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Capacities facilitating school change involving project-based learning at the middle school level

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CAPACITIES FACILITATING SCHOOL CHANGE

INVOLVING PROJECT-BASED LEARNING

AT THE MIDDLE SCHOOL LEVEL

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Doctor of Philosophy

_____

by

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ABSTRACT

With schools continuing to fall short of No Child Left Behind standards and with future

challenges just around the corner, educators must identify and make positive changes in schools.

Researchers must work to recognize and exhibit how student achievement is fostered and inform

educators of options on how to move in a positive direction according to research. The purpose

of this qualitative, multiple-site case study was to examine what capacity-building factors were

in middle schools identified as successfully implementing project-based learning. This study

focused on the capacities that are consistently implemented leading to successful school change

with the Schools to Watch®. The Schools to Watch® sample of three schools was purposefully

selected with respect to this designation itself, as membership in that group served as a quality-

assurance mechanism that participating schools strove to be high-performing, challenging to all

students, infused with rigorous curriculum, imbued with rich instruction, and staffed with

teachers who were trained at the highest levels with outstanding supports. These schools had

completed rigorous training and development to achieve the status of being a School to Watch®

member for the 2012-2013 school year. The sample schools had all addressed the issues of

change as they implemented project-based learning during the past few years, since this is a

focus of the Schools to Watch® program. The enrollments of these schools ranged from 255 to

915 and included Grades 5 through 8. This study focused on the capacity-building initiatives that

occur within the building as a component when implementing school change. In doing so, it

strived to answer the question, "What components of capacity building are essential when implementing selected school change?" Sub-questions included the following:

1. What capacities are needed to implement project-based learning at the middle school level?

2. What leadership characteristics are valuable to building capacities in implementing project-based learning at the middle school level?

3. What are the keys to sustaining successful change after implementation of project-based learning at the middle school level?

This study focused on the use of interviews, observations, and document analysis to examine school capacity at the middle school level. This process created consistent results that indicated that these schools consistently focused on the personal sphere through a "we-centeredness," through an interpersonal sphere with respect to coaching, and through the organizational sphere with respect to data, which worked together in the context of high-level school functioning. In the three conclusions, the focus was on creating better relationships that could enhance and expand upon a we-centered approach, using talent scouting and teambuilding to further the notion of leader-as-coach in school operation, and reconceptualizing the structures and operations of schools to maximize the opportunity to use data to increase the professional capacities within a school.

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INTRODUCTION

Study Rationale and Foundation

America's educational system has witnessed wave after wave of change focusing on

school improvement with minute, positive results since the 1960s (Redding, 2006). These waves

were revisited because evidence was mounting that America's schools were failing to educate

our citizens at the rate necessary to be global competitors (Redding, 2006). This thought

propelled the United States to evaluate the progress of American schools and eventually

prompted the publication of A Nation at Risk by the National Commission on Excellence in

Education (1983). A Nation at Risk indicated that improvement needed to occur and evidenced

the factors that contributed to challenges within education (Redding, 2006). Edmonds (1979)

concluded, in conjunction with A Nation at Risk, that children's learning could be directly

related to schools' operational capacities.

Sweeping changes in education began in the 1950s when the United States embarked on

the progressive period (Fullan, 2001). This progressive period featured the launching of a large-

scale national curriculum forum that focused on spreading innovation throughout the country.

By the 1970s researchers, such as Fullan and Pomfret (1977) and Sarason (1971), indicated that a

failure of reform was evident (Fullan, 2001). In the 1980s, school systems moved toward

school-based management that allowed schools more autonomy to make decisions (Wagner,

1994). According to Wagner (1994), school test scores had either remained the same or in some cases even declined. That led to further approaches that emerged like the business-driven approach that was launched during the late 1990s (Wagner, 1994). According to Hatch (2000), the United States began to struggle with innovation overload. This occurs when schools and/or school districts try to implement an excessive amount of changes too fast (Hatch, 2000).

Since the 1950s, multiple large-scale educational innovations had come and gone. Most exhibited minimal gains and large expenses (Redding, 2006). More recently, on January 8, 2002, the reauthorization of the Elementary and Secondary Education Act, entitled No Child Left Behind, was signed into law by Congress (No Child Left Behind, 2002). This act encouraged schools to focus on increased accountability of teachers and school personnel with the goal of raising the level of academic performance of all students. The accountability required by the Act ushered in another surge of changes over the past decade. The act mandated that schools have highly qualified teachers and encouraged states to increase alternative certificate programs (Darling-Hammond, 2010). These changes caused schools and school corporations to implement new programs and innovations to attempt to reach the accountability measures needed for the act (Darling-Hammond, 2010).

The notion of school improvement has been around for decades and will continue. As educators react to the current climate of change, they must evolve and focus on the direction that is needed to continuously exhibit student achievement but be cautious of the factors that can cause potential problems. Researchers have indicated that multiple factors, such as schools' using well-conceived school visions, stakeholders' full involvement, and clarity of the vision and task at hand, were not present, and those factors caused school improvement to not be successful (Schwahn & Spady, 1998). Fullan (1997a) concluded that change would not occur if a growing

sense of alienation among teachers, teacher burnout, and the unconnected and fragmented change initiatives existed. Hargreaves (1997) believed that change faltered because of a lack of resources, commitment, and the concept that the change is too broad. Levin (2010) mentioned that when schools strive toward improvement, they commonly remain in the maintenance area and fail to focus on real improvement. Berman and McLaughlin (1978) indicated that change falters because of school organizational climate and leadership.

One of the common factors mentioned to increase school improvement is the building of school capacities. Capacity building within schools directly affects the instructional quality and professional development that occurs within a school (Newmann, King, & Youngs, 2000). Fullan (2007) indicated that if an entire staff worked collectively to increase student achievement, then these capacities must be emphasized. King and Newman (2001) concluded further after nationwide research that schools should focus on four dimensions for improvement. These dimensions are teacher knowledge, professional learning, program coherence, and technical resources to build school capacity for enduring change. King and Newman indicated that these factors were vital for successful schools.

In other research, Mitchell and Sackney (2001) developed the spheres of capacity that must be established if a school hopes to continue sustained improvement. These capacities, the personal sphere, the interpersonal sphere, and the organizational sphere, helped develop guidelines for one of the first capacity-building practices within a school of its time. These guidelines set boundaries and expectations for school leaders as they work to improve the capacities within the school. Fullan (2005) indicated that school capacity is a public service with a moral purpose. This moral purpose focuses on the belief that all people should strive to make the world a better place. Hargreaves and Fink (2006) cited new educational developments as

they indicated that education was inseparable from global trends toward positive lifestyle and continued conservation. They pointed to the fact that educators must strive to evolve education until it perfectly suits the population and moves students toward a positive future.

With the development of NCLB and the continued research that is consistently changing, it is easy to understand why schools have a difficult time with change. As Burke (1995) and Senge (1990) have indicated, new knowledge is a constant. Although new knowledge is a constant, educators must strive to have the capabilities to build upon the growth and vision that is needed to move forward. This could only be accomplished by establishing consistent development of capacities over time. These capacities would allow schools to keep pace with the everchanging world and would give them the needed structure to be successful in the future.

Establishing consistent capacity building is a very difficult task. In order for schools to establish proper capacities, multiple factors must come together. Crowther (2011) indicated that the establishment of a direct relationship between leadership and capacities is a distributed quality for successful school improvement. Another issue that was monitored was the reassurance of clarity for all parties. Everyone involved must have a common and clear understanding of the vision and goals that one is working to achieve. Crowther also mentioned that teachers must be up to date on all policies and procedures that are available as educational procedures continue to evolve.

