which visitors entered a large front foyer. Flanking either side of the foyer were the administrative offices, and beyond the entrance was the large cafeteria and auditorium. A wooden balcony surrounded the second floor of the auditorium, which

was not in use in 2012 because it was structurally unsafe. There were two wings on either side of the school building with classrooms on the first and second floors.

Classrooms had high ceilings, tall, paned windows, and green chalkboards. Student artwork was posted prominently on classroom doors and in the hallways. The parish church was directly next door to SBS. Katherine was hired as principal in 2010 and shortly after enrolled in the LLA program. Katherine remained at SBS for three years before leaving for family reasons. Since her departure, SBS continued to face professional, operational, and economic challenges, and at the end of the 2019-2020 school year, SBS closed.

Fiorella

After three years at SBS, in 2013, Katherine decided to move to rural Maryland to be closer to her extended family. The smaller context offered few job opportunities for school principals, but she was hired by Fiorella, a small Catholic K-8 school in a nearby town. Describing her experience with the job search process Katherine recalled:

The only [job posting] I saw posted in the county was for principal of Fiorella, which is where my grandma went to school. And it's eight miles from her house. It's an eight minute commute. So, it was just kind of like the doors opened one after another.

Fiorella is a single story, white school building on a large, grassy, lot. A wide parking lot decorated with a painted map of the United States and four-square court separates the school from the rectory and parish church. On Tuesdays, as students walk with their teachers and classmates to Mass, they pass the porch of the rectory on which the pastor displays his wood carving of a three-foot-tall eagle in flight. Behind the school

is a playground, basketball court, and one modular classroom that houses the music room. The principal's office, where Katherine worked during her time at Fiorella, is the first door to the left of the main entrance, and directly beyond her former office is the auditorium/gymnasium where Morning Meeting is held. Classrooms for students in grades four and below are closer to the main entrance, and grades five and above meet in classrooms behind the auditorium. Fiorella has a large computer lab and library with computers for groups of up to twenty students at a time. The foreign language and music classrooms are only used part time, as those teachers work three days a week. Within a mile of Fiorella are two other local schools, a charter high school and a public elementary school, also serving students of the region.

Fiorella has an average student enrollment of 150 students, aged five to 13 years old. Approximately 15% of students are students of color, and no students enrolled in the 2014-15 school year reported speaking a language other than English. Prior to 2014, there were no supports specifically identified as special education interventions available to Fiorella students. During the 2014-15 school year, parents were given the option to pay for a one-to-one paraprofessional for students whose individualized education plan indicated a need. Low enrollment from 2014 to 2016 forced the school to combine two classrooms into a split-grade model. In 2015, the year of the site visit for this study, grades four and five were combined in one classroom with a total of twenty students. Approximately 50% of students graduating from Fiorella go on to a Catholic high school. The remaining students attend the local charter or other public high schools.

In addition to the students, staff, and families, this case came to include other elements of the Fiorella community. Many families had a connection to the local naval

base and during Katherine's tenure, the school sought partnerships with their education liaisons. Katherine developed relationships with area Catholic school leaders whose influence shaped her approach to leadership at Fiorella. Other area Catholic schools should also be considered when analyzing this case, as Fiorella often partners with the schools for dances, sports, and religious events. Katherine was principal of Fiorella for four school years from 2013 until she and her husband decided to return to the Northeast in 2017.

St. Anne's School

Hired in 2017, Katherine was the principal of the final research site for this study, St. Anne's (SAS), until 2021. Located in a suburban Northeast town, St. Anne's School was founded in 1888 and has traditionally been a Pre K-8 elementary school with one classroom in each grade. The three-story brick building houses students in grades Pre K-2 on the first floor, grades 3-5 on the second floor, and grades 6-7 on the top floor. An old cafeteria and newly renovated auditorium are at the basement level. On a typical day, parents drop off their students in the parking lot at the rear of the school and teachers escort their classes to Morning Meeting, held in the auditorium space. After Morning Meeting, students travel to their classrooms using one of the two marble staircases that run on either side of the building. Across the street and one block north of St. Anne's is Catholic High School, where students from St. Anne's eat lunch every day.

St. Anne's School has an average student enrollment of 280 students, aged four to 13 years old. Approximately 12% of students are students of color, and information regarding linguistic diversity was unavailable via school records. There are 24 teachers currently working at St. Anne's School and an additional 11 support staff, and the

average class size is 16 students. The majority of St. Anne's students enroll in the partner Catholic high school across the street.

During the summer of 2017, coinciding with Katherine's hiring, St. Anne's parish decided to initiate a merger of its two schools. Beginning in the 2017-18 school year, St. Anne's School and Catholic High School were rebranded as the St. Anne's Parish Schools. The purported benefits of the merger included seventh and eighth grade students playing on high school teams, increased retention of St. Anne's School students at Catholic High School, and accelerated middle school learners being able to take Catholic High School classes. With this merger came a realignment of the schools' administrative teams. Katherine's position remained principal of St. Anne's School, but the former high school principal became head of schools for St. Anne's Parish Schools. There remains some confusion among the staff and Katherine about whether the distinction between principal and head of schools is a semantic formality or authoritative one. The tensions among the administrators will be explored in detail in Chapter Six, but methodologically the tensions reinforced the need to keep the sites unbounded so that as new elements emerged, they could be scrutinized for their contributions to the findings of this study.

St. Anne's, as the third research site in this comparative case study, encompasses the students, staff, families, and communities of St. Anne's School. Traditionally, the boundaries of this case may have been determined by those staff and students over whom Katherine had authority as school principal. However, the merger has broadened the anticipated boundaries of the case to include the staff, students, families, and communities of Catholic High School as well. This case reaffirms my use of the

methodological approach of comparative case studies put forth by Bartlett and Vavrus (2017). As the schools merged, the traditional boundaries of St. Anne's School began to be redefined. It became necessary to consider not only those structural and cultural factors existing among St. Anne's School students and staff, but also those factors existing within Catholic High School, as well as those factors existing in the spaces between.

Case Selection Process

Initially, Katherine was one participant within a larger study investigating the experiences of fellows from the Lynch Leadership Academy program for leaders of urban schools at Boston College's Lynch School of Education. As a member of that research team, I followed Katherine over time, first at SBS and then to Fiorella. Throughout the course of that study, it became clear that each school was experiencing structural and cultural changes during Katherine's tenure. As a result, SBS and Fiorella were identified as the first two cases; when Katherine decided to leave Fiorella for St. Anne's School, SAS was identified as a third case for this study.

Interview Participants

Interview participants included the principal, teachers, support staff, parents, and school administrators. In total, 29 people were interviewed for this study. The timeline and sources of these interviews are displayed in Table 2. At SBS, interviews were conducted with three teachers and Katherine in 2012, and I conducted an interview with the new principal of SBS in 2016. A total of six interviews were conducted at SBS. At Fiorella, interviews were conducted with six teachers, four parents, and Katherine. Three of the teachers interviewed during the first site visit to Fiorella were interviewed two

years later after Katherine had left for St. Anne's School. A total of 15 interviews were conducted at Fiorella. At St. Anne's School, interviews were conducted with seven teachers, the guidance counselor, a special educator, the development director, and one of the school secretaries, a long-time school employee. Additionally, members of the administrative team were also interviewed, including Katherine, the apprentice principal, and Beatrice Lonergan, Head of Schools. A total of 15 interviews were conducted at St. Anne's School. Katherine was interviewed multiple times at each site. It was determined that the focus of this study did not necessitate interviews with students. Rather, evidence of students' experiences of structural and cultural change at each site were ascertained through interviews with their teachers, interviews with parents, classroom observations, and student work observed during site visits.

Table 3.1

Data Sources and Timeline

	SBS	Fiorella	SAS
Year(s) Data Collected	2012, 2016	2015, 2017	2018
Data Sources			
Interviews			
People Interviewed	Katherine, teachers, new principal	Katherine, teachers, parents	Katherine, teachers, guidance counselor, development director, secretary, head of schools, apprentice principal
Number of Participants	4	11	14
Total Number of Interviews	5	15	15
Observations	Classroom writing instruction, professional development sessions	Faculty meetings, classes, Morning Meeting, First Communion	Classes, Morning Meeting, Rosary recitation, administrative team

Lesson plans, copies of student writing, email correspondence, meeting notes, teacher surveys, weekly newsletters, teachers' manual and rubrics

practice, teacher team meetings, student lunch, recess Meeting agendas, Strategic Plan, mission statement, lesson plans, student texts, sample student work, bulletin boards, student art

Meeting agendas, Staff survey, lesson plans, sample student work, bulletin boards, promotional materials

meeting, parent drop

off

Data Collection Procedures

Site Visits

Site visits at each site differed in terms of procedure. Visits to St. Bernard's School took place from 2011-12 and again in 2015. During site visits, researchers conducted interviews, observed classes and events, and collected documents. Site visits varied in length from two hours to a full day. At Fiorella, a three-day site visit was conducted in the spring of 2015. The visit consisted of interviews; observations of classrooms; school events such as Morning Meeting, First Communion practice, and a faculty meeting; and document collection. In the evening, the researcher toured the surrounding community including the local naval base and viewed the surrounding schools. Additional contact with Fiorella staff in 2017 was conducted remotely via phone interviews. A series of two site visits were conducted in St. Anne's School in the fall of 2018. The first half-day visit was used to conduct interviews with the administrative staff. The second visit followed a month later, and the two days consisted of interviews with teachers and staff; observations of classrooms, Morning Meeting, and a prayer service; and document collection.

Interviewing

In total, data included 35 interviews with teachers, parents, other administrators, and the principal. These semi-structured interviews (Merriam, 2009) lasted approximately one hour. In order to get a sense of changes in Katherine's leadership practices over time, teachers and Katherine herself were interviewed multiple times. The interviews with teachers followed the same protocol and included questions that addressed themes within adaptive leadership, such as how power was distributed at the schools, for example: "Does Katherine share leadership with faculty?" and "How involved are parents in the running of your school?" Questions also addressed how teachers described the school culture, such as, "How would an outsider visiting your school know what your key values are that drive the work of the teachers and administrators?"

Interviews with Katherine focused on the same themes but differed slightly to allow her to reflect on changes in her practice over time and the impact of the LLA on her experiences as principal. For example, at St. Anne's School, Katherine was asked to reflect on the progress of her plan to incorporate a theme for the school year: "Last year you were considering introducing a theme for this school year. Did you move forward with that plan? If so, what is the theme?" Interviews with Katherine focused on questions central to getting a sense for her ideals, ambitions, and plans. I sought also to gain understanding into structural and cultural change occurring at each school site, while also building upon previous knowledge of Katherine's efforts at change.

Observations

A second source of data collected in this research came from observations at the three sites. Because issues of power were central to the goals of this study, I conducted

observations of faculty meetings, administrator meetings, and teacher team meetings in order to observe interactions between the principal and teachers and among the teachers when Katherine was not present. Observations of school culture took place in visits to Morning Meetings, walking through all parts of the school, and being present at First Communion practice and public recitations of the Rosary. In these observations, student interactions and visual depictions of school mottos and art were witnessed, providing a sense of how the school culture was portrayed by and made visible to students. Lastly, observations of teachers' lessons provided insight into the ways in which shifts in power and a shared school culture impacted instruction.

Document Collection

A final source of data came from documents collected at the sites, including lesson plan templates; the Fiorella School Strategic Plan; copies of emails sent to faculty, staff, and families; letters to the faculty; promotional materials; photographs of student work; and photographs of teacher bulletin boards. The documents selected were chosen for their relevance to issues of school leadership and school culture. As with interview and observation data, documents revealed themes related to power and school culture. For example, the strategic plan from Fiorella contained a written outline of the decision-making process and leadership roles within the school. Connections to school culture were evident in meeting agendas that included the school's mission statement. These data and data from interviews and observations were collected from each site and analyzed to reveal links to the overarching research questions. The process of collecting documents was guided by the interview and observation process. Based on comments made by interviewees, documents were requested or collected that seemed connected to emerging

themes in the research. The purpose of the collection process was to provide data to triangulate findings from one case to the next and reveal new avenues of inquiry and illuminate aspects of data already collected (Bowen, 2009).

Timeline

Research for this study was conducted between 2011 and 2018. The timeline is enumerated in Table 2.1. Initial data collection at St. Bernard's School took place in 2011 and 2012. I returned to St. Bernard's School again in 2015 to develop a sense of what practices initiated by Katherine endured in the years after she left SBS. In the spring of 2015, data collection began at Fiorella. The three-day site visit was the only time research was conducted at the school site. However, in 2017, teachers originally interviewed in 2015 were interviewed again by phone to determine the lasting impact of Katherine's leadership. In spring of 2018, Katherine was interviewed at the conclusion of her first year at St. Anne's School. Site visits were then conducted in fall of 2018, which included additional interviews with Katherine, informed by her responses in the interview earlier that year. Data collection, coding, and analysis has been an iterative process beginning in 2011 and continuing to the present day (Glaser & Strauss, 1967).

Data Analysis

To analyze the data I gathered through interviews, observations, and document collection, I used the constant comparison process described by Glaser and Strauss (2009). This process was used to provide information about how principals' leadership practices impact the change process at their schools. Constant comparison allowed for a process of reducing the data, spanning across three schools, to concepts and then identifying similarities and differences from among the data. This process revealed broad

themes and subcategories I used to make sense of how each school experienced the change process (Strauss & Corbin, 1990).

The length of this study meant that the data analysis process took place over the course of several years. The process of analyzing and coding the data was iterative in that, as new data were added, previous data were reanalyzed and new comparisons were made. Data analysis began with the open coding of interviews from St. Bernard's School before data were collected at the two other schools (Glaser & Strauss, 2009). This open, initial coding process sought to make sense of what leadership for adaptive change looked like at the school. Some examples of these initial codes included "principal attempts at distributed leadership" and "staff mistrust." As the scope of this study expanded, I engaged in another round of initial coding, this time using data from all three school sites. I explored both commonalities and differences across the cases, using constant memoing to record themes and patterns (Charmaz, 2006).

Open coding of data from across the three schools revealed themes related to leadership for adaptive change. I engaged in a process of axial coding (Strauss & Corbin, 1990) in which I brought the distinct codes generated during initial coding together again in "a coherent whole" (Charmaz, 2006, p. 60). The process of axial coding revealed the centrality of several themes across cases. The following themes surfaced during this process: promoting a common school culture, fostering trust, distributing leadership, and instructional innovation. In addition to these larger categories, the coding process revealed subcategories significant to the change process across sites. For example, prominent subcodes for distributed leadership included teacher leadership, parent partnerships, and outside networks. Subcodes related to common school culture included

themes, community celebrations, and Catholic values. Subcodes related to trust included competence, sincerity, and reliability. The software application, MAXQDA (2018), was used to enter and sort data based on these codes. Analytical insights were reviewed with other members of the research team throughout the length of this study.

Again, in keeping with the comparative case study methodology described by Bartlett and Vavrus (2017) and the systemic orientation of complex emergence, the role of relationships in this analysis was key. Each case was not bound by location or time, but rather the relationships between system actors were analyzed to contextualize the findings. For example, throughout the process of analyzing these data, the boundaries of each case were expanded as the new system actors were identified and incorporated into the analysis of each system. In St. Bernard's School, the system went beyond normal school personnel and came to include university researchers; at Fiorella, the system included newly hired paraprofessionals, the local naval base, and a laboratory science teacher; and St. Anne's School underwent a profound realignment as the lower and upper school came together as one fragmented system. I was able to categorize data into themes that emerged during the iterative process of analysis and then identify relationships between the data.

Validity

The process by which I established validity in this study was guided by the strategies described by Maxwell (2009) and Miles and Huberman (1994). First, the length of this study supports an increased likelihood that the situations are represented accurately (Maxwell, 2009). For example, over time, my impressions of events were supported when I had new opportunities to ask questions related to what had previously

occurred and thereby triangulate relevant data sources. This process enriched both my understandings and the substance of the questions that were posed to participants.

Second, the richness of the data was enhanced by verbatim transcriptions of the interviews and copious note taking during the observation process that provided detailed accounts of events, participants, and surroundings. Observational data were further supported by a catalog of pictures taken at each site and during larger events such as Morning Meeting and faculty meetings.

A third means of establishing validity for this study was respondent validation (Maxwell, 2009) or member checks (Lincoln, 1985). I sought feedback from Katherine throughout the study to ascertain her opinion of my findings. She has had access to transcripts from her own interviews as well as notes from papers, such as a conference paper presented at the Annual Conference of the American Educational Research Association (Noble, 2016). She has not offered any feedback, positive or negative, regarding the written documents. Teachers that have been interviewed more than once have received copies of previous interview transcripts, but those transcripts did not yield any feedback. The main source of feedback for the direction of this study has come from discussions with the primary investigator and other members of the research team. This process of comparison has allowed me to consider these cases within the context of the larger study and glean new insights (Maxwell, 2009; Miles & Huberman, 1994).

Lastly, validity was established through the process of triangulation. The three cases provided a means to verify the experiences of each system independently and in relation to one another (Maxwell, 2009). Additionally, scholars recommend that triangulation can be established through the process of triangulation with multiple

investigators (Denzin, 2009; Fielding & Fielding, 2008). My work with the larger research team has led to improved triangulation of these findings. Work with other members of the research team afforded me the opportunity to discuss relevant themes, determine patterns, and compare these three cases with the experiences of other principals.

This chapter has discussed the design of this study as well the process by which I applied the design in practice. Additionally, I have provided an outline of the three cases that will be described in great detail in the following chapters.

Chapter Four—St. Bernard's School Case Study

Katherine became principal of St. Bernard's School (SBS) in the summer of 2010. SBS was a small, urban, Catholic elementary school, open to students in grades pre-K through eight. Prior to being hired at SBS, Katherine taught elementary school for three years, followed by experience supervising student teachers and participating in an administrative internship. Speaking of her motivation to become an administrator Katherine explained:

I loved [teaching]. But, had some frustrations with kind of like the limited amount of change that I could affect. You know, like just within the walls of my classroom and I was seeing things happening in other classrooms that were really inconsistent with my beliefs and philosophy of education and that was just really frustrating to me. And so, I think that kind of started working within me although I wasn't really conscious about it.

Katherine's comment signals that her desire to move from the classroom to administration was based on an understanding that school leaders are in a better position to promote change and foster shared beliefs.

As Katherine navigated her first leadership role, she sought to make changes to improve the school, with a particular focus on instructional growth. During Katherine's time at SBS, her work with the Lynch Leadership Academy (LLA), a university program designed to foster leadership skills in early career principals, was formative in helping guide Katherine's efforts. She learned the importance of leveraging structural and cultural change to promote growth with a particular emphasis on distributing leadership and creating a common school culture. These themes, central to the leadership program,

align to leadership practices found to foster adaptive change (Lichtenstein & Plowman, 2009; Plowman et al., 2007).

The degree to which Katherine was successful at introducing change and promoting growth during her three years at SBS was influenced by her relationships with teachers and their willingness to embrace the practices and strategies Katherine introduced. Initial conditions in the form of existing teacher beliefs played a key role in the change process. To understand Katherine's efforts at promoting change at SBS, I turn now to an exploration of the ways in which she aimed to engender structural and cultural change at the school, thereby generating the conditions associated with promoting adaptive change (Goldstein et al., 2011). Additionally, this case unpacks evidence of the degree to which trust, an element central to the change process, existed between Katherine and the faculty.

The Role of the LLA on Katherine's Approach to Leadership

Katherine's participation in the Lynch Leadership Academy (LLA) provides context for her experiences at SBS. The LLA was a graduate program developed to foster the skills of educational leaders to promote instructional change in their schools. Guided by three curricular foci, promoting instructional leadership (Hargreaves & Fullan, 2012), generating a common school culture (Sarason, 1993), and distributed leadership (Spillane, 2006), LLA Fellows participated in retreats, workshops, and site visits where they learned about research-informed leadership practices and reflected on the progress of their own work in partnership with colleagues. Within her LLA cohort, Katherine was assigned to a "critical friends group" of public, charter, and Catholic school leaders who provided thought partners to discuss ideas shared in program sessions. In addition to

meetings and professional development with colleagues, Katherine worked closely with a leadership coach who mentored Katherine based on her self-identified needs.

As a participant in the LLA, Katherine learned about theories of leadership and best practices for encouraging change in schools. She was also able to rely on interactions with colleagues and visits to their schools to inform her own leadership practices. Joining the LLA allowed Katherine to shift her thinking about the role of the principal. Her work with the LLA served as an opportunity tension in which she encountered new ideas and practices that were not available in her immediate community (Lichtenstein, 2009). As Katherine commented, the LLA offered a new source for ideas and growth:

In one way I felt like I had a lot of work that needed to be done but felt like I was kind of spinning my wheels and not knowing where to start and how to focus. I had a real hunger for colleagues that had similar values and priorities, that would challenge me and support me because I wasn't feeling that from the other principals in my region among the Catholic schools. I was always seen as the new guy who didn't know anything.

LLA colleagues and faculty shared new ideas with Katherine that she drew upon in attempting to disrupt the status quo at SBS. As she remarked:

I feel like the biggest thing LLA has helped me with this year has been giving me the courage to say [academic growth] is the most important part of what we do, and it's an issue of justice for our students. And yes, there might be some difficult conversations involved. And no, it's not always going to be easy to look at data or to hear that you're not doing what you should be doing. But, at the end

of the day, it's not about you. It's about our students. So, I think that I didn't really have a sense before LLA that [these difficult conversations] needed to happen, but I think that I've really been empowered to make it happen. The professional community has been very life-giving for me.

The LLA offered Katherine the opportunity to learn from the perspectives of educational leaders in different contexts. Her leadership coach, Owen, remarked on the power of learning from leaders of different school contexts:

She's in a Catholic setting, she sees the charter school setting, she sees the [public school] setting, and she takes from that and is wise enough to see what won't work in her parish school but will work in terms of the academics for the kids.

In addition to its commitment to student achievement as a school's number one priority, community and shared learning was a centerpiece of the LLA model. Katherine remarked that her relationship with other leaders in the LLA provided an alternative to the isolation she often experienced as a school leader:

I think the hardest part of this job for me has been feeling like it's just me. At the end of the day there's not really anyone. I don't have an assistant principal or administrative team. It's not like when you're a teacher and you have all your other teachers to talk about stuff with... You could argue that I have that with all the other Catholic school principals within my area because we have monthly meetings and that kind of thing. But, that has been a source of great discouragement for me since I've been in this position because so many are so tired, jaded, and bitter and all they ever do is complain. I hate going to the

meetings for that reason. And so, I loved the idea of being with people who were still fairly early on in their careers, energized, and passionate.

The LLA also provided Katherine with a space to reflect on her practice so that in disrupting the system, she could do so with an awareness of her strengths and weaknesses as a leader. She stated, "I try to juggle too many things at a time and sometimes end up not doing any of them well. Sometimes I try to initiate too many changes at once and this is overwhelming to people." Katherine's understanding of her tendency to take on too many responsibilities directly influenced her choice of her LLA Leadership Growth Project, the capstone project to the program, for which she instituted an Instructional Leadership Team at SBS.

Throughout the LLA program, Katherine and colleagues viewed change as natural, embracing new ideas and implementing new programs that were previously unfamiliar (Chiles et al., 2004). Katherine explained:

I always look forward to any of the events that we have or days together. The opportunity to visit other schools has been really helpful to me as well because sometimes you kind of get into your little bubble and it's so good to see how other people are doing things and get ideas. I think the overarching thing as far as my leadership has been the sense of empowerment to do the really hard parts of the work.

The LLA enhanced Katherine's knowledge of best practices in educational leadership and reinforced her commitment to leadership for instructional improvement. Katherine found a network of colleagues who shared her interest in fostering academic achievement at their schools by drawing on the tools and supports they encountered through the LLA.

With this background in mind, I turn now to the specific ways in which Katherine, guided by knowledge developed in the LLA, sought to enact change at SBS.

Structural Change at SBS

Katherine promoted structural change at SBS by regularly encouraging shared leadership and communication among the staff. As her leadership coach described, "Katherine has taken that leadership role as a nucleus and sort of made the tentacles go out." The analogy of a nucleus and tentacles reflects Katherine's process of shifting the dynamics around communication and decision-making at SBS. Katherine remained the school's central authority as she added new opportunities for teachers and outside partners to provide their ideas and expertise to the instructional landscape of SBS. The "tentacles" came to include an instructional leadership team, advisory board, university partnership, and relationship with a foundation that supported SBS with grant funding. These network features contributed to a dynamic of enhanced interactions with a deeper and wider reach than had previously existed (Heifetz, 1994).

Teacher Leadership Opportunities

Katherine established opportunities for distributed leadership among SBS staff. By serving on different committees, interested teachers could contribute to the decision-making process around issues of student learning, teacher evaluation, and school life in general. Even teachers who did not sit on a specific committee attended faculty meetings which provided a forum for communicating school news and sharing feedback on relevant topics. Structural supports that encourage staff interactions are significant because they draw on collective intelligence when considering new challenges (Heifetz et al., 2009). The specific committees Katherine established included cluster leaders, an

instructional leadership team, advisory board, and a student support team, all complemented by general faculty meetings.

For SBS staff, any degree of shared decision making marked a significant change from past practices. Prior to Katherine, nuns ran the school and did not share authority with other staff members nor did they seek input from outside their immediate circle.

Katherine described how she worked to shift this dynamic over her years at SBS:

SBS had always had nuns as principals. What they said went. There was no, "Let's talk about this," or, "How about, you're in charge of this." The nun just did it all. [Thinking about that difference] has been really helpful to me this year, especially with the ILT. That is a small group where I can test certain little things before exposing them to the whole staff. Maximum appropriate involvement is what they call it in decision making. In the beginning I think the chocolate milk episode [described later] is a perfect example of a "decide and announce" [leadership style]. The leader's just making a decision and telling everyone. But then, you can also talk to a few people, get a few perspectives, and gather input from individuals and then decide. The next step is gathering input from the group as a whole and then deciding. Consensus, where you say, "We as a group all need to come to this decision." I think that I've been working a lot in my ILT towards consensus.

In Katherine's first year at SBS, there was little staff involvement in decision-making.

Katherine made decisions unilaterally, exemplified by an incident in which she attempted to remove chocolate milk as an option at lunch, when a seemingly harmless effort to enrich the quality of the food served at lunch by eliminating chocolate milk coalesced

into a school-wide debacle in which students, teachers, and parents aggressively confronted Katherine. Through the LLA, she learned the benefits of shifting to a more inclusive leadership style whereby she would build consensus with grade level leaders and communicate decisions as partners.

Cluster leaders. Katherine organized each grade level grouping into a "cluster" (the three pre-kindergarten rooms, grades K-2, grades 3-5, and grades 6-8) with a cluster leader chosen to represent their grade level grouping. Cluster leaders were responsible for communicating grade level concerns to Katherine and the ILT and communicated relevant information back to their group. Cluster meetings served as an opportunity for similar grade levels to spend time focusing on shared needs. For example, the middle school grade level cluster took on the responsibility of rewriting the middle school section of the school handbook. The middle school cluster spent several meetings reviewing sample handbooks from other middle schools, distilling the most relevant parts, and editing a final version to be presented to the rest of the school. Staff members agreed that the Cluster Leader model at SBS had a positive impact on the school and faculty communication. The fourth-grade teacher, Lilah, commented:

I consider the Cluster Leaders a really [important change instituted by Katherine]. Having that opportunity to meet with the third-grade teacher and the fifth-grade teachers and getting the chance to do things together, like planning things just strengthens [our school]. We're a family here, and we do things together... Just take fractions, for example. The third-grade teacher introduces, fourth grade you get a little deeper, fifth grade is about really deeper and deeper, so if we can get together and talk about "Let's do something fun with fractions as a cluster." Not

only for the kids' sake but being able to teach better. Sometimes when you have to do something, and it might be a little scary, doing it together with your colleagues makes it better.

The clusters, guided by Cluster Leaders, worked together to strengthen the curriculum and reported back to Katherine about their progress. As the third-grade teacher, Evelyn, remarked, the cluster leaders served as representatives of their grade level, "We're representatives for the other teachers so we can talk about what we're teaching and how we could change it... If there's something [our group] wants to talk about at a level meeting we take notes and let [Katherine] know." The cluster model provided a forum for grade levels to interact and the cluster leaders were positioned to enhance communication among the grade level groups and Katherine. This dynamic of enriched communication enabled teachers to respond to challenges such as curriculum alignment between grade levels.

Instructional Leadership Team. Cluster leaders interacted monthly as members of the Instructional Leadership Team. Other members of the ILT included Katherine and the guidance counselor. These meetings provided an opportunity for members to discuss concerns, share best practices, and plan for the future. After implementing the ILT, Katherine noted the success of the initiative in allowing her to share some responsibilities with teacher leaders:

Over time, the ILT became a sounding board for me. I could trust them to tell me if something didn't make sense or if their grade level team members wouldn't go for it or if it was too much too soon or if I needed to present it in a different way in order for others to jump on board.

The middle school ELA teacher, Gertrude, noted a similar sense for the role of the ILT. Katherine would share ideas with the ILT and get their feedback before presenting to the full faculty. She would also solicit their feedback on curriculum, funding, and assessment:

She uses [the ILT] as a test for things that she wants to do, or what she wants to present to the rest of the faculty. To get our reactions and see what our opinions are and how she can better do it. Also, she had us think about how we want to use grant money, what would be the best focus for that, revamping curriculum across different age levels, things like that. She wanted to focus more on the Stanford Ten results, so there were a few meetings that focused on how to improve the results.

Gertrude went on to explain specifically how the ILT directly informed decision-making at SBS. When the school community conducted a survey about teaching and learning, the results were unfavorable to teachers, and, after reviewing the results, the ILT recommended Katherine not share the results with the wider faculty. Katherine followed their advice and kept the results private, thus providing a sense for how the ILT shaped decision-making.

One way Katherine used the ILT to encourage instructional growth involved soliciting members' input in the evaluation process. Katherine explained that ILT members worked with their grade level clusters to compile a list of best practices in the classroom and then brought those ideas to the ILT, where together, they created the rubric Katherine would use in her observations:

I told them that I could just create this [rubric] myself based on all the research that's been done, but I felt like there was value in it coming from them. So, I said, "Brainstorm among your grade level what you think are the best practices that you use in your classroom." Then they brought those all back together and we compiled them into [the rubric]. And so, this is now what I use when I go in for mini-observations in the classroom.

Katherine went on to use the co-created observation rubric in her evaluations, signaling to the teachers that their colleagues' feedback was a factor in developing the tool. This collaboration between the ILT and Katherine generated a sense of shared accountability and ownership, creating the conditions for teachers to support what they helped create (Wheatley, 2006).

Despite Katherine's enthusiasm for the start of shared leadership at SBS, her expectations for the contributions of teacher leaders did not necessarily reflect their commitment to these new positions. For example, the kindergarten teacher, Ruth, communicated the sense that Katherine's vision for the cluster leader role did not match her colleagues' expectations.

Occasionally Katherine would give us an article to read and say, "Go give this back to your team and see what they think." I'd have to go and get through the papers, trying to figure out exactly what all of them were, to be completely honest. They were ultimately around trying to improve the standards for the school. I think she really wanted a team of teacher leaders that were able and willing to give up the extra time to be able to pull everyone's ideas together.

Ruth had difficulty understanding the resources Katherine provided the ILT, including articles on instructional improvement. She also noted that Katherine's expectation of the extra time cluster leaders would put into their role was not reflective of their level of eagerness to participate in the work. This mismatch was exemplified when Katherine shared an article on Growth Mindset (Dweck, 2007) with the ILT and received little interest from cluster leaders, suggesting the limits these new network connections had in contributing to the change process at SBS.