With the current flux in education, it is imperative that schools make positive changes to move forward. No longer can school leaders change just to change. With new accountability measures frequently being ushered in, educators must be prepared for the tasks that they will face in the future. Educators must strive to build capacities that strengthen education from within and

break down existing barriers, thus establishing capacities for change that will have a lasting effect for positive change (Fullan, 1997a).

Statement of the Problem

Educational leaders are currently in the midst of a standards movement that is overwhelming. Leaders are focused on raising the rigor for all students, raising student test scores, meeting global expectations, and most urgently, raising curriculum demands to meet the new demands on curriculum changes that are quickly approaching. With accountability measures on the rise, school leaders are stepping on fresh ground with new innovations and school improvement plans with the hopes of increasing instructional quality and continuing to push student achievement even higher. With all of these areas being addressed, it is imperative that schools focus on raising the capacity level or implementing capacities of all stakeholders if they expect to experience sustained and meaningful growth. Capacity building that occurs inside a school, as defined by Lambert (1998) is "building the usefulness of an infrastructure that is aligned with the work of the school" (p. 11). Fullan (2007) described capacity building that occurs with school personnel as "the policy, strategy, or action taken that increases the collective efficacy of a group to improve student learning through new knowledge, enhanced resources, and greater motivation on the part of people working individually and together" (p. 58).

When Senge (1990) first introduced capacity building into the concepts of a knowledge society and organizational development, he indicated that these two concepts are integral for sustained success (Crowther, 2011). Senge united these two subjects to form a Utopian flavor. His thought was that these two systems would create a competitive advantage and allow for the nurturing of new ideas because of the desires that people genuinely chase (Argyris, 1999). Senge mentioned that new knowledge would always be forthcoming, and organizations must

have capacities in place to be able to deal with these new 21st century ideas. Fullan (2007) also indicated that capacities need to be in place to allow increased instructional quality and a narrowing of the achievement gap between groups.

Multiple researchers indicated that school capacities affect the quality of instruction and achievement of students (Crowther, 2011; Fullan, 2001; Stoll, 2009). Crowther (2011) indicated that capacity building within the building needed attention in multiple areas. He pointed out that leadership and management are areas in which researchers have little understanding. Crowther also mentioned that researchers have even less understanding about sustaining success. Fullan (2001) suggested that immense professional effort is expended on improvement, but efforts often neglect the abilities to incorporate capacity building strategies and are often wasted. As Stoll (2009) stated,

> We learned ten years ago that multiple parts of the school as an organization have to be developed if capacity is to be built, but only now are we beginning to understand capacity as a holistic and generic process of continuous improvement. (p. 116)

With change a constant in education, it is imperative that school leaders focus on building capacities that will allow them to move forward. These capacities are pertinent in establishing sustained student achievement over the coming years. This research was focused on understanding those capacities that lead to increased student achievement while implementing project-based learning at the middle school level to insure future success.

Purpose of the Study

The purpose of this qualitative, multiple-site, case study was to examine what capacity building factors were in middle schools identified as successfully implementing project-based learning. With schools continuing to fall short of NCLB standards and with other movements

just around the corner, educators must identify and make positive changes in schools. Researchers must work to recognize and exhibit how student achievement is fostered and inform educators of options on how to move in a positive direction. Darling-Hammond (2010) emphasized how educational changes must be student focused in a manner that strives to develop the potential and personalities of all students. She indicated that the job market for students has drastically changed and will continue to be in flux with the addition of global markets. With the proper capacities in place, schools will be able to prepare students for these demands.

DuFour and Marzano (2011) indicated that after studying thousands of cases, they have yet to encounter a single extraordinary act of student achievement that did not involve a multitude of people. Researchers have consistently explained that no one person has the knowledge and skills to meet the needs of every student with whom he or she comes in contact. This example exemplifies the need for leaders to instill school capacities for the sake of improvement over time.

This study identified schools that had recently implemented project-based learning into the curriculum and what, if any, school capacities were established to assist in this school change. Lambert (2003) concluded that effective leaders learn together toward a common goal so they can work on particular task. She indicated if school leadership is building capacities with teachers and other school leaders, this typically lends itself to high leadership capacities that can create increased student achievement. This phenomenon is imperative for sustained improvement. The qualitative study focused on the capacities that are consistently implemented that lead to successful school change.

Research Questions

This study focused on the capacity-building initiatives that occur within the building as a component when implementing school change. In doing so, it strived to answer the question, "What components of capacity building are essential when implementing selected school change?" Sub-questions included the following:

1. What capacities are needed to implement project-based learning at the middle school level?

2. What leadership characteristics are valuable to building capacities in implementing project-based learning at the middle school level?

3. What are the keys to sustaining successful change after implementation of project-based learning at the middle school level?

Definition of Terms

The following terms have been defined for clarification and for the purpose of increased understanding of this study:

Capacity building is the strategy or action taken that increases the collective efficacy of a group to improve student learning through new knowledge, enhanced resources, and greater motivation on the part of people working individually and together (Fullan, 2007).

Complexity theory focuses managerial thinking on the interrelationships among different parts of an organization and on the trade-off of less control for greater adaptation (Fullan, 1999).

Culture comprises artifacts (visible organizational structures and processes), espoused values (strategies, goals, philosophies) and basic underlying assumptions (unconscious, taken-for-granted beliefs, perceptions, thoughts and feelings) of the school (Schein, 1992).

Efficacy is the individuals' convictions about their capabilities to execute a specific task

successfully (Argyris, 2010).

Instructional coaching is selecting the appropriate approaches to teaching for the different kinds of learning that students should experience and possibly model those practices in the classroom, observe teachers in the classroom, engage in support and dialogue to encourage improvement of instructional practices (Knight, 2007).

Instructional learning-centered approach is an instructional process that leads to content relating to individual student needs that promotes specific student abilities and encourages students to be more active in participation (Savery, 2006).

Leadership is the interaction between two or more people that involves structuring or restructuring the perceptions and expectations of a group to accomplish a desired goal (Bass, 1990).

Leadership capacity matrix describes the flow of information, roles of formal leaders, and defines the roles of participants and the relationships between stakeholders, norms, innovations, and student learning (Lambert, 1998).

Learning is the development of insights and structural actions that result in the creation or change in knowledge (Fiol & Lyles, 1985).

Modeling is an instructional strategy in which the teacher or leader demonstrates a new concept or approach to learning and students learn by observing (Baldwin, Keating & Bachman, 2006).

Perceptual learning system is a system that continues to grow and leads to constant improvement (Schein, 1992).

Professional learning communities are a culture of sharing knowledge for the commitment and purpose of raising the level of student achievement within the organization

(DuFour, 2004).

Project-based learning is an instructional learning-centered approach that empowers learners to conduct research, integrates theory and practice, and applies knowledge and skills to develop a viable solution to a defined problem through authentic 21st century skills preparing them for the global market (Savery, 2006).

School capacity building is a policy or strategy that is conducted by a group to improve student achievement with the use of new knowledge, additional resources, and great motivation by people either working independently or as a large group (Fullan, 2007).

School leadership should be a broad concept that is separate from a single individual or small group that is embedded in the overall school culture to reach true improvement (Bass, 1990).

Self-efficacy is the level of confidence individuals have in their ability to execute courses of action or attain specific performance outcomes or gain positive outcomes (Bandura, 1997).

Systematic change is defined as modifications that amount to a cultural shift in institutionalized values (Adelman & Taylor, 2007).

Summary

Chapter 1 firmly establishes the need for effective capacities that multiple researchers have suggested would establish a strong infrastructure that lead to a school moving toward strong student achievement. Chapter 2 discusses the importance and historical reference point for capacity building that occurs within the buildings. Continued detail from multiple researchers chronicles the reasons and benefits for effective school capacity building. Details from Lambert (1998) and Fullan (2007) indicate the multiple levels of complexity and details of capacity

building. Researchers delve into the necessities that must be present to build effective school capacities.