Advisory Board. In addition to the cluster leaders and ILT, Katherine developed an advisory board that bridged parent, teacher, and community interactions. The advisory board was composed of parents, teachers, and community members organized into committees focused on specific topics. Each committee had three members, including a parent and a staff member, and was chaired by someone considered to be an expert in that particular area. It was the teachers' responsibility to report back to the full staff on their committee's progress at faculty meetings. Katherine expressed her sense that members enjoyed owning the work that they did and they felt the work was important to the school:

We have an advisory board, which is made up of people from the community who have different areas of expertise like, law, finance, marketing, and one is a retired Sister who used to teach here. This year we decided to form committees so each advisory board member from the community is a chair of a committee. Each committee has a teacher and parent as well, which hasn't happened before, as far as them coming together to talk about things. There is a committee focused on academics and curriculum, one focused on mission and Catholic identity, one

focused on safety, security, facilities, and one on technology. I think that's been a really interesting thing for them to all come together from these different perspectives and get work done. It's been another form for me to distribute leadership. When we have our faculty meetings the first ten minutes are a time for teachers to go around and report back from their committees about the work that's being done. They totally own it. They're so proud of what's being accomplished and what they're doing. It's been really a good thing. There's at least one parent on each committee, but we just offered the opportunity for more people to sign up if they would like to be on one. I think moving forward that I would like to reach out to certain parents that I think would be great for certain committees.

The SBS Advisory Board provided another way in which Katherine enhanced interactions among members of the school community. Through the Advisory Board, committees shared expertise to inform decision making in the areas of academics, mission, operations, and technology.

Faculty Meetings. The ILT and Advisory Board served as smaller forums for staff and the school community to interact, but on a larger scale, monthly faculty meetings provided opportunities for the entire staff at SBS to come together and review instructional matters relevant to all. The structure of faculty meetings changed during Katherine's time at the school. They evolved from last-minute meetings at which Katherine would report on upcoming events to scheduled monthly meetings at which staff could engage in substantive conversations about teaching and learning across grade levels. Katherine explained this shift:

When I first came, SBS had never had faculty meetings or any kind of opportunity to talk together, or be together, or work together. Everyone was just in their own classroom doing their own thing. Then, my first year I said we were going to have a monthly faculty meeting. And then I realized that we weren't getting a lot of work done during that time. It was mostly me going through what's coming up in the school. I felt like we weren't focused on teaching and learning. So, I did a lot of thinking this summer between my first and second years about how I could structure our meeting time to make allowances for that. So, teachers could be talking more to, across grade levels but also within their grade levels. Last year we started having grade level team meetings once a month. And then faculty meetings once a month. But then coming into this year, we now have grade level team meetings twice a month, and faculty meetings once a month. I feel like you can feel it in the pulse of the school when we haven't met for a while. You can tell that people just feel disconnected or that we need that time together.

As Katherine explained, the faculty meetings and cluster meetings complemented one another, so that the discussions in cluster meetings were then shared with the entire faculty. This dynamic encouraged enhanced communication and decision-making at SBS; deeper discussions at the cluster level were introduced to a wider audience in faculty meetings. Feedback in each setting framed the trajectory of the conversation in the other. For example, clusters would discuss changes to their grade-level curriculum and review the scope of that conversation in faculty meetings. Grade clusters would then consider feedback and strategies from other grade levels in subsequent cluster meetings.

Many of the staff interactions Katherine encouraged represented horizontal rather vertical connections in the form of peer-to-peer meetings. Horizontal connections tend to be less hierarchical than vertical connections, typically involve a greater number of people, and allow for "learning at the local level" (Clarke & Collins, 2007, p. 163) without the need for hierarchal control. These dynamics shifted patterns of communication and information sharing among the staff.

Katherine's work to share decision-making and improve school-wide communication was evident in new teacher leadership opportunities through the cluster leaders and ILT and increased opportunities for staff interaction at faculty and grade level meetings. This marked a change from the initial conditions Katherine experienced upon joining SBS where teacher leadership opportunities were absent. Despite Katherine's intention to expand decision-making authority at SBS, her approach was, at times, confusing to staff. For example, when Katherine purportedly gave teachers the option over whether to attend certain school functions with their classes, some chose not to attend, but Katherine later overruled their decision. The middle school ELA teacher, Gertrude, described this incident as an example of mixed messaging from Katherine regarding the scope of teachers' authority over instructional decisions:

[Katherine] recommended that we start opting out of things and I tried to opt out of the science fair. Basically, she overruled me and told me that we couldn't miss it in order to be in class. To me, it was a real mixed message because she said that we could start opting out of things if we needed to. Personally, I believe a lot of this enrichment stuff that gets brought to the school is not geared towards our

middle school students. It is geared towards a younger crowd, and it is frankly a waste of time for the middle school.

Not all of Katherine's efforts had their intended impact with staff. In another example, some staff reported that faculty meetings were not always relevant or useful. According to Gertrude, faculty meeting agendas were often too lengthy to cover everything adequately:

We have faculty meetings, but the faculty meetings just don't address anything. They address things, but Katherine has these agendas and we begin everything with a reflection which is nice. And then we usually have a thing where we talk to each other. Then she has four or five other items (and she's gotten better about that as the year has gone on, I've noticed that) but we'll spend all of our faculty time meeting or beyond, on our first item... And sometimes the items are really not very practically oriented.

The kindergarten teacher, Ruth, expressed a similar sentiment that meetings were not as impactful as they could be, adding that the time spent at meetings was overwhelming:

I feel like there are more meetings and extra stuff at SBS than at any other school I've worked at. A lot of [the meetings] I left feeling very unfulfilled because of the amount of time I spent there, that I think overwhelmed me. It ended up being a lot of extra hours, which was a lot of extra time for things that felt like it didn't amount to anything.

She went on to explain that the number of meetings has increased significantly. Between the evening meetings, the ILT, the PD, and meetings specific to the preschool, Ruth was attending three more meetings each month than the year before.

Katherine's efforts to provide teacher leadership opportunities and enhance communication among staff were evident, but teachers and Katherine differed in their perspectives of how effective these efforts were. SBS teachers felt that meetings were unfocused, too long, or irrelevant, and, though the cluster leaders had a defined scope to their role, other teachers were unclear as to their authority to make instructional decision-making for their classes. These challenges impacted a sense of trust and opportunities to develop complementing priorities between Katherine and the staff (Goldstein et al., 2011).

Outside Partnerships

During her time with the LLA, Katherine expanded her professional network to include university faculty who could contribute their expertise to her work at SBS.

Through one such relationship, Katherine developed a partnership with a research team that provided SBS staff with professional development in writing. The writing program initiated through the partnership was still being used at SBS years after Katherine moved to Fiorella. The fourth-grade teacher, Lilah, remarked on the process of program implementation and impact:

We have this writing program where we work with a college professor and Katherine brought her in so that she could work with all the teachers—meet with us as a cluster, and then meet with us individually, and some of her student teachers—would come in and actually work with us once a week and help us to implement this new type of writing program. We basically got to pick what we wanted to focus on. It's had a very positive impact.

Katherine initiated this collaboration, and it represented a way for some faculty to gain new authority to make decisions regarding classroom instruction.

Input from the university research team gave Katherine a sense for how the program was being implemented. Instructionally, Katherine hoped the writing program would improve the quality of student writing across content areas. One member of the research team provided Katherine with samples of teachers' work and observations of their participation so Katherine could assess progress. In this way, support from outside networks helped contribute to Katherine's instructional goals at SBS. The university researcher explained:

[Katherine] wanted to see that people were attending the meetings and working with me and [the other researcher], and she asked us, whenever she saw us in the hallway, for informal updates. I know her and [the lead researcher] were in touch about people and how they were responding. There were only a few people who were resistant, and we've certainly had more in-depth conversations about them. She did want to look at their lesson plans and wanted to see that they were doing writing. Not just writing in literacy, she wanted to see writing in math, in science, and I was trying to get more writing in history as well.

These university partners supported Katherine's efforts to hold teachers accountable for instructional expectations and their own professional learning. Based on their feedback, Katherine followed up with staff members, tailoring her approach based on the particular individual. For example, one middle school teacher was particularly resistant to teaching writing during his lessons and required a more authoritative approach to change his teaching. Katherine approached other teachers, who embraced the writing program, in a

more collaborative way, serving as a resource for any questions they had. The university researcher noted this distinction:

It was a really individual process. I think Katherine had different ways of motivating different people. I know there were some people who needed the whole, "Hey I need to see this is your lesson plan," but then there were some who bounced ideas off of her. She didn't have to be so authoritative with them because they were engaging with the project at their own level.

This university partnership provided a source of disequilibrium in the form of new instructional practices and those ideas became amplified during professional development sessions that included other teachers and university researchers (Goldstein et al., 2011)

At professional sessions members of the research team would discuss different writing strategies and then work with Katherine to ensure teachers were integrating the expectations of the program into their curriculum.

In another instance of Katherine partnering with outside organizations, she worked closely with a school accreditation team from a partner agency. Katherine communicated with representatives from the accreditation team, leveraging their authority to promote change at SBS. This arrangement demonstrated how Katherine operated within her network to communicate with others and process decision-making. Suggestions from the accreditation team stimulated changes in staffing. As Katherine described:

One thing that was helpful my first year was that we had our accreditation visit.

The first visit was in October, a month into school. And this whole team came and interviewed everybody and then did a report. That was kind of nice because there

were several suggested things that needed to be improved mentioned in the report. It was really easy for me to follow up on those things because it wasn't coming from me, it was coming from this visit. One of those [recommendations for improvement] was for our preschool, the teacher was not certified in early childhood... She and I had a difficult conversation and then I was able to put someone in there who was qualified and able to do a good job.

Katherine shared that the preschool teacher did not have much experience teaching preschool and struggled with curriculum and instruction for that age group. The accreditation report provided Katherine with further justification for hiring someone new.

Katherine's partnerships with foundations resulted in new sources of funding to expand school programs. A large grant from a local foundation enabled SBS to add two new preschool classes and make associated curricular improvements. Katherine noted the impact of the funding on preschool programming at SBS:

Our pre-K early childhood is lightyears beyond where it was when I first got here. They were using a Mother Goose curriculum when I first got here, basically doing crafts all day, every day. And, not even creative crafts, just cutting out and pasting. It was not fun and exciting and there was little learning taking place.

Now they have a literacy program, a math program, and a writing program.

They're doing great things. Pre-K is definitely a place of growth for us.

Katherine explored outside partnerships for professional development opportunities, assistance with accountability measures, instructional support, and program expansion.

These relationships generated new sources of disequilibrium, generated challenges, and

enriched opportunities for growth which were addressed through the new network structures that had been created (Goldstein et al., 2011).

During her three years at SBS, Katherine introduced many structural changes—creating an Instructional Leadership Team, scheduling times for faculty meetings, removing teachers, and initiating new instructional practices such as a new writing program and lesson plan procedure. Accompanying these developments, Katherine encountered some teacher resistance, particularly with regards to a new lesson plan procedure. Katherine explained:

There was definitely push back and they felt like it was a waste of their time at first. But what started to come out of that eventually was, "I don't especially like doing this, but I can see the value in it because it is pushing me to actually start planning." We definitely made progress [on lesson planning]. I don't think we got as far as I would have liked to have gotten. I don't think they were thrilled about doing it, but I think they understood why they were doing it.

Katherine discovered that taking time to understand specific structures within SBS, such as teacher leadership teams and grade level groups, revealed points of leverage for change and mechanisms for distributing authority. For example, Katherine's work with grade-level groups revealed which teachers' beliefs and practices aligned with her instructional priorities. In this way, as she made changes in instruction such as the new lesson plan template, she could use cluster leaders to communicate new expectations on her behalf.

After experiencing some initial difficulties finding traction for her initiatives linked to instruction, such as growth mindset, Katherine moderated her plans for growth,

not pushing too hard when she was met with resistance. At SBS, some teachers were not invested in prioritizing academic excellence. They remained entrenched in the status quo. Katherine had to balance her desire for change while recognizing the capacity of her staff to embrace new challenges. Her leadership coach, Owen, described:

[Katherine's efforts] have taken two steps forward, and a step back, and because of internal issues that have come up she's been wise enough to deal with those issues rather than just trying to push [her plans] through. I think the teachers themselves said it best, that they have come a long way.

The changes to communication and distributed leadership that Katherine implemented including Cluster Leaders, partnerships with outside networks, and new professional learning opportunities, enhanced connections at SBS. This new dynamic contributed to increased possibilities for system change by providing a platform for the sharing of ideas and expertise so that new ideas might be amplified to challenge the status quo (Goldstein et al., 2011). Though many new ideas Katherine tried to implement were not ultimately adopted by all staff, as in the case of the new writing program, Katherine had contributed to the conditions necessary for change to take hold (Lichtenstein & Plowman, 2009).

Cultural Change at SBS: "The focus wasn't on learning."

In the decades leading up to Katherine's arrival at SBS, the school community experienced changes in both the student and staff populations. For example, the neighborhood directly surrounding SBS was historically comprised of a high proportion of immigrant families. Throughout the latter half of the twentieth century, the countries of origin of these families shifted from European to South American and Southeast Asian. Green and O'Keefe (2001) describe similar shifts in student populations among

Catholic schools throughout the United States. As the student population changed at SBS, there were also notable changes in the population of the staff. Entirely composed of nuns at its founding, SBS teachers had shifted to majority lay people with one nun still teaching during Katherine's time at SBS. Despite shifts in both students and staff, teachers reported that the school community remained committed to the Catholic values and traditions on which SBS was founded. Katherine, very open about the importance of Catholic values and faith in her own life, felt personally aligned with the common values shared by her SBS colleagues and students.

Although aligned on matters of faith, Katherine realized early in her tenure at SBS that her new school did not share her same level of concern for the importance of academic achievement. In a sign of the initial conditions at SBS, Katherine remarked that even during her first visit to the school, she had a sense that the culture of the school focused on fun at the expense of learning:

[The culture at SBS] was always about celebrating and "how can we make everything fun?" To the point where the focus wasn't on learning. And so that was the biggest thing I saw coming in and I thought, "Okay, this is what we need to work on: changing." Because really what you're talking about is a shift in the culture of the school ... [SBS] is a great place, the climate is great, there's a lot of love here. There's respect. There's diversity. There's faith. There's all these wonderful things, but the academic rigor is not what it should be.

The teachers at SBS believed in the importance of student engagement and enjoyment of school. Consequently, Katherine's attempts to shift the culture of the school were met with resistance. Katherine's changes were seen to not align with the culture at SBS.

In an early, symbolic attempt at reshaping school culture to reflect her belief in the importance of a focus on learning, Katherine decided that school lunch should reflect the healthy atmosphere she wanted to create throughout the school. She decided to stop serving chocolate milk at lunch and only have the cafeteria serve white milk. What, in her mind, was a simple and sensible change to student lunches became a source of contention among staff and families:

I learned a lesson really early on about how sometimes the little things make such a big difference to people. I was having a conversation with Chrissy who is in charge of the lunch program and she mentioned, "We offer white milk but most of the kids just drink the chocolate." It was like the icing on the cake for me. They're selling ice cream every day at lunch, they're having slush twice a month for lunch, they're having chocolate milk. I said, "Well, let's just not order chocolate milk anymore, let's just do white milk." And so, we did it. We only ordered white. You would have thought that I, I don't even know. I mean I had teachers down my throat. I had parents down my throat. I had students down my throat. It was the most horrible thing ever. And, it was a really good learning experience for me because in retrospect I thought, "This is not really the kind of leader I want to be just coming in and making decisions and not consulting people or hearing perspectives." I had a teacher say to me, "This is not fair, this is not who we are. And if you're not going to do something about it then I'll go straight to Father." And let me just frame this again, we're talking about chocolate milk. Nothing about teaching or learning, but to me that was very telling of the climate at the time.

Katherine assumed she would get a lot of support from teachers by switching from chocolate milk to regular milk at lunch. To her surprise, teachers, parents, and students vocally resisted this effort. Katherine assumed a shift in the lunch menu was a technical change, but she came to understand that chocolate milk and other treats at lunch represented the larger cultural values of the school, centered on student enjoyment and fun. This adjustment to the menu actually represented an adaptive change in the sense that it required a shift in the culture of the school. As Katherine noted, the situation reinforced for her the importance of building relationships and trust prior to attempting change, a notion that is particularly important when the proposed change reflects a cultural shift.

Despite this initial setback, many of Katherine's early attempts at promoting change as principal of SBS centered around building a culture of academic excellence.

She planned to introduce the idea of growth mindset (Dweck, 2007) to teachers, communicated through the Cluster Leaders, as a feature of teaching school-wide. As she explained, her plans did not have the impact she hoped:

Some things that I initially thought were going to be central to our work, I haven't ended up focusing on just because, I think, because priorities change. I thought coming into [SBS], that my big focus was going to be on Carol Dweck's growth mindset and adapting that school-wide. And, we just weren't ready for it. I had my [newly created] ILT read a little article about it and their reaction was silence. No one responded. And I thought, "All right we're going to take a different approach on this."

Staff resistance to the idea of adopting growth mindset as a feature of their work signals another way in which Katherine's attempts at promoting amplifying actions on a school-wide scale did not have the intended outcome. This resistance suggests a lack of both structural and cultural supports to promote change at SBS. The ILT structure did not provide the conditions for recombinations to encourage the spread of new ideas (Goldstein et al., 2011). Additionally, the staff's unwillingness to shift their practice by adopting new ideas related to growth mindset suggests that the culture at SBS was not aligned with the new ideas Katherine promoted, perhaps being uncomfortable with the overtly academic orientation of those ideas.

Though Katherine's work with the ILT to adopt practices of growth mindset did not appear to resonate with the teachers, Katherine continued to model the concept in her interactions and expectations with staff. The third-grade teacher, Evelyn, reported feeling professionally supported by Katherine through changes to the curriculum and expanded professional development opportunities. Evelyn alludes to Katherine's higher standards for her teachers, goals, expectations, and professional learning, which all reflect the concept of growth mindset applied to the staff:

I feel like many of us have grown in so many ways. We're encouraged to take many classes, to change ways that we used to teach, to update many things. All of the curriculum has been changed. Structured, more structure. Goals are set, expectations are all met...And professional growth, classes, she encourages us to take many classes. And like higher standards for us.

In response to resistance, Katherine altered her approach and timeline but continued to promote her cultural priorities of shifting SBS to a focus on academic rigor. This

included introducing a new evaluation rubric, continuing professional development in writing across the curriculum, and requiring teachers to submit lesson plans for her review, all of which signaled her unwavering commitment to academic improvement.

Contributing to Katherine's difficulty in promoting instructional growth was a general sense among the faculty that they were overburdened with their existing professional responsibilities, which led them to be resistant to the new requirements Katherine introduced. As explained by the kindergarten teacher, Ruth, the negative tone among staff was compounded by an unwillingness of anyone to raise the issues with Katherine directly:

[No one wants] to be asked to go to a dance on a Friday night. I think a lot of teachers would never say that to Katherine though. Most people just go with it and complain about it. Which by the way, talk about what that does to the culture, when everyone is just complaining about everything all the time. It's not good energy because everyone is so negative. No one will say anything! I think everyone is feeling dragged down because our day got extended by 45 minutes and I think everyone feels like the day is too long especially without breaks. Most teachers, unless we have specials, which our music teacher, I'm sorry, has barely been there this year, that's my break. If he doesn't come, I don't get a break. If my aide's not there, I really don't get a break! I have to yell down the hall to go to the bathroom. Katherine does what she can in those situations, however I feel like those situations are very unmanageable for teachers. Almost every day when I'm saying goodbye to my students, everyone has this sigh of, "Another day done."

Katherine's arrival at SBS accompanied an increase in teacher expectations in terms of the quality of their work and time spent at the school and in meetings. SBS staff had grown to expect a significant degree of autonomy in their work, while Katherine expected teachers to adjust their practice based on her instructional priorities—a marked change from the initial conditions Katherine encountered at SBS. This quote by Ruth is another example of teachers expressing frustration with these new expectations that reflected a change in teaching at SBS. Though these specific problems regarding scheduling and breaks may not have been raised with Katherine, she was aware there were issues with staff satisfaction. To counter the low morale among staff, Katherine planned a retreat for the entire faculty in January of her third year at SBS. Katherine described the retreat as one of the most important things they did that year. A focus on shared values and faith served to give teachers an opportunity to recharge:

This year was a staff retreat when we came back from Christmas vacation in January. We framed it as looking back on what's happened so far this year and looking ahead to what's to come. Focusing on what really matters. We started to go through and identify core values. I think if I had to pinpoint the single most important thing that we've done this year, it was that. Because I think that people were just starting to get to the point where they were complaining about everything. I think the fall was a lot in a short amount of time for them. And I was asking a lot and we had a lot of evening and weekend things that were happening. People felt like they didn't have any time to take care of themselves or recharge and so having that day where we all came together [was important].

Parts of the retreat were definitely within the context of faith and religion, and parts were definitely focused on the work that we do.

Revisiting common values gave context to the academic work teachers did elsewhere at the retreat, reminding teachers that they had a shared purpose to their work. Katherine's commitment to promoting a shared school culture had to be balanced with other pressing school matters. She recognized that the new expectations she introduced required teachers to be working in the evening and weekends and meant that teachers did not have free time to take care of their own needs. She was beginning to notice complaints among the teachers and decided it was time to revisit shared values.

The goal of transforming the culture of SBS to reflect a school committed to academic excellence and rigor never manifested. However, Katherine did contribute to the school culture in other notable ways, including promoting a sense of welcoming for culturally and linguistically diverse families and investing in historical school traditions. Katherine, admired among the faculty for her ability to speak fluent Spanish, prioritized communication in multiple languages for SBS families. As described by the third-grade teacher, Evelyn, this was notable in Katherine's efforts to make school memos available in Spanish and Vietnamese, as well as English:

[Katherine's] very interesting because she also speaks Spanish, which is very helpful. Another language. She does things in Vietnamese and different languages too which is more welcoming to the people. Where we didn't have interpretation, a lot of that before which we have now. Like memos and everything are going out in different languages.

As Katherine made changes to be more inclusive of families that were new to SBS, she also sought to keep past traditions alive. For example, Katherine continued the annual celebration of the school's birthday, which was an expected celebration among staff and students.

Through her final months at the school, Katherine never gave up on shifting SBS to a more academically rigorous environment. With some cultural work already in place, Katherine began working towards next steps. Even after she had announced she was leaving SBS for her second school, Fiorella, Katherine remarked that she was planning to promote peer feedback among the staff. She felt peer observations would be well received and provide an opportunity for teachers to give one another constructive feedback:

The next phase for us is doing peer observations. Which, it's been done informally here and there, but I [we will begin doing observations] in a more structured way. I think we're finally getting to the point where teachers wouldn't just give all affirmations. They would be constructive as well. And there wouldn't be a lot of hurt feelings. I think we're kind of beginning to cross that bridge from the congenial to the collegial. It's been a long time coming.

Katherine's approach to school culture at SBS reveals that she attempted to shift the school culture from one of fun to a culture centered on healthy practices, be they dietary or curricular. While her attempt at changing the school's chocolate milk was ultimately successful due to a later change in state-wide lunch policies, her attempts at impacting instruction through school culture were not fully adopted by the faculty. Katherine did introduce some degree of change, but a shift toward a culture focused on

academic excellence would have required teachers to engage independently in new instructional practices that they then promoted with students in their own classrooms, which did not occur.

Trust

As a first-year principal, Katherine began her time at SBS navigating relationships with her staff and getting a sense for the important role trust played in her efforts to promote change. From the outset, Katherine disapproved of the general tone of the school building and some of the practices she observed, but she prioritized building individual relationships with her teachers. Katherine described how she went about getting to know the staff:

As I started to do classroom observations, I was seeing really passionate teachers and really caring teachers, but I was also seeing a lot of like wasted time, a lot of students not engaged. For the first year, I would say, I was pretty much just collecting information. Doing a lot of observing. Starting little conversations one on one with people and asking a lot of questions, but not really sharing that I had any issues with anything.

Katherine approached her staff with openness and curiosity, starting with questions rather than reacting with feedback. These interactions were among the various opportunities Katherine and the staff had to develop trust in one another, through a sense of the other's competence, sincerity, and reliability (Bryk & Schneider, 2004). I turn now to a discussion of the degree to which Katherine was able to foster trust at SBS.

Competence

As a first-year administrator, Katherine had to demonstrate her competence in her new role. Her efforts at changing past practices in the school, such as switching the milk offerings at lunch, did not promote a sense of her experience working in new contexts with different expectations and priorities. A sense of Katherine's competence was important for her building relationships with teachers. Over her time at SBS, Katherine's knowledge of curriculum and instruction was revealed. The kindergarten teacher, Ruth, acknowledged that some teachers came to value Katherine's input and experience on teaching, "I feel like there are a few teachers that really value what Katherine says and she directs us in curriculum or pedagogy." As Ruth notes, Katherine's competence set the conditions for teachers being open to her expectations as instructional leader of SBS.

Sincerity

Similar to evaluating her competence as an administrator, staff at SBS also assessed the sincerity Katherine brought to her work. Evidence indicates that the teachers believed she was sincere in her commitment to school improvement and that she approached staff interactions with caring and support. The kindergarten teacher remarked at Katherine's desire to improve teaching at learning at SBS:

There's a lot the school needs to work on and Katherine is very dedicated to improving the school. That's one thing I felt from the second I met her; she felt like it was her duty to improve the school and her heart is engulfed in SBS.

Furthering the notion of Katherine's investment in her staff, the third-grade teacher, Evelyn, commented on Katherine's ability to secure resources to support school goals, such as professional development and financial support for additional staff members.

In sincerity, caring, anything that she could possibly do for us she does. If there's a financial resource available, a counseling resource, professional development, any way that we can grow she's right on that. And I love the spirituality that she has too. That's a very big part of her life.

In order to implement changes and improve the school, Katherine provided teachers with additional support through professional development opportunities. Her leadership coach, Owen, noted that Katherine's willingness to participate in the professional development alongside her staff was further evidence of her caring:

[At a recent professional development] you could tell that she was really into it and she wasn't just saying, "teachers, do this—I don't really care about it." She was really invested too and was really learning alongside them. It said a lot that she was dedicated to going to those meetings on Friday with her staff.

During this time of disequilibrium, in which Katherine was sharing new ideas and promoting change at SBS, there was a great deal of uncertainty among the staff.

Katherine's acknowledgement of her staff's efforts was seen as a reflection of her caring and support for her staff. The kindergarten teacher, Ruth, explained how Katherine's feedback and acknowledgement was unique among her experiences with other administrators, "One thing I feel like I've got from Katherine more than anybody else is positive feedback. She'll say to me, 'Wow, you did this' and acknowledge things beautifully." Over time, Katherine was able to relay a sense of her investment in SBS and consideration of the needs of the school and staff. This took time to evolve as Katherine admitted to initial missteps in her approach to implementing change, her desire to shift school practices outpacing her ability to generate trust and support for her vision

for SBS. For example, the chocolate milk incident became contentious because Katherine did not have the trust of her staff. In her own words, Katherine recognized that the staff reaction was a result of a lack of trust: "I hadn't really had time to build trust yet. So, they just kind of saw it as like me coming in and like laying down the law." In subsequent years, Katherine worked to generate trust by demonstrating her sincerity for making positive, gradual, change at SBS with input from others.

Reliability

Katherine's reliability was revealed as she slowed the pace of change in response to teacher resistance. She recognized their capacity to shift their practices and adjusted her approach. For example, as Katherine created a plan to conduct teacher observations, she noted the likelihood that teachers would be anxious about being observed because it would be a new practice at SBS. She decided to wait until after her first year and "ease in." In her second and third year, she started having three meetings a year with each teacher to review their goals and subsequent progress:

I think my first year, I didn't go in [to classrooms] a lot, but they had not ever had observations done in their classroom before. Teachers would ask, "Wait, are you going to tell us before you come?" It was this kind of real anxiety about me being in the room. And so, I just decided my first year to ease in as far as that went. Then last year, I decided I really want to make this a regular thing and I started doing one-on-one meetings with the teachers.

Though Katherine initially tempered her expectations in response to teachers' anxiety, she continued to communicate her goals and expectations in a caring manner. The third-

grade teacher, Evelyn, noted that Katherine coupled her expectations with supports to achieve those goals:

I feel like she gives us guidelines to work and to follow, a more professional attitude, she's encouraging to families, and she's always there for us. Whatever we need of her, she's very caring and very personal. You know if something needs to be done. Also, she's very disciplined. She sets her expectations and her goals. She's very nice to work with, very uplifting and pleasant.

As the staff became familiar with Katherine's evolving expectations for SBS related to school improvement, she demonstrated her reliability by holding herself to the same standards as the teachers. Her commitment to her own job reflected her expectations for her colleagues. Katherine's reputation as a hard worker is exemplified in the following quote from Evelyn:

I think that she works really, really, hard. She gives in 100% plus. She's very dedicated, caring, I feel like if there was something that she could get done, she would do anything she could to get it done. She meets the challenges as best she can. And she goes beyond.

The staff at SBS grew to count on Katherine as supportive and reliable. Though Katherine was able to establish trusting relationships among her staff, trust alone was not sufficient to generate the change she hoped. Ultimately, a lack of a shared vision for SBS limited the impact Katherine was able to have on instructional improvement. It is unknown if more time at SBS would have enabled Katherine to leverage her reputation and relationships with staff in the areas she hoped to have a greater impact.

Case Study Summary

In general, teachers were reluctant to change their practice based on new ideas Katherine shared, though some embraced new practices and beliefs when they had built a trusting relationship with Katherine over time. Katherine's time at SBS revealed several important lessons about instructional change that shaped her approach to leadership going forward. First, she found that often only those teachers with whom she had struck a trusting and supportive personal relationship supported her ideas, as exemplified in her comments about working with a second-grade teacher:

When I first started at [SBS] she wouldn't even talk to me. She was just one of those people who wanted to be in her classroom and do her thing, not paying attention to anybody else. And then, over time, she would come to by my office and say, "I want to talk to you about something that happened yesterday," and asked if I had any ideas.

Second, Katherine learned the importance of getting a sense for the school culture and climate prior to introducing change. A sense of the initial conditions at the school could be revealing as to how staff may respond to change. Her attempt to change the lunch menu was one instance where this lack of understanding proved particularly salient. Third, individual relationships with teachers became an important foundation on which she gained a broader understanding of SBS. Katherine used classroom observations as a means to build relationships with teachers and gain a sense for instructional progress at SBS:

A crucial piece for me is being in the classrooms. In my first year I didn't go in a lot and they had not had observations done in their classrooms before. There was real anxiety about me being in the room. And so, I just decided my first year to

ease in. Then last year I made it a regular thing. I started doing one-on-one meetings with the teachers too at the beginning, middle, and end of the year to discuss their goals and progress. I asked them to self-evaluate [their teaching], so they brought rubrics to our meetings based on what they thought. Then we had a conversation if there were any discrepancies between what they had said about themselves and what I had said based on my observations. And that was a really, really good thing that I am doing again this year.

Katherine slowly increased her time in teachers' classrooms and let them be part of the observation process. She gained teachers' trust by allowing for teacher feedback and conducting one-on-one meetings to assess their goals and progress, and she then built on that trust as it emerged to further her various initiatives.

Though Katherine had begun to formulate her approach to instructional change at SBS—including a new writing program, expanded teacher observations, the implementation of a teacher evaluation rubric, and new preschool opportunities—she faced ongoing challenges to her ideas from faculty and staff, in part due to the increased pressure her ideas generated for classroom teachers. Her emphasis on academic achievement, in her mind, necessitated a shared commitment to learning above all else. SBS staff were used to a school culture that encouraged teacher autonomy, student enjoyment, and frequent celebrations. Katherine's vision for SBS did not reflect the existing priorities and initial conditions of the school. Despite this cultural misalignment, Katherine was able to work towards fostering trust and enhancing communication among the staff. Katherine applied the Cluster Leader model as a way to share expertise and ideas between herself and the grade level teams. The mechanisms were in place by

which SBS could have demonstrated evidence of rich interactions and the sharing of new ideas and practices among staff members in the future. However, these later phases of emergence never manifested during Katherine's tenure, and instances of instructional growth were limited, overridden by an uncompromising commitment to teacher autonomy and a sense of tension generated by the additional work that accompanied many of the innovations attempted by Katherine.

Chapter Five—Fiorella Case Study

In Katherine's fourth year as principal, she transitioned from Saint Bernard's School (SBS) in an urban area of the Northeast United States to a rural K-8 Catholic elementary located in a mid-Atlantic state. Katherine's move to a new school in Maryland was precipitated by family health concerns. Her new school, Fiorella, and SBS shared many common characteristics including faculty commitment to a Catholic mission, a mix of new and veteran teachers, and a small school atmosphere. One important difference between the schools was in their student populations. SBS was more racially, culturally, and linguistically diverse, while Fiorella maintained a predominantly white, English-speaking student body. The schools were also different in terms of their academic priorities. Remarking on the transition to Fiorella, Katherine saw new challenges ahead of her:

From what I can tell at this point, my new school appears to be pretty far ahead of SBS when it comes to academic achievement. They mapped their curriculum almost ten years ago and aligned it with the Common Core. It will be challenging for me in new ways to maintain the rigor that is already there and to push everyone to always strive for more.

Prior to adding Katherine to the staff of Fiorella, the school had a short-term principal lauded for his attempts to improve the school's fiscal status, but at the same time the staff lamented that he was not committed to becoming part of the school community. He had crafted an image of the principal as responsible for the financial well-being of the school but did not embrace a role as an instructional or cultural leader. Katherine entered at a time in which many different stakeholders contributed to the

running of the school; for instance, teachers coordinated church milestone events and fundraisers, parents were part of an advisory committee and volunteered in the classrooms, and the pastor regularly attended school events. These supports focused on non-academic parts of school life, but instructional improvement remained the responsibility of the principal alone. Although the contexts differed notably in terms of financial pressures, teacher quality, and parent involvement, Katherine utilized the same strategies as she did at SBS to promote similar outcomes at Fiorella, perturbing the status quo (Beabout, 2012) by distributing power and authority throughout the school communities to enhance teaching and student achievement (Opfer & Pedder, 2011) while enacting a new school vision to gain commitment to common priorities as a means to enrich relational trust.

Seeking to answer this study's first research question, "To what degree did the principal enact leadership for adaptive change at the three schools she led?", this case study describes the findings from interviews, observations, and document collection from Fiorella during site visits conducted in 2015 and follow-up interviews and document collection occurring in 2017. During Katherine's four years at Fiorella, the school experienced numerous shifts to its culture and power dynamics. These changes created the conditions that enhanced the possibility for transformative change. Katherine's approach to leadership for adaptive change at Fiorella can be explored along the same interconnected dimensions as SBS—distributing authority and fostering relational trust in the interest of promoting instructional change and generating a shared sociocultural vision that provided the school community with a means to assess whether any change that emerged aligned with the school's overarching culture.

The findings in this chapter are organized both thematically (structural change, cultural change, and the promotion of relational trust) and temporally (by year of her work at Fiorella). Organizing the findings in this way allows the reader to understand the flow of change among the three thematic dimensions. As Katherine introduced change at Fiorella, the school experienced enhanced system interactions supported by a robust cultural change. With these themes in mind, we first turn to a description of the structural changes that occurred during Katherine's time as principal of Fiorella.

Structural Change at Fiorella

In order to understand structural change at Fiorella, I sought to uncover evidence of those structural mechanisms that have been found to provide support for change initiatives, namely distributed leadership, professional learning communities, and networks of support and accountability (Daly & Finnigan, 2010; Spillane et al., 2004; Stoll et al., 2006). This included both within-school interactions and evidence of collaboration with outside networks. It is expected that as power is distributed throughout a school, enhanced system interactions will contribute to the system's readiness for change (Harris et al., 2007), as more system elements are poised for change. Katherine distributed authority at Fiorella by incorporating both individuals and groups into the decision-making process, including teachers, the pastor, parents, outside organizations, and neighboring schools. Katherine approached network change at Fiorella incrementally. It will be recalled that Katherine had limited success enacting structural change at SBS, so Fiorella provides evidence for a different approach and a varying degree of success at distributing authority throughout the system.

Distributed leadership among Fiorella teachers

Katherine's efforts at distributed authority among teachers evolved over her four years as principal of Fiorella. Initially unsure who she could trust to enact her vision of cultural and instructional change, over time, Katherine grew to depend on certain teachers' competence, sincerity, and reliability—key system features linked to relational trust—and expanded decision making authority as a means to delegate the breadth of responsibilities that were difficult to sustain alone. The distribution of authority is presented chronologically to provide a sense for how Katherine's approach to teacher leadership shifted over time.

"It's not a dictatorship." In Katherine's first year at Fiorella, building on lessons learned at SBS and in particular, the importance of generating knowledge about the initial conditions at a school before attempting to implement change, she established individual relationships with teachers, learning about their roles and strengths within the system. This approach can be seen in Katherine's relationship with Elizabeth, the fourth-grade math teacher. As their relationship developed over the first year, Elizabeth, a typically reserved teacher, became increasingly confident participating in meetings and sharing ideas, often with Katherine's solicitation:

Katherine will say, "Look, if you have other thoughts or other ideas, I want to know. Email me, text me, jot something down on paper and give it to me."

Katherine always wants our input. It's not a dictatorship.

For Elizabeth, this inclusive approach to leadership was exemplified when Katherine sought input and judgment in selecting a new religion textbook, a far cry from her unilateral decision to stop serving chocolate milk at SBS:

I told her I really didn't like the one we were using, so she started talking to everybody, and brought it up at a meeting. We decided to see what was out there. Next thing you know Katherine gives all these samples for us to look at. She said, "Look at them, I want to know your thoughts." We gave her feedback and we all decided what we want to do. That's how she does a lot of stuff. She'll tell you what she's thinking, or she'll say, "I had an idea about this but I want to know what everybody else thinks." She lets you voice your opinion.

Teachers had a role in providing input and also shaping change in the school.

Rather than attempt large-scale change to the networks at Fiorella, in the first year of her principalship, Katherine left most existing structures (such as faculty meetings and Grade Level Leaders) in place and encouraged individuals to lend their ideas to decision-making, generating a sense of individual empowerment and inclusion rather than attempting a more ambitious, committee-based approach to change. Grade level leaders continued to meet with colleagues periodically, but no other leadership teams were established. Katherine solicited teacher input at faculty meetings, sometimes singling out certain teachers who seemed to have information to share. In one particular faculty meeting, Elizabeth began to share something with the group, but when she stopped herself short, Katherine prompted her to continue. Elizabeth expressed concern that students were over-tested and when she explained why the midyear test did not provide valuable data, Katherine agreed and the assessment schedule was changed for the following year.

With the exception of setting a meeting schedule and establishing agendas for faculty and Advisory Board meetings, no other system-wide changes were established.

Rather, she focused on individual rather than systemic relationships with teachers, getting to know teachers, sharing ideas, and seeking their input on varied matters—in essence, establishing a sense of relational trust that would serve as a foundation for more substantive change in ensuing years.

Stemming from her initial reticence to attempt ambitious change, by the end of her first year at Fiorella, Katherine became frustrated with the amount of work she was responsible for. A lack of distributed authority, for instance, meant Katherine had to attend most events and meetings. This tension tied directly to the state of relational trust at Fiorella. Katherine had positive relationships with many individual faculty members, but there were few opportunities for teachers to demonstrate their competence, sincerity, and reliability with one another, a social interplay essential to nurturing relational trust and elemental to shared decision-making. Katherine went into her second year at Fiorella considering ways in which to share responsibilities and was becoming more open to distributing decision making authority to select teachers.

"I need to make those committees work for me rather than making more work for me." Katherine's second year at Fiorella marked the start of her building a decentralized network whereby she began tentatively distributing authority, creating the possibility of developing leadership capacity in others (Daly & Finnigan, 2010).

Teachers were no longer simply lending ideas to Katherine, the solitary agent in the decision-making process; rather, they were becoming active participants in decision-making. Examples of this included creating committees focused on different areas of school improvement, encouraging teachers to take part in professional development

opportunities, providing space for teachers to bring new ideas back to their colleagues, and allowing teachers to make changes to the curriculum and classroom schedule.

Katherine created committees around different school priorities such as safety and technology, characterized by pockets of information that led to some, but limited, sharing of information. Though each committee had a chair, Katherine's presence at meetings signaled she was the true leader. Details of the work being undertaken and follow up to the discussions that occurred largely fell to her. Accordingly, Katherine strategized ways to distribute authority through a committee structure, lessening her workload and ideally empowering teachers in the process:

Ideally, I'd like to find a way that I don't have to be at every committee meeting and that the chair of that committee really could take ownership of [the process] and debrief with me afterwards or ask any questions. As of right now, I feel like there is a chair for each committee, but I feel like the true chair is me. I am the one who creates the agendas and I am the one who does the emailing, reminding people to come to the meetings and I'm the one who takes notes during the meeting. It's just exhausting and I feel like there is no need for it. I need to make those committees work for me rather than making more work for me.

Despite some new structures that reflected distributed authority at Fiorella,

Katherine avoided establishing an instructional leadership team (ILT), concerned that the

process of selecting certain teachers for the committee could alienate other teachers:

I've actually thought a lot about if I want to create a formal ILT here because I haven't done that yet. What I keep coming back to is asking myself who would be on it? I have been really going in circles about that because I feel like there are

people like [Shelly] who would expect to be on it because of their longevity in the school and would see that as an honor. But I'm not sure that they would drive the work for it that I want to be driving forward. At the same time, if they weren't on it they might go against the work. So, is it even worth it to create an ILT when it probably would cause some friction or do I just leave it up to the Holy Spirit and have it be open to everybody so maybe nobody can complain? I don't know.

Somewhat undecided, Katherine ultimately chose not to create an ILT, instead organizing staff into committees based on archdiocese accreditation areas such as technology and bullying. This approach differed from establishing an ILT in which only certain teachers would share in the decision-making process. Every teacher joined at least one committee based on their area of interest, but that was the only topic on which they could exert any influence. Their influence was limited. By assigning all staff to specific committees, Katherine avoided the conflict she feared would arise by creating an ILT because everyone was given a role. The middle school social studies teacher reported a more positive view of the committee work:

I think at first there was some resistance just because it went from having very little responsibility, either because we didn't know we were supposed to have it, or it just wasn't implemented, to now having some. There was a little bit of resistance. But I think once people realized [the committees] were for the better of the school and for the better of us as teachers, they accepted it a lot more.

The benefits of the committees became apparent to the middle school math teacher when her committee coordinated a visit from a local foundation. They were able to accomplish the work and put on a positive event for Fiorella:

One of the other biggest things that we just did, and I'm sure you saw it from our decorated gym, is we had [the foundation] come and talk to us, and that was something that the middle school team had been planning for five or six weeks, about how to coordinate it. Susie, [their program coordinator], gave us what we needed, but then told us what we needed to do at the school to get ready. She was able to give responsibilities to us.

As a team, the committee coordinated an event directly tied to a cultural priority of the school (Peacemakers). In this work, Katherine was able to share many aspects of the decision-making process with the committee. The middle school team approved the speaker, communicated with the speaker's team, decorated the school, and shared progress with the school community. The teachers took responsibility for reinforcing an outside connection tied directly to a theme Katherine developed as foundational to her work at instructional leadership.

In addition to committee assignments, teachers were also responsible for overseeing clubs and various school events. Whereas in the past, the same teachers would volunteer for these responsibilities, a shift occurred so that the responsibilities were spread across the faculty. The second-grade teacher explained this shift:

Everybody now has something that they are responsible for, if it's the Social Studies Club or the Yearbook Club or getting prepared for the Christmas programs. I feel like everybody is involved in something now whereas before it was kind of the same people over and over again. I am responsible for the Second Grade Sacrament, so twice a year I set up their retreat and then I go to their practices and then when they make their sacraments I am there with that as well.

And then, I help with yearbook as well.

The sharing of some responsibility with teachers, whether through committee assignments or leading a club, marked the start of a shift in how decisions were made at Fiorella. Katherine began sharing authority and shifting some of her responsibilities to her staff. By opening the possibility of teacher leadership at Fiorella, Katherine began creating the conditions necessary for more distributed connections throughout the school community.

One area of school life that teachers had a broader impact on at Fiorella was the day to day life of the school. As the committee structure was starting to get established and initial steps towards distributed leadership became evident, teachers had integral roles in many areas of instructional growth. In response to a desire to improve instruction and student assessment outcomes, Katherine gave teachers the opportunity to personalize their classroom schedule and offer intervention blocks throughout the week to address students' specific needs. The fourth/fifth grade teacher used this time to offer additional math help to her students and reported on progress in assessment scores:

Katherine has allowed for us to put [intervention blocks] in our schedules. In my schedule I have a couple 20-minute blocks a few times a week where I do interventions. One of our focuses was improving our math scores because they were low. So, what I've done with that is, besides doing my normal math lessons in the morning, during those intervention blocks I run groups based on students' needs. The change has really improved things the last couple years. I'm happy about my math scores. My special needs kids too, I was very pleased everyone progressed.

In another academic realm, the Resource Room and technology teachers became responsible for a new school-wide digital assessment system. They reported to Katherine and over the course of the year recommended many changes to their approach to assessment. One notable instance arose as the teachers remarked to Katherine that the benchmark assessment timeline consumed a full 20 weeks of classroom pull-out time. The time away from instruction for benchmarking was significant, and teachers did not support requiring the additional testing. The Resource Room teacher conferred with other classroom teachers, gathered their opinions, and approached Katherine with the recommendation to only participate in the diagnostic and summative assessments.

We decided for next year it's too much, it's way too much. Grades 2-7 are assessed in reading and math, and then eighth grade has reading, math, and algebra. Then, in March, eighth grade has to take high school placement test. And, in March everybody takes the faith and knowledge assessment. Three times a year they take the reading and math diagnostics. This year we also included the benchmarks. It comes to about 20 weeks of testing and we decided that we won't participate in benchmark again because it's just, it's too much, it takes so much away from the teachers. We're just going to stick with what must be done because it took a lot of instructional time away from teachers.

Despite lacking a formal administrative or leadership team, Katherine did have staff members she could rely on to support her instructional goals. For example, the Resource Room teacher explained:

With this being Katherine's second year, she has very strong ideas about what the expectations are, such as in math. There has been some resistance from seasoned

teachers feeling, "Well this is how we've always done it. I don't want to change it." We should be following a math pacing guide through the whole school but they're not, they're using a curriculum that doesn't match the pacing guides.

They can use both the pacing guide and curriculum, but it means more work aligning things. I went to bat for Katherine because I spoke to the Director of Instruction for the diocese who also said they need to be following the pacing guide. I feel comfortable backing Katherine up and saying, "In order to get our assessment numbers up you must be following these pacing guides." It's not always easy. I am sympathetic to what they're saying, but it's laid out, it's telling you what points must be covered every day, down to the week. This week cover this, next week cover that, so rip the math apart and use it as such. Hopefully the message has been received that this is what has to be done next year. And so hopefully by then we've seen a difference in our scores.

Support from individual teachers assisted Katherine in this instance of curricular change, specifically the Resource Room teacher's support and connection to the school's math goals.

The middle school math teacher explained how Katherine supported her to make decisions regarding student placement and then supported the decisions she made:

Next year we're going to be splitting the math classes for eighth grade. Some students who are ready for it are going to take the algebra, and some that are not are going to take eighth grade math, and she's very supportive with, "Okay what materials do you need, let's work out a schedule, and how that's even being determined, which students are going where?" . . . she's letting me do a lot of

decision making, but supporting why I'm making that decision making, because she understands that I'm the teacher that's in the class, I'm the one that sees them on a daily basis, and it's not, she doesn't feel that she should have an overpowering source of "I'm the principal, we should do it this way."

Katherine was supporting teachers' authority to make decisions related to instruction as well as providing them with the opportunities to execute their work successfully. This support included providing teachers with mentorship from their colleagues. For example, when the second-grade teacher was struggling with her instruction, Katherine asked the resource teacher to work with her to assist her in her teaching practice. Katherine facilitated communication and connections between teachers, encouraging mentor-like relationships to address needs she and the teachers identified.

In addition to within-school professional support, Katherine facilitated teachers' access to professional development opportunities through the archdiocese, local universities, and educational organizations, providing sources of support from more distant connections, which are often a means to enrich systems interactions (Goldstein et al., 2011). For example, teachers attended archdiocese meetings around curriculum, returning to the school to share with grade-level partners what they learned from the professional development events. The second-grade teacher explained this process:

We are starting to do our pacing guide for the archdiocese, so one teacher from every grade will go to that meeting. We will report back and we will work on our pacing guides. I actually was part of a math workshop this year so I went to four different classes and I came back and reported to pre-K, first, kindergarten, and then we are going this summer to meet about new textbooks and we will come

back and talk about that. Everyone is doing something different and then we all come back and work together.

Another example of a teacher engaging in professional development outside Fiorella was the fourth/fifth grade teacher, who enrolled in classes or workshops nearly every semester. During Katherine's second year, Elizabeth attended a conference on special education and took a summer course at a university on differentiation and instructing students with disabilities.

I went to a conference in March, it was all on faith, deafness, and disabilities.

And I'm taking a class this summer too, it's all on universal design for differentiation. It's all to get more information and see what I can use in the classroom to help me to do better for our special needs students.

Elizabeth's choice of professional development tied directly to a school-wide goal of improving educational opportunities for special education students at Fiorella.

Like Elizabeth, Katherine also sought to make connections between outside trainings and conferences and the instructional goals of Fiorella. As the Resource Room teacher Wendy explained, Katherine would base her faculty meeting agendas on recent conference topics: "She has an agenda for each faculty meeting and it's on the heels of whatever conference we attended. Like with the data conference in the fall or spring or something we just learned how to do somewhere else." Fiorella teachers would attend local conferences and then further that work at subsequent faculty meetings. Katherine was responsible for setting the agendas for faculty meetings, and teachers also had a role in bringing outside learning to Fiorella. The fourth/fifth-grade teacher explained how some teachers would attend math labs at other schools and "share with the rest of us who

couldn't attend." These connections were significant because they provided continuity between outside learning opportunities and Fiorella's capacity to engage with new ideas.

Katherine's second year of distributed authority at Fiorella saw her begin to expand authority to faculty and parents while remaining careful of how power was distributed and to whom. Her early reticence to share authority evolved, and by the end of this stage she had started exploring the best way to organize committees comprised of teachers and parents, in part because of how much work she faced. Trust became an important element of this process, building throughout year two. She gained a sense for the competence, sincerity, and reliability of staff members as she spent more time with them. Katherine became more trusting of certain teachers as leaders, and they gained a greater sense of how new responsibilities would benefit their school and students. Overall, interactions within the school became richer as faculty who had previously had little interaction with one another began to work collaboratively. Moreover, the professional development many experienced further enriched these interactions. Moving into year three and four at Fiorella, Katherine sought a more comprehensive committee structure that better aligned with student learning and the goals of the strategic plan she authored while serving as a means to free up some of her limited time.

"I just let them do their work." In years three and four, Katherine continued to introduce structural innovations at Fiorella. During this time, the school community, under Katherine's guidance, began drafting a three-year strategic plan focused on four topics: operational vitality, mission and identity, governance and leadership, and academic excellence—each representing separate committees comprised of parents, teachers and staff, and clergy. Katherine identified teachers to sit on the committees and

lend their insight to the strategic planning process. While Katherine played an important role in the planning process, after committees were formed they operated independently. Katherine only joined the governance and leadership committee, giving other committees freedom to express their ideas unencumbered by her presence:

At the end of the day my big goal was for everyone to own [the strategic planning process] and for us to all feel like we had a role in creating it and all be excited about the future of the school. I had to be part of the Governance and Leadership committee because there was information that they had to have that nobody else could have provided. But I didn't chair it, and I didn't sit in on any of the other committees. I just let them do their work.

This change had a direct influence on the expansion of Fiorella's network from centralized to increasingly more decentralized. She began sharing power with parents and staff members who comprised the committees. The school community was focused on these important academic matters and reported back to Katherine about their committee's progress. Katherine, in turn, facilitated communication between the committees and the Fiorella faculty. As Elizabeth explained, Katherine sought ideas from the whole staff about what they thought the committees should focus on and then communicated updates from the committees at faculty meetings:

At faculty meetings she talked about the strategic plan. At one point she handed some stuff over and told people to look it over and see what they thought, if they wanted any additional information or they thought something should have been added. She's really good about trying to include everybody. She likes everyone to be able to have their say before something is finalized.

These faculty meetings became information-rich opportunities to think about teaching and learning and which changes would best support instructional growth.

The committees identified priority areas and specific action items for instructional improvement. Katherine enacted several of those changes during her third and fourth years at Fiorella. As Elizabeth explained, those changes included updates to the schedule, a technology class for younger students, teacher mentoring, and a learning management system:

The committee recommended changing the schedule so that specials don't start until 8 am to avoid conflicting with morning prayer so they changed that. That's completed. We added a technology class to pre-K and kindergarten. That's completed. They started a new teacher mentoring program this year. That's completed. They implemented a cloud-based student system, that has to do with our grading. That's completed. I would say one of the best things that came out of the strategic planning is we have a new digital math program. The school did end up buying that. I definitely see things happening. Already, next year,

The breadth of these changes signals a shift in power dynamics at Fiorella, in which the strategic planning committees experienced newly instituted decision-making authority. Comprised of teachers, parents, administration, and clergy, the committees were able to recommend change and use their various spheres and levels of influence to promote the recommended changes.

Katherine's adding a pre-K three-year-old program.

In addition to participating on strategic plan committees, teachers had opportunities to assume leadership positions in other parts of school life, such as Grade

Level Leaders. The pre-kindergarten teacher, Olivia, described her role as a Grade Level Leader and her means of communicating concerns to Katherine:

Basically, Grade Level Leaders are a communication point. You talk about specific topics for our grade level, and the leaders will then report back to Katherine. We're not too leadery. We certainly don't have any authority over the other teachers. I think it's a better way to do meetings, and Katherine has faculty meetings for stuff that's pertinent to all of us. We don't have two classrooms or three classrooms of the same grade, so to do grade level meetings, we can bounce ideas off each other or get help if there's something that's going on. The leaders are sort of there to make that happen for Katherine and then get back to her with concerns based on each grade level.

At this time Katherine was no longer the expected hub of all information flow at Fiorella, but this transition took time. Whereas in her first year at Fiorella Katherine communicated ideas and changes directly with staff members at faculty meetings, by her fourth year, Katherine had learned which teachers to trust to speak and act on behalf of strategic planning committees. Katherine's work to promote relational trust focused on developing individual relationships with teachers, demonstrating her sincerity, reliability, and competence and gaining a sense for those same qualities in her teachers. Prepared with a sense for teachers' instructional priorities and skill at decision making, gleaned from numerous interactions and personal conversations, Katherine was in a knowledgeable position to determine who would best support her vision for instructional improvement on the strategic planning committees. Olivia went on to explain how she

communicated activities of her strategic plan committee back to her grade level team while Katherine reviewed her own committee's progress at faculty meetings:

I kept my grade level team in the loop about what [my committee was] thinking. I certainly asked them when we were in the beginning processes to let me know if they had any major concerns or if they had any ideas, so I think that was a great way to do it in those sorts of smaller settings. Also, at our larger faculty meetings Katherine reported out and shared with everybody on the staff about what was happening in the process. We've recently seen the draft form of the strategic plan. Everybody is in the loop.

Both the Grade Level Leaders and strategic planning committees distributed authority and decision-making and both directly impacted teaching and learning at Fiorella. The strategic planning committees determined a variety of school priorities. For example, the Teaching and Assessment Strategic Plan Committee set priorities for technology at the school, which led to purchasing a portable cart of 1:1 devices. Strategic planning committees crafted the larger direction for the school by evaluating programs and proposing changes, while grade level leaders and their teams communicated and executed those plans in their particular area. A system was in place in which teachers had power and could work to address needs and challenges that arose, some at the specific grade levels and others focused on the school more broadly.

Parents

As Katherine experienced some successes in distributing authority among teachers, she was simultaneously considering how to incorporate additional voices, those of the parents. This broader focus was key to expanding Fiorella's network, further

decentralizing authority, and revealing to Katherine the power of distributing authority:

I had a small [teacher] team that really pulled together and worked with me [during the accreditation process]. I would say there was definitely distributed leadership in that particular instance. And what I learned from the teachers who worked with me on that is that those are kind of my go to leaders, teacher leaders on the faculty. [...] Something this year that I've been thinking a lot about is how I can do a better job with distributing the leadership on our committees that are made up of parents. Because what I'm finding is that every time I go to one of these meetings I walk away with a long list of things to do and I feel like that is not helpful. My thinking going into next year is how can I focus more on the parent aspect of that and not just letting [parents] give me more things.

Katherine worked closely with the Parent Advisory Committee when she first arrived at the school and, in her later years at Fiorella, added parents to the strategic planning committees.

In her second year at Fiorella, Katherine began the process of forming committees around the four criteria for school accreditation: operational vitality, mission and identity, governance and leadership, and academic excellence. In addition to teachers, parents played a key role in the work of the committees. The fourth/fifth-grade teacher explained how Katherine enabled parents to participate in the school without interfering with her progress:

[Katherine] balances the parents, I mean, she is very good about listening to them, and wants to hear what they have to say, but she doesn't let them over step the

boundary and run the building. She runs the building. But they're very involved in different aspects of the school.

As Katherine shared in decision-making with parents and committees, she did not relinquish all of her authority. She remained leader of the building even as she began including other voices in decision-making. The process of sharing power with parents evolved as Katherine spent more time at Fiorella and built the trust needed to sustain a decentralized network. As with teachers, the process of sharing power with parents was most pronounced between Katherine's second and third years at Fiorella, when Katherine had established a degree of trust and began to integrate parent voice on the strategic planning committees.

A key component of the relationship between Katherine and the Parent Advisory Committee was shared decision making. In instances of pushback on decisions from parents, Katherine and the Advisory committee were able to collaborate on a solution. This dynamic provided Katherine and the committee with space to consider change and collectively arrive at a solution. A relevant example of this dynamic occurred toward the end of her first year at Fiorella, when the Parent Advisory Committee collaborated on a change in the "Room Parent" policy. Previously, parents were able to earn mandatory volunteer hours by helping in their child's classroom. The advisory group believed that those hours did not help the financial status of the school and the volunteers' time would be better spent attending fundraisers or other school activities. The group decided to change the policy so that volunteering in the classroom, while welcomed, would not count toward volunteer hours in the hopes of raising volunteer hours at fundraisers and

school activities. When the policy change was implemented, some parents fought back.

Katherine described the disagreement:

The volunteer hours are meant to help with our major fundraising events that support our budget so we attempted to communicate that to the families and did it at a parent meeting and also in writing going into this year. Our current families pretty much accepted it but we've got a lot of push back from the new families. When I brought that to the advisory board, initially, the reaction was like what is wrong with these parents. I just said, "Guys, I totally understand [why you disagree with parents who want to count time in their child's classroom as volunteer hours] and I feel like we communicated why we made this decision. But I am going to be honest, it is not worth the time and the energy [to maintain the policy change]. This the kind of thing that may seem small to us but is likely to be so important to a parent that they would like to leave the school over it." And I said, "It's not worth it. It's not worth losing families over this... We have to compromise sometimes."

This serves as one of many examples in which Katherine collaborated with parents and shared decision-making authority. She prompted the committee to consider the interests of a broad range of people during the decision-making process and avoided being unilateral in her position, ultimately encouraging the committee to reverse its decision when the new policy was not well received.

Beyond sharing in decision making, Katherine also entrusted parents to communicate planned changes to others. For example, a rise in tuition was determined by the members of the Parent Advisory Committee. Rather than Katherine informing the

school community of those changes, various members of the committee shared out parts of the report. This dynamic signaled a shift to the school community regarding the changing leadership role of the Parent Advisory Committee. Additionally, Katherine found that this shared approach resulted in fewer questions and criticisms from parents who were receiving this information from their peers.

At our midyear meeting parents are informed about what changes are going to be made for the coming year. If tuition is changing, if the volunteer requirements are going to change, that kind of thing. It's right before we open up re-enrollment, so we feel like it's the respectful thing to let them know so they can make the decision about re-enrollment. In previous years, it's always been on me to put the information out there and then also defend the changes. But this year, all of the members of advisory board each took a section of the report, and they took the lead on presenting it to the rest of the parents at the midyear meeting. I just tried to answer questions as they arose, but it was the first one since I've been here where I didn't have any hostile parents. I think part of it was because we actually worked really hard on what we were presenting... But I think the other piece of it was that their peers were the ones presenting it, not me. I would say that has definitely been helpful as far as the overall culture and community here.

These shared responsibilities created the possibility that Katherine could rely on Fiorella parents, while parents were able to work more closely with one another to further strengthen the school community. Katherine trusted parents to assume more responsibility, which in turn gave them ownership of aspects of school life as they

communicated directly with one another and participated in the strategic planning process.

The Parent Advisory Committee provided Katherine and Fiorella with a supportive structure for planning events and supporting fundraising efforts. Katherine enhanced their role further by asking for their feedback on the question of raising tuition. Including them in the decision-making process lent the advisory a sense of authority and promoted trust between Katherine and Father Francis and the parents. As one parent, Alice, remarked:

I think the parents are very involved in running the school. I think Katherine and Father Francis are both receptive to the ideas that the board puts out. I don't think we are being shut down or not allowed to express our ideas or that our ideas are being discounted. Probably the biggest thing we discuss is the tuition and that is what I think of when I say that we are allowed; Katherine comes to the table and says, "Look, this is the research that I have done. Other schools are charging this for tuition. We haven't had increase in tuition in x number of years. What do you all think of this?" And I think that is a good idea to put out to the advisory board because most of us on the advisory board have children in the school, so, we have to look at it from the stand point of we are helping to run the school and keep the school open but at the same time, we are looking at it and saying, "Well that's affecting our pocketbook too." We have voted for tuition increases. We have never said no, ever in the seven years I have been on the advisory board. So, to me that says, we are putting aside our own personal financial interest and looking more towards the interest of the school. And I think the administration and

Katherine allowing us to have an input on that is valuable to the school instead of just two of them making the decision.

Alice noted the value of shared decision-making because parents have a different perspective on issues like tuition compared to administrators. The sum of insights from various stakeholders has the potential to illuminate new ideas and areas for growth.

Bringing the parent point of view into the ongoing discussion offered new ways to understand some key points of tension within the school system.

Katherine's relationship with the parents transformed during her time at Fiorella. In the beginning, Katherine utilized their ideas and suggestions to the degree she felt was right. At times, she felt that her relationship with parents meant more work for her because she was responsible for executing any of the ideas she wanted to adopt. Over time, Katherine shared responsibility with parents for decision-making, execution, and communication. This shift lessened her perceived workload and created conditions for enhanced relational trust and a flow of new ideas.

Outside networks

Katherine's efforts at expanding communication and encouraging the sharing of new ideas included staff, parents, and outside organizations. As Katherine strengthened network connections within Fiorella, she also sought new partnerships among regional resources to support instructional growth and contribute to her cultural vision for the school. Examples of these partnerships included relationships with neighboring Catholic schools, connecting with other educators through social media, partnering with a local special education service provider, and joining with the local naval base for field trips and hosting guest speakers. Connections to outside ideas and influences can strengthen a

school's collective identity and infuse the staff with new ideas and energy (Daly & Finnigan, 2010). These partnerships provided Fiorella and Katherine with new opportunities and connections, contributing to the school's potential readiness for change by enhancing the interactions among various systems elements.

While in Northeast, Katherine had an extensive network of colleagues through her university affiliation and relationship with an organization supporting aspiring Catholic educators, upon moving to Maryland, she worked closely with principals from area Catholic schools. However, their ongoing competition for many of the same students necessitated that those relationships remain more tenuous than those she experienced in the Northeast, and she would always be wondering about the motivations behind her colleagues' actions. Accordingly, relational trust could be difficult to establish with other local principals.

Being in a rural area, it was often difficult to find opportunities to physically meet with other educators to share ideas. Social media provided a venue for communicating with others that was not tied to the challenges of geography. Katherine and the Resource Room teacher regularly used social media to communicate with and learn from other Catholic educators. The Resource Room teacher explained how she began using Twitter, another outside resource, to engage in a biweekly chat hosted by the Archdiocese:

A lot of us are on social media. The diocese does encourage us to have a Twitter account. So, two Wednesdays a month there's conversations through the whole archdiocese. The diocese encompasses a lot of territory. There's a woman named Gabby, she's really great, and she throws out questions for everyone to answer. They're useful. "How do you feel about the benchmark? How do you feel about

Scantron? What do you do to manage unruly children?" You don't know what the questions are in advance. There's usually five questions but it's around a single topic. It's really fun to participate in and to see what other teachers are saying.