Chapter 3 explains how this qualitative, multiple site, case study discovered what components of capacity building were presented after implementing PBL in a middle school. This chapter explains the research methodology and pieced together the individual layers that allowed the research to materialize. Chapter 4 presents three main themes after review of the transcribed interviews, observations, and data analysis with the three members of the Schools to Watch Program®. These three themes focus on a we centeredness that imbued the professional responsibilities of leadership, coaching traits that are widely discovered within leadership, and data that presented itself as a key conversation component that led to change within these buildings. Chapter 5 focuses on the development of conclusions, implications, recommendations, and further questions regarding the study.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The state of knowledge has been a very important component throughout the history of

education. Any time new knowledge is discovered, the effect could cause change to follow.

Burke (1995) indicated that change is now the only constant. Burke pointed out that people

assume recent information is the most logical and correct knowledge that has ever existed. This

will be the thought of the masses until the unthinkable occurs: new knowledge is discovered.

Think of how the world changed when Galileo used a telescope to discover that the sun was the

center of the universe or the changes that occurred when Pasteur discovered germs and doctors

no longer believed that an invisible miasma caused disease (Burke, 1995). The world has

evolved and changed due to new knowledge and data that has been discovered throughout

history. Senge (1990) indicated that when a school creates new knowledge and sets a course of

building and refinement of that knowledge, then the school's capacity is greatly enhanced and

the likelihood of sustainability is increased.

In the 1970s, the graduation rate in American schools was considerably lower than it is at

present time, and the country was not considered to be in crisis. The crisis arose from the nature

of different skills that are needed to perform in today's global community (Wagner et al., 2006).

Although the educational system has not changed drastically in the past decades, the world

around our country has. Research indicated that in "comparisons among Organization for

Economic Cooperation and Development (OECD) member countries, 15-year-olds in the United

States markedly lag in mathematics, trailing their counterparts in 30 other countries, including

China, France, and Estonia" (OECD, 2006, p. 6). Darling-Hammond (2010) indicated that

Finland dismantled their rigid tracking system that they were using and focused on problem

solving, creativity, independent learning, and student reflection. This has allowed Finland to

propel to the top of the international rankings for achievement. Snyder, Acker-Hocevar, and

Snyder (2008) stated, "Our moral obligation as an educator is to prepare competent global

citizens who care about human community and its sustainability and who find an important role

for making a contribution to the world" (p. 5). Making this transition at the most basic level

requires the shedding of bureaucratic thinking to revise rules and regulations that will allow such

entrepreneurial mindset with systematic thinking and continued change (Snyder et al., 2008).

Collins (2001) also indicated this when he pointed out that leaders should avoid bureaucracy and

hierarchy and instead work on creating a culture of discipline. With these global reasons for

reform, it is clear that our schools "need to teach learning processes that better fit the way the

world is evolving" (Rohlen, 1999, p. 251). For this reason the intensity of large-scale changes in

education is occurring at a very high level. With the introduction of new large-scale change

come the obstacles that change presents to the system. This review focuses on the capacities

needed at the middle school level to implement effective change that prepares students for the

globalization that is occurring.

Historical Components of Capacity Building

With other countries moving forward in education recently, it is important to understand

the historical components that have allowed the United States to get into the situation in which it

currently resides. This historical research focused on school capacity building and how it affects

the quality of education. Capacity building that occurs within the building with all personnel is an essential strategy that is used during implementing reform and change initiatives. King and Newmann (2001) conducted nationwide research to discover how school capacity affected the quality of students' education. They indicated that a teacher's knowledge skills, dispositions, professional learning, program coherence, and technical resources were needed capacities to improve the quality of education for students.

Mitchell and Sackney (2001) followed by developing three spheres that they thought were imperative for the existence of affective capacities. The three spheres–personal, interpersonal and organizational–encompass everything from learning communities to effective and shared leadership. Hopkins and Jackson (2003) analyzed the notion that capacity building was a response to the fact of discontinuous societal change. The three components they analyzed were as follows: foundational conditions that focused on a sense of purpose; the personal, which focused on new knowledge; and the interpersonal, which focused on a collaborative approach to learning.

Fullan (2007) indicated that school capacity building is a policy or strategy that is conducted by a group to improve student achievement with the use of new knowledge, additional resources, and great motivation by people either working independently or as a larger group. Newmann et al. (2000) defined school capacity building as "the collective power of the full staff to improve student achievement school-wide" (p. 261). Newmann et al. indicated that one can increase school capacity building by implementing five components: teacher knowledge, professional communities, skills and dispositions, principal leadership, and technical resources. Fullan (2007) concluded that student achievement will be positively affected with the increased

opportunities for teacher advancement and a school's capacity to implement continuous improvement.

Although this research on school capacity building is ongoing, one should note that these researchers have varying options. These concepts or elements deal with everything from teacher knowledge to technical resources and make the process of defining school capacity very difficult.

Barriers of Capacity Building

Since the Sputnik incident of the late 1950s, the United States has witnessed large-scale reform during almost every decade. Literally hundreds of innovative approaches have been implemented to address school improvement over the years (Fullan, 2001). These approaches range from action learning to school re-culturing, to involving coaches and mentoring, to cluster-based networking and infrastructure design and reconstruction. Most of these approaches were methodically developed, comprehensively implemented, and systematically analyzed (Crowther, 2011). Levin (2010) indicated that this movement has created small influence on student achievement with most focus in schools remaining on general maintenance and not improvement.

Coleman's (1966) research helped lead the way and reported that schools exhibited little or no evidence of using student resources to assist in learning. This statement, later proven false, helped pave the way for the 1980s A Nation at Risk, which pushed reform to a whole new level (Fullan, 2001). This was a remedy for failing schools and indicated that the United States should engage every school in lifelong learning that should be delivered with excellence (Redding, 2006). After that, the country was swept away with the No Child Left Behind movement, which focused on scientific research and paved the way for other reform movements that have surfaced as the latest educational reforms. This change over the years has created great opportunity for

positive change in the educational system but has frequently been wasted due to multiple instances of poor management and misuse of resources (Darling-Hammond, 2010).

Change often leads to uncertainty for schools, particularly when the reforms introduced are entirely new and unfamiliar (Hatch & White, 1998; Leventhal & March, 1993). Datnow (1999) explained that, ideally, schools would select appropriate change or reform based on the best fit for the school's function and theories of change from all stakeholders involved with the school. The decision to select a particular model can be a difficult decision and is not as neat and clean as one might believe. Simon (1957) indicated that the theory of bound rationality would suggest that organizations consisting of a small number of decision makers have limited rational decision-making capabilities, perhaps because they have too much information, unreliable information, or not enough. "In practice, individuals and organizations consider only a relatively small number of alternatives and frequently stop searching once they find a tolerable course of action, rather than seeking the best possible" (Black, 1997, p. 3).

Myatt and Kemp (2004) indicated that school personnel have squandered the potential of the most recent moment by taking the path of least resistance when making decisions about curriculum, creating incentives for change, developing the ability of teachers and administrators to evaluate and adjust the common practices of programming, assessing student work and school performance, and engaging the public about major issues of school accountability. This approach to go fast and cheap has led to a uniform approach that uses testing as the driving force for accountability. This has resulted in an antiquated curriculum and reinforced the same values and pedagogical approaches that have been identified as problems in the past (Myatt & Kemp, 2004).