Katherine also noted her participation in Twitter chats hosted by the archdiocese. A particularly common hashtag Katherine used to link her tweets to larger message threads was the hashtag started by the regional archdiocese, meaning that she was communicating with other educators and school leaders across two states and the District of Columbia.

In addition to communicating with other educators, the Resource Room teacher used her Twitter account to share resources with Fiorella parents around topics such as special education:

I don't put anything personal on my social media except my passions about special education. I put a lot of stuff from understood.org on my feed so parents are informed. For example, there's a great webinar about executive functioning, we have three students who have executive functioning issues. So, I'm virtual friends with those parents and they look at [the content I share online] online.

These interactions signaled a shift in how Katherine and the Resource Room teacher shared resources with parents and engaged in professional development among area colleagues. Despite being a small school, Fiorella was part of a larger educator network, and the opportunity for virtual interactions meant learning from colleagues was not limited by geography and Fiorella parents had a new means of accessing resources specific to their students' needs. Once more, systems interactions had been enriched,

which in turn impacted the experience of students, teachers, parents, and Katherine.

In addition to finding opportunities to communicate and learn from other educators, Katherine encouraged partnerships with local agencies and community resources. The outside connections included a behavioral support service organization, local resource agency, environmental center, and the local naval base. The fourth/fifth grade teacher explained that though the school had had past interactions with some of these services, Katherine was the first principal to take full advantage of outside partnerships:

Katherine has made a lot of partnerships in the community, like with Personalized Therapy who provides ABA therapists to work with our kids. We have Southern State Resources, they do a lot with special needs, and we have a partnership with them. We have a partnership with the naval base. People from Fiorella go visit the base, and sometimes we get people down here. I had people from the environmental center come down here when we did our life science unit and they brought in little critters and everything like that. You can have engineers come and talk, or when they do something on base they invite us to it and then we go and see it. She's brought a lot of awareness and different workshops. I think she stresses the benefits of partnering with other groups more, so people are taking advantage of it, whereas it was introduced to us in the past but no one really took advantage of it. Now we are really trying to take advantage of all the partnerships that she's trying to bring in.

These partnerships were all fostered by Katherine, and the growing network enhanced system potential for even further growth. As these relationships developed, it provided

the opportunity to expose additional needs of the school and greater opportunities for connections with outside groups.

Connections with outside organizations provided Fiorella with a network of supportive resources that could be accessed in a time of need. Just such a need arose when the Resource Room teacher had to resign mid-year for health reasons. Her special education experience and the nature of the part time position meant finding a replacement would be difficult. Elizabeth explained that an existing relationship with a local organization helped the school identify someone to fill the role:

We had a resource teacher, and she resigned around Thanksgiving because of health reasons. It is really hard to find a resource teacher with a special education background for part time. So, through Personalized Therapy, we already had this little partnership with them about ABAs, they have people that have the background in special education - matter of fact, the lady that's working with us right now used to teach in a public school. She knows how the school systems run. She has her Master's in Special Education plus behavioral analysis. She's heading up our resource program, and I'll tell you what, she has been - I mean, she came on board, and she has been wonderful. She has got groups up and running. Kids are being pulled. People are coming into the classrooms to help support the teachers.

Elizabeth recognized the potential difficulty of filling a specialized role like that of the Resource Room teacher. Fiorella was able to leverage existing relationships to fill the teacher vacancy and avoid a prolonged interruption of students' academic services, while creating groups to support student learning and bringing additional resources into the

classroom.

Outside connections strengthened the educational experiences of Fiorella students and provided teachers with new resources and ideas. As new connections were established, it led to the possibility of even more connections as Katherine and the teachers interacted with new people and organizations. New network connections from these organizational contacts marked a shift in the scope of interactions among system agents. Increased connections established the conditions necessary for new interactions and potential for collaboration. This shift, similar to that of teachers, meant that the expanded network at Fiorella functioned in new ways. New network connections and shared decision making among various individuals and groups created the possibility for improved communication, enhanced relational trust, and the spread of ideas, creating the conditions necessary for potential transformative change.

Cultural Change at Fiorella

In order to understand cultural change at Fiorella, I sought to explore efforts at shaping the values, attitudes, and beliefs in the organization to respond positively to proposed changes (Davis & Sumara, 2006). Over Katherine's four years at Fiorella, there is evidence of an increased robustness in cultural elements. The specific thematic elements she elevated among the staff and students became more noticeable in different aspects of school life. In a similar way to the section above, the evidence of changes in school culture are presented across Katherine's four years at Fiorella in an effort to demonstrate the evolution of cultural change and provide a sense for how the dynamics of the school shifted during her time there.

Themes

As Katherine sought to establish a system of distributed authority throughout Fiorella, a common school vision and culture emerged. Shared Catholic values helped networks within Fiorella function by providing staff with a common language and sense of the school's mission and priorities. Katherine recognized the significance of the impact shared values had on teachers, students and instruction at Fiorella:

I think that we all work hard here and it's because we believe in what we're doing. And that I think is shared by the vast majority of the staff. The whole faith foundation piece is a huge one here. The Catholic identity in the school really comes out in all the different classrooms. And that's not just from me.

Katherine built upon the traditional Catholic school values of faith, knowledge, and service, and infused the school culture with elements specific to her life and vision for the school. Central to her approach was yearly "themes" in which she communicated an idea that was then, to certain degrees, infused into daily life at Fiorella. Some teachers who embraced this practice made changes to their curriculum and how they interacted with students. This included service projects and public recognition for positive behavior. The integration of the themes followed a similar progression to decentralizing authority in the school— at first, Katherine introduced the theme and directed teachers in how to implement it into school culture. Over time, while she continued generating themes, grade level groups decided how to shape their curriculum and projects around that theme. The themes served as a common vision for teachers and students at Fiorella, as well as parents. In her first year at Fiorella, for instance, Katherine presented the theme "Journey" as a way of introducing herself to the school community, as explained by a third-grade teacher:

I think that Katherine has brought a new sense of self into this school. At the beginning of the year she gave everybody a shell, as she had when she went on a mission. It's a shell to share where you've been and where you are going to keep it with you on your journey. I thought that was pretty neat that she was bringing her life to the kids.

The "Journey" theme was a point of entry between Fiorella and Katherine as their new leader. They had a common platform to share experiences and expectations.

In Katherine's second year at Fiorella, the theme "Peace Maker" served as a catalyst for conversations about positive student behavior, collaboration and support for fellow students. At the end of each quarter, a student was chosen to receive a "Peace Maker Award" in recognition of actions they did to bring peace to the school and their classmates. Contributing to the theme, Katherine invited the mother of a famous author to visit the school at the end of the year to meet students and discuss the importance of peace in one's relationships with others. The author had written books about the importance of peace, kindness, and compassion for those with special needs. This was a timely visit, as the school recently enrolled special needs students for the first time. To serve the new student population, Katherine contracted with a local organization to provide aides for the students and in doing so further expanded and decentralized Fiorella networks. Connections to outside ideas and influences strengthened the school's sociocultural vision and infused the staff with new manifestations of their cultural vision. The second grade teacher observed:

I felt like [the visit from the author's mother] just tied together everything for the year but it was like... Katherine was glowing when she was here. You could tell

that it was something so special to her and she would light up when she talked about it. It made everybody else feel the same way. It kinda tied in our whole theme for the school year and everyone was excited about it. It brought everybody a little bit of peace.

The Peace Maker theme became pervasive in school activities, empowering teachers with new foci for curriculum integration while enriching the sense of caring embodied in the school community. The fourth/fifth grade teacher reported:

The last two years, at the beginning of every year, [Katherine] picks a theme and really focuses a lot of that. This year it was with peace. And the whole thing with the peacemakers, you saw the little things, like with the pre-K students holding the doors for each other. The [theme] Peace Maker also made an awareness of kids that have learning disabilities or special needs, and [taught the students] that you don't want to exclude anybody, you want to accept everybody.

The themes Katherine introduced transcended the classroom and reached students and families at home. Parents were aware of the values Fiorella promoted and the specific themes each year. One parent of third and fourth grade students explained how her children spoke about peace at home:

My kids know what a peace maker is. It's not just an award that someone gets at the end of the quarter. They come home and talk about being a peace maker and how they did it in their classroom. So, I feel like things in the classroom are really incorporated enough that they come home and talk to me about it. It's not just the book stuff at the school, they're more well-rounded. But, you know, it comes

from the leadership. It comes from the top. Because, [Katherine's] explaining that, they talk about it in morning prayer. She's living what she's preaching. Fiorella students shared the themes at home and gave concrete examples of how they enacted the values they were learning.

Teachers received weekly recommendations from Katherine as to how they might connect Catholic teachings and their classroom lessons. They took note of Katherine's ability to connect Catholic values with the students' academic lives. As the middle school math teacher remarked:

Every week Katherine sends us a weekly email called "The Week at a Glance," about what we should expect for the following week. In the first part of it, she writes which Gospel they are going to talk about on Sunday, and then she always relates that with how we should teach in the classroom. She says, "Maybe you should think about xyz when you teach in the classroom," and "You should show this type of a lesson that's being talked about in the Gospel." She always reflects the lessons to a current topic.

The cultural vision Katherine had created for Fiorella was, to degrees, infused into academics. Katherine contributed to fostering these connections by explicitly recommending cultural/instructional connections to the teachers. Augmenting traditional Catholic values, Katherine used the themes to further enhance the possibility of concrete curricular connections.

Fiorella teachers appreciated the power of the themes to connect instruction to Catholic values and the school culture while promoting a sense of school community.

One teacher noted the significance of the themes that served as a foundational element for

the school:

Every day we talk about faith, service, and learning. . . It helps to have a big idea to tie things back to, both academically and in the special events we do. [The themes] are a new thing that [Katherine] brought in. We use it as a touchstone. We come back to the themes and build our lessons and special events off that. . . It definitely solidifies our community. It brings us together.

As Katherine considered what the theme would be for her third year at Fiorella, she wanted to select something that would make a connection to the nearby naval base. She spoke to the school's pastor to get insight into his ideas. Together, they developed a theme that built upon Catholic values and capitalized on available network connections, such as the environmental education staff on the base. Katherine described the process and its link to the school vision:

Father and I were talking. He was saying that he wants to do something that pushes us to connect more with the [naval] base. . . There is a lot we could do with them related to STEM. . . But how do we turn that into a theme that can flow into everything? So, I was thinking, what about "created to care?" That we are all created to care? And it's kind of a pushback against the "I don't care movement" that seems to be really prevalent in society. It's like, "No, we do care. And who do we care about? What do we care about? Everything and everybody." That could really push us in our thinking about service and service learning.

Such values were infused in all aspects of school life, including discipline. When students engaged in unexpected behaviors and Katherine needed to address the issue, she

would conference with the student and end the conversation by sharing a prayer card. As the second-grade teacher explained, Katherine used the prayer cards to encourage students to reflect on their values.

Kids will always come back with a prayer card which she always tells my kids, "If you think that you might do something that's not right, use your prayer card" which I think is pretty cool. It's not just discipline. It's a positive with the discipline if that makes sense. Yes, they might have a recess minute taken away or they have to walk [laps around the field at recess] but they are also given this prayer card as well so I feel like that's a positive spin whereas before, it was just "You've lost recess."

Students learned the values of the school through the curriculum, assemblies, and discipline. Building upon this work, Katherine and the teachers sought to promote service as a means to further enact the values of the school.

As a cornerstone value of the school, service served a dual role as a mechanism by which the culture of the school became visible and also as a means of further strengthening connections in Fiorella's network. As a middle school teacher noted, students engaged in service projects in many different locations in partnership with different organizations:

Fiorella students do community service. It's more emphasized in eighth grade, just because they have to do a community service project, but some of them extend it to animal shelters, or different businesses, or medical offices. But they do spread out through the community, as well as extracurricular activities.

By serving different local agencies, students and staff at Fiorella were developing new

connections, thereby enriching their existing beliefs and values while creating the conditions for even more connections and new ideas and understandings to emerge.

The theme for Katherine's fourth year at Fiorella was "Doing Ordinary Things with Extraordinary Love." The theme was inspired by the canonization of Mother Teresa and her reputation for showing her love of others through everyday actions. Students were recognized by teachers and peers at Morning Meeting when they demonstrated love for their class and community. As Elizabeth explained:

We have a bulletin board about "Extraordinary Things." You can write on a heart if you catch somebody doing something like that. Every time somebody gets a heart turned in, Katherine makes a big deal about that and announces it at morning prayer in front of the whole school to show them whose names got chosen. Sometimes it's so simple, little things, like when a pre-K student helped one of his friends who had a bad day and dropped everything. Simple, but at that level, it does start somewhere.

Though teachers sought to capture small moments of student kindness, Katherine and the staff developed activities to promote large-scale enactments of love manifested through service projects. Elizabeth went on to explain how those projects looked different at various grade levels:

It is just really nice what is going on right now. One of the things we're doing this year, we each took a service project. Little first graders were involved a lot with children who had cancer, and they wrote cards to different children Specifically, there was one little boy in our community, Cameron, he has cancer. It was bad. Then third grade is doing something with a veteran's home. They've

been communicating with the veterans and next week they're going there to play Bingo. In my grade, we've adopted sailors that are out right now on the USS *George Bush*. They're deployed and we've written to them and sent care packages. Sixth grade did something about the environment and taking care of God's creation. They did their project with their prayer partners from second grade, and they got people to donate trees. They planted sixty trees around the school grounds. Doing extraordinary things with extraordinary love.

Each year, the themes contributed to the culture at Fiorella. The culture was manifest in students' actions among their peers and through their service projects. In addition to students, parents and teachers were integral to the promotion of a shared school culture.

Katherine encouraged reflection among her staff as a means to strengthen the commitment to shared values. Teachers were asked to reflect on questions from the archdiocese and the work being done at Fiorella. The second-grade teacher explained:

She's always constantly getting us to reevaluate ourselves. Yesterday she gave us new group work to evaluate and reflect on. She's always forwarding the archdiocese weekly memo to us which has questions every week: "Are you doing this, are you doing that? How can you do this better?" Every day we reflect in prayer about how we do better for the whole school.

Reflection provided teachers with space to consider areas for improvement.

Katherine used the yearly themes to connect with individual teachers and the school community collectively and further strengthen her vision for the school. She was then able to leverage her individual relationships with teachers, starting from a centralized network that eventually evolved into a more interconnected, decentralized

network through the process of distributing authority. This process of change was supported by the school community's trust in Katherine's leadership.

Trust

As Katherine continued to shape a common culture at her school, she enriched relational trust within the community, setting a foundation for people to assume new responsibilities, including the inclination to take risks and demonstrate competence in various school-related endeavors, from participating as teacher leaders to integrating new technologies into their classrooms. Assuming such responsibility within the network then revealed teachers' competence, reliability, and sincerity, thereby enriching relational trust and allowing Katherine to relinquish some responsibility to new individuals within Fiorella.

Upon joining Fiorella, Katherine was conscious of the importance of trust in her ability to connect with others and actively sought to build trusting relationships within her new community.

My biggest thing my first year was to try to build trust and to try to build relationships, and that meant being at every Sunday basketball game and every fundraiser and every event and joining the local parish and going and talking at masses and doing everything I felt like I possibly could to be visible and be out there and get to know people in the community as well. So, I think that was my number one focus for last year.

By attending community and school events, Katherine situated herself as a member of the community and demonstrated sincerity and reliability to her staff. Building trust, in turn, helped Katherine shape a shared school culture infused with her themes and values. We

turn now to a discussion of the various ways Katherine sought to establish trust with others by finding opportunities to display her competence, sincerity, and reliability.

Competence

Katherine demonstrated her competence through her work to improve instruction at Fiorella. She introduced a STEM curriculum for the middle school, Spanish language instruction, and new textbooks for upper elementary students. She also hired a part time technology teacher, updated the curriculum, and purchased new infrastructure for the technology class. These larger instructional improvements were complemented by her work with individual teachers. She worked with teachers individually to give them strategies to improve their teaching. For instance, when the second-grade teacher was having difficulty with the math curriculum, Katherine worked with her. The second-grade teacher noted how valuable Katherine's help was:

She's very supportive. I feel like she sat down and listened to me. She's given me pointers like helping me to organize my math lessons. I'm not too fond of the math program we have and I was telling her about the trouble I've been having. She came to my room and she helped me organize it and she showed me some supplemental ways that I can teach the lessons. I mean she's very supportive; she took the time out of her day to come and help me with that.

Katherine's work with teachers enabled her to display her expertise as an educator; she was able to discuss her knowledge of the curriculum and understanding of pedagogy.

As principal, Katherine was centrally involved in most instructional activities.

The second-grade teacher explained that her presence signaled her commitment to helping teachers grow and giving her all to support the students and parents:

I feel like she is always looking for lesson plans. She's popping in your classroom to see what you are doing. She gives examples on how to do things better. She's taking care of all of the students here at school. She's meeting parents' needs. She's meeting our school's needs. She's taking a lot onto her plate and she does it every day.

Evidence of Katherine's competence was coupled with a sense of her reliability and the sincerity she brought to her work. The second-grade teacher's perspective that Katherine cared for students and worked to meet people's needs was one of many examples of sincerity that her staff noted in interviews.

Sincerity

Teachers noted that, in addition to competence, Katherine approached her work and relationships with others with sincerity. Outwardly, she emphasized the importance of serving Fiorella students by providing them quality educational opportunities. Her teachers noted several instances when Katherine's actions revealed that she worked in the best interest of Fiorella's students and staff and reflected the values she promoted.

Katherine's attitude and general demeanor reflected her sincerity and desire to create a loving learning environment. She was known for her calm demeanor and being at the school because of her love of the students. As noted by the Resource Room teacher, Katherine's positivity was evident in many situations where she would bring optimism to a situation:

When there's a negative situation she's very good about turning it around. If you say something to her in a negative way, she has a way of stating it back to you in a positive manner to make you stop and think. Anybody else would say, "Well

you're accusing me of this, or you're not listening to me." You know, she makes you stop and look at yourself, and how you're handling a situation. She's just a really neat person. I really just am grateful to be working with somebody like that, with such a positive attitude and who is here for the right reasons. This is because she loves children, she loves working with adults and children alike. I don't know how she does it. She puts in some crazy hours. I don't know how she does it. But I've never, even on a day that she's exhausted, I've never seen her mishandle a situation. It's just incredible.

The same calm and caring demeanor she showed the teachers was reflected in her approach with Fiorella students. The Resource Room teacher noted an occasion of a student conflict where Katherine handled her interactions with the students in a positive manner:

There was seventh and eighth graders, I guess their group of friends were hanging out one weekend and then there were rumors going around and students were screaming at each other in the hallway. It took all of us to separate them. There were about four kids involved. One teacher, who's older, she just said, "You should be ashamed of yourself." She handled things like they would in the 80s and 90s, where the adults shamed and blamed you and they didn't talk to you. On the other hand, Katherine said, "You're sitting here, you're sitting here, I want everybody to calm down, I want to speak to everybody individually, and then I will let you know what's going to happen." She was very calm, I've really never heard her raise her voice. I feel grateful to have a leader like this, that is somebody who always tries to stay calm, who always does stay calm, and who

always tries to look at every situation very globally. It's not like her ego's in the way at all.

Katherine approached her interactions with parents in a manner similar to her interactions with teachers and students, where respectful discourse and discussion could be expected. She modeled that respectful expectation in the way she spoke to others and was clear in her insistence that, while she was open for feedback, conversations would be respectful. The Resource Room teacher witnessed such interactions and noted:

Fiorella is a loving environment from leadership down to students down to their parents. The parents know they're allowed to express how they feel, but they know Katherine will not tolerate outrageous screaming, yelling, or foul language. She's very good about saying, "When you've calmed down I will hear you.

When you've calmed down we'll have an opportunity to discuss this."

Katherine projected her sincerity by modeling the values that she espoused.

Teachers found that Katherine's concern for her staff extended beyond a formal relationship to include times of personal crisis and that she cared about their wellbeing beyond their professional success. The Resource Room teacher, Wendy, joined Fiorella during Katherine's second year as principal. In the weeks before the start of the school year, Wendy's father died unexpectedly. Katherine coordinated a donation from the staff for cancer research in his name. Wendy noted that these efforts immediately made her feel part of the community. This positive experience served as a foundation to her relationship building with the staff when the school year began. Wendy viewed her new colleagues and principal as caring and supportive.

They sent an enormous donation to the cancer society when they only knew me for a full second. The donation was in his name and honor. The cards, the overwhelming emails, and phone calls was just incredible. And then just coming back to work was so easy, I needed to be busy, but coming back to work with all these people, just was incredible. With such a tragedy in our lives, because it was so unexpected, everybody was just great.

Among Katherine's actions that promoted trust building, she was able to demonstrate her sincerity through shared spirituality grounded in Catholic values and a positive attitude. As Elizabeth explained, Katherine was relentless in her desire to form connections. Her persistence eventually led Elizabeth to trust her and want to be a better educator.

I don't think I was the easiest for her to get to know, because I stayed away and like hid in my room most of the time. But little by little she just kept doing little things, and...like I don't know how to describe her leadership. All I can tell you is she's very spiritual, and that just flows out of her, and it's so positive all the time, and trusting. She's so enthusiastic all the time, a little energizer bunny. She makes you want to come in and try to do better. She's really patient, and I know, for me, she has just helped me tremendously both professionally and personally.

Katherine's impact on teachers' growth as educators had the potential to enhance instruction at Fiorella. Teachers' trust in Katherine was founded on a sense that she was competent, sincere, and reliable.

Reliability

Katherine's presence at Fiorella contrasted with that of her predecessor. Many teachers commented that the principal prior to Katherine lived nearly an hour from the school and was rarely seen beyond the school day. The second-grade teacher noted the significance of Katherine's availability. Comparing Katherine's visibility in the building to the previous principals the teacher remarked:

What I've noticed with Katherine is she is here every day. She is here before school begins and she is here after school ends. The children know that her presence is gonna be here. And I think that's such a big difference that the principal is always present and here every single day. That's one of the big changes that I've noticed. Another change I've noticed is that our enrollment has gone up since she's been here. I mean she's totally invested in the school. So, I feel like with the other two principals, they were invested but not to the point where Katherine is and I think she's getting more parents involved. I think it's a really, really great thing for our school.

Beyond the school day, Katherine attended sacramental retreats with her teachers and robotics challenges in which her students competed. The fourth/fifth-grade teacher noted a similar commitment from Katherine to attend school related activities outside the school day. Additionally, Elizabeth remarked how Katherine's reliability extended to willingness to cover classrooms if a substitute teacher was unavailable:

She leads by example. She does not ask you to do anything that she herself would not do, you know. She's so understanding if a teacher has to leave to care for a sick child. She'll say, "You've got to go, don't worry, I got it. I'll sub for them." I have never seen a principal do that, but she does that. She'll sub, she'll cover a

class until they can get a sub, or there have been days where she subs the whole day. She attends every school function. She goes to everything. You know, all the games, all their meets, all their STEM stuff, the spelling bees, the choir, the band. It doesn't matter what it is, she makes an appearance and goes to everything.

The middle school math teacher, Sarah, had a similar experience, noting Katherine's involvement in many aspects of teachers' classrooms. She requested weekly lesson plans to stay abreast of what was being taught, which enabled her to accurately communicate instructional work with parents or assist in securing a substitute teacher when needed. When Sarah had to leave her classroom unexpectedly due to pregnancy-related illness, Katherine could be relied upon to step in as a substitute:

Katherine is very active with what we're doing in class. I mean, every week we have to turn in our weekly lesson plans so she knows at any point in time what we're doing. Especially if parents are wondering, or if we're out, if for an emergency she knows what to bring in for the sub or anything like that. She does come in and do formal and informal observations. She has been a lifesaver in the times where we couldn't find a sub, and specifically me for instance, on the spur of the moment when I would have to leave because of my condition, she would just come in and say, "I'll be your sub for you."

Katherine's presence expanded her connections to her staff and visibility with the students. As leader, she was not isolated from the staff but rather central to their work, establishing expectations for instruction and also providing support when needed, all aligned with her vision for the school. The additional expectations on teachers to create

and submit lesson plans was not just busy work. The middle school math teacher explained that Katherine read over the plans and then would ask teachers how they were progressing. The expectation was viewed as more supportive than taxing:

Creating the lesson plans is hard. It's very hard. But you see all the work that she puts into it on her end and that she actually uses them. You know you're not just doing work just to do it. Our prior principal wanted us to turn in weekly lesson plans, but I don't even know if he read any of them. I would see Katherine and she would ask, "Are you still doing this at this time?" I mean she would check. And then we would invite her into class, you know, if there's anything interesting that you're doing and you would like me to get pictures or videotape or somehow show it off, onto either our Facebook page or just our website that we could invite her in. You would just have to say the activity that you're doing and she knew when to come.

Teachers felt connected to Katherine through the lesson plans. She knew what they were planning to do in their classrooms, and both Katherine and the teachers used the plans to communicate interesting activities that Katherine might want to join the class to see, as well as revealing the degree to which the lessons embodied the school's commitment to shared values and beliefs. Several teachers remarked at Katherine's consistency with social media as a means of promoting the work of Fiorella. Katherine's reliability with growing their web presence in turn allowed teachers an opportunity to display their competence.

Katherine was known for listening to all sides in a conflict. Teachers could be assured that they are going to be listened to and that their opinions mattered. While

Katherine would ultimately make the decision on an issue, teachers were welcomed to share their opinions, ideas, and perspectives. Katherine would not make an impulsive decision before getting feedback and reflecting on the issue. As explained by the Resource Room teacher, Katherine facilitated open dialogue in a conflict and encouraged respectful discourse and reflection. Her emphasis on respect and openness translated to her staff:

She is one of the few people that you would hope to run into as a leader and be fortunate enough to work with because she, she doesn't have any jerk reactions. She stops, she'll take a breath, she'll say, "I heard your side, I have to speak to so and so to get they're side and I'll come back." I've never seen her lose her cool. When there is a hostile situation she is one of those people that can diffuse it. She will just say, "Everybody needs to calm down, everybody has to be respectful, we're meeting in a respectful manner, I have to hear both sides." She states her position too, whether it's employees, parents, children. She doesn't arbitrarily do something; she explains why she's doing it. We were brought up in an era that, you just, that's an authoritative figure and you just do what they say, but she wants you to know why she's doing something and where she's coming from. She's very, very respectful. And her demeanor spreads to the rest of us.

Katherine's interactions with parents mirrored her approach to interactions with her staff. As the middle school teacher explained, Katherine created a comfortable environment for parents in which they could share their opinions about different aspects of the school. Parents felt that, though they might not get the answer they wanted,

Katherine would listen to their concerns and could be relied upon to respond to their questions.

I think parents feel more open to coming in, and more open to saying, "Hey did you think about this? Maybe we could change this? Do you even think this is of concern?" They just feel, I think it's a more comfortable environment for them. And I think they respect that. Because a lot of times, they will get answers. Whether it's an answer they want or not. But they get an answer, it's not just thrown up in the air and never discussed again.

Katherine's work ethic was visible to her staff. For the middle school math teacher, this induced a similar work ethic:

She makes me want to do my best at work. She, from seeing how much hard work she puts in from her end, it makes me want to do more for her and want to do more for the school. And want to go above and beyond and spend the hours and hours on our lesson plans, like I do.

Though not every decision Katherine made fostered the commitment and trust from the community that the middle school math teacher's quote conveys, in general, Katherine created a pattern of consistency and reliability that her staff could emulate. In addition to providing reliability for her staff, Katherine provided standards of work and growth to which they could strive.

Katherine encouraged teachers to try new things and challenge themselves professionally. In another instance where Katherine as a role model engendered increased commitment on the part of faculty, her relationship with the fourth/fifth-grade teacher exemplified her ability to leverage the strength of her individual relationships

with teachers to serve the needs of the school and, in this instance, also have a positive impact on the teacher's experience as an educator. Katherine tapped Elizabeth to be the teacher of a new combined fourth and fifth grade class. Elizabeth reported that she had not accurately anticipated the amount of work the combined classroom would be. She had to review two separate curricula, create double lesson plans, and keep two gradebooks. Despite the challenges, Elizabeth was committed to continuing in that role for three years and reported that the experience was positive in enabling her to challenge her own skills as a teacher:

At first, I don't think I knew what I was getting into. It is a lot of extra work with lesson planning, and you have to keep two separate grade books on the computer. I mean, two of everything. But, in some ways it was really good for me at that point, because it made me sort of go outside my box and get those creative juices flowing again. Katherine came at a time, I was coming off some of my worst years ever at school. The year she came, I had actually started applying for other jobs that didn't have anything to do with teaching, and then here she is saying, "Oh well you're going to do a split." And I'm thinking, "Are you sure you're talking to the right person?" Maybe she had doubts but she never came across like that, and the last two years for me have just been so much personal and professional growth. Even how I view my job, it's totally different.

Katherine's relationship with Elizabeth best exemplified her approach to individual relationship building. Her work to get to know each teacher, even when those individuals were resistant to her efforts, endeared her to some staff members.

Katherine's efforts at building relational trust among the Fiorella community were largely successful. Even among teachers with whom she had to have more difficult conversations, Katherine was still viewed as competent, sincere, and reliable. A central theme to her approach to relationship building was establishing individual relationships with her staff, proving herself to be trustworthy, and in turn determining with whom she could rely upon to share power and decision-making authority. In interviews, many teachers commented about their relationships with Katherine and alluded to the factors contributing to their trust in her. One teacher chose to summarize her relationship with Katherine in a note left for me in the conference room: "I forgot to mention that being under Katherine's tutelage has been inspiring, rewarding, and purposeful. It is truly an honor to be in her presence." This quote, and the additional effort the teacher took to ensure the message got to me outside of our scheduled interview time, provides a sense for how many staff viewed Katherine, particularly that the relational trust existing between Katherine and her staff allowed many to feel purposeful and rewarded in their work.

Case Study Summary

There is evidence that Katherine enacted leadership for adaptive change at Fiorella by promoting structural and cultural change. Katherine's work to distribute authority among staff and parents included developing strategic planning committees, utilizing grade level leaders, and supporting teachers' professional development. Her approach to fostering distributed leadership was incremental and in keeping with Harris et al.'s (2007) recommendations that prior to making significant changes to leadership, individuals' expertise is determined and that a leadership configuration is planned and

executed in advance of a change effort. At Fiorella, individual relationship building revealed initial conditions at the school and qualities various teachers and parents could contribute to the change process. The competence teachers demonstrated promoted trust which helped Katherine to relinquish some of her authority to others, encouraging others to share their input and contribute to the decision-making process to varying degrees. Several leadership team arrangements were tested before Katherine arrived at the strategic planning committees, perhaps the most encompassing feature of distributed leadership at Fiorella.

Important to the work of the strategic planning committees was securing teacher and parent support for new ideas. To do so, Katherine had teachers participate in developing ideas for the strategic plan, either as committee members or during discussions at faculty meetings. Raelin explains the significance of getting participant support for new initiatives: "When people who have a stake in a venture are given every chance to participate in the venture . . . their commitment to the venture will be assured" (2006, p. 155). Katherine solicited teacher and parent input in the change process both in terms of structural considerations and cultural change.

Fiorella's commitment to its Catholic identity was among the reasons Katherine was keen to join the school. Her contributions to cultural change built upon this identity specifically in regards to curricular connections. The themes served as an entry point, providing a concrete means of integrating the school's values into student instruction, while empowering teachers with new curriculum and pedagogical strategies. Service projects, assemblies, and routine communications were infused with explicit examples of the themes. Evidence suggests that as a model for these values, Katherine demonstrated

for the students, staff, and parents what it meant to be a peace maker, to care for others, and to do things with extraordinary love. By attending to the existing school culture, Katherine was able to align her priorities with the attitudes and beliefs of the school community (Fullan, 2011).