Adelman and Taylor (2000) discovered similar issues and called for systematic restructuring and personnel retraining at all levels to assist in reducing barriers with school change. They maintained that

> well-redesigned organizational and operational mechanisms would allow schools to (a) arrive at a wise decision about resource allocations, (b) maximize systematic and integrated planning, implementation, maintenance, and evaluation of enabling activity, (c) outreach to create formal working relationships with community resources to bring some to a school and establish special linkages with others, and (d) upgrade and modernize interventions to reflect the best models and use of technology. (Adelman & Taylor, 2000, p. 18)

Limitations or Factors That Inhibit Reform

School change has been an issue within the United States for years. With opportunities in the past squandered, educators can now focus on the factors that have limited or inhibited reform efforts (Fullan, 2007). Over the years, educators have implemented a wide array of changes that have resulted in a variety of results. Research has indicated multiple factors that cause school reform not to occur. Schwahn and Spady (1998) indicated five reasons that school change was not successful.

1. The purpose was not compelling enough. School leaders remarked that if the staff is unable to restate the purpose of the reform in their own words and with enthusiasm, then the purpose is lost to them.

2. The reform effort was developed without stakeholders' involvement. People involved in and affected by the reform must have a sense of ownership in the effort if the change is going to last.

3. The change was not immediately implemented. The vision of the reform must be integrated into all decisions and actions, and the principal and other school leaders must model it throughout the year.

4. Everyone in the school was not aligned to the vision or purpose of the reform initiative. People involved in the change must have a clear picture of what the change will look like for them personally.

5. Organizational support for the change was not present. (p. 8)

Fullan (1997b) reported three main reasons for change not properly occurring during school reform mandates: a growing sense of alienation among teachers, the balkanization and burnout of the most reform-minded teachers, and the overwhelming multiplicity of unconnected, fragmented change initiatives.

Hargreaves (1997) remarked that educational change falters because

1. The change is poorly conceptualized or not clearly demonstrated. It is not obvious who will benefit and how. What the change will achieve for students is not spelled out.

2. The change is too broad and ambitious so that teachers have to work on many fronts, or it is too limited and specific so that little real change occurs at all.

3. The change is too fast for people to cope with, or too slow so that they become impatient or bored and move on to something else.

4. The change is poorly resourced or resources are withdrawn once the first flush of innovation is over. There is not enough money for materials or time for teachers to plan.

5. There is no long-term commitment to the change to carry people through the anxiety, frustration, despair of early experimentation and unavoidable setbacks.

6. Key staff members who can contribute to the change, or might be affected by it, are not committed. Conversely, key staff might become over-involved as administrative or innovative elite, from which other teachers feel excluded.

7. Parents oppose the change because they are kept at a distance from it.

8. Leaders are either too controlling, too ineffectual, or cash in on early success of the innovation to move on to higher things.

9. The change is pursued in isolation and gets undermined by other unchanged structures. (p. viii)

One of the most ambitious attempts to evaluate educational change occurred by Berman and McLaughlin (1978). Their studies focused primarily on federal programs and why they were not successful. Berman and McLaughlin indicated that no class of current existing treatments consistently leads to improved student outcomes when other variations are added to different school circumstances. Schools often struggle to successfully implement and most importantly sustain the level of success over a number of years.

Berman and McLaughlin (1978) conducted a study to identify the strengths and weaknesses of implementing federal change agent policies. The findings were in conjunction with a variety of other findings during this time and still today. Berman and McLaughlin found that schools took advantage and did, in fact, implement innovative strategies because of the allocation of additional funds. This, however, did not insure proper implementation or guarantee long-term success. Berman and McLaughlin also discovered while implementing federal and general programs that the success or failure of these programs was determined mainly by how

the school districts implemented the change. During this study they focused on the project's educational method, resource levels, scope, and implementation strategies, school climate, teacher attributes and district management capacities (Sarason, 1996).

Datnow and Stringfield (2000) studied schools and discovered the issues with implementing and continuing school change. They found that by the third year of the four-year study, only one of the original 13 schools was still implementing its chosen reform design. Six of the schools had completely stopped implementing the reform. One of the factors in sustainability of reform was the instability of district leadership and the political challenges. Datnow and Stringfield noted that in one school, the former superintendent created the environment for reform, and the current superintendent quickly ended this reform work when he took office. These findings were consistent with those that both Fullan (2005) and Hargreaves (1997) examined as they encountered reasons for failed school change.

Cyclical Effects on Education

As school personal look to overcome limitations, they also must be aware of the cyclical effects in education and how this inhibits potential growth in education. This constant change is another issue that has plagued the educational system over the last few decades. Fullan (2001) concluded that the main issue with educational change is not the absence of innovation in schools but rather too many disconnected, episodic, fragmented, superficially adorned projects. Bryk, Sebring, Kerbow, Rollow, and Easton (1998) called this the *Christmas tree* effect after the Chicago evaluation. Hatch's (2000) perspective on innovative schools revealed that the list of reforms suggested or attempted since 1983 encompassed almost everything from higher standards and new tests for student performance to merit pay and school-based management. He also mentioned that it was not uncommon for schools that are implementing multiple changes at

one time to have implementation issues. In fact, in a study of 57 districts from 1992-1995, Hess (1999) reported that a typical urban district pursued more than 11 "significant initiatives" (pp. 1-2) in basic areas such as rescheduling, curriculum, assessment, professional development, and school management.

Hatch (2000) also indicated that this endless cycle of substantial improvements saps the strength and spirit from administrators, teachers, and school communities. Hatch performed a survey of schools in California and Texas to discover that 66% of schools were engaged with three or more improvement programs, 22% were involved in six or more, and in one district 19 schools were working with nine or more improvement programs simultaneously.

Fullan (2001) stated, "Change may come about either because it is imposed on us or because we voluntarily participate in or even initiate change when we find dissatisfaction, inconsistent, or intolerability in our current situation" (p. 30). When this occurs in the educational environment, the culture can be altered in the school setting. Sarason (1996) indicated that prior to the implementation of any change, the practitioners must establish a culture of change. This would be beneficial all the way from the state level to the individual classroom.

Berman and McLaughlin (1978) assessed reforms that failed due to "school organizational climate and leadership" and "characteristics of schools and teachers" (p. 30). These findings were reinforced by Hargreaves' (1997) findings that indicated that teachers' effect on change was affected by the years of teaching, sense of efficacy, and verbal ability. Sarason (1996) also indicated that teachers struggle because they teach like they have been taught. During change teachers usually get frustrated, and they teach the way they have taught in the past. As Sarason mentioned, the issue with change is the problem with power. In order for

change to occur, the power must be wielded in a way that empowers others to a sense of ownership with the goals and process of change.

Factors of Positive Educational Change

Once educators discover the negative effects of cyclical change, they can then move toward understanding the positive factors that occur in educational change. Mourshed, Chijioke, and Barber (2010) focused on researching the experiences of the top school systems from all over the globe. They included systems that had received large-scale, significant gains that had been sustained for a long period of time. The systems they studied had gains from poor to fair, from fair to good, and from good to great. The results of this study were obtained by studying 575 school interventions that spanned 20 school systems along with 200 system leaders and staff (Mourshed et al., 2010).

Mourshed et al. (2010) found that leaders, when looking for direction, are too often told what to do from a different vantage point than their own. The report indicated that school leaders should integrate five aspects when developing and implementing change:

1. Performance stage—identifies the point that the current system is in;

2. Intervention cluster—identifies the interventions that are needed to implement change;

3. Contextualizing—must take all factors like history, culture, politics and structure into account;

4. Sustaining—what the system puts into place to ensure improvement over time; and

5. Ignition—describes the conditions necessary to spark the reform journey.

Fullan (1999) indicated that the old way of managing change no longer works during these unstable times. He mentioned a theory that is a "new science of complexity that claims

that the link between cause and effect is difficult to trace, that change unfolds in nonlinear ways, and that contradictions arise from conditions of uncertainty, diversity and instability" (p. 4). Stacey (1996) explained the theory of complexity and what it is built on:

- All organizations are webs of nonlinear feedback loops connected to other people and organizations (its environments) by webs of nonlinear feedback groups.