Interconnected to Katherine's work in the areas of structural and cultural change was relational trust. Evident in teacher and parent interviews was a sense that Katherine had demonstrated her competence, sincerity, and reliability to various stakeholders in the school community. The significant amount of time Katherine spent at the school and at school-related events provided opportunities for her to interact with others and further enhance her relationship with faculty and parents. Her availability and positive approach in personal interactions were reflected in interviews. Katherine contributed to a sense of relational trust among the staff by sharing authority. As expressed by Bryk and Schneider (2004), leaders who promote opportunities for others to share ideas contribute to relational trust and help ready a system for adaptive change.

Katherine disrupted the status quo at Fiorella by distributing power and authority and making cultural change a centerpiece to her efforts—using values and beliefs to mobilize faculty and gain commitment to common priorities. Beyond traditional Catholic school values, she communicated her unique vision for the school, developing a community identity based on yearly themes. Evidence from this case study suggests that Katherine had a significant degree of success enacting leadership for adaptive change. She established structural mechanisms through which she distributed power and enhanced communication while promoting a shared school culture. Katherine fostered the conditions that contributed to Fiorella's readiness for change. In an upcoming

chapter, drawing on features of complex emergence (Goldstein et al., 2011), evidence from this case study will be explored further to assess how Katherine's enactment of adaptive leadership practices at Fiorella impacted the process of institutional change at Fiorella.

Chapter Six—St. Anne's School Case Study

"New context, unique problems."

At Katherine's third school site, St. Anne's School (SAS), she once again sought to initiate change, targeting the school's structure and culture in order to impact positive growth. At SAS, Katherine faced several unique problems that, even as an experienced school leader, she had never faced before. Within weeks of her accepting the position of K-8 Principal, SAS merged with Catholic High School (CHS) and transformed into a K-12 multi-campus school. As a result, the high school principal became Head of Schools for the new combined school, and Katherine reported to her. From this merger, several problems emerged that had a direct impact on the structure and culture of the school that Katherine had not anticipated when accepting the position. Among the most prominent constraints, the restructuring of leadership removed some of Katherine's autonomy to make changes to SAS; for instance, she now had to get permission from the Head of Schools before purchasing certain curricular materials or making scheduling changes. Additionally, staff did not fully embrace the merger, causing new tensions and issues related to trust between the administration and faculty. Constraining some school operations, SAS and the CHS now shared certain facilities like the cafeteria, some classrooms, and an administrative conference room. As a result, SAS students and staff had to cross the street every day for lunch, meetings or, in the case of older students, to attend advanced classes hosted at the high school. The merger also contributed to students having new educational experiences at SAS, such as allowing students to participate in high school level sports and enrolling in advanced level classes, which enabled greater vertical alignment of curriculum. Changes resulting from the merger

comprised some of the initial conditions Katherine encountered at SAS and uniquely impacted Katherine's efforts at structural and cultural change because the scope of her authority over leadership decisions was limited compared to her experiences at SBS and Fiorella.

This chapter comprises the case study of Katherine's time at SAS, guided by the first research question of this study: *To what degree did Katherine enact leadership for adaptive change at St. Anne's School?* In keeping with the dimensions of leadership for adaptive change, the findings for this chapter are organized in three distinct sections. First, I explore the structural changes introduced at SAS during Katherine's time as principal. Next, I detail Katherine's efforts at enacting cultural change at SAS. Third, I consider the role trust played in Katherine's ability to enact leadership for adaptive change at SAS. Katherine's work at enacting structural and cultural change was significantly impacted by the school's merger with CHS; therefore, this chapter will conclude with an exploration into the ways Katherine's efforts were challenged by the merger. This final section will include the same interrelated dimensions of leadership for adaptive change investigated earlier in the chapter, namely structural change, cultural change, and trust, and explore the systems dynamics generated by the interactions among these dimensions.

It will be recalled that Katherine began working as principal of SAS in 2017. I conducted interviews with Katherine in the spring of her first year at the school. During the fall of her second year at SAS, I conducted a two-day site visit in which I met and interviewed a variety of staff members. In addition to interviews, the findings described

below are supported by observations and document collection. We turn now to an exploration of structural changes that occurred during Katherine's time at SAS.

Structural Change at SAS

In order to understand structural change at SAS, I explored various aspects of systems dynamics linked to Katherine's efforts relative to shifts in leadership responsibilities, enriched opportunities for collaborative professional learning, and growing networks of support (Daly & Finnigan, 2010; Spillane et al., 2004; Stoll et al., 2006). At SAS, Katherine attended to structural shifts primarily among teachers. As teachers' responsibilities shifted to include elements of leadership, so too did their interactions with colleagues, signaling a growth in networks. Though Katherine's enactment of structural change at SAS was similar to her approach at her previous schools in terms of a focus on distributed leadership and growing the school's network, findings from SAS provide a sense for the varying degrees of success Katherine experienced based on the particular conditions within each school.

Katherine sought to respond to the need for improved collaboration at SAS by distributing power and facilitating communication throughout the school by introducing a variety of structural supports, expanding the school's leadership team, exploring the role of parents in school life, enhancing the role of the school's priest, and sharing decision-making authority among staff and teachers. These shifts in power away from a more centralized model mark a distinct change from how SAS functioned under previous leadership and signal a change from initial conditions at the school.

Teacher Leadership

Prior to Katherine's hiring, SAS had a centralized school structure with little distribution of leadership responsibilities. There was no leadership team, and the principal maintained primary authority over virtually all aspects of school decision-making. There was a lack of regularly scheduled meetings, which meant that there were few routine opportunities for staff to share their ideas, questions, or concerns in a formal setting. There was also an absence of professional development, further isolating teachers from their colleagues and the principal. The Latin teacher, Joseph, noted several differences between SAS under the previous principal and new changes under Katherine's leadership:

Things were pretty loosey-goosey around here before. Since Katherine came, we do many things together as a school. There are a lot more formal meetings, a lot more focus on formal professional development, and collaboration between teachers in a more formal setting since she came.

As an example of how Katherine formalized staff meetings and collaboration time,
Katherine instituted Morning Meeting and monthly staff meetings as a time for members
of the school community to come together in the same space to share information about
upcoming events and ongoing work. This arrangement encouraged efficient
communication so Katherine could speak to all staff members in a single space at a
designated time and provided formal opportunities for collaboration. The Latin teacher,
Joseph, described the changes in meeting formats:

Each Wednesday of the month there is a faculty meeting where we will usually go over things that are coming up that we need to be aware of. And sometimes we will use faculty meeting time for professional development.

There was evidence that Katherine participated in a degree of shared decisionmaking at staff meetings. She was known for listening to feedback from the faculty
before issuing a decision on certain topics that arose. For example, during an October
staff meeting, there was a question about whether the faculty should dress up for
Halloween. Some teachers wanted to wear costumes, while other teachers did not want to
dress up. After listening to the opinions of all the teachers, Katherine decided that as a
compromise, teachers could choose whether or not to dress up. If they decided not to
wear a costume, they would come dressed in orange or black. The K1 teacher, Avery,
described how Katherine approached discussion at staff meetings:

Katherine's approach is, "Let's all talk it out," and she hears you out at staff meetings. This is just a silly example, but we were talking about Halloween and she wants to promote the spirit of the holiday and everyone being involved and engaged. She listened to everyone who wanted to share and I think that just shows what kind of leader she is and what kind of administrator she is.

The Resource Room Teacher, Rachel, shared a similar sentiment as Avery regarding Katherine encouraging discussion and the exchange of ideas among SAS staff:

When we have meetings, it's not her doing all the talking. She wants other people to talk. She's very good about asking people to participate, even if they're not willing to, and they do. At every staff meeting we've had, every table has to share out, participate, not just sit there and nod your head. So that part has been good. And I think she tries to build this feeling of, "We're all family. We're all in this together. We all bring something to the table."

Faculty meetings provided a forum for ongoing interaction, in which staff shared ideas with colleagues and Katherine, thereby generating a flow of information across the school (Goldstein et al., 2011).

Though encouraged by Katherine, discussing issues at staff meetings was a challenge because of the size of the faculty at SAS, as there were approximately 40 members of the teaching staff. It was difficult to ensure that everyone was heard during the meetings, and teachers reported a sense that a few voices tended to dominate the conversations. It was difficult for everyone to be heard, so teachers were frequently looking to Katherine to take the dominant role in the meetings, whereas she would have preferred the meeting to consist of a conversation in which all teachers were able to offer their opinions and feedback. Between her first and second year at SAS, Katherine maintained monthly faculty meetings and supplemented them with monthly meetings of the Instructional Leadership Team to enrich patterns of information flow.

Instructional improvement was one area in which Katherine promoted shared decision-making with teachers. Katherine was able to identify some teachers for greater responsibility related to the curriculum, and in some cases, she gave them the authority to make change and serve as leaders among the staff. For example, when it became necessary to replace the math curriculum, Katherine reached out to the Grade 7 math teacher, Nolan, to lend his expertise to the decision-making process:

She talked to me and all of the math teachers about the program and then she deferred to me to be the go-to person for the change. I was emailing companies trying to get as many samples as we could. We all talked about what was wrong with our current book and then we had multiple meetings beforehand asking,

"What do we need from a book company? What do we not need?" We were looking for programs that had online components. We're trying to be a more 21st century school. We finally moved into the 21st century with a lot of things. So, we were really trying to figure out what would be best for the kids and be collaborative.

Katherine encouraged collaboration among the math teachers to determine the instructional needs of the program and deferred to Nolan to be the spokesperson for the group. Sharing responsibility in this way empowered Nolan to take on decision-making authority for the department and promoted consistent communication and collaboration among the teachers regarding curricular matters.

In addition to collaboration with other SAS teachers, Katherine identified opportunities for teachers to engage in professional development with educators from other schools. The kindergarten and second-grade teachers expressed the sense that Katherine prioritized professional learning so teachers might improve their practice and foster their own learning networks. One such professional development workshop was described by the second-grade teacher, Lilah:

We went to a math training with some other Catholic elementary schools that are using the same new math program that we're using. We went and met at another school and it was a day long training in the math program, which was really good.

It was nice that it was brand new for everybody.

By promoting opportunities for shared learning, Katherine was encouraging relationships between SAS staff and educators at other schools, thus enhancing system interactions and facilitating information exchange with outside networks (Daly, 2010).

Discipline

In the areas of school policy and procedures, Katherine took her time getting a sense for the initial conditions, how the school was run in the past and identifying where there was space for improvement. Katherine noted immediately upon joining SAS that the student handbook was old and outdated, and that consistency around student discipline was a prevailing tension among the staff. Unable to find a digital copy of the handbook, Katherine spent the summer before her first year at SAS typing, reviewing and editing the school handbook. She introduced the changes to the staff as a means to communicate expectations and promote consistency. Though the edited handbook did not initially include staff feedback, Katherine encouraged faculty to offer their opinions during meetings throughout the year. She explained how the process unfolded and that when recommendations for change arose, she noted them for inclusion in future iterations of the handbook:

When I got here in July, I worked on the handbook pretty much all of July and had it in place for the start of school. It's been well received for the most part. I think the teachers probably would have liked to have maybe had more say in it, but there really wasn't time. Certain things have come up this year that we have made notes to change for next year.

Despite some staff members reporting an appreciation for consistent expectations, various aspects of the handbook were not universally enforced. For example, teachers had different classroom procedures for student use of the bathroom, causing confusion for the students when they went from one class to another. Teachers also handled discipline differently, so expectations for student behavior varied. Lastly, some teachers

adhered to the requirement that they post their assignments to Google Classroom, while others did not. In sum, these inconsistencies confused the students and promoted a sense among some teachers that students were not doing what they should. Instead of uniting teachers around common expectations, the handbook served as a means to frustrate those who adhered to the stated guidelines while their colleagues did not.

In their work, student discipline frequently surfaced as a topic of concern among staff, another potential source of dissonance and potential division. Teachers reported that Katherine could be relied on to enforce discipline, but their colleagues were inconsistent about student behavior and classroom management, leading to what the Resource Room teacher described as "chaos" in some classrooms:

I think the disconnect is basic classroom management where we have kids yelling and screaming and running around. How is [it that] this one class can sit there for 30 minutes or 60 minutes, and be able to do their work, and then this other class, you have to wait 15 minutes before kids are sitting in their seats? Because clearly the adults need to . . . have higher expectations of the kids. That's what I see is the issue. That's all I can say. But it's chaos. It's basic chaos.

With new structures in place to address student behavior and expectations, including a more supportive administration and clearly defined expectations in a school-wide handbook, the discrepancies still continued. This contradiction reflected Katherine's desire to balance staff accountability and autonomy, particularly during her first years at SAS, which served as a time for the staff to get to know her expectations and build trust.

Generally, the teachers reported a more formal system of decision-making under Katherine's leadership compared to past principals. Katherine's efforts to foster teacher leadership, collaboration, and communication signaled a shift towards enhanced system interactions. Teachers began sharing in some areas of decision-making and reported instances of enriched communication, all of which can lay a foundation for enriched trust. The examples above focus primarily on teacher leadership, and we now turn to an exploration of specific leadership teams Katherine introduced to support change efforts at SAS.

SAS Leadership Teams

In addition to fostering collaboration and decision-making responsibilities among teachers, Katherine introduced several formal leadership structures at SAS, each with a specific scope of authority. The structures Katherine introduced included hiring a new member of the administrative team (apprentice principal), creating an Instructional Leadership Team (ILT), utilizing Grade Level Leaders (GLLs), introducing a mentoring program, and utilizing a committee structure to address particular topics outside of the scope of the ILT and GLLs.

Apprentice Principal. In addition to sharing responsibility with her teachers, Katherine was able to secure an apprentice principal through a program with the archdiocese in her second year at SAS. This was a notable change between Katherine's first and second year at the school. Katherine was able to use the apprentice principal, Lucy, as a resource and a thought partner. Lucy mentored new faculty, attended all administrative meetings, and joined Katherine for professional development conferences. Comparing her first year at SAS to her second, Katherine emphasized how Lucy's presence at the school impacted her work. In that regard, Katherine reported a particularly negative experience during her first year at SAS where she felt she had to

"pick her battles" and that the teachers hated her and resisted change. In her second year she attributed her renewed sense of the teachers' ability to move forward to having Lucy on the team:

When I think of last year, I really had to pick my battles and not address a lot of things right away because I think it wouldn't have gone well. Even the things I did address didn't go well. I was kind of just drowning in this swamp of "everyone, like, hates me and hates change." And, you know, "life sucks in general." I was kind of waiting to get through the year to be able to move us forward because it had to happen. This year has been great in the sense that we've already put so many changes in place that are going to help us to move forward. I think one thing that's been different from Fiorella in terms of starting and building the leadership teams has been having Lucy and her perspective. She's been involved with teams at other schools too, and hearing about that, and what's worked and what hasn't worked—we've been putting our heads together on that, that's been really great. I think I faced a lot more pushback here than I did at Fiorella.

In Lucy, Katherine found an experienced administrative partner who she could collaborate with and share responsibilities.

Katherine acknowledged that the addition of the apprentice principal, Lucy, made a substantial difference in her daily workload. Lucy also provided Katherine a counterpart with whom she could discuss ideas and reflect on her priorities. Katherine emphasized that the apprentice principal position itself may not have improved things at SAS, but rather it was Lucy's particular approach to the role that made it a successful

partnership. As they regularly interacted around matters of substance, a foundation was laid to enhance relational trust and their working relationship, thereby playing an important part in subsequent changes:

I've been thinking a lot about what's made this year so much better than last year. I would say the biggest reason is because of my apprentice principal. It's just been fabulous. I feel like just having an apprentice principal, in general, wouldn't make things better. I think it totally has to do with who she is as a person. I could see that if it had been someone who either I don't completely trust or who doesn't seem super capable it would feel like one more burden that I was carrying.

Instead, I mean, honestly, there is nothing that I don't feel like I can share with Lucy. She's been involved in everything, she's up for anything, she doesn't think she's above anything. I mean, she's lugged things around this building. She is just taking a lot off my plate as far as some of the day to day kind of stuff. Then I think the biggest piece is this sense that we're in it together. I feel like we talk all day long about what's going on, what we're thinking about, and reflecting on everything. I think that's been just really huge too. Because it can be kind of a lonely job sometimes so it's been nice to have all that.

Lucy expressed a similar sentiment that her relationship with Katherine was one of collaboration and growth:

I am so grateful that she has literally put a desk for me in her office. Because I don't think I would have the full picture of what this job looks like if I did not share this space with her. And with that, I think that having her as a conversation

partner and listening to her ideas and her willingness to listen to my ideas has helped me grow exponentially since the beginning of the year.

Katherine's willingness to share leadership responsibilities with Lucy enriched Katherine's development in two complementary ways, contributing to her professional growth and impacting her ability to support SAS teachers.

Teachers found Lucy to be responsive and supportive in the areas of curriculum and student discipline. As the Director of Enrollment, Monica, explained, Lucy would help Katherine to enforce student expectations:

Discipline is getting more consistent. Every time it's loud, I'll call Katherine or Lucy up and say, "Come up here. Come up here. Listen to this. Please come up!" And when she comes up, when Lucy comes up, it's nice and quiet.

For some responsibilities, like discipline, Katherine and Lucy became interchangeable and offered the same supports for teachers. Rather than calling the office and finding Katherine was unavailable, Lucy could step in to handle many of the same problems that arose.

Though Lucy was available to support all staff, she took on a mentor role for the second-grade teacher. As a former second-grade teacher herself, Lucy was able to share grade-specific recommendations and strategies with her mentee. Talking about her experience meeting Lucy at new teacher orientation and then working with her during the fall, the second-grade teacher, Lilah, explained:

Lucy introduced the mission of the school, gave us a tour, and then we got some time to meet. Lucy and I kind of met to talk about the overall curriculum for my grade. She's been really helpful because well, she's amazing to begin with, but

she taught second grade. So just sharing resources has been helpful or to just bounce ideas off of. For example, we're going on a field trip and she helped me figure out kind of what that would look like and what's too much to expect of the students. She ended up coming, which was great.

With several new teachers in grades K-3 joining the staff that year, Lucy's support was important for fostering connections and sharing information.

As apprentice principal, Lucy had an impact on many structures at SAS. She served on the ILT, helped with curriculum, mentored new teachers, advised teachers and students on First Communion, and served as another administrator in the building upon whom teachers could rely for discipline and to answer their questions. The addition of Lucy as another administrator helped to decentralize decision-making relative to issues of general education and thereby enriched interactions among faculty and staff.

Resource Room Teacher. Just as Lucy was a person with whom Katherine could share administrative responsibilities related to instruction and operations, the Resource Room teacher, Rachel, provided much needed expertise in helping Katherine oversee special education at the school. The Resource Room teacher was new to SAS for the 2018 school year. In her first month, she observed that many of the teachers were unfamiliar with the legal requirements behind special education documents.

Accordingly, Rachel promoted her sense for how the school culture might shift:

If we could do a little better job of . . . having the teachers understand what an IEP is, what a 504 is, what accommodations mean, because those are all legal. It's a legal document. And some of the teachers feel that they can pick and choose which accommodations they make. And it's hard to change the culture of the

school in a short amount of time, so I think I'm going to suggest that we need a little bit of professional development for the teachers.

Rachel felt that the issue was rooted in past expectations at SAS and that if teachers became more knowledgeable about special education, then they might change their approach. She indicated that it was within the scope of her role to recommend professional development to Katherine.

In addition to advocating for professional development on topics of special education, the new Resource Room teacher, Rachel, provided teachers with one-page summaries of IEP accommodations for each student in their class. She hoped that these "IEPs at a Glance" would make it simpler and less time consuming for teachers to discern the services written into the IEP, and thus shift how the school's special needs students were educated. Despite this support, teachers would comment to Rachel that they were still not planning to honor students' accommodations.

There's still some resistance. People are saying, "I'm not doing that." And I'm like, "It doesn't work that way. It says that they can get less work, because they have a processing problem. You wouldn't penalize a blind kid. So why are you doing this to a kid that has processing issues or whatever the case may be?" I have gone back and I've gone back again to teachers with the same message, but I think it's just gonna take time. It's a matter of time, because every time I'll go and I'll say, "Look, this kid is allowed this. They have anxiety with testing. You can't say 'I don't feel like sending them,' it doesn't work that way." So, it's just going to be a battle. And that's all it is until I get them to see the light.

Rachel's role encompassed significant decision-making responsibilities including strategizing on professional development, advising teachers on their students' needs, and creating resources. The degree to which Rachel and Lucy had authority over different aspects of SAS signaled a growth in distributed leadership in Katherine's second year at SAS.

Instructional Leadership Team. In addition to sharing leadership responsibilities among some key staff members at SAS, Katherine created formal team structures tasked with instructional decision making. The SAS Instructional Leadership Team (ILT) was composed of the Resource Room teacher, the Grade Level Leaders (GLLs), the guidance counselor, and administrators. They were charged with improving teaching and learning at SAS by serving as advisors and collaborators with administration. Once new ideas were established, the ILT helped Katherine and Lucy determine the best way to communicate decisions to the whole staff and served as a bridge to their grade level teams. Together, this team was positioned to make decisions that could provide a shift at SAS from significant teacher autonomy and disorganization to increased accountability and a shared culture around some educational practices.

Grade Level Leaders. While the ILT was responsible for addressing school-wide instructional issues, each grade level had a leader who served as facilitator for grade-specific concerns. The Latin teacher, Joseph, described how information could be exchanged among grade level teams at monthly meetings:

Now there are grade level meetings each month where we talk about things we are seeing with the kids and how things are going in general. If there are any issues we can brainstorm what we can do about those things.

Grade level meetings provided a forum for rich information exchange among colleagues with similar curriculum and students in a comparable age range. Teachers could help one another problem-solve and provide an audience to get feedback on new ideas. In the event that something shared at a grade level meeting might be applicable school-wide, the GLLs would communicate with the other GLLs and the ILT, who would determine next steps for addressing the issue. The flow of information at SAS evolved significantly from a reliance on whole school faculty meetings to the grade level team format. Grade level meetings, facilitated by the GLLs, allowed for the exchange of information across levels and helped to address the problem of a few voices dominating whole-group conversations.

A specific example of how Katherine distributed power to GLLs was through empowering them to share information about new initiatives. Though Katherine was still the primary evaluator for all staff members, GLLs were responsible for preparing teachers to be evaluated using a new evaluation rubric, T-Eval. The new rubric, promoted by the archdiocese, was a requirement for schools to get a portion of money from the school tax fund. Katherine introduced the rubric in her first year as SAS principal and started reviewing it with staff beginning in October of her second year. Faculty and grade level meeting times were dedicated to reviewing each standard of the rubric. GLLs facilitated conversations with their colleagues in which teachers reflected on evidence that they met the expectations of each standard. Academic improvement was the primary responsibility of grade level teams, which included topics such as teacher evaluation, curricular alignment, and lesson planning. Concerns that arose at grade level meetings were discussed and, where appropriate, the GLL would bring concerns back to

the ILT. The distributed flow of information within the grade level teams and ILT promoted collaboration and shared decision-making around issues of curriculum and instruction, all in the process of enhancing trust.

Specialized Committees. Katherine formed specialized committees to address the needs of the school that fell outside the scope of the ILT and GLLs. For example, the DOE, guidance counselor, nurse, administrator and GLLs were members of the School Climate Committee, which was concerned with all non-academic aspects of school life. They discussed topics like graduation, enrollment, and celebrations. Vertical alignment of instruction and policies was a particular focus of members of the Middle School Committee, who were tasked with addressing the needs of teachers and students in grades 6-8. With the addition of the merger, it became increasingly important that the middle school considered how the middle school experience at SAS prepared students for success at CHS. The committees, like other new collaborative teams Katherine developed, contributed to increased potential for communication among SAS staff. Faculty could do work around a particular topic with a smaller group of colleagues, and there were mechanisms in place to disseminate ideas developed in those settings to the broader school community, all of which enhanced system interactions.

Katherine's efforts to shift and enhance networks of communication and collaboration at SAS were done after first getting a sense of everyone's existing role within the school. In keeping with a similar recommendation from Harris et al. (2007) that leaders gain an understanding of roles and responsibilities prior to introducing significant change in a system, Katherine spent time during her first two years at SAS determining the scope of responsibilities and expertise among her staff. One specific

example of this process was how she approached getting to know and ultimately amending the duties of the Director of Enrollment, Monica. In previous years, the position encompassed fundraising, enrollment, and a variety of ancillary responsibilities. Katherine determined that the role was inefficient and not aligned with the needs of the school. Rather than mandate change without knowledge about what the potential impact might be, Katherine approached Monica to ask her directly about her responsibilities and get her feedback on changes to the job description. Together, Katherine and Monica created a new job description that better capitalized the Director of Enrollment's job aspirations and skills, shifting the position to focus specifically on enrollment. Monica welcomed the change and described her contribution to the shift:

My position has changed this year and it was Katherine-driven. I am the Director of Enrollment, which means I am responsible for all things enrollment. I am responsible for the marketing, advertising, recruiting the children, giving the tours, working with parents, I'm responsible for keeping the website updated and there is some social media... Previous of that I was hired as the Director of Development which encompassed everything I do now and fundraising, alumni relations, and [developing relationships with local philanthropic organizations]. When Katherine first came she called me and said, "I want you to come in, because I don't really understand what you do. Every time I ask somebody 'Who's responsibility is that?' they say 'Oh, Monica does that.'" She said, "I can't believe how many things you are saddled with." She said "Do you want to be the Director of Enrollment or Fundraising?" and I told her I wanted to focus on enrollment because I have a personal stake in this, I don't want to see this place

become condos, this is my parish, I don't want to fail. We redid my job description. Things were taken away and it gave me opportunities to do better. Initially I could have thought, "Oh no, I did such a bad job that things are being taken away from me," but Katherine explained how it was a positive thing... She was very good at making sure I felt valued, which is huge!

Katherine first gained a sense for what already existed at SAS before seeking to introduce change. Katherine's approach to addressing structural change at the school was collaborative in the sense that she sought input and feedback from staff.

Role of Parents at SAS

The level of involvement among SAS parents shifted in the years leading up to Katherine joining the school and continued to shift during her time as principal.

Historically, parents at SAS were involved with all aspects of school life, including being present in the classroom, running fundraisers, and event planning. Coinciding with the merger of SAS and CHS, there was a significant shift in parent involvement at the schools. The addition of a K-12 business office formalized school fundraising efforts and removed the need to rely on parent support to coordinate those events. As explained by the SAS Director of Enrollment, Monica, this change marked a big shift for the parents, who were used to being heavily involved in the running of the school and being on campus on a daily basis: "Before, the parents used to run this place. They would be here for everything, doing all the side stuff." The responsibility to raise money for the school that typically fell to parents in the past became the responsibility of the business office.

The broader influence of SAS parents on many aspects of school life shifted over time.

Katherine encouraged the involvement of parents at SAS in a variety of ways. In an effort to support the work of room parents and work through any issues that arose, Katherine created the volunteer position of Head of Room Parents, an individual that she met with regularly to discuss any questions or concerns. Additionally, Katherine held informal monthly coffee meetings for parents. Along with the school psychologist, nurse, and apprentice principal, Katherine was available to meet with any interested parents. These meetings served as an opportunity to get to know one another and discuss any issues that surfaced. SAS parents were also invited to many different school events including morning prayer and First Friday Mass.

During Katherine's first years at SAS, the parents that shared the most significant power to influence school life were those that volunteered as room parents. As described by the K1 teacher, Avery, room parents would buy supplies, plan projects, help teachers in the classroom on certain days like holiday celebrations, and support their child's learning by conferencing with the teacher regularly:

Each classroom is assigned one or two room parents. I have two room parents and from day one, they always ask, "What do you need?" They want to be involved and they want to help in any way they can. I have two parents coming in on Halloween to do a craft and they want to purchase everything. It's not like they say, "You make up a project and we'll do it." They plan everything. They're definitely very involved. They just want to know how their child is doing and what they can do to support the school, which is nice.

The first-grade teacher, Megan, also noted SAS parents' willingness to help with extra materials purchases, particularly around special projects. Though many of the teachers

reported that parents were more involved as room parents at the younger grade levels, the Latin teacher, Joseph, reported that his room parents helped set up Grandparents' Day for his students.

In addition to staff and parents, the parish priests had a role in the decision-making process at SAS. The role of the parish priests spanned between SAS and CHS and also enhanced the potential for communication and collaboration between the school and the parish. Fathers Michael and Brendan were new to SAS in Katherine's second year at the school. Katherine noted that the new parish priests were more active in the running of the school than their predecessors. They regularly attended school prayer and met with students:

I think another big piece of the improvement between my first and second year is we've had a transition with our leadership in the parish. We have new priests on board, who have really breathed new life into everything, which has been really great.

Katherine routinely solicited input from the school chaplain, Father Brendan, regarding school events and her efforts at building a shared school culture. Father Brendan attended Morning Meeting twice weekly, advised Katherine on topics for Morning Meeting connected to scripture, and visited classrooms to give lessons to students. Father Michael, the parish pastor, was present at most of the joint meetings with SAS and CHS administrators helping craft details of the merger. Katherine felt Father Michael's presence in those meetings was essential to building a shared mission between the schools, enhancing system dynamics to support common priorities across the campuses.

Challenges to Shifts in School Structure

Interviews with staff revealed that Katherine's efforts at introducing distributed leadership and enriching the networks within SAS were not without obstacles. Some of the challenges that emerged were technical in nature, challenges with direct answers that did not require adaptive solutions (Heifetz, 1994). For example, it was revealed that several of the staff members did not know who the members of the school leadership teams were. Both the first-grade and K1 teachers did not know which of their colleagues served as their GLL. Though Katherine could easily clarify this information, it reveals an underlying need to improve communication.

Other challenges to Katherine's work towards structural change required an adaptive approach in the sense that progress required Katherine to attend to existing practices, relationships, and beliefs to promote change (Heifetz et al., 2009). School size surfaced as among the most significant adaptive challenges Katherine faced related to structural change. To promote communication and collaboration across the faculty, Katherine quickly realized that the staff meeting format was not adequate. The ILT, grade level teams, and committees emerged in response to this challenge, enhancing network connections school-wide. Katherine used the improved communication network at SAS to promote procedures and expectations, including the discipline policy. Despite supports, discipline remained inconsistent, signaling a need to reexamine the source of the inconsistencies.

Central to Katherine's progress toward structural change and a greater distribution of leadership was her collaboration with her new apprentice principal, Lucy. Lucy's expected departure at the end of Katherine's third year at SAS reinforced for Katherine

the importance of having other supports in place to maintain a distribution of leadership. Katherine prepared for Lucy to leave at the end of her apprenticeship by implementing a larger network of supports of people to "lean on." The ILT and GLLs were two teams with which Katherine could share instructional responsibilities. By her second year, Katherine could not identify anyone besides Lucy with whom she could share her other administrative responsibilities, and despite frequent meetings and communication, her relationship with the administrators at CHS was not strong.

Katherine's work to introduce and support structures within SAS that would broaden leadership and enhance communication faced some obstacles, but she was able to begin to address some areas of structural change by promoting shared leadership among teachers. The principal prior to Katherine had a reputation for disorganization and significant teacher autonomy. Katherine began to shift the school structure to include a higher level of accountability in the areas of curriculum and student assessment, while sharing responsibility and authority with others. Summarizing how Katherine shared responsibility, the Director of Enrollment noted: "She lets me go to meetings. She empowers me to do what I think is the right thing to do." Katherine spent her first two years at SAS introducing and fostering structural change. By enhancing system interactions, Katherine had a stronger network through which she could promote her goals.

Cultural Change at SAS

Shared values and complementary priorities are central to the change process, contributing to a dynamic in which enhanced interactions amplify new ideas and increase system capacity (Goldstein et al., 2011). At SAS, I looked for evidence of the ways in

which Katherine contributed to building a common school culture and shaping teacher beliefs to support change efforts (Gee, 1996; Geertz, 1973; Kin et al., 2018; Priestley et al., 2011). As with her efforts at structural change, Katherine approached cultural change at SAS quite differently than her predecessors. Prior to Katherine's arrival at SAS, there was little emphasis on unifying the school community or promoting shared values. For example, the school did not come together in one space for Morning Meeting or assemblies. The principal before Katherine recited prayers over the loudspeaker, one of the only daily reminders that SAS was a Catholic school intended to be guided by shared religious values. As in her other schools, Katherine's Catholic faith guided her work as principal of SAS. Underlying Katherine's efforts at cultural change was her work promoting a renewed focus on Catholic identity among the school community. Katherine's approach to fostering cultural change at SAS was comprised of identifying specific values that could be universally impactful to the school community; promoting those values by communicating them regularly to staff, students, and parents; and promoting curricular connections between the values of the school and the academic experience (Mehta & Fine, 2015).