- Such nonlinear feedback systems are capable of operating in states of stable and unstable equilibrium, or in borders between these states, that are far-from-equilibrium, in bounded instability at the edge of chaos.

- All organizations are paradoxes. They are powerfully pulled towards stability by the forces of integration, maintenance controls, and human desires for security and adaptation to the environment. They can also be pulled to the opposite sides by decentralization, human desires for innovation and from isolation from the environment.

- Success lies in sustaining an organization between stability and instability. This is chaos in a difficult to maintain dissipative structure.

- The dynamics of the successful organization are those of irregular cycles and trends, falling within qualitative patterns, fuzzy but recognizable categories taking the form of archetypes and templates.

- Because of its own internal dynamic, a successful organization faces completely unknowable specific futures.

- Agents can only operate in the short term. They should not establish long-term planning or ideological controls for the future.

- Long-term development is a spontaneously self-organized process. Spontaneous self-organization is a political interaction and learning in groups.

- In this way managers create and discover their environments and the long-term futures of organizations. (pp. 27-28)

According to Fullan (1999), the complexity theory stemmed from the belief that too much structure is gridlock and too little is chaos. To be successful, one must learn to operate between the two paradigms. When operating between the two paradigms, the flexibility, the conversations, and the opportunities for growth within the structure can occur. This area is where continued growth from the appropriate capacities could occur.

Tushman and O'Reily (2002) claimed that managers are faced with a very difficult paradox when they create structures, markets, and systems of success in mature markets. When this success occurs, the creators become arrogant and committed to the status quo because of their previous successful actions. This, in turn, reduces their flexibility to remain nimble and active in emergent markets. This result is a phenomenon called "the tyranny of success," (Argyris, 2010, p. 180) which means that success in a stable market enhances the probabilities of failure when the market or environment shifts.

Saul (1997) stated that the "strategy is about marrying ideas and capacities with intuition and daring" (p.171). For this to be successful, one must add some more clarity to Fullan's (1999) complexity theory. He also pointed out that organizations are living systems and that the role of knowledge creation is in innovation. As was mentioned previously by Burke (1995), the creation of knowledge and data changed the way the world reacts from that point forward. Fullan commented that new innovations are extremely difficult to create, which explains why some schools decide not to implement effective innovation. Fullan identified two main causes

for the reasons why schools do not implement more change: (a) schools have not yet appreciated the organic and (b) evolutionary nature of the processes of humans or organizational change.

Argyris (1999) stated, "Learning is the detection and correction of error" (p. 165). Organizational learning is important because the better organizations are at learning, the better they will be at learning from their errors. He also mentioned that this capacity allows people to be more effective at learning, so the more likely they are to be innovative and know the boundaries for that innovation. Educators have struggled for years to make adjustments or implement change in ways that have consistently benefited student achievement. Fiol and Lyles (1985) defined learning, whether undertaken by individual or organizational agents, as "the process of improving actions through better knowledge and understanding" (p. 803). Huber (1989) suggested that an "organization has learned if any of its components have acquired information and have this information available for use, either by other components or by itself, on behalf of the organization" (p. 3).

In fostering learning environments, Argyris (1999) mentioned several key items in a review of literature. He suggested that the conception of a central idea is broadly shared and consists of organizational adaptability, flexibility, avoidance of stability traps, propensity to experiment, readiness to rethink means and ends, inquiry orientation, realization of human potential for learning in the service of organizational purposes, and creation of organizational settings as contexts for human development.

One Type of School Reform in the Midwest

In line with Huber's (1989) thinking that learning occurs with the presentation of new information, one former Superintendent of Public Instruction urged middle schools to use the Schools to Watch® criteria to evaluate schools. These criteria are a checklist for reform of

middle-level schools in the Midwest that focuses on the continuous improvement processes. This process enables compliance to Public Law 221 and gives framework for school improvement. The Schools to Watch® criteria is a rubric that assists in establishing academic excellence, developing students that are developmentally responsive, social equity, and organizational support and processes. This framework was presented by the National Forum to Accelerate Middle Grades Reform (1999). With new information that is gained from the rubric, school leaders are able to focus on the capacities of change that are needed to move a school forward (National Forum to Accelerate Middle-Grades Reform, 1999).

Components of Change

Fullan (1999) indicated that school effectiveness research pointed toward management issues as a major component of school problems. He later discussed that the old way of conducting business does not work any longer and leaders have to adjust. Leaders must work to create a new environment that allows schools to foster effective capacities that promotes student achievement to take place in today's global environment.

"People change what they do less because they are given analysis that shifts their thinking than because they are shown the truth that influences feeling" (Kotter & Cohen, 2002, p. 1). Anytime one deals with large-scale change, this is typically the case. Kotter and Cohen (2002) indicated that when one handles this shift correctly, then the organization has the opportunity to change in a positive way. Kotter and Cohen identified eight large-scale change stages that they feel are vital to change.

The first step is to establish a sense of urgency among relevant people. Leaders are sometimes very creative in the way they move people with the sense of urgency. The second step is to pull together a guiding team that is highly skilled, credible, and has connections and the

authority to provide leadership. The third step is for the guiding team to establish a vision that is sensible, clear, simple, and uplifting. The fourth step is the ability to communicate the vision and direction out to the critical masses. It is extremely vital that effective communication is established and the message and vision are shared effectively. Empowering the masses within reason is the fifth step and includes the ability to remove obstacles and give people the ability to work. Once people have been empowered and working on the vision and creating successful change, celebrating these short-term wins is the sixth step. Wins create credibility, resources, and momentum toward the overall goal. After celebrating, it is imperative that change leaders do not let up. With step seven, leaders must take the momentum and push for even more change and avoid stopping too soon, which is often the case. The final step of making change stick is one of the most difficult. Leaders must work to create a new culture that will limit the negative effects of this from occurring (Kotter & Cohen, 2002).

Kotter and Cohen (2002) pointed out that these eight steps are in motion and flow during the process. These steps will overlap during certain change cycles, and sometimes leaders may not use all of them during the process. They further mentioned that evidence overwhelmingly indicated that the number one issue with implementing change along the stages is the ability to change the behavior of the people.

Fullan (2008) discussed six secrets that he believes are vital to change. The first secret is the ability to love your employees. He presented evidence that historically indicates that leaders should establish the culture that allows your employees to learn constantly and to establish meaning in the work that they are working on while building relationships with coworkers. The second secret is establishing a connection with peers and purpose. Fullan indicated that large-scale reform is desired, requirements and guidelines must be established under which people

must operate under to move forward. This principle relates back to the complexity theory and how leaders must walk the fine line between requirements and free reign to establish growth.

Fullan's (2008) next secret related to the importance of capacity building. He indicated that leaders must focus on the "development of individual and collaborative efficiency of a whole group or system to accomplish significant improvements" (p. 13). These capacities that Fullan believed are important relate to the abilities to establish new competencies, new resources, and new motivation. Fullan cautioned against the use of fear or punitive accountability in implementing change. This may build short-term or fleeting results but in the long run will be counter-productive. He believed one can accomplish the same outcomes by being transparent and using peer interaction.

The next secret is the focus that learning is the work. Fullan's (2008) fourth step explained the way in which organizations address the core goals and focus on constant improvement that leads to continuous learning. Step 5 established the culture of transparency. Fullan defined transparency as a "clear and continuous display of results, and clear continuous access to practice" (p. 14). In this flat world that uses accountability, transparency should be evident and be used to create a positive learning environment for all stakeholders. The final secret that Fullan mentioned is that educational systems must learn on a consistent basis in order to continuously improve. With the process of continued learning, processes and ideas may constantly be challenged leading to the improvement of all parties involved.

Adelman and Taylor (2007) established that well-conceived, well-designed, and well-implemented prototypes are vital to the establishment and implementation of all innovative school models. A school district's change depends on the ability of the stakeholders to implement and carry out the perceived changes. As this phenomenon of implementation

becomes more and more difficult, many educators are looking at increasing their understanding

of systematic change. Adelman and Taylor defined systematic change as "modifications that

amount to a cultural shift in institutionalized values (i.e. reculturalization)" (p. 57).

Adelman and Taylor (2007) indicated that school improvements are logically connected

to the systematic change process. They contain largely the same elements that are used to frame

key innovative change strategies. The elements consisted of

1. Vision, aims, and underlying rationale for what follows;

2. Resources needed to do the work;

3. General functions, major task, activities, and phases that must be pursued;

4. Infrastructure and strategies needed to carry out the functions, task, and activities;

5. Positive and negative results that emerge. (Adelman & Taylor, 2007, p. 59)

Adelman and Taylor (1994) contended that intentional interventions are rationally based.

They stated that vision statements should hint at the rationale by establishing ideas that should

become the foundation for the focused change. The rationale that supports any change is a very

complicated component. This component shapes the aims and procedures of the process. These

are the components that will layout the plan for implementation and the theoretical,

philosophical, and empirical procedures that should be followed (Adelman & Taylor, 1994).

These rationales can also differ from plan to plan according to the goals that are set forth.

Resources are a very important aspect of any change process. These resources will typically be

implemented with an overarching approach that these resources are vital to the cause. This

encourages policy makers to pass policies or allocate necessary revenue to the cause (Adelman &

Taylor, 1994). Given that the foundation has been laid the general function, major tasks and

activities must be identified and carried out in order to sustain and replicate this action. This is a

very important component when establishing systematic change. Adelman and Taylor (2007) noted that effective leadership is important for the success of change and they indicate that it is imperative for everyone to know who is in charge if systematic change is going to occur.

Effective Leadership During School Change

As Fullan (1999) mentioned earlier, it is imperative to have appropriate leaders before school change can be addressed and systematic change can take place. Bass (1990) explained, "Leadership is the interaction between two or more people that involves structuring or restructuring the perceptions and expectations of the group" (p. 19). He also concluded that leaders are agents of change and that their actions affect other people more so than they are affected by the actions of others. This usually occurs when one modifies the motivation or competencies of the other members within the group (Bass, 1990).

Goleman (2000) agreed that leadership deals with people, situations, and how one deals with them in conversation and actions. He indicated that many leaders mistakenly assume that leadership style is a function of personality rather than a strategic choice they make. Goleman pointed out that too many leaders select a temperament that suits their style and do not demonstrate versatility by adjusting different styles to special situations. Research in the field of leadership suggested that successful leaders have strengths in the following emotional intelligence competencies: self-awareness, self-regulation, motivation, empathy, and social skills (Goleman, 2000).

Goleman (2000) analyzed 3,871 executives from Hay/McBer to discover six different leadership styles:

1. Coercive—the leader demands compliance. ("Do what I tell you.")

2. Authoritative—the leader mobilizes people toward a vision. ("Come with me.")

3. Affiliative—the leader creates harmony and builds emotional bonds. ("People come first.")

4. Democratic—the leader forges consensus through participation. ("What do you think?")

5. Pacesetting—the leader sets high standards for performance. ("Do as I do, now.")

6. Coaching—the leader develops people for the future. ("Try this."). (p. 82-83)

Collins (2005) explained "true leadership only exists if people follow when they have the freedom not to" (p. 13). His research led him to create the "Level 5 Hierarchy" (p. 20) of leaders. The highest level of the hierarchy was a Level 5 leader. This leader "builds enduring greatness through a paradoxical blend of personal humility and professional will" (Collins, 2005, p. 20). Some of the characteristics of a Level 5 leaders include company ambition, compelling modesty, drive with an infected need to sustain results, workman-like diligence, and ability when things go poorly to blame themselves (Collins, 2001).

Leadership is an important role in promoting and sustaining change in schools. Principals serve as the catalyst for moving school change forward. Sammons (1999) concluded that every study of school effectiveness has shown both primary and secondary effectiveness to be a major factor in success. A variety of studies have indicated that school leadership is important to the change process. One study in Chicago by Bryk et al. (1998) reported that in schools that improved over time, principals evidenced these characteristics:

1. Inclusive, facilitative orientation;

2. An institutional focus on student learning;

3. Efficient management;

4. Combined pressure and support.

These similar characteristics were observed by Day, Harris, Hadfield, Toley and

Beresford (2000) as they studied 12 schools in England. Their findings indicated that school

leaders were relatively centered focused on professional standards, and outwards looking in

monitoring school performance. Day et al. also indicated that these leaders were very goal

oriented, set high expectations for everyone, and worked to maintain collegial cultures. Day et

al. stated leaders also focused

> primarily on enhancing the skills and knowledge of people in the organization,
>
> creating a common culture of expectations around the use of those skills and knowledge,
>
> holding the various pieces of organizations together in a productive relationship with
>
> each other, holding individuals accountable for their contributions to the collective result.
>
> (p. 15)

Research from a variety of organizational sectors has comprised a list of basic common-

core practices that any successful school leader should call upon. These basics of successful

leadership include setting directions, developing people, and redesigning the organization. The

common core practices allow a leader to build and adopt four goals that are vital to achieving a

successful school environment by creating and sustaining a competitive school, empowering

others to make significant decisions, providing instructional guidance, and developing and

implementing strategic and school wide plans (Leithwood, Louis, Anderson, & Wahlstrom,

2004).

The term school leader should be a broad concept that is separate from a single

individual, person, or small group of people. This needs to be embedded in the school culture as

a whole if true improvement is the desired outcome. The term leadership is broader than the sum

of its leaders, for leading should involve everyone and focus on shared responsibility for a shared

purpose of community (Lambert, 1998).

Lambert (1998) mentioned two important types of participation of leadership vital to the

change and capacity building process. These two processes include

- broad-based participation, which involves administrators, parents, students,
  community members and district personnel all working to increase the achievement
  of the school.

- skillful participation, which refers to all stakeholders comprehensively understanding
  and demonstrating proficiency in the knowledge and skills of leadership. (Lambert,
  1998, p. 12)

Leadership capacity, according to Lambert (1998), is defined as a "broad-based skillful

participation in work of leadership" (p. 12). Lambert (2003) has since identified higher levels of

leadership capacity with six critical features: (a) broad-based, skillful participation in the work of

leadership, (b) roles and responsibilities that reflect involvement, collaboration, and collective

responsibility, (c) high or steadily improving student growth or achievement, (d) inquiry-based

use of data or information in informed decision making of practices, (e) shared vision that is a

direct result of program coherence, (f) exhibit reflective practice and innovation as the norm as

reflected in Figure 1.

Figure 1. Six critical features of leadership capacity (Lambert, 1998, pp. 17-23). Adapted from *Building Leadership Capacities in Schools* by L. Lambert, 1998. Copyright 1998 by Association for Supervision and Curriculum Development.

This leadership capacity leads to a dynamic Lambert (1998) referred to as a "leadership capacity matrix" (p. 12). Each of the four quadrants describes the flow of information, roles of formal leaders, defined roles for participants, relationships between stakeholders, norms, innovation, and student learning. Lambert (1998) shifts from six features of leadership capacity to four areas of school participation to explain how leadership operates within a school.

In Lambert's (1998) Quadrant 1, low participation and low skillfulness, the information flows from the principal to the staff creating an autocratic culture. The relationships are very co-

dependent, as teachers rely on the administration for answers and the administration is constantly attempting to be validated by the teachers. Teacher interaction is weak and resistant in silence. This will allow for minute amounts of innovation, as many of the changes will be top down. If student achievement rises, it will not be sustained, and teacher morale will be worse than ever. Leaders in Quadrant 2's high participation and low skillfulness usually operate in a laissez-faire and unpredictable fashion. The information that is shared can be fragmented, which results in a school with little focus and direction. This causes teachers to operate in silos, doing their own thing.

Quadrant 3's leaders are highly skilled, but participation is low, which results in a school making little progress on reforms. The school has a core group of leaders who attempts to lead the school with data and leadership skills. However, this group is limited in numbers, and the animosity builds, which establishes barriers within the school. This creates pockets of innovation and great teaching, but the school's lack of student learning as a norm limits the gains. The long-term pattern of this quadrant is similar to Quadrant 2. In Quadrant 4, the school contains high skillfulness and high participation that allows leadership the capacity to create an environment that is collaborative and fosters inclusive learning. The school-wide focus is not only student achievement but also adult learning. The decision-making is shared, and information is looped to allow reflection, interpretation, and construction of shared meaning. These four quadrants explain the overall capacity issues and levels that exist in a school.

Newmann and Wehlage (1995) found that principals in successfully restructured schools "gave central attention to building a school wide collective focus on student learning of high intellectual quality" (p. 291). With the focus on teaching and learning, the leaders in the schools were able to strengthen and build capacity within the schools. The leaders consistently messaged

out each of their school's visions, expressed norms and values that defined the school vision, initiated conversations, and provoked staff to focus and think about the vision. Other common traits observed from these successful leaders were that they created time for reflection and inquiry, insured staff development centered around the school vision, and they were conflict managers or politicians that took needed steps to ensure that the vision and culture of the school moved forward (Lambert, 1998).

Newmann and Wehlage (1995) focused on building school-wide learning and Grissom, Loeb, and Master (2013) concentrated on how principals should lead the charge as instructional leaders. Their research indicated that behavioral factors within the school can positively affect student outcomes. They suggested that being in the classroom provides the school leaders the opportunity to observe lessons and get an authentic feel of actually what is occurring within the classrooms. Grissom et al. concluded that being in the classroom allows the opportunities to speak to the teacher with regard to the lesson. One statement that they reported was, "I am able to go into any classroom in this building and teach that lesson, diagnose what's wrong with that lesson, and then be able to tell the teacher, you really need to do this (p. 440). This action is identified as "coaching" and according to Grissom et al., it is an effective instructional tool. They concluded, "time spent directly coaching teachers is positively associated with achievement gains and school improvement, especially in math" (p. 440).

School Culture

Once leadership has been established and all stakeholders are involved, leadership can then take on the task of building appropriate school culture. Creating the perfect school culture is a difficult task for any leader. Schools are like most other organizations; they strive to develop a set of norms that respond to the environment and to the individuals they serve (Deal &

Peterson, 1998). Culture is very important for the sustainability of any educational change. Culture is the *it* that survives and continues to produce continuity after everyone is gone (Hurst & Zimmerman, 1994). It will shape a school's purpose, motivation, vision, effort, and focus for years to come (Peterson, 1999).

Schein (1992) defined leadership as "the attitude and motivation to examine and manage culture" (p. 374). He argued that in today's turbulent world, organizations must be able to learn faster, which calls for a learning culture that emulates "a perceptual learning system" (Schein, 1992, p. 372). This system allows schools or organizations to continue the growth that leads to constant improvement.

Schein (1992) indicated that a learning leader must evaluate the culture of the situation, identify any levels of dysfunction, and promote its transformation. This transformation should start by identifying learning assumptions and then use these assumptions to foster the culture within the organization. This is an area that is often overlooked when implementing change in a new environment. Finnan (2000) identified five culturally based assumptions that affect the influence on whether or not the implementation is successful. She indicated that assumptions are ideas or thoughts that are taken for granted or truth by a school environment or organization. The assumptions that Finnan identified are "assumptions about what adults hold for students, assumptions about leadership and decision-making, assumptions about adult roles and responsibilities, assumptions about best practices and structures for educating students, and assumptions about the value of change" (p. 9). The recognition of these assumptions and the way leaders deal with them will be a deciding factor in the implementation and success of school change.

Schein (1992) defined culture as artifacts, visible organizational structures and processes; espoused values, strategies, goals, philosophies, and basic underlying assumptions (unconscious, taken-for-granted beliefs, perceptions, thoughts and feelings). Sackman (1991) concluded that "culture is a set of commonly held cognitions that are held with some emotional investment and integrated into a logical system or cognitive map that contains cognitions about descriptions, operations, prescriptions and causes" (p. 39). Argyris (2010) stated that authors agree the "components of culture become attached to emotion and degrees of importance" (p. 146). With these components relatively stable, they provide order, which makes the world relatively calm (Argryis, 2010). This is also the culture that allows people in organizations to ask in-depth, open-characteristic questions (Sackman, 1991).

Collins's (2001) findings indicated how important it is to guide people toward what he described as the hedgehog concept when building a successful culture. This concept focuses people on the idea of being great at something. With this focus, people will begin to be successful at something and eventually raise the culture for the entire situation. Collins explained this more specifically, by stating that one must

1. Build a culture around the idea of freedom and responsibility within a framework.

2. Fill that culture with self-disciplined people who are willing to go to extreme lengths to fulfill their responsibilities.

3. Avoid confusing a culture of discipline with a tyrannical disciplinarian.

4. Adhere with great consistency to the hedgehog concept, exercising an almost religious focus on the intersection of the three circles. Equally important, create a "stop doing list" and systematically unplug anything extraneous. (p. 124)

Bruner and Greenlee (2000) indicated that school culture is a major factor in why more reform efforts are not more successful. School studies have indicated that improving school culture is vital to improving student achievement. Fyans and Maehr (1990) indicated that students are more motivated to learn in schools that exhibit strong cultures. Evidence from Cheng (1993) found that schools with strong cultures in the areas of strong commitment, shared participation, intimacy, and strong leadership had more motivated teachers that created a positive school culture.

Lambert (1998) identified several strategies that can assist principals in building a culture of peers and building leadership capacities that are needed in schools:

- Posing questions that hold up assumptions and cause reexamination

- Remaining silent, letting other voices surface

- Promoting dialogue and conversations

- Raising range of possibilities but avoiding simplistic answers

- Focusing attention

- Allowing time and space for people to struggle with decisions

- Confronting data

- Turning a concern into a question

- Being wrong with grace and humility

- Being explicit and transparent with strategies, since the purpose is to model, demonstrate and teach them to others. (p. 27)

Lambert indicated that the use of these components redistributes the authority and power in a school's culture. This will assist in creating a culture of peers or a professional learning community that will foster building leadership capacity within the school.

Professional Learning Communities

In developing successful professional learning communities (PLCs), researchers have focused on Collins's (2001) hedgehog idea. DuFour, DuFour, and Eaker (2008) concluded that when individuals had a clear sense of purpose, a clear sense of direction, and an ideal understanding of the focus of the school, they are better able to understand their principle roles in the school. To make these issues known, some researchers have relied on the hedgehog idea of focusing on what one can be great at and trying not to overextend. Once these issues have been identified, a school may implement PLCs.

Barber and Mourshed (2007) indicated that the quality of the educational system cannot exceed the quality of the teachers. This is why establishing effective PLCs is vital. The goal of PLCs is to build a shared knowledge of commitment and purpose to raise the level of student achievement within an organization (DuFour et al., 2008). DuFour and Marzano (2011) concluded that PLCs are not programs; they are structures and cultures that are pursued but never perfected. PLCs call on all educators to redefine their roles and responsibilities and conduct business in a new way. Graham and Ferriter (2010) indicated that successful PLCs had created a consistent core vision and identified what they could be good at, what they cared about, where they would excel, and how they may gauge success in these areas. After extensive research, Hord (2003) indicated that effective PLCs include "support and shared leadership, collective creativity, shared values and visions, and supportive conditions" (p. 14).