Several staff members noted the importance of Katherine's work to refocus on Catholic values and practices as a vital part of the culture at SAS. The Director of Enrollment explained the change:

I think Katherine's done a very good job of instilling the whole religion thing. I can't say that enough because we had really gone away from that whole thing. We were so afraid of public schools doing things better than us that we lost our way a lot. I had teachers say to me, "I am not [teaching religion]." They didn't

even do prayers in the morning because they were doing something else.

Sometimes there is a tendency to not teach religion in [Catholic] schools and I think that is what happened here. "Oh gosh, we need to make sure we are doing well in math and English so we are going to stop doing religion." Religion is not a byproduct, it's why we're here. And Katherine made that clear, people have to teach religion classes. The religion piece is a huge part of [what Katherine has done].

Katherine reemphasized Catholic values and religious instruction at SAS. In doing so, she distilled the existing values of the school into concise thematic elements around which the school community could unite and introduced new traditions to frame that work (Branson, 2008; Fullan, 2011).

Themes

Every morning, SAS students and staff gathered in the auditorium for Morning Meeting. Younger students sat in the front of the space with their teachers in rows, while middle school students sat at round tables in the back. Morning Meeting included a daily prayer, scripture reading, and announcements. Katherine's commitment to having everyone physically together for morning prayer was considered a reflection of her values as a leader. She wanted to foster a sense of community for the school founded in shared Catholic values expressed and practiced together in the same physical space.

Building upon new traditions like Morning Meeting, Katherine introduced a yearly theme at the start of her first and second year at SAS. The themes were intended to provide a common frame for the work of the school year. In her first year the theme she selected was "Unity," but the theme quickly "fizzled." Katherine had picked unity to

reflect the larger context of the merger between schools. When reflecting on her selection Katherine explained:

I don't know, last year, we kind of started a theme and then it fizzled quickly. I was really excited about it last summer when I came in. I shared the idea with Beatrice [the Head of Schools] and she was like "Yeah, if you want to.

Whatever." [spoken flatly] Her attitude was not enthusiastic. I tried really hard.

We had a faculty mass before school started with the high school and the theme was "Unity" because it was two schools coming together but also the climate of our country, Charlottesville had just happened, and the global situation too.

Anyways, every summer something always just comes to me as the right thing for that time. So that was really on my heart last summer. That was the theme for our opening school mass with the teachers and I also worked it in to my professional days with teachers before school started. It started off really well but we haven't carried it out throughout the year.

Perhaps unsurprisingly, "unity" was not a theme wholly embraced by SAS staff.

Teachers still lacked clarity around details of the merger and were still adjusting to changes in responsibilities and scheduling that resulted from sharing teachers and cafeteria space.

Teachers reported general agreement that the theme during Katherine's second year was better received, and they highlighted different ways it was incorporated into school life. Katherine explained that the choice "Christ be our Light" was, in part, a reaction to the 2018 Catholic Church child sexual abuse scandal:

Our theme for this year is "Christ be our Light." We settled on that right before the Pennsylvania Report came out, it kind of put a damper on everything for everyone related to the Catholic Church. But I felt, for me, that just solidified that the theme was the right thing for this year. Because I think there is like so much darkness with the church right now that this theme was calling us to look for the bright spots.

The theme was introduced at the start of the school year with staff and students. Each student completed a coloring sheet with a lighthouse and responded to the prompt, "I am the Light of Christ when..." Students' responses were visible, posted on bulletin boards throughout the school. As the Kindergarten teacher explained, the theme was well known by students and staff:

Everyone did a coloring sheet where they colored a lighthouse. And then wrote in "I'm the Light of Christ when..." Even with the four-year olds, they wrote, "When I pick up my toys." Yes, you are being like Christ when you pick up your toys and listen to mommy. So, it's a well-known thing across the school.

Katherine reported other responses by older students including, "When I stand up for someone in need." Student worksheets serve as one example of how the theme was used to make visible the values and beliefs of the school. Additionally, Katherine commissioned a large plywood lighthouse figure that children could pose with for pictures during a town celebration.

The theme was used among faculty as a frame for staff events and discussion.

Katherine explained:

We're trying to weave in the theme as best we can. Our opening mass with the CHS faculty and SAS faculty like that was the theme. The songs, the readings, and everything went along with that... We're trying to revisit that idea at faculty meetings like when we have our opening prayer and then they do a turn and talk, they ask, "What has been a bright spot for you this week?" And, "What is an example of darkness that you're working with right now?"

The theme served as a reflection tool to note positive growth and areas for improvement.

Incorporated in faculty meetings and used by students in school-wide activities and events, teachers also noted examples of the theme being reflected in the students' daily lives. For example, the K1 teacher, Avery, noted they spoke about the theme on a daily basis:

The theme, that's talked about on a daily basis. It's about upholding the values of the school throughout everything we do. If a child is acting up? We ask "What would Jesus do?" It's throughout the whole day, every day.

The themes provided a unified idea around which SAS teachers and students could feel connected. In addition to the yearly themes, Katherine introduced other cultural ideas and traditions to promote a sense for a shared vision of SAS.

Virtues of the Month

While yearly themes were used largely in faculty meetings and school events as a touchstone belief, Virtues of the Month provided a framework for student expectations with direct ties to the curriculum. Each month, the president of the student council gave a speech at Morning Meeting describing the importance of the virtue and read the biography of a saint who modeled the virtue during their lifetime. At the end of each

month, teachers would award one student from their classroom with a certificate recognizing their efforts in practicing the virtue. Teachers were given an information sheet about the Virtue or the Month they hung in their classrooms as a reference sheet. The K1 teacher detailed how the Virtues of the Month impacted SAS:

We have Virtues of the Month and September was hospitality. October was respect. It's nice because you get information sheets. You're expected to talk to the kids about it. It's hung up at a prominent place in the classroom. And then at the end of every month, you pick a student of the month who really did live up to that virtue of the month. And it's nice because it makes the kids aware of how much they're doing. Like, "Oh, you know what, that was really respectful to me." And "That was a respectful way to act." So, there are clear expectations.

Lucy created packets of resources for teachers to use in the classroom and resources to be sent home to parents each month. In this way, the school sought to create a connection between the school culture and home lives of students.

In addition to recognizing student's positive behavior associated with Virtues of the Month, "Paw Prints" were school-wide awards announced weekly acknowledging students' good deeds. The second-grade teacher, Lilah, explained the significance of the awards:

We do "Paw Prints," where teachers share good deeds that have been happening in their classrooms. Those are announced once a week and that's school wide. I think it's nice to hear the good things that kindergarteners are doing and things that the middle schoolers are doing. It gives us a sense of community and that sense of caring between the kids, peer to peer, and also teacher to student.

The Virtues of the Month and Paw Prints provided opportunities to highlight the different ways students were demonstrating the values of the school and enriching the school climate.

Teachers hoped to see service emerge as an important value within the school. Prior to Katherine joining SAS, students engaged in service projects intermittently, and those experiences were not central to the curriculum. Katherine and Lucy sought to build opportunities into the curriculum to reinforce the importance of service for students and staff. Lucy explained how they planned to incorporate these new expectations with work that already existed in the school. This was an effort to balance the work teachers were already doing and secure their support for the plan:

Katherine and I have talked a lot about introducing service learning to students and making that a goal where each class takes on a yearlong service learning project. We talked a lot about how we can make this not feel like another thing on [the teachers'] plate, but ultimately, it's something that we want everyone to see, how much good can come from it for the students. We decided to introduce it first to the Instructional Leadership Team and get their feedback and see what they think and approaching it from the mission focused viewpoint. When I introduced it to the Instructional Leadership Team, we were saying, "What ultimately do we want our students to be leaving SAS able to do?" And I think when you ask that bigger question they realize they don't want them just to know their math facts or be able to read at a certain level, they also want them to be able to go out into the world and serve other people in whatever ways their gifts and talents will allow them to. We shared some ideas for service projects and at first,

they reacted that this was another thing being added to their plates. Katherine started to ask them to share projects they had done in the past. So, teachers started to say, "Well we did cards for veterans and gift baskets for veterans" and she said, "Well, let's take that idea and instead of it being one of the one-time projects that we've done, maybe the fifth grade class expands that project over the year and learns about how veterans have served our country and the challenges that they have faced when they return?" Some of the teachers in the group said, "When you put it like that it makes it seem less overwhelming." Let's look at the big picture but we're also building on something that is already here as opposed to something new. That is how Katherine shifted that conversation so it went a little more positively.

Katherine's efforts at shaping the culture of SAS built upon work already being done.

This example gives a sense for how Katherine leveraged the ILT and enhanced communication at SAS to promote her ideas around culture among the staff. These shifting dynamics enhanced system interactions, enriched common culture, and promoted trust.

Challenges to Cultural Change:

Katherine's work to establish a shared school culture at SAS was built on a sense of shared Catholic values. The themes and Virtues of the Month were directly connected to the religious beliefs that were of central importance to Katherine. Despite working at a Catholic school, not all teachers had the same commitment to Catholic values, with the circumstances in the Church at the time potentially impacting these feelings. As the math teacher explained:

I think, especially with everything going on with the Catholic Church with the abuse, I think some of us feel kind of nervous about promoting the Catholic values while all this other stuff is going on at the same time.

This example of conflicting feelings towards the Catholic identity of the school signals a potential obstacle to Katherine's efforts.

Despite some setbacks, including a theme that was not particularly effective and varying degrees of commitment to Catholic values among the staff, Katherine had some success at promoting a shared school culture at SAS. On the highest level, themes were used to unite the work of the year for the entire school. Virtues of the Month were used to connect school values to specific student behaviors and Paw Prints recognized students for being positive members of their community, integrating multiple systems levels. By encouraging service learning projects for students, Katherine sought to introduce new opportunities for students and teachers to put values in action. The shared culture at SAS was enhanced by Katherine's efforts to promote and communicate common values and initiate new traditions at the school.

Trust

As in her previous schools, trust played an important role in Katherine's ability to promote change at SAS. Known for spending significant time at Fiorella outside the school day, Katherine acknowledged that she mainly kept to school hours at SAS.

Between constraints on her personal time and her required attendance at frequent meetings at CHS, Katherine had limited opportunities to demonstrate her competence, sincerity, and reliability to SAS staff. She recognized the impact her absences from SAS had on her relationships with staff. Noting her need to address the issue, Katherine

remarked: "I don't feel that my relationships with teachers and parents are what I would like them to be at this point. That is something that I have kind of as a priority to look at." We turn now to a discussion of the degree to which Katherine was able to foster trust at SAS.

Competence

Katherine demonstrated her competence to staff members by sharing her knowledge on various topics. For example, Katherine assisted the Director of Enrollment when she needed to learn a new computer program. As Monica described, Katherine's approach to teaching Monica the program fostered Monica's confidence in her technological abilities:

When I came back to work after staying home with my kids, the whole world had changed. That was very daunting for me. My last principal said, "That's fine, as long as you can sell the school you don't have to have any computer skills." But Katherine has been very good about teaching me. There is a whole new computer system where I can look up everything. She has been teaching me and doesn't make me feel like a dope. She says, "Well you may not know as much about computers but walking into a room full of people I don't know terrifies me, so you are good at that. I am good at computers."

Katherine's experience with computers was not the only way she demonstrated her knowledge in education. Her experience in other schools enabled her to draw on those understandings when making recommendations for improvements at SAS. Monica described how Katherine's past gave credibility to her suggestions:

She is smart which makes you want to do better. She's not afraid to say, "We did this at another school and it was successful." Not only will she tell you to do something, but she will give you a reason why. I don't think she ever makes you feel like you haven't done a good job, just, "Hey, let's think about it another way." I think her heart is in making this school a better place. I believe that 100%.

Katherine's competence was evident through her experience as principal of other schools. She was also knowledgeable on many aspects of teaching and learning. She would share her specific recommendations with teachers during the observation process. The second-grade teacher, Lilah, reported that Katherine had been in her room several times during the teacher's first year at SAS and had offered suggestions for improvement around topics of student engagement and lesson planning.

Sincerity

In Katherine's first year at SAS, sincerity was a concern in terms of who she could trust among the staff. Katherine described that the staff as more trusting of each other than she was of them, in part because staff members had shared information she had not expected them to share:

That is a big part of the problem. I don't know that there is a lack of trust among the faculty but I don't feel like I can trust anyone exactly. The reason I say that is because I have had a couple of instances where I have said something to someone (not something super serious or important, but in confidence) and it has come back to me through someone else. You know, that sends a message that maybe they don't fully trust me yet either.

Katherine concluded that the staff members' willingness to break her confidence signaled that perhaps, just as she was not trusting of her staff, the staff did not trust her either.

Katherine moved on from this initial experience of mistrust to find opportunities to demonstrate her sincerity by responding to criticism, promoting professionalism, recognizing the work of others, and modeling her faith.

In an effort to build trust, Katherine publicly responded to criticism about her performance as a leader. In the beginning of Katherine's second year at SAS, she released the data from a school climate survey. Though she removed information on specific teachers before sharing the results school-wide, she left in comments critical to her leadership. As the apprentice principal described:

The archdiocese put out a school survey and she helped all the teachers go through the feedback both positive and negative given by the parents, students, and staff. They were given the exact data. And she kept in the feedback about herself. She took out the negative feedback about individual teachers and had them go through and I thought that was such an indication of how she wants teachers to be involved in the school improvement process.

Katherine's approach to the survey discussion signaled her willingness to be vulnerable to criticism and sincerity in her desire to improve. Katherine modeled reflection on practice as a key element to the school improvement process.

Just as Katherine reflected on the outcomes of the school climate survey to improve as a school leader, she promoted reflection among staff. In one instance, Katherine was informed that a group of teachers had behaved unprofessionally at Open House, generally being unprepared and in one case, being on a cell phone while their

colleagues were presenting. Katherine used the opportunity to frame the conversation around the standard of professionalism incorporating both the concern and the ongoing good work teachers were doing:

The complaint was along the lines of either teachers seemingly not being prepared and organized, in one case, a teacher being on a cell phone, while other teachers were presenting. Basically, a lack of professionalism, which reflects poorly on all of us. We have a faculty meeting next Wednesday, and we're going to do a deep dive into the standard that's part of our teacher evaluation rubrics on professional responsibilities. We want to highlight some of the great things that teachers are doing in that regard and balance that we did receive some negative feedback and we need to think about how we can change this in the future.

This approach signaled Katherine's belief that improvement requires opportunities to reflect on the standards of an educator. Katherine provided opportunities for all of her teachers to reflect on each standard, both individually and with colleagues.

Another way in which Katherine promoted a sense for her sincerity was by recognizing the contributions of others. Drawing from an example explored earlier in the process of changing the job description for the position of Director of Enrollment, Katherine noted that Monica appeared to be over-extended and her various duties seemed to be greater than a single fulltime position. Katherine ingratiated herself to Monica by recognizing her efforts, seeking to alleviate some of her workload, and sharing some new responsibilities, including attending leadership meetings with the high school staff.

Monica recognized Katherine's sincerity and concern that Monica's former position was overwhelming. This particular situation points to how the attributes of leadership for

adaptive change are inexorably linked—shifts in structure and culture contribute to trust building, and, once established, trust enables a leader to identify those with whom power can successfully be shared to promote a shared vision of instructional improvement.

Remarking on a similar sense for Katherine's sincerity, the Resource Room teacher remarked that she found Katherine to be "genuine," "I think she's very genuine.

She makes it very obvious that she's here for the kids and for the staff." The Resource Room teacher continued that she could count on Katherine to always listen to her side of the story in a parent conflict before reaching a conclusion:

The times that I've had parents not happy with my performance Katherine supports me and says, "You know, don't worry about it. We understand this is a difficult parent." So that I've had a positive experience that I feel like if something does happen, I'll at least get to tell my side of the story and won't be thrown under the bus.

Lucy developed a sense for Katherine's sincerity through attendance in the same educator preparation program and through the recommendations of trusted friends. Lucy explained that Katherine's "transparent" approach led to a sense that she can be trusted:

I think her immediate openness to the joys and challenges of being a principal, when we first met, she has always been very transparent. So, I think that was the first initial trust. And I think also knowing that we both did [a program for Catholic school educators who seek to teach in Catholic schools] and by choosing to do that program it forms you as a teacher and you have some similar values. I think that helped with that trust. Every person I know who knows Katherine just gushes about her. When I was speaking with mentors of mine and deciding

whether or not I should do this, they said I just had to work with her. That really helped with that trust because right away there were people I trusted who said that she is the best.

As a trusted colleague, Lucy noticed how Katherine modeled her sincerity for others, particularly through her faith. Katherine modeled her faith for others at church services and during prayer. By finding a balance between attending to her own faith experience in church and showing teachers and students what it looks like to live those values, Katherine further promoted a shared culture at SAS. Lucy explained:

Teachers have to find a balance between supervising student behavior while modeling what it means to be a faithful person who is attending Mass. I think that being a teacher is so similar to being a principal managing a group of teachers. In Katherine's case, she is modeling what it means to be a person of faith as a leader so that other people can grow in their faith around her. It is so apparent in her actions in how she leads so that teachers will feel empowered and grow, so that they can do that in their classrooms as well.

Katherine modeled her sincerity to teachers which Lucy felt in turn encouraged similar modeling by teachers to their students. Modeling was also reflected in the student experience at SAS. "Buddy classes," classes of older students paired with classes of younger students, helped students form relationships between peers and provided mentors to younger students to share important information like expectations for walking over to the church and how to sit at Mass.

Reliability

Reliability was an area of trust in which Katherine faced significant challenges. The perception among teachers that Katherine was often unavailable and frequently at CHS for meetings contributed to a feeling of mistrust. Despite challenges related to the merger, there was evidence among some teachers that Katherine demonstrated her reliability to the staff. Katherine demonstrated her reliability to the SAS community through consistent communication, helping staff with problems, responding to teacher requests, and being as visible and available as her schedule allowed.

When a new teacher had a struggling student, Katherine demonstrated her reliability by reaching out to his previous year's teacher (who had since left SAS) to get their input. The second-grade teacher, Lilah, described how Katherine helped her address the student's needs:

I had one student who I was really concerned about in the beginning of the year. Katherine reached out to their last year's teacher, who left, getting a lot of information for me to help get a sense of that child, since I kind of didn't really have a lot to go off of.

Lilah was able to better teach that student based on the information Katherine obtained.

Katherine demonstrated her reliability to families through consistent communication, including through a weekly memo entitled "Tuesday Tidbits." The second-grade teacher, Lilah, explained that the memo provided families with a description of upcoming events and current information:

Katherine's really good about sending out her Tuesday Tidbits which goes to the parents and to the staff with all of the information about everything that's

happening now and upcoming events. Everyone's on the same page with what's happening throughout the school.

Similar to her own approach to communication, Katherine required that all teachers communicate regularly with families. The K1 teacher reported that she wrote a weekly newsletter to the families of her students.

Teachers frequently made requests of Katherine, and on several occasions

Katherine's ability to support those requests contributed to the sense that she was a

reliable leader. In one example, Katherine supported the Grade 7 math teacher, Nolan's,

request to student teach at SAS. Nolan described the experience:

[Katherine] was the one who gave me the opportunity to do my student teaching here. She was able to give me one class last year to take as my own and I molded into my own vision. She was helpful with that. Because of that, I was able to get my master's last year. And then when the opportunity came that we needed a new homeroom, she offered it to me, which gave me a bump in salary and gave me more responsibility. I got extra teaching duties as well, which has made my life, you know, challenging, but I'm a better teacher now.

Katherine supported his aspirations to become a teacher and ultimately hired him as that seventh-grade math teacher. Katherine deferred to Nolan to serve as the school's contact with textbook companies when it came time to purchase a new program. Katherine's trust in Nolan's ability to make curricular decisions reflected her belief in his competence as an educator. In another example of Katherine responding to teacher requests, she sat down with a group of teachers concerned about the recess and lunch duty schedule. With the change in schedule that resulted from the merger, teacher duties had changed to every

day. A group of teachers brought the problem to Katherine, who reviewed the schedule and alternated teachers so they only had duty on a rotating schedule. Katherine's willingness to meet with teachers and collaboratively solve problems signaled her reliability to staff.

Though there was a consensus that Katherine was a more engaged leader than the previous principal, some teachers still found fault with her consistency and visibility.

The K1 teacher, Avery, who was among the teachers that felt that Katherine was a reliable leader, referenced Katherine's weekly memo among the evidence of her dependability. She noted that Katherine sent emails late at night, putting in the long hours. Avery also felt supported by Katherine despite competing interests:

You can tell she's dedicated. You know, as principal, she is completely busy with so many other things. But yet during the course of a day, when 70 other things pop up, she makes time for you as well. I think she is dedicated by putting in the long hours by receiving the emails from her late into the night even on the weekend. This poor woman. You can tell she's just committed to seeing this [school] will continue to grow with enrollment and making sure that these kids are actually prepared for when they go. She's supportive and she is so nice, she's so nice.

Within the school, the K1 teacher, Avery, noted Katherine's reliability through her presence in the classroom and interactions with the students:

She definitely makes a presence in the classrooms, which is nice to just walk in and see the kids. I think it's important for the kids to know that the principal comes in and she wants to see what you're doing.

New staff members, like Avery, tended to report a sense that Katherine was more available, in contrast with veteran teachers who reported that Katherine was absent from the building too often. In her second year at SAS the guidance counselor, Lindsay, described Katherine as "someone who is available to everybody and is accessible. She is really trying to implement new programs and committees to meet the needs of everybody." Avery expressed a similar sentiment when she described Katherine as communicative, supportive, and approachable:

I can't say enough good things about Katherine. I really can't. I love the woman because I think I know that I can go to her anytime. I think the constant communication from her is huge. I mean, it's huge. I have never felt like I don't know what's going on. I think that the communication is a huge piece, just making sure that everyone's on the same boat, especially with things that impact the whole school, impact the grade. The constant communication and the support from her has been unbelievable.

A recurring theme in many comments about Katherine's ability to build trust among the school community was the perception she was not available or present in the school. New staff members were able to see Katherine's competency, sincerity, and reliability separate from any perceived pressure from the merger. She earned trust among those staff members more easily than veteran staff members. The guidance counselor's sentiment below reflects the perception of the staff members who came to SAS within Katherine's first two years as principal:

I think that for me, Katherine is quite extraordinary. I've been in this field for a really long time, and I've told her this before, I really feel for the first time in my

career I'm working with somebody who really, really, really, really will address what needs to be done for kids. And [she will] follow it through. Katherine is thoughtful about what she does and really reflective. She is always thinking ahead, like, "How do you move forward? How would we do this differently?" So, I feel like I'm working for somebody who is pretty comprehensive in the position that she's in. She really knows what's happening on all levels. She's very bright and genuine. She's a good person and she's a really good leader.

The admiration and trust in the guidance counselor's statement stand in contrast to the Grade 7 math teacher, Nolan's, opinion of Katherine as a leader. He described Katherine as responsive but not reliable in the sense that staff could count on her support when their needs competed with the needs of CHS:

I think that anytime I've brought an issue to her, she's always addressed it. We just notice, sometimes, she seems... There's been some tension with this whole collaboration of the schools and when we brought things to her and it seemed like when our staff needs her to back us up she seems to cower to what the people above her want to do. We don't seem to get the support. A lot of the teachers seem to think CHS gets more support than we do here. We just want her to fight for us a little bit more. This is the best way I can say it... I always feel she's honest with us, but I think sometimes the teachers think, "Yeah, you're honest with us but can you back us up a bit?"

The merger greatly impacted Katherine's ability to build trust among her staff.

The feeling persisted into Katherine's second year at the school that Katherine was loyal to the merged K-12 school and answered only to the Head of Schools. A lack of trust

impeded Katherine's ability to impact structural and cultural change at SAS. The significant impact of the merger requires that we now turn to a detailed exploration of its role on the change process at SAS.

Challenges of Parish Level School Change on Change Process at SAS

In the summer of 2017, SAS and CHS were rebranded as one K-12 school across two campuses. Katherine would remain principal of the K-8 school while the former principal of CHS was elevated to the position of Head of Schools. Within her first month as principal, Katherine's position shifted within the leadership hierarchy, and Katherine was no longer an independent principal but now required to report to Head of Schools, Beatrice. The parish level change consisted of an organizational arrangement in which a consistent early childhood through 12th grade pipeline was established between the parish-governed elementary and high schools where the pastor has ultimate authority. Katherine explained her reaction to that change:

The way it was originally explained to me was that [leadership] was going to be a joint collaboration and that the principal from the high school and I were going to be a team and work closely together. But then, early in the year, I was told that there was going to be a slight change, that she is going to be Head of School and overseeing everything. And so, I was going to report directly to her...I feel that my understanding coming into this was that she and I were equals. It's just frustrating and challenging and I haven't figured it out yet.

Changes associated with the merger, including the scope of her own authority, impacted Katherine's ability to direct change within her own school, representing a noteworthy initial condition Katherine encountered at SAS. She had to navigate the process of

determining what was within her control and when to defer to the Head of Schools. This tension existed as a significant factor in Katherine's planning and decision making.

Exploring these challenges reveals the ways in which Katherine's attempts at leadership for adaptive change may have been impacted by work that occurred at the parish level.

Relationship with the Catholic High School Leadership Team

Changes in the leadership of the merged schools occurred during summer break 2017 and teachers returning to school in the fall of Katherine's first year were not only met with a new principal but also with a new Head of Schools and a new relationship between the two previously distinct and independent schools. Among the changes connected to the merger, SAS adopted a new rotating schedule to align with the CHS schedule so the cafeteria could accommodate all students, the administrators held occasional joint faculty meetings, teachers walked SAS students across the street for lunch each day, two teachers split their time between the two schools, and the new schedules included increased student supervisory time. Though Katherine had no direct influence in guiding these aspects of structural change at SAS and CHS, the changes greatly impacted her teachers and thus her ability to enact change at SAS. We turn now to a discussion of the merger's impact on Katherine's efforts at structural change.

Katherine entered SAS with an expectation that she had primary authority over decision-making at her school. Though she was successful at creating teacher leadership opportunities through the ILT and GLLs and establishing the position of Head of Room Parents, Katherine felt it necessary to have her decisions approved by Beatrice. The relationship between the CHS and SAS leadership teams was confusing to Katherine.

She explained that her interactions with Beatrice led her to feel frustrated by the dynamics of the team at CHS:

It's been a little frustrating on my end. Part of it is that I am used to working with pastors and I've never worked with a pastor who has made me feel less than him. It's always been a really close team relationship. This whole setup really feels like any time we have a meeting, or there is an administrative meeting I'm invited to at the high school, I don't want to say it feels like a firing squad, but I am just bombarded with questions and it doesn't feel collaborative at the leadership level. I've been trying to think about, if and how, I need to communicate my thoughts and feelings on that to Beatrice. I have to try to figure out how to read her sometimes. And any time I try to mention anything or suggest anything she gets very defensive and I'm not used to that, so I am trying to figure it out. I find myself getting stressed if I know I have a meeting over there. I wonder, "What are they going to want? Am I going to have all the information they are going to ask me?" And I think it's an internal pressure but it is also coming from this external source, maybe unintentionally on their part. I have never had a meeting with her that she hasn't invited at least one of her assistants into. So, I don't feel that we ever have a chance to just talk. And I feel like she also never just makes a decision. She always wants her assistant principals to weigh in. And usually Joe is the one in on these meetings. And he starts telling me what I should do about certain situations at school. It's just frustrating and challenging and I haven't figured it out yet.

The sentiment Katherine describes reveals a lack of clarity around not only the scope of her authority but also the relationship between members of the leadership team at CHS. She did not feel that the CHS administrative team or Beatrice were supportive of her work. Katherine's description of these meetings as a "firing squad" echo comments from the Director of Enrollment that Beatrice had a reputation for raising her voice at staff members.

Everyone seems to be afraid of [Beatrice] and I feel like that's a horrible way to live. I can't imagine coming to work every day and being afraid. I feel like that's sometimes how poor Katherine feels, afraid because Beatrice could just blow up at her. One day, [Beatrice] blew up at me for something. I'm like "Are you speaking to me like that? I don't deserve that tone. We're in a Catholic school." Like, I don't care if you're my boss. You don't talk to me that way. I wouldn't talk to a kid like that. I wouldn't talk to a parent like that. I wouldn't talk to a colleague like that. She does that to Katherine too.

The lack of support and even hostility from Beatrice impacted Katherine's efforts at SAS. She could not trust the Head of Schools for support for her initiatives or plans for growth.

Several SAS staff members noted that tensions in the dynamics between the schools' administrative teams impacted Katherine's approach to her role. As the Director of Enrollment, Monica, explained:

There's a whole hierarchy in the Admin Team. Across the street, there's an Admin Team, which everybody and their brother is on. There's like ten people. And then there's Katherine. I can see why she's like, "I'm just gonna follow the chain of command because it's not worth it." Most of them over there are men

and they will do things like—my counterpart across the street, when he sends an email to Katherine and me, he addresses it, "Ladies." But that bothers me and I told Katherine, "Katherine, tell him to stop calling you a fucking lady." That is insulting. If my husband ever called his boss or one of his counterparts "ladies". I mean, that's just inappropriate. But she just said, "Oh, it's okay." I feel like sometimes she gets beaten down by that whole thing. Teachers may interpret that as her not having their back, but I kind of see it from a different point of view.

Just as Katherine could not trust Beatrice to support her work, she could not count on support from other members of the CHS administrative team. Not only was Katherine anxious about the state of her relationships with her own staff, but when communicating with administrators at CHS she was, in the opinion of the Director of Enrollment, treated inappropriately.

The Director of Enrollment was not the only staff member to recognize the impact the merger had on Katherine's approach to change at SAS. The Latin teacher, Joseph, noted that the merger put Katherine in a difficult position balancing her accountability to Beatrice and the CHS administrative team, while at the same time she was accountable to staff and parents at SAS:

I think Katherine is in a really tricky position. With Beatrice being the Head of Schools and having to work under her and then also try to appease the teachers and the parents here and make this collaboration go as smoothly as possible. She's in a really tough position. I feel like when she came here she was set up to fail. This school seemed to be dying out with low enrollment and the last chance to save it is to do this collaboration with CHS.

The feelings described by Joseph point to a sense that Katherine was stretched across the two schools and not only concerned with the needs of SAS. The perception of competing interests and divided loyalties created barriers to Katherine's efforts at promoting trust and a shared culture at SAS.

The status of the merger contributed to a sense of confusion about the identity of SAS. Katherine had to navigate this uncertainty when it came to tangible items needed to run a school. For example, the receptionist reported that it wasn't until after seeing the new letterhead that some teachers were aware the merger was underway. In another example, Katherine described her process for ordering "Spirit Wear" [clothing emblazoned with the school logo] for SAS:

Certain things come up that I do feel I need to check in with Beatrice about. As an example, we've had some parent and student requests to have spirit wear, here at SAS. I touched base with Beatrice about that just because, they have a school store that has spirit wear as well, I thought, okay, if we're working towards becoming one, if at some point, we're going to have some kind of a common logo, does it make sense to do all this SAS spirit wear? But it sounds like we're still at a point where we can kind of have our identity as SAS, in the context of this greater identity of the merged schools.

As Katherine worked to develop common values at SAS and promote a sense of a shared school culture, the status of the merger and separate school identities created an obstacle in the minds of some teachers and families.

Lucy noted the difficulty in trying to merge schools with two distinct identities.

She also highlighted a lack of clarity about which school was expected to adapt to the

other. There was a continued sense among SAS staff and families that SAS was expected to align with CHS, a perception reinforced by SAS shifting their schedule and curriculum to better align with CHS. Lucy remarked:

I think that idea of the merger is really exciting but I think the biggest growing pains are from trying to maintain each school's identity while weaving it together. What is really interesting is that because both schools have this really long history there is a lot of deep rooted connections to each school individually. It's interesting that even though there is a lot of people who attended both, I am hearing from families that there is still a lot of resistance to uniting the two. Which I think is really interesting as someone who is coming from outside of the community to witness that because it is harder for me to understand. From what I've heard about last year, the merger was much more of a decision, "We're gonna unite these two schools." Whereas this year [the approach is] "Let's take a step back and look at this as an ongoing process and evaluate What is our identity? What is our shared mission?" Families have expressed that they feel that they are being swallowed up by the high school. From what I have observed in meetings it is described as, "We're being told that we need to adapt to unite with them as opposed to here is where we can meet together." And I think that will change with this new pastor but from what I have gathered from these bits and pieces I have gathered from families and what Katherine has shared and my observations in meetings that is the general sentiment.

The change in approach to the merger described by Lucy signaled recognition that the identity of the schools was a significant barrier to unifying as a K-12 school. Bringing

the schools together as one unified school required a more adaptive approach.

Katherine's understanding of the importance of attending to a shared school culture was reflected in her efforts to bring the schools together with the same theme "Unity," but that effort was not broadly supported and it did not gain traction. In Katherine's second year at SAS, her cultural efforts were limited to developing themes and promoting values within SAS and not across the schools.

Separate school identities contributed to the perceived distance between the schools and a wariness among the SAS staff that the merger would have a negative impact on their own school and professional lives. Prior to Katherine arriving, the previous principal had promoted the merger by telling staff they would be moving to the same pay scale as CHS teachers, higher than the pay scale at SAS. This promise did not manifest within Katherine's first year at SAS. A sense among teachers that they had been deceived had a negative impact on Katherine's efforts at building trust at SAS. The Grade 7 math teacher, Nolan, described the significance of the salary disparity for teachers at SAS: "[CHS teachers] make a lot more money than every teacher here because their salary structure is completely different than ours. That's one of the biggest tension issues I think this year." The continued difference in salary signaled for SAS teachers that there was a difference in their perceived worth and that by not addressing the issue, Katherine and Beatrice were not concerned about how they felt.

Compounding this issue, in Katherine's second year at the school, CHS hosted a joint faculty meeting at which all teachers were asked to contribute to a student scholarship fund. Though the CHS Director of Development clearly stated that the contribution was symbolic and they were only being asked to give a dollar to the fund,

SAS teachers felt that to ask for any contribution while they were still being paid less than CHS teachers was disrespectful. The Grade 7 math teacher, Nolan, explained his reaction:

I just spent almost \$500 of my own money on my classroom this past year. You really want me to give more of that? I don't make a lot already. I think the way they asked us, I don't think it was the right way to do it. It was like, "Well we want to do this. You have to do 100% because CHS did 100%." I think it was a lot of pressure. We're supposed to be one team now but their salary structure is completely different. We don't mind giving to the fund but can we at least be on the same scale as them pay-wise?

Beatrice agreed with the teachers' position but gave context to the complexities of the problem:

We need salary equity between the two campuses. The SAS teachers are not on the same pay scale as the high school. That's a huge morale issue and it's a justice issue. But it can't be solved overnight. We've been distinctly separate for the 60 years that CHS has existed. They've existed for 135 years. So that's not a problem solvable overnight. It's layered into the advancements, embedded in enrollment, and so forth. But is it a justice issue that needs to be worked on in good faith? Yes. I think that what you'd hear is they're holding back on contributing to the scholarship fund because they feel that their salaries are not equitable to CHS salaries.

Communication of these underlying complexities had not reached SAS teachers in the sense that they felt it necessary to respond to the request for money.

A group of teachers at SAS responded to the request to contribute to the scholarship fund in a signed letter addressed to Katherine. They voiced their concerns that the request was another example of the lack of acknowledgement of the pay disparity between the two schools. Katherine responded to their letter in an email to the whole staff. In the email, she acknowledged their concerns and communicated her hope that the schools would soon be paid on a more equitable scale. She copied Beatrice and both parish priests on her email. The first-grade teacher, Megan, remarked that Katherine's email was respectful and helped to repair some of the trust that had been broken during the incident:

I read her response to my husband and he agreed it was one of the most thoughtful—he's like, "Considering how you could react to something like that." I just think she's a great leader personally. I feel she is very respectful and I think people appreciate that in general. There are a lot of things that can't be fixed, you aren't going to go into a Catholic school to make a ton of money. But, I think she understands and respects that it is challenging. And I think she appreciates what everyone does for the kids.

Although SAS and CHS had different teacher salary scales prior to the merger, the merger made visible the existing discrepancy and impacted Katherine's ability to generate trust with her staff. She was able to use her email to reinforce her sincerity for equity between the two schools, but the merger contributed to ongoing issues around trust, some of which Katherine needed support to address.

The Director of Enrollment felt that it was Beatrice's, rather than Katherine's, responsibility to address the teachers concerns with the scholarship fund. She believed

the SAS teachers didn't feel valued as a consequence of the merger and that, as Head of Schools, Beatrice, was in the position to address the issue:

I think the teachers still want some resolution [to the scholarship fund incident], but it has to come from above Katherine. It has to come from Beatrice. And she has to feel that- the teachers need to feel from her that everyone's valued over here. And it's not us versus them. Which is how sometimes people feel.

This sense that Katherine alone did not have the ability to address the staff's concerns reflected the ongoing challenges regarding where decision-making authority resided both within SAS and the K-12 system. Katherine's autonomy over changes at her own school was impacted when decisions made at the parish level influenced life at SAS.

Case Study Summary

There is evidence of a mix of success and setbacks in Katherine's efforts to enact leadership for adaptive change at SAS. In the area of structural change, Katherine encouraged shared decision-making among teachers both individually and through leadership teams. Leadership teams such as the ILT, GLLs, and committees shared authority over different school matters by providing their input and ideas to Katherine and other team members. These teams provided an information rich forum for exchanging ideas, providing a network by which decisions could be communicated to the rest of the SAS staff (Goldstein et al., 2011). These types of teacher leadership opportunities have been found to improve efficiency and effectiveness of interactions of staff within a school (Struyve et al., 2014). By promoting increased connections and collaboration at SAS, Katherine enriched system interactions and contributed to the potential for growth and sustainability of change (Spillane et al., 2004). The absence of

much interaction between leadership teams at SAS and CHS meant that Katherine was limited in her ability to promote change that involved K-12 matters, particularly with regards to a lack of support from the Head of Schools and high school leadership team. The degree to which Katherine was able to promote structural change at SAS was influenced by the support she received from leadership networks within both SAS and parish-wide.

Katherine's efforts at cultural change at SAS included an emphasis on shared values and promoting a common school culture that encouraged student growth and school improvement (Davis & Sumara, 2006; Kin et al., 2018). Katherine returned to her cultural strategy, themes, to identify an overarching value to guide the work of the school year. The first theme, "Unity" did not resonate with staff to the degree that "Christ be the Light" was adopted by staff and students in Katherine's second year at SAS. Katherine also introduced Virtues of the Month and encouraged traditions like Morning Meeting and student awards for positive behavior that reflected the school values. Challenges to school culture again centered mainly around the status of the merger. While Katherine attempted to promote a theme suitable to a K-12 focus in her first year, by her second year Katherine limited her scope to what she could accomplish at SAS. A void in a vision for the schools as a K-12 system further weakened any sense of a shared culture between SAS and CHS (Sarason, 1993). The culture within SAS was supported by curricular connections and consistent communication between Katherine and the school community (Davis & Sumara, 2006).

Perhaps most challenging to Katherine's change efforts at SAS was a lack of trust with the staff. Demands on Katherine's time, related to the merger, meant that Katherine

had to be absent from SAS for meetings with the high school team and therefore unable to demonstrate her competence, sincerity, and reliability to the staff (Bryk & Schneider, 2004). A perception that Katherine was unavailable contributed to a narrative among teachers that Katherine was more concerned with the needs of CHS than her own school. Incidents like a request that all SAS teachers contribute to a CHS student scholarship fund further perpetuated mistrust in Katherine and CHS administrators, interpreted as a lack of benevolence (Tschannen-Moran, 2014). Katherine was able to foster trust among some her staff, particularly teachers new to SAS who had never known SAS as a separate school and therefore did not have concerns about inequities between the schools or a suspicion that Katherine might care more for the needs of CHS than SAS. Fostering trust among the staff took longer than Katherine had anticipated, but by her second year Katherine had begun to develop strong relationships with some members of the staff. Many of the issues that arose from the merger were out of Katherine's control but had an impact on her ability to distribute authority, promote a shared culture, and foster trust at SAS. This case study points to the need to consider the whole system when seeking to introduce change in a school, as well as the important role initial conditions may play in understanding change efforts (Gallagher & Appenzeller, 1999). In the next chapter, I will consider how Katherine's enactment of leadership for adaptive change compared to similar work at her two other schools, as well as explore a comparison of the emergence process across the three schools.

Chapter Seven—Discussion

The following chapter provides a discussion of the findings from this empirical study. Guided directly by the two research questions, the chapter begins with a cross analysis of the case studies of the three schools in terms of Katherine's ability to enact leadership for adaptive change. Drawing on the data reveals a series of interconnected patterns and trends linked to the varying outcomes at each site. Following that analysis, I turn to a comparison of the emergence process across the three schools. This comparison further illuminates the factors that contributed to variations in system adaptation across the three sites. To conclude, this chapter will explore the theoretical implications of this research, paying particular attention to how this research may be informative to theories of adaptive leadership, the application of complexity thinking to the field of educational change research, and the role of trust in complex systems.

Cross-case Analysis of Leadership for Adaptive Change

In an effort to answer the first research question guiding this study: "To what degree did the principal enact leadership for adaptive change at the three schools she led?" I analyzed data from the three schools in terms of the dimensions of leadership for adaptive change—structural change and cultural change—the first of which entailed exploring shifts in the distribution of leadership at the schools, such as changes in leadership roles, improved communication methods, or the establishment of specialized teacher teams, and the second of which focused on changes in culture through common language, shared vision, and collective values. In addition to these two dimensions and related components, I analyzed Katherine's ability to foster trust among her staff in each school. The three previous chapters provided an in-depth analysis of Katherine's efforts

at the three schools. We now turn to a cross-case analysis of the findings from the case studies and a discussion of the implications of that analysis.

Katherine's efforts at systems change in each school were driven by an underlying commitment to instructional improvement. Examples of her work in the area of instructional excellence include the introduction of a universal lesson plan template for teachers at SBS to encourage rigor and consistency, the use of "themes" at Fiorella to sustain ongoing instructional reforms such as those related to special education student learning, and the purchase of a new math curriculum at SAS. As points of leverage to achieve these and other goals, Katherine implemented structural and cultural changes at each of the schools. In both dimensions, as well as her ability to foster trust among her staff, Katherine had varying degrees of success implementing leadership for adaptive change.

Structural Change Across Schools

Leadership for adaptive change emphasizes the importance of attending to mechanisms for distributing authority and strengthening network connections as a means to support change, with those connections providing opportunities for capacity building and expertise sharing (Harris et al., 2007; Spillane et al., 2001). Table 7.1 provides a summary of Katherine's endeavors at promoting distributed leadership and enhanced network communication across the three sites. Sorted thematically, the evidence is summarized in terms of distributed leadership among teachers, creating parent partnerships, connecting with outside networks, and drawing on the skills of other school administrators and pastors, thereby capturing the various ways Katherine acted on

improving network connections at each school by drawing on features of structural change.

As illustrated in the table, though each school site had some evidence of efforts at structural change, the specific approaches and extent of the evidence varied. Katherine's time at SBS provided the least evidence of distributed authority among the three sites. At SBS, though Katherine retained the existing Cluster Leader model, grade level leaders did not contribute to Katherine's efforts at instructional improvement, but rather they served as a point person for communication between Katherine and the rest of the staff. This was particularly evident when Katherine attempted to engage in shared learning around growth mindset with the grade level leaders. It was Katherine's hope to share ideas around instructional improvement with the Cluster Leaders, who would then provide professional development teaching ideas to their teacher teams. She felt that their disengagement in her efforts to integrate aspects of growth mindset practices signaled a lack of interest in instructional improvement, and there was no evidence of future attempts at shared leadership. In contrast, there was significant evidence of Katherine engaging in shared decision-making with the staff at Fiorella and SAS. At Fiorella, the strategic planning committees served as a platform for teachers to apply and foster their own leadership skills to direct the course of change for the school. The newly distributed authority offered a means to empower teachers in the change process, which was significant because when change is being enacted, people most likely support what they helped create (Wheatley & Kellner-Rogers, 1996). At SAS, Katherine established an instructional leadership team and various other committees to address the needs of the

school. In the area of curriculum, there was evidence of teachers sharing authority with Katherine to both research and select instructional materials for their classes.

Parent partnerships served as another important indicator of the extent of network connections as a manifestation of structural change among the school community. At SBS there was little evidence of parent partnerships. Katherine actively tried to connect with parents through weekly communication and school events but did not have formal structures for sharing authority or information with parents. When Katherine conceived the strategic planning committees at Fiorella, she intentionally gave space for parent voice on each of the committees, signaling a greater level of shared authority at Fiorella compared to SBS. Parents involvement at SAS was limited to informal weekly meetings with administration and Katherine's regular meetings with the Head of Room Parents. Parents at SAS were involved in fundraising and event planning but had no decisionmaking authority. At each school, Katherine varied her approach to parent partnerships in response to the specific school context. At SBS Katherine was met with resistance from faculty to the new endeavors she attempted, and there was a degree of uncertainty regarding parent support for her instructional priorities. Parent partnerships at Fiorella were a natural extension of the support she received from the faculty. The uncertain authority structures at SAS due to the merger restricted Katherine's ability to promote relationships with parents.

Similar to parent partnerships, evidence of partnerships with outside agencies varied at each site. At both SBS and Fiorella, Katherine engaged with outside agencies to promote instructional growth. Katherine promoted a university partnership around writing instruction at SBS, which was adopted to varying degrees among the staff, though

there was never any formal follow up or oversight of faculty reactions. At Fiorella, Katherine frequently partnered with outside organizations including the local naval base, a company providing paraprofessional support personnel for schools, and the local Catholic schools network. These partnerships led to new learning opportunities for students and professional development for staff, which to some degree may have been enhanced by Katherine's willingness to model such practices as the Catholic "themes." Katherine again promoted professional development opportunities through a network of local Catholic schools at SAS, but the extent of her work navigating outside partnerships focused on the relationship between her school and the newly merged high school. The merger and Katherine's rearticulated role within the hierarchy meant that she was not as free to seek outside partnerships as she was at Fiorella. Rather, any partnerships would need to be first discussed with the Head of Schools. In practice, no formal relationships with outside organizations were established at SAS. Importantly, at both SBS and Fiorella, Katherine expanded her networks beyond the respective school site, bringing in new stakeholders and generating collaboration for the benefit of her students, and enriching the decentralized nature of the school community.

Shared leadership responsibilities among other administrators and the pastors was most prevalent at SAS, where there were people in those roles. Katherine emphasized the importance of her relationship with the apprentice principal as a collaborative partner with whom she could share in the decision-making process. At Fiorella there was no other administrator, and the secretary was the only other office personnel. The pastor at Fiorella did not spend significant time at the school and served in more of an advisory role, while the pastors at SAS were younger and more eager to be present in classrooms

and meetings. Similar to SAS, there was little evidence of Katherine sharing authority with the guidance counselor or pastor at SBS. Each school and parish had a different expectation for the role of the pastor and their relationship with the principal. Katherine navigated these differences by deferring to the pastors and engaging with them to the extent they felt appropriate.

Though it manifested differently in each context, Katherine engaged in structural change among teachers and the wider school community at all three sites. Contrasted with SBS, Fiorella and SAS experienced a greater degree of distributed leadership and network growth. These types of recombinations increase capacity within a system, such as in the case of Fiorella's strategic planning committees, where resources, namely expertise, were shared (Goldstein et al., 2011). Enhanced network connections, such as Fiorella's partnership with the naval base, provided for the flow of ideas between the school and wider community (Uhl-Bien et al., 2007). The success of these endeavors is important, because they shape the conditions for fostering even greater change, readying the system to respond to still unknown challenges (Kershner & Mcquillan, 2016). As one dimension of leadership for adaptive change, changes in patterns of leadership and network connections must be understood in relationship to efforts at promoting a shared school culture and trust (Heifetz et al., 2009). The structural changes described above provide a sense for the means by which Katherine was able to promote her cultural goals at each school.

Table 7.1
Structural Change Across Schools

Distributed Leadership among Teachers	Cluster leaders	Waited on the formation of ILT, began strategic planning committees in year 3	Began creating committees. ILT, GLL, School Climate. Not familiar to all staff
Parent Partnerships	Multilingual written principal communication	Coffee meetings with parents, Parent Advisory Committee, role of the strategic plan committees, fundraising	Coffee meetings with parents, Head Room Parent
Outside Networks	University partnership	Naval base, Catholic school network, invited speakers (Peace Makers)	Merger with AC, PD with Catholic school network
Administrators	None	None	Apprentice Principal
Pastors	N/A	Meetings with Katherine to discuss big ideas	Consistent presence in the building, frequent invitations, attendance at Morning Meeting, admin mtgs.

Cultural Change Across Schools

Katherine made cultural change a centerpiece to her change efforts at all three schools, using values and beliefs to mobilize faculty and gain commitment to common priorities. As with her attempts at distributing authority and enhancing network connections, Katherine's work to shift the culture at each school was met with varying degrees of success. (Table 7.2 identifies the ways in which Katherine's cultural efforts differed across school sites.) Grounded in traditional Catholic school values (Bryk et al., 1993; Denig & Dosen, 2009), Katherine's approach to addressing school culture evolved notably between her time at SBS and Fiorella (Denig & Dosen, 2009). At SBS,

met with resistance by the staff. Admittedly, Katherine felt that her approach to change did not account for the existing cultural priorities of the school and that she moved too quickly. Shared Catholic values and traditional celebrations reflected the culture at SBS with no evidence that Katherine shifted the values or priorities or that the culture of the school shaped larger conditions for change.

At Fiorella, Katherine developed yearly themes as a means to introduce herself to the school community and unite the staff. Evidence revealed that the themes were incorporated into the classroom through art and service projects, and even made it into student remarks to their parents about work being done at the school. This foundation served as a starting place for change as shared values and beliefs served as an "attractor" (Gilstrap, 2005; Reigeleuth, 2004) that maintained system fidelity as power and authority were dispersed through the school systems and new initiatives emerged. As teachers began to participate in the decision-making process through the strategic planning committees, a shared commitment to common values helped align their efforts. At Fiorella, Katherine had more latitude to direct the vision of the school, whereas at SAS she needed to coordinate yearly themes with CHS. Despite this obstacle, Katherine implemented themes upon arriving at SAS. Monthly virtues were a new initiative specific to SAS, with the greatest curricular ties of all Katherine's cultural efforts. Lucy, Katherine's apprentice principal, created resource packets for teachers and families that explained the application of the monthly virtues in the classroom and at home. At both Fiorella and SAS, Morning Meeting served as an opportunity for Katherine to promote and engage with shared values. No such opportunity existed at SBS.

Evidence of cultural change across the school sites reveals that SBS experienced the least change to their shared values and priorities. Shifts in culture were visible in the school building and curriculum at both Fiorella and SAS. The use of themes at each school was made visible in student artwork and bulletin boards posted throughout the buildings and lessons and student projects explicitly connected to those values. These efforts are significant, because common school culture signals shared priorities which are important to the success of change initiatives (Fullan, 2011).

Table 7.2

Cultural Change Across Schools

	St. Bernard's School	Fiorella	St. Anne's School
Themes	N/A	Yearly themes	Yearly theme strong
		directed by	at SAS, not present
		Katherine	at AC. Stronger
			curricular ties than
			Fiorella
Virtues of the	N/A	N/A	Introduced in year
Month			1, curricular ties
Catholic Values	Strong ties to	Impact of strong	Seen to reemphasize
	Catholic values	Catholic faith	Catholic identity
Morning Meeting	N/A	Yes	Yes, switch from
			previous years
Other	N/A	N/A	Identity merger with
			AC

The Role of Trust in Promoting Change

Trust revealed itself as a central factor contributing to the change process at all three schools. As illustrated in Table 7.3, Katherine had varying degrees of success demonstrating her competence, sincerity, and reliability in each context (Bryk & Schneider, 2004). Katherine was most successful building trust among the faculty at Fiorella. This can be attributed to many interrelated factors. First, Fiorella's small

school size meant Katherine had more opportunities to engage with staff individually. She got to know people personally as well as professionally and forged deep connections, exemplified in her relationship with the fourth/fifth-grade teacher, who attributed Katherine's mentorship to her success as a teacher. Her staff saw her sincerity in those connections. Katherine was considered reliable because she was always available to her staff and after school for every event. Katherine's experience as an administrator and her educational background contributed to her staff's sense of her competence, while her sincerity was revealed through the sharing of "themes" with the faculty and her willingness to relocate to a rural area.

Her success at Fiorella contrasts with a much more difficult time building trusting relationships at SBS and SAS. A lack of trust at SBS is best illustrated in Katherine's missteps in attempting to change the chocolate milk offering at lunch. Staff viewed her directive as her lack of knowledge of the school, belying her lack of competence and sincerity as a community member. Trust at SAS was inhibited by the merger with AC. Katherine was unable to demonstrate her reliability as she was constantly pulled to meetings at CHS. While this arrangement may have enhanced trust with those in the upper school, her relative absence from the lower school contributed to her inability to demonstrate her competence as an administrator and school leader in the school she was ostensibly leading. Katherine admitted she spent less time at school outside the school day, rarely attending evening events. Most teachers did not question her sincerity, particularly as they spent more time with her, but her motives were always clouded by the unknown impacts of the merger and a lack of clarity about her role relative to the head of schools.

Understanding Katherine's success at fostering trust within the school communities is important to understanding the change process more generally. In the contexts where little trust was established, namely SBS and SAS, Katherine was limited in her ability to engage in the other practices of leadership for adaptive change. For example, at SBS, teachers questioned her sincerity and competence, and in turn some teachers felt free to not fully engage with a new writing program that was offered through a university partnership. A similar tension surfaced at SAS, where Katherine's absence led to a general sense that she was unreliable. When new issues arose, staff responded by questioning Katherine's commitment to the school and support of the teachers, perhaps best exemplified when the teachers shared a letter of concern with Katherine expressing their frustration with being asked to contribute to a student scholarship fund for high school students. Structural and cultural change relies on a degree of trust between the principal and staff (Bryk et al., 1993). At Fiorella, where trust was most evident, Katherine was able to more easily shift authority and grow the culture of the school with support for the staff and school community.

 Table 7.3

 Fostering Trust: Competence (C), Sincerity (S), Reliability (R)

	St. Bernard's School	Fiorella	St. Anne's School
Among Staff	Chocolate milk eroded trust (S), new to administrative role (C)	1:1 efforts at trust building (S), very available (R), welcomed as one who could save the school from closure (C), offered ideas for curricular innovation that proved useful (C)	Not seen as present and available (R), role of the merger with the impression she is working for the newly appointed Head of Schools (S), distinct relationship with new staff (S), Solicited feedback

			from staff on restructuring process (S)
Among Community	N/A	Consistently attended community and school events (R)	Water gun emoji incident (C)

Implications of Findings on Leadership for Adaptive Change

The evidence explored above reveals several implications for the practice of leadership for adaptive change centered on trust as a key factor in the change process. First, the three cases reinforce the importance of the role of time in the change process (Fullan, 2001). Katherine's ability to enact cultural and structural change relied on her knowledge of the system, identifying important points of leverage, and building trust. Missteps that Katherine highlighted at both SBS and SAS, such as stopping the sale of chocolate milk at lunch and losing the support of parents over how she handled a student conflict, were largely a result of her lack of familiarity with the school. For example, at SAS she did not have a sense of the behavioral reputations of a group of students involved in a texting dispute. One of the students texted another student a water gun emoji, and the first student reported it to Katherine as a threat. Katherine suspended the students involved, much to the outrage of their parents. The following year, parents were still making negative comments about how she handled the situation. It is unclear if Katherine would have handled the situation differently had she had more knowledge of the students and parents involved, but she reported that she wished she had had a better sense of the dynamics of the school at the time. She did not have the trust of the families, and she in turn had not built trusting relationships with the students. Time at each school provided her with opportunities to display her own competence, sincerity, and reliability,

and develop a sense of trust in others. Without such opportunities relational trust is unlikely to emerge.

Another implication revealed by this analysis is the importance for leaders to consider how their own cultural priorities align with new contexts (Fullan, 2011). The three schools in this study each shared a general commitment to Catholic values. As a Catholic school leader and a person of strong faith, many of Katherine's own beliefs and priorities mirrored those of the three schools. However, SBS revealed a misalignment between Katherine's desire to promote a culture of academic rigor and the school's culture centered on student fun and engagement. Katherine's attempts to apply her own priorities were met with resistance, and Katherine reported frustration in her perceived inability to shift the school's culture with efforts aimed at promoting a growth mindset and creating standardized lesson plans (Kin et al., 2018; Priestley et al., 2011). Katherine had more success at Fiorella and SAS, where her cultural themes built directly upon Catholic values. Katherine and teachers at both schools reported a sense that the themes became embedded in the school community and that the themes provided opportunities for individuals to foster trust by revealing their competence, sincerity, and reliability. For example, at Fiorella, Katherine's initial introduction to the school was framed around the theme of "Journey." The theme allowed her to reveal her experiences to the staff and students, distinguishing herself as competent, sincere, and reliable. These findings reinforce the importance of shared beliefs and attitudes in the change process (Branson, 2008; Lee, 2020). The importance of values alignment may be particularly relevant in other, non-Catholic, school contexts where there is not already a foundation of shared values (Mehta & Fine, 2015).

Underlying the implications of this cross-case analysis is the central role of trust in leadership for adaptive change. Katherine's ability to enact structural and cultural change at each school site relied, to a degree, on the extent to which Katherine had established trust among the school community. For example, at Fiorella, Katherine was able to promote partnerships with outside organizations because the staff trusted that the resulting changes in teaching and learning would be in their students' best interest. Similarly, staff did not resist Katherine's staffing changes. When Katherine asked the fourth-grade teacher to take on a combined fourth and fifth grade class, the teacher reported being terrified but trusted Katherine's opinion that she could handle it. In a surprising response to getting fired, the second-grade teacher apologized to Katherine for not making the changes necessary to remain at Fiorella, signaling that even in the most extreme circumstances, her staff trusted her judgment on school matters. This trust contributed to Katherine's ability to make instructional changes that were supported by the school community. As she expanded the role of the strategic planning committees and sought new ways to integrate the themes in the school curriculum, she had the support and trust of her staff.

In contrast to evidence of trust at Fiorella, SBS and SAS reveal the significance that a lack of trust can have on the change process. At both schools, Katherine was routinely met with resistance to her change efforts, with the underlying sense that her decisions were not aligned with the teachers' priorities. At SBS this was reflected in her attempts to shift the instructional expectations at the school. Her work with growth mindset was not adopted by the rest of the staff, and a new writing program was not universally embraced by the faculty. The case of SAS reveals one way in which trust can

be undermined within a system, ultimately impacting another's ability to promote change. One instance where this dynamic was particularly poignant was when the faculty was asked to contribute to the high school's Higher Learning Fund. Staff members felt it was disrespectful for the administrators to ask for money when SAS teachers were paid less than their CHS colleagues. The staff protested the request by refusing to contribute and writing Katherine a letter explaining their position. Though Katherine was not aware prior to the faculty meeting that CHS administrators were going to ask SAS teachers for the contribution, she was not surprised at the teachers' reaction. The SAS staff held Katherine partially responsible for what they perceived as disrespect, further eroding the little trust they had in Katherine. The status of the merger continually impacted Katherine's ability to foster trust with staff at SAS and points to the significance of trust within systems of distributed leadership. This analysis of the evidence across the three schools reveals how the role of trust either contributed to or undermined Katherine's ability to enact structural and cultural change thus indicating trust as a central factor in the change process.

A cross-case analysis of the three studies that compose this research provides empirical evidence for the varying degrees to which leaders can implement leadership practices for adaptive change. This was illustrated in the extent to which Katherine distributed leadership at the three schools. In each school, Katherine attempted a variety of changes and was met with different outcomes. This section illuminated the specific changes, influenced by the school principal, that contributed to overall systems change. Katherine's efforts at structural and cultural change, as well as trust building, informed the schools' preparedness for future challenges. In the following section, I turn to a

discussion of how those adaptive changes contributed to the broader emergence process, the creation of new structures, the promotion of new values, and the appearance of novel practices driven by these structures and values.

Cross-case Analysis of the Emergence Process

The second research question guiding this study, "In enacting adaptive leadership how did the process of emergence compare at each school?" asks that we chart the emergence process at each school and compare those findings across sites, looking for patterns and processes that over time surface in the school contexts and link to the features of emergent change. As described in the section above, the structural and cultural changes Katherine implemented had varying degrees of impact on decision-making, communication, values, and beliefs at the three schools. These changes signaled Katherine's efforts to generate the conditions necessary to foster system transformation, using shared decision-making, common values, and trust building to promote instructional innovation. What follows is an exploration of how, through the lens of Katherine's leadership, the emergence process developed at each school.

Phases and Cycles of Emergence

The focus of this analysis thus far has been to explore specific manifestations of organizational change implemented by Katherine, specifically those focused on shared decision making and common values. Leadership for adaptive change supposes that, if successful, those changes will result in greater system adaptability. The new conditions will create flexibility and responsiveness so that the system is better positioned to engage with new challenges. This new state, emergent order, differs from the organizational

changes associated with practices for adaptive leadership. As described by Goldstein, et al., emergence indicates a new state of system transformation:

It is important to recognize that emergence is not merely a technical term for just any kind of organizational change. Instead, it refers to those kinds of changes that are deeply rooted in the organization and that significantly increase an organization's capacity to quickly adapt to environmental changes and opportunities. (2011, p. 77)

The emergence process can be understood as spanning several phases that follow a cyclical pattern. The phases—disequilibrium, amplifying actions, recombinations, and stabilizing feedback—provide a model for understanding a way in which the process may unfold (Goldstein et al., 2011). To explore how the process of emergence compared at each school, evidence will be presented for the ways in which the phases of emergence were visible in the cases. For example, evidence of disequilibrium would be revealed through disruptions to the status quo. Amplifying actions would be indicated by evidence of innovative challenges, opportunities, and new ways to understand the school system. In response to these new innovations, evidence of structures, arranged and changed to allow for those new ideas and practices to be tested and spread further through the system, would suggest the system engaged in recombinations. Ultimately, if a school experienced emergent order, there would be evidence that the system shifted into a new state of being where new system features supported the spread and adoption of transformational practices (Lichtenstein et al., 2006). The evidence that follows provides a sense for how the emergence process compared across the three schools.

Evidence of the Emergence Process at the Three Schools

As described in chapters four, five, and six, initial conditions varied at each school site and played a significant role in setting the foundation for the change process (Opfer & Pedder, 2011). (Table 7.4 provides a summary of the findings related to the emergence process across each of the three schools.) Katherine navigated these conditions differently as her experience as an administrator evolved. Disequilibrium, in the form of a new principal, marked the extent to which the experiences of the schools were similar. SBS experienced the least progress in terms of emergence among the three schools. Though Katherine's time at the school was marked by several examples of disequilibrium, including university-directed professional development, a new lesson plan template, the introduction of the concept of growth mindset, and a new emphasis on academic rigor, SBS remained largely entrenched in past practices. Staff resisted Katherine's attempts at curricular innovation or cultural enrichment, signaling a disconnect between Katherine's priorities and the beliefs and practices of SBS staff (Opfer & Pedder, 2011). Davis and Sumara (2006) would characterize this state of resistance as reflective of an unhealthy system. Rather, "healthy systems...must continuously respond to a diversity of circumstances that do not allow it to exist in a steady state" (Davis & Sumara, 2006, p. 92). Resistance to Katherine's change efforts meant that SBS largely remained rooted in the status quo. As new economic, professional, and operational challenges arose, the system did not have an enhanced capacity to respond by seeking novel and innovative solutions. SBS was closed in 2020 due in part to its inability to respond to new challenges.