Fullan (2007) believed that in order for a school to exhibit continuous growth, the school must establish ongoing collaboration and development that can best be accomplished with PLCs. To help establish this pattern for success DuFour (2004) mentioned several core elements of effective PLCs: shared vision, mission, values, goals, and a collaborative culture. He also

mentioned that PLCs should have an action component that focuses on the continuous improvement and results. Fullan and DuFour, along with others, consistently indicated the importance of effective PLCs. They concluded that this will not only increase student achievement but it will allow teachers, principals, and all other school personal to continuously move a school forward.

Components of Project-Based Learning

As mentioned by Wagner et al. (2006), American students are in crisis mode of education and need to prepare for the globalization that is currently taking place. Fullan (1999) also indicated that preparing students for the future is a moral purpose that educators should adopt. A rapidly changing labor market will demand that the labor force be more flexible and focused on knowledge-intensive work teams, thus enlisting lifelong learners (Tynjala, 1999). This is where the educational system must evolve and focus on the 21st century skills that will make students successful. Project-based learning (PBL) could be an instructional solution that focuses on group work with knowledge being integrated as a part of the whole solution, which is important in the middle school context (Torp & Sage, 1998). The National Middle School Association (1995) declared that through PBL the middle school curriculum could address the major components of effective curriculum: "challenging, integrative, and exploratory" (p. 20).

Barrows (2002) defined several key components of PBL:

- Students' work presented as unresolved so students work to solve the problem with multiple solutions.

- Students perform in a student-centered environment and focus on what they feel they need to learn.

- Teachers act as facilitators asking meta-cognitive questions that reflect the learning back to the students.

- Students focus on authentic problems that promote learning.

Savery (2006) indicated that PBL is "an instructional learning-centered approach that empowers learners to conduct research, integrate theory and practice, and apply knowledge and skills to develop a viable solution to a defined problem" (p. 9). Hmelo-Silver (2004) concluded that PBL is a challenging and difficult structured problem-based approach that is integrative because it incorporates the opportunities for cross-disciplinary content. As Ravitz (2010) explained, no two teachers will teach PBL the same way, which makes defining PBL a difficult process. Ravitz used a broad definition of PBL, which concluded that the instruction should feature self-directed, in-depth inquiry over an extended period of time and involves a formal presentation of the results.

Research suggests that PBL can assist in raising the motivational level of middle school students. Anderson and Maehr (1994) concluded that middle school students who solve real-world problems may shift their goals from grade related goals to task related goals that increase a student's motivation to learn at a higher level. Meece (2003) indicated that when middle school students become co-constructors in learning, they exhibit higher levels of motivation.

Strobel and van Barneveld (2009) concluded that PBL is just as effective as traditional instructional approaches, and many times the evidence suggest that PBL is superior. Ravitz (2010) suggested that PBL has shown an increase in understanding of concepts on standardized tests, enabled students to remember what they had been taught longer, allowed students to work together in groups, increased motivation, and demonstrated effectiveness with lower performing students. To allow PBL to complete these tasks, Strobel and van Barneveld indicated that

teachers need a supportive environment, extensive planning, professional development, and strategies for effective instruction.

Ravitz (2010) concluded that moving to PBL is a large undertaking for a school. He stated that

> meaningful instructional changes related to PBL may not take hold unless they are adequately emphasized and supported by broader changes in school structure and culture. The effective use of PBL may require a coordinated set of reforms and practices, and knowledge of how educators avoid being overwhelmed by a myriad of other issues. (p. 294)

As Ravitz and other researchers consistently mention, PBL and other changes will all need capacities to be successful in the future.

Summary

As Fullan (2005), Lambert (1998), and various other researchers who were mentioned in this chapter, capacity building takes on a wide array of obstacles and challenges. The varying dynamics of different leadership capacities to managing school culture along with staying relevant with local and federal guidelines makes student achievement a compelling task. As Collins (2001) indicated, "good is the enemy of great" (p. 1). These best sum up why school leaders must focus on the capacities that allow school change to move forward from bad to good or good to great. This study focused on establishing the capacities that have been exhibited to allow schools to move forward.

CHAPTER 3

RESEARCH METHODOLOGY

The purpose of this qualitative, multiple site case study was to examine what capacities existed during a time of positive school change in middle school. The focus of this research was on schools that had implemented PBL between the last two and 10 years. Multiple sites were used to identify a common logic of replication that occurred and allowed positive capacities within a school to exist. Capacity building is defined as "the strategy or action taken that increases the collective efficacy of a group to improve student learning through new knowledge, enhanced resources, and greater motivation on the part of people working individually and together" (Fullan, 2007, p. 60).

A phenomenological case study was used to identify what capacities existed during school change. A case study is defined by Merriam (1998) as "an in-depth description and analysis of a bound system" (p. 40). Merriam described three special aspects of a case study phenomenon: the first is for the researcher to focus on one particular phenomenon. The second is that the researcher should provide a thick, rich description that provides as a large number of details as possible. The third is that this research should bring about new discovery, extend the researcher's experiences, or confirm what is already thought to be true (Merriam, 1998).

Creswell (2007) indicated that a case study is most effective when the inquirer has clear identifiable cases and boundaries for which to study and collect in-depth understanding of the

cases. The data must be collected in a natural environment by interview, observations, or

document analysis. This natural setting should allow the researcher to shape themes during data

collection. The researcher will then strive to develop complete understanding, analyze the data,

and answer the question that is being asked during the study.

This chapter explains the methods that were used to conduct this study. A thorough look

at the components of data collection, study participants, research questions, methods, data

analysis, and the verification process are addressed in this chapter.

Limitations

Merriam (1988) defined a case study as an intensive, holistic description and analysis of a

single instance, phenomenon, or social unit that allows for the study to be somewhat focused.

Merriam listed several limitations that could be present in a case study design: reliability,

validity, and subjectivity of the researcher.

A limitation that was inherent in the study pertained to the limited number of schools

instituting project-based learning (PBL) that were identified as potential study participants. I

purposefully selected the Schools to Watch® due to the common theme of the selection process

into the program and resultant descriptions of schools admitted as successful (National Forum to

Accelerate Middle-Grades Reform, 1999). These schools had completed rigorous training and

development to achieve the status of Schools to Watch® member for the 2012-2013 school year.

The subjects of this study were given the opportunity to remain confidential (Denzin & Lincoln,

2005). The reason for the purposeful sampling was to select participants who would be most

informative during the process. Bias could have offered limitations or trepidations that could

alter the study. I had also received project-based learning training in the past and had a school

that actively works to implement this style of learning. This could have potentially offered

difference of opinion or practices that could have caused concerns during the study. To limit this from occurring, I used data and actual findings for evidence during the study. Another potential area of bias could have been toward leadership traits and philosophies of school management or leadership since I was a principal of a middle school. I only reported the findings of the study and did not offer an opinion about different leadership or management traits. These bias traits were minimized by adhering to the data that was collected and not offering opinions during the process.

Marshall and Rossman (1999) indicated that the researcher should have strong listening skills, be highly skilled with personal interaction, and focus on gentle probing when necessary to discover complete details of information. They also indicated that bias can be limited by a strong understanding of methodological literature while interpreting data and conducting inquiry.

The interviewees could have offered bias during the process or have difficulty evoking high-level, in-depth responses during the interview. Frequently, interviewees may be unwilling or uncomfortable to share all the information that the interviewer desires to explore. To minimize this from occurring, I shared all needed documentation requests before the process began in an attempt for clear expectations in the onset of the research. Marshall and Rossman (1999) indicated that lack of expertise and experience with interviewing could cause concerns during the process. This issue could have also manifested itself during the data collection process if the interviewer was not well organized. I used multiple layers of assurances to minimize the possibility that issues would arise during this time. Multiple devices were used to collect the data at the time of the interview. Once the information was transported, the data were stored at different locations to secure safety. As the process unfolded, I