As compared to SBS, SAS was able to respond to disequilibrium through new innovations and a realignment of resources and practices. Among the disequilibria SAS

faced, the merger consistently surfaced as a primary source of teacher concern and organizational challenge. There was a lack of clarity about the identity of the newly merged schools, concerns about pay inequity, and an unclear leadership structure. The various ways in which new expressions of disequilibrium surfaced during the merger signal the potential for increased resistance within a system (Beabout, 2012). In spite of ongoing disequilibrium, Katherine continued to introduce opportunities for substantive staff interactions at Morning Meeting and curricular meetings, at which the flow of information generated a rich exchange of ideas and practices. These amplifying actions marked the introduction of innovations that generated new ways to understand the school (Goldstein et al., 2011). Complicating interactions between individuals, there was little evidence of trust between Katherine and her staff, the exception being teachers new to the school who had no knowledge of the SAS pre-merger. Recombinations and collaborations within teams were successful, with teachers remarking on the progress they made at their own grade level. However, at the school level, a lack of trust in Katherine's leadership made teachers increasingly more resistant to change and resentful of increased expectations. At SAS, mechanisms were in place to foster innovative practices, but a lack of trust impeded the emergence process due to staff resistance to new ideas, particularly those promoted by Katherine. For example, teachers frequently lamented the student discipline policy at SAS, and expressed frustration in their colleagues' inconsistent student expectations. Katherine created a student handbook with clear expectations for discipline, but teachers did not apply the guidelines with fidelity. Katherine offered improved supports to address a challenge but her approach was met with resistance. This example is emblematic of the process of emergence at SAS.

Despite new enhancements to collaboration and distributed power, innovations were not adopted school-wide, indicating a lack of system transformation.

Of the three, Fiorella was the only school to experience evidence of emergent order (Goldstein et al., 2011). Just as in SBS and SAS, Fiorella faced sources of disequilibrium including the hiring of a new principal and the threat of imminent closure. Rather than responding with resistance, Fiorella teachers embraced the disequilibrium as an opportunity tension, setting into motion a transformative dynamic in the school (Beabout, 2012). A period of intensification followed in which Katherine leveraged her efforts at promoting a common school culture and shared decision-making to introduce new innovations. For the first time, Fiorella began providing special education students paraprofessional support, initiated a cycle of strategic planning, and started to promote cultural values through the curriculum. As Katherine moved to help Fiorella adapt to disequilibrium and respond to intensification, she shifted interactions among system elements, thereby disrupting traditional patterns of authority and collaboration. The strategic planning committees served as one example of recombinations in which new patterns of substantive interactions encouraged innovative thinking and the sharing of resources (Lichtenstein & Plowman, 2009).

Fiorella was the only school to move beyond innovation and collaboration to a state of system transformation. A phase of stabilizing feedback signifies the ways in which innovations are spread and effectively supported by the whole system. These small technical adjustments were in response to the more prominent shifts that already occurred. This was evident in Fiorella in the ways in which teachers adopted the themes in their own curriculum and that paraprofessionals continued to work with students in

new classrooms throughout the school. Katherine had fostered the conditions, enhanced system interactions grounded in a shared cultural vision, to enable innovative practices to spread. Fiorella is distinguished from the other schools in that it is the only school at which Katherine was consistently trusted by her staff. Trust contributed to Katherine's abilities to make the changes that readied Fiorella to respond to change.

The case of Fiorella's fourth/fifth-grade teacher, Elizabeth, highlights how the emergence process manifested on an individual level. Elizabeth worked in relative isolation from her colleagues, rarely speaking at faculty meetings, and considered leaving the profession due to a sense of limited impact through her work. Upon arriving at Fiorella, Katherine began meeting with Elizabeth independently (a practice she engaged in with all teachers). Through her meetings with Elizabeth, Katherine identified significant competence and reliability. Katherine asked Elizabeth to teach the combined fourth and fifth grade class the following school year. This switch served as a substantial source of disequilibrium for Elizabeth. Katherine supported Elizabeth in developing a new curriculum and resources for the class, encouraging Elizabeth to attend professional developments and share her insights at faculty meetings. When establishing the strategic planning committees, Katherine invited Elizabeth to serve as a teacher representative. In Katherine's third year at Fiorella, Elizabeth won a national award in recognition of her abilities as a teacher reflecting her professional transformation. On both the individual and school-wide levels, the evidence indicates that Fiorella experienced cycles of emergence through sustainable and effective instructional improvement.

Table 7.4

Summary of Findings Related to Cycles of Emergence

	St. Bernard's School	Fiorella	St. Anne's School
Initial Conditions	Shared belief in teacher autonomy Cultural emphasis on student fun	Desire among faculty to remain financially viable and increase enrollment Openness to new teaching practices	Distrust in the merger process Confusion regarding the school's identity
Disequilibrium (Disruption to the Status Quo)	New principal Emphasis on academic rigor Growth mindset book study New lesson plan template	New principal Threat of closure Themes	New principal Merger with Catholic High School Recommitment to Catholic Values
Amplifying Actions (Innovation)		Servicing special needs students Peacemaker Strategic plan Themes were welcomed as a source of curricular innovation and inspiration	Morning Meeting Public recitation of the rosary Vertical alignment of curricula Discipline/Handbook
Recombinations (Collaboration)		Instructional leadership team Networking with naval base Paraprofessionals Strategic planning committees	Department meetings for teachers in the upper grades GLL School Climate Committee ILT
Stabilizing Feedback (Technical Adjustments)		Teachers adopted themes in their own classrooms Teachers utilizing paraprofessionals to	

support student learning

Implications of Findings

The evidence explored above reveals several implications, the first being that a system's position within the cycle of emergence is not absolute. These findings provide a sense of how things were at each school at one point in time, but the cycle was ever changing as new sources of disequilibrium emerged and new innovations were introduced. Figure 7.1 provides an approximation of where the evidence indicated the schools were located within cycles of emergence at the time their case study was conducted. Depending on the evidence under consideration, a school might be considered in more than one place within the cycle. This is the case with St. Anne's, the relativity of its position indicated in Figure 7.1 by dashes around the school's name. Although there has been some evidence of collaboration, the school's position is variable, and a lack of trust continues to impede progress towards innovation and emergence, as exemplified by SAS teachers' unwillingness to implement the school-wide discipline policy.

Figure 7.1

Progress within the cycle of emergence across three schools at a point in time

Disequilibrium: A shift to the status quo requiring a process of adaptation to address the shift. Fiorella St. Bernard's School **Stabilizing Feedback: Amplifying Actions:** Earlier amplified System agents amplify new ideas and innovations that innovations are institutionalized adequately respond to new throughout the system. environmental stressors. St. Anne's School **Recombinations:** Structures are arranged and changed to allow for new

ideas and practices to be tested and spread further through the system.

Another implication indicated by these findings is an outline of the conditions necessary for schools to maintain their position in a phase of stabilizing feedback. In this phase, the system has embraced adaptive innovations helpful to the system and is tweaking those innovations to better enhance system growth; it is not transformational change, but rather it is positive and negative feedback applied to the system to generate balance throughout the system. In the case of Fiorella, an innovation was the

commitment to service special needs students in the general education classroom through the hiring of paraprofessionals. This innovation became ingrained into the practices of the school, and as teachers and Katherine continued to make small changes to optimize the way the paraprofessionals supported students and the curriculum, emergent order was achieved. Now primed to respond to new sources of disequilibrium, Fiorella has structures, a school culture, and experience with adaptive change. It may be easier for the system to respond to new challenges, because, in the process of enacting these reforms, faculty revealed their competence, sincerity, and reliability, thereby enriching relational trust and allowing them to embrace these transformational changes.

Evidence of emergence at Fiorella was particularly informative as to the ways in which stabilizing feedback can be navigated in a school setting. As Katherine entered her third year as principal of Fiorella, she had to consider the sustainability of change, finding a balance between chaos and stagnation by identifying first order changes to support the ongoing success of her initiatives. "In so doing these role-based actions help institutionalize the change throughout the system... by slowly increasing the legitimacy of the new entity" (Lichtenstein & Plowman, 2009, p. 620). At the same time, Katherine had to address new sources of system disequilibrium through continuous emergence navigating a tenuous state of school change. Brown and Eisenhardt describe the specific balance Katherine had to maintain between order and disorder signaling that each phase of the emergence process requires attention to system elements that can support and sustain change efforts:

Rather than ever reaching a stable equilibrium, the most adaptive of these complex systems (e.g., intertidal zones) keep changing continuously by remaining at the

poetically termed "edge of chaos" that exists between order and disorder. By staying in this intermediate zone, these systems never quite settle into a stable equilibrium but never quite fall apart. Rather, these systems, which stay constantly poised between order and disorder, exhibit the most prolific, complex, and continuous change. (1997, p. 29)

Katherine's time at both SBS and SAS ended before any attempts at continuous emergence could be observed, but her time at Fiorella offers an opportunity to consider the longevity of system change. As seen in the case of Fiorella, to get to a state of continuous emergence requires a commitment of time, resources, relationship building, and willingness to change throughout many different areas of the system. If possible, progress should not be lost. To maintain this position, there need to be structures in place to respond to new sources of change through feedback loops and first order change (Plowman et al., 2007). These structures cannot rely on a principal or head of schools to maintain alone. They need to be significantly ingrained in the system to maintain stability during times of leadership transition. Additionally, a shared culture in which change is embraced and not feared is important. Elizabeth's experience at Fiorella demonstrates the ways in which individuals contribute to the emergence process within the larger system. Even small shifts in the system structures or devolving into a culture of apathy can easily send a system right back to a pattern of status quo in which the school fails to respond to new change and progress is stagnant. The phase of stabilizing feedback exemplifies the reason that Heifetz and Laurie (1997) described leadership as a "razor's edge" (p. 127). It is within the scope of the leader's responsibility to contribute to a system's balance between welcoming change and becoming overwhelmed by it. These case studies reveal the work that is required to build towards emergent order, and they also point to the undesirability of losing that ground.

The adaptive conditions Katherine promoted at each school contributed to their success navigating through cycles of emergence. At SBS, Katherine's inability in promoting a common school culture, coupled with a lack of trust, detracted from the school's ability to respond to disequilibrium in adaptive ways. A similar lack of trust at SAS led to staff resistance to her change efforts. Fiorella reflected the greatest success in terms of the emergence process across schools. A combination of enhanced connections, shared authority, common school culture, and trust contributed to the adoption of innovative practices and the spread of novel ideas. This research provides evidence of a single principal trying to accomplish similar objectives in three different school environments. The varying degrees of her success at implementing leadership for adaptive change strategies relate to the system's success at experiencing evidence of emergence. The theoretical implications of this empirical work are significant in that this analysis of Katherine's experiences can inform theories of adaptive leadership, as well as speak to the use of complexity theory in the fields of school leadership and educational change.

Informing Leadership Theory

One of the most important aspects of this study is its use of a theoretical framework designed to identify those features of a complex system that can contribute and respond to adaptive change. Informed by Kershner and McQuillan's (2016) understanding of leadership for adaptive change, this framework allowed for an analysis of the change process at each school. This theoretical approach allowed for consideration of the unpredictable, non-linear qualities of change in complex systems by focusing on a set of stable, interconnected dimensions of adaptive leadership found to promote cycles

of emergence (Kershner & Mcquillan, 2016). Earlier in this chapter, a cross-case analysis of the findings from each site revealed understandings of the ways in which adaptive leadership practices informed system transformation. In addition to these empirical findings, the use of this framework has yielded important theoretical implications. In the final section of this chapter I will outline the theoretical implications of this study, answering: How can this research inform theories of leadership?

Implications for Theories of Adaptive Leadership

This study revealed the variability of Katherine's leadership practice across three schools. In each context she applied different strategies in an attempt to distribute authority, foster a common school culture, and build trust among her staff. While it has been noted that Katherine had the greatest success fostering the conditions for emergence at Fiorella, her experiences at both SBS and SAS make visible the obstacles and missteps that can occur in the process of fostering adaptive leadership in schools. Without discounting the importance of learning from those leadership practices that help ready systems for unknown challenges, it is possible that theories of maladaptive leadership could be helpful in gleaning new insights in this field.

On an individual level, maladaptive behaviors are studied extensively in the field of psychology (Anestis et al., 2007; Caspi, 1993; Nowak et al., 2020) These behaviors inhibit a person's growth and can constrain their ability to respond in helpful ways to future challenges. While much can be learned about the nature of change at the individual level from studying these behaviors, the same may be true at the systems level. Within an organization, maladaptive leadership practices encompass those practices that impede the growth of an organization, and when faced with new challenges, practices

that lead the system to respond in unhelpful ways. Katherine's engagement in maladaptive approaches to leadership at each school reveals insights into the nature of theories of adaptive leadership and signals the potential importance for the development of theories of maladaptive leadership.

At SBS, Katherine's most poignant example of maladaptive leadership was her attempt to remove chocolate milk from the lunch menu. Katherine admittedly did not anticipate the extent of the reaction from her school community and did not seek out insight from others that may have helped contribute their knowledge to the decision-making process. This points to the significance of considering the nature of nonlinear change. One way to understand this development is that Katherine did not fully appreciate the nature of the system she was working within. Thus, when she sought to introduce change, the school community responded in ways that surprised her because she did not have a full understanding of the system and the significance played by chocolate milk within that system. This resistance suggests a sense of limited trust for Katherine's leadership at SBS, further impacted by her insistence that her decision stand.

Maladaptive leadership emerged at Fiorella through Katherine's approach with room parents. In an effort to improve parent contributions to time and money at fundraisers, Katherine changed the ways in which parents could count their required volunteer hours. They could no longer count hours helping in their own child's classroom as volunteer hours. Again, Katherine issued a decision without full knowledge of the interconnectedness of relationships within the system. Parents from her advisory board supported the change, but the majority of parents objected and Katherine had to reverse her decision. This example speaks to the unpredictability of

change in complex systems and the need to understand the nature of challenges as requiring technical or adaptive solutions. Seemingly logical fixes to perceived problems do not always work to meet everyone's needs, thus surprises may emerge.

Misidentification of the nature of a challenge may result in maladaptive leadership decisions.

Informed by her experiences at SBS and Fiorella, Katherine was knowledgeable of the circumstances in which maladaptive leadership may arise. She spoke directly of her intentions to get to know the structures and people of SAS before seeking to promote significant change. However, through failures of the merger and decisions made at a higher level, Katherine's role and the scope of her authority were unclear to the staff at SAS causing ongoing uncertainty and mistrust. Certain aspects of her time at SAS that might be labeled as maladaptive are not in fact a product of her own leadership decisionmaking. Rather they are representative of nonlinear outcomes of technical and adaptive change in a complex system. For example, Katherine's absence from the school building, a point of frustration and mistrust among her staff, can be explained by the Head of Schools requiring her to attend frequent administrative meetings at CHS. Similarly, Katherine was blamed by the SAS staff for the Higher Learning Fund incident, but that criticism was misdirected. Though perhaps hesitant to undermine other school leaders, Katherine had a responsibility to her staff to help communicate the structural organization of the schools to the best of her ability, particularly in the absence of such an explanation from the Head of Schools. The example of Katherine's experience with the merger at SAS points to the impact other system elements may have on instances of maladaptive leadership.

Underlying each example of maladaptive leadership above is a lack of a degree of trust in Katherine. Resistance to her attempts to shift elements of school structure or culture emerged from a sense of mistrust in her competence, sincerity, or reliability (Bryk & Schneider, 2004). For instance, a lack of a sense for Katherine's sincerity inhibited staff support for her efforts to promote instructional improvement at SBS. At SAS, Katherine was considered unreliable, and the lack of trust constrained her work to develop a shared school culture. Trust, therefore, emerges as an area of central importance for theories of adaptive leadership, currently underrepresented in the literature (Heifetz et al., 2009). The nature of complex systems requires a consideration of the various factors and unpredictable outcomes that may emerge through the change process. Examples from all three schools reinforce the insights that can be gleaned from exploring maladaptive leadership alongside adaptive practices.

Implications for the use of Complexity Thinking to Study School Improvement

Although it is hard to explain "where things start," the initial conditions of these case studies provide a foundational sense of Katherine's experiences. For example, her graduate work and experiences at SBS did not predict the emergent changes at Fiorella but did shape Katherine's own thinking regarding teacher leadership and school vision (Mason, 2008). Initial conditions are significant, because they can influence path dependency and shape a system in important ways. Path dependency refers to the idea that "irreversible processes lead to different results under the same regulations, regardless of starting from similar initial conditions" (Fidan & Balcı, 2017, p. 12). Significantly different initial conditions cause results from the change process to be even more pronounced. This was most evident at SAS, where the merger restricted Katherine's

authority relative to the Head of Schools and contributed to the sense of mistrust in Katherine's leadership. This contrasts with the initial conditions Katherine experienced at Fiorella, where she experienced a general enthusiasm for her hiring and a school culture interested in academic improvement. Though taken in totality, initial conditions cannot predict the future of a system, for individuals within that system, initial conditions can indicate system potential (Mason, 2008). Complexity thinking can illuminate the emergence process, but it cannot predict future outcomes from initial conditions (Goldstein et al., 2011; Mason, 2008). It is within the scope of the leader's ability to attempt to shape those conditions that may contribute to the potential for emergent order and system transformation, though the initial conditions may restrict what is possible.

A consistent initial condition experienced at all three sites was the introduction of a new principal, Katherine. Her hiring also served as a source of disequilibrium disrupting the status quo. The schools' varying responses to Katherine's leadership encourage consideration of the importance of changes in leadership, particularly with regards to the emergence process. It is possible that changes in school leadership can stifle the emergence process, in part because it takes time to generate relational trust. Complexity thinking provides a lens for understanding the conditions that shape a system's readiness for change, many of which can be fostered through complexity-informed leadership practices (Goldstein et al., 2011). For example, at all three schools it took Katherine at least until her second year to generate structural supports to more effectively share decision-making authority with her staff. Similarly, it took multiple years at Fiorella and SAS for her themes to be adopted into classroom curricula. Trust is significant to a leader's ability to shift those structural and cultural supports needed to

support new innovations. Once implemented, innovation requires ongoing technical adjustments, in the form of stabilizing feedback, to maintain efficiency and operational effectiveness (Lichtenstein & Plowman, 2009). It can be difficult to maintain innovations as leaders shift, because new disequilibrium can trigger a new cycle of emergence. if there is theoretical potential to do so, this should be studied and exploited. Further research may be able to unpack the specific ways in which innovation can be maintained through periods of new leadership. I began to do this by re-interviewing a sample of Fiorella teachers one year after Katherine left and found limited evidence of sustained innovations. While paraprofessionals still worked with Fiorella students, the strategic planning committees and themes were no longer in existence. Two of the teachers I interviewed remarked that the new principal did not share Katherine's interest in innovative practices. Exploring systems in which leadership transitions do not result in interruptions to the emergence process would be a significant contribution to our understanding of change.

Theoretical Significance of the Role of Trust in Complex Systems

Many of the findings from these case studies were informed by the presence or lack of trust among system actors. As the cross-case analysis revealed, varying degrees of trust in each school influenced Katherine's ability to successfully enact leadership for adaptive change and thus impacted conditions that could shape the emergence process. Trust emerges when people have opportunities to do things of significance collaboratively, giving them opportunities to reveal their competence, sincerity, and reliability (Bryk & Schneider, 2004). In turn, this leads to the development of relational trust and related risk-taking. The significance of trust should not be overlooked; rather,

where possible, the interactions among systems elements within a school need to be enriched in whatever ways seem possible. In Fiorella, where there was evidence of trust between Katherine and the staff, Katherine had improved support to enact change in the form of teachers adopting the themes she promoted and embracing teacher leadership opportunities. This contrasted with SBS and SAS where there was little trust and Katherine could not rely on staff to support initiatives, such as the irregular implementation of new writing program strategies at SBS or teacher resistance to the merger at SAS.

The size of each school played a role in Katherine's ability to foster trust with her staff. In the smallest system, Fiorella, Katherine had opportunities to meet with each staff member individually during the summer she was hired. This marked the first of many opportunities Katherine had to foster trust. Throughout her tenure at Fiorella, Katherine continued to meet with teachers before and after school at their preference. These conversations often included talk of their personal lives and it was common for Katherine to meet staff members' families. At SBS and SAS, the systems were larger, making it harder for Katherine to meet people individually. Compounding this problem, the merger at SAS meant Katherine had even more people to meet and fewer opportunities to connect. It appeared easier for Katherine to foster trust in the smaller school setting (Fiorella) where one-on-one relationship building was her primary strategy. The role of trust in the change process was significant in each case study and revealed itself to be of theoretical significance for our understanding of complex change in schools. In the absence of trust between the leader and staff, there are barriers to enacting leadership for adaptive change. Identifying ways in which trust can be fostered

while accounting for the initial conditions of a system can be informative to understanding the process of complex change.

Future Research

This research provided empirical evidence for the ways in which leadership for adaptive change manifested and the extent to which it contributed to the emergence process at three different school sites. Following the same principal across the schools helped to provide a narrative thread to the research and consider the contextual limitations to her change efforts. The iterations of change processes both within and between schools points to what can be revealed when change can be studied over longer periods of time (Fullan, 2011). This research was able to report on changes that unfolded over multiple years at each site and then considered iterations of similar change efforts in new contexts. Future research of complex change may need to consider the significance of the role of time in these cases. At Fiorella, it was two years before any evidence of amplifying actions emerged and examples of stabilizing feedback were not evident until year four. The first two years were significant because it was during that time Katherine began to promote the conditions that created future opportunities for complex change, but system transformation and the technical supports to grow those changes system-wide did not occur until later in Katherine's tenure at Fiorella. In order to study leadership for adaptive change and the emergence process in schools, researchers should consider allowing for significant time to explore the ways that process can unfold.

This research specifically followed one leader as she moved between schools. A limitation of this approach was not being able to examine how different initiatives fared once the principal left. Exploring the extent of the sustainability of change by examining

schools after a principal leaves would be an important next step in this research area (Hargreaves & Goodson, 2006) I returned to both SBS and Fiorella in the years after Katherine left with the intention of considering this line of inquiry. My impressions from these visits and interviews endorses the need for research in this area. Several of the key features of change noted at each school were no longer present after Katherine left. For example, the strategic planning committees and themes no longer existed at Fiorella. Building on empirical understandings of the role of the leader in the emergence process in schools can inform our understandings of sustainability of change (Lichtenstein & Plowman, 2009). Studying the emergence process through the lens of leadership for adaptive change revealed important insights about schools as complex systems. Future empirical research in this area will contribute further to our understandings of educational change and leadership.

Conclusion

Evidence from this study indicates that in schools where adaptive leadership practices are successfully implemented, there may be greater progress towards emergent order. Leaders readying a system for adaptive change are implementing the system supports needed to react not only to the immediate needs of the system, but also future, unknown challenges. Principals need to develop an awareness of how they can impact the change process and be empowered and supported to do so. They are positioned to contribute to "creating the conditions that will create the conditions" to promote adaptive change (McQuillan, 2020, p. 97). A combination of support from principal preparation programs and key stakeholders throughout the education system can positively influence a principal's ability to foster adaptive change.

Educational leadership and principal preparation programs provide current and aspiring principals with the knowledge and skills needed to lead schools in various states of instructional readiness. As in the case of the LLA, these programs often encourage future leaders to approach their work with an emphasis on instructional improvement. Leadership for adaptive change provides a framework of those focal points for attention leaders can attend to better enable systems change. Specifically, this research has shown the change that can ensue when a leader commits to focusing on structural and cultural mechanisms as a means to leverage key priorities. Adaptive leadership elements that need attention include identifying effective ways to share power and distribute authority and developing a common shared vision to maintain system fidelity to subsequent change. This all needs to be done with an emphasis on trust building and a sense for where the school has been and the existing structures and practices in place. Principals need to be mindful of not intending to wipe out the good things that already exist in their new schools, signaling the importance that leaders gain a sense for the role of time in the change process while building understandings of the key elements of leadership for adaptive change. Within the three case studies explored in this research, time was a key factor in Katherine's ability to promote change, particularly as it related to gaining a sense for the initial conditions at the schools and engaging in trust building among the community.

Investing in principals' understanding of leadership for adaptive change can help those individuals develop capacity to more successfully navigate the change process.

The literature indicates that principal transitions are not infrequent (Snodgrass Rangel, 2018) and therefore identifying factors that may allow for continuity and growth in a

school despite changes in principals may be helpful. Examples of these factors may include various stakeholders at different levels of the system. At the district or parish level, stakeholders such as central office personnel or parish leadership could provide consistency in accountability policies, expectations for instruction, or initiative priorities. Interruptions in change would be limited during transitions between principals.

Established structures for distributed leadership within a school, in the form of instructional leadership teams or advisory boards could provide a degree of stability within the school during changes in leadership. Beyond the school or district, maintenance of networks with outside groups such as professional development organizations, parent groups, or local universities might be relied upon as new principals become acclimated to the school community. These serve as just a few examples of how principals can be supported in their own efforts to impact the system by factors that can maintain consistency during times of turbulence.

As principals begin to promote change at their school, they need to be cautious of taking solo ownership over too many things and rely instead on other stakeholders. If the principal has responsibility for something alone, it is less likely to last past their tenure. Fostering partnerships with teachers and other stakeholders is significant to this process as educational leadership focused on instructional improvement cannot be achieved alone. Enabling teachers to assist in enacting change is key to distributed leadership, shared culture, and trust building in schools as part of the leadership for adaptive change framework. Teacher agency supports the change process, particularly in the current reality of frequent leadership transitions in schools. Ripening the system to ready for adaptive change will provide the incoming leader with improved initial conditions to

avoid prolonged entrenchment in the status quo. Complex adaptive systems should not have to rely on a single leader for system progress; however, it is often up to a leader to identify those with whom power can be shared. Promoting teacher agency secures a degree of enhanced connections to promote and spread new ideas. Drawing from the findings in this study, teachers represent one key group of individuals with whom power can be shared. Katherine evolved her network at Fiorella, the school that experienced the greatest degree of change, to include parents and outside partners as well. The significance being that the process of change in schools can be enhanced when the leader works to foster trusting relationships with others that share a common educational vision. When asked what one piece of advice she would give an aspiring principal Katherine responded:

From my perspective, it's so important to stay connected to God and your faith.

To come back to those beliefs when things are tough and to take care of yourself.

Surround yourself with people who are gonna help you to be your best because it's not an easy job.

In this final quote, Katherine captures all of the interrelated factors inherent in adaptive leadership. If a principal is able to ground their work in a clear vision, guided by complementary values, and foster a supportive team to help enact that vision, they can more successfully promote growth in a complex system. The challenges of the principalship are varied and profound. Katherine's assessment that the job of a principal is "not easy" is reflected in the literature citing the many factors contributing to turnover in educational leadership (Beteille et al., 2012; Branch et al., 2009; Snodgrass Rangel, 2018). In order to assist aspiring principals in navigating the challenges of the job,

educational leadership programs can look to understandings from theories of adaptive leadership and complexity thinking. Additionally, a macro level view of these challenges points to the importance of infusing the system with supports to sustain growth during times of leadership turnover. These supports may exist at the school, district, or even state levels. During times of principal transition, those supports (in the form of teacher leadership teams, cohesive vision building, or succession planning, to name a few) could help a system maintain a degree of emergent order and avoid retreating to the status quo better positioning schools to engage in future iterations of the change process.

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Appendices

Appendix A: Teacher/Parent Interview Protocol

Background

- Tell me a little about your position here and how long you have been working at the school.
- How would you describe your school to someone who has never visited?

Probe: What kind of a school is it?

Probe: What are the school's main priorities?

School Change

• Since Katherine arrived, have there been changes at the school?

Probe: Has she brought new ideas or new practices to your school?

Probe: If so, how would you describe them?

Probe: Which of the changes seem most prominent to you?

• Has Katherine's leadership impacted faculty?

Probe: Have there been changes in faculty responsibility and delegation (e.g. ILT)?

• Do you think that the faculty at large has bought in to the changes taking place, and the ideas presented by Katherine?

Probe: If so, why? If not, why not?

- What impact have any changes had on you?
- Is there support given to teachers who take on additional responsibilities?
- Have you felt supported by Katherine?

Probe: Have you grown as a teacher?

Probe: Are you learning as part of your professional responsibilities at the school?

School Culture

• What values does your school promote?

Probe: Are they new?

Probe: How are values promoted?

Probe: If new, what have been the effects of the introduction of new values?

 How would an outsider visiting your school know what your key values are that drive the work of the teachers and administrators?

Parental Involvement

• How involved are parents in the running of your school?

 Have there been changes in parental relationships and policies since Katherine's arrival?

• Do you sense that parents support Katherine's leadership direction?

Student Involvement

• Are students active participants in your school community?

• Probe: If so, what form does this take?

Leadership

• How would you describe your principal's leadership style?

Probe: Is it inclusive?

Probe: Can you give an example to explain how?

• Is she supportive of teachers?

Probe: If so, what form does this take?

• Does she push faculty in thinking about the work they do?

Probe: How?

- Does she model your key values/common school culture?
- Can you give me 3 words to describe your principal as a leader?

Probe: Explain the relevance of each?

• Can you describe an instance when your principal's leadership style was especially prominent, a time when her actions truly embodied what you think she is all about in terms of leadership?

Conclusion

• Any final thoughts about your principal's leadership or life at the school that you would like to share?

Appendix B: Initial Principal Interview Protocol

Background

• How would you describe your school to someone who has never visited?

Probe: What kind of a school is it?

Probe: What are the school's main priorities?

School Change

• Since you arrived, have there been changes at the school?

Probe: Have you brought new ideas or new practices to your school?

Probe: If so, how would you describe them?

Probe: Which of the changes seem most prominent to you?

• What have been the impacts on the faculty?

Probe: Have there been changes in faculty responsibility and delegation (e.g.

ILT)?

• Do you think that the faculty at large has bought into the changes taking place,

and the ideas presented?

Probe: If so, why? If not, why not?

• What impact have any changes had on you?

• Is there support given to teachers who take on additional responsibilities?

School Culture

• What values does your school promote?

Probe: Are they new?

Probe: How are values promoted?

Probe: If new, what have been the effects of the introduction of new values?

 How would an outsider visiting your school know what your key values are that drive the work of the teachers and administrators?

Parental Involvement

- How involved are parents in the running of your school?
- Have there been changes in parental relationships and policies since your arrival?
- Do you sense that parents support your leadership direction?

Student Involvement

- Are students active participants in your school community?
- Probe: If so, what form does this take?

Leadership

• How would you describe your leadership style?

Probe: Can you give an example to explain how?

Conclusion

• Any final thoughts about life at the school that you would like to share?

Appendix C: Principal Interview Protocol, Follow Up February 10, 2016

School Culture

• What theme was chosen for this school year?

Probe: Who chose the theme?

Probe: What was the decision process like?

• How are teachers enacting the theme in their classrooms?

Probe: How are students engaging with the theme?

Probe: Have there been any outcomes?

Staff Growth

• What growth have you noticed among the staff over this past school year?

• Have there been any staff changes?

Probe: Why or why not?

• Specific staff updates

• Among the members of the staff, who do you count on to get important work done? Probe: Why?

Teacher Leadership

• Last year you were in the process of possibly creating committees among the teachers, what happened to the committees?

Probe: If they do exist- what have been the benefits?

Probe: How does communication occur?

• Did you institute an instructional leadership team?

Probe: What does it look like?

Probe: How do you share power in the school?

• Why was an instructional leadership team established at Fiorella but not SBS?

School Updates

• Are there any other new or expanding pressures on the school?

Probe: What is the current state of enrollment?

Probe: The population of special needs students was growing last year, how is it going this year?

• Have there been any surprises at the school this year?

Probe: Teacher performance?

Probe: Parent involvement?

Probe: Your leadership impact?

Outside Partnerships

• Who is part of your support system?

Probe: Who do you turn to for advice regarding the issues of educational

leadership?

Probe: Are you connected to a network of principals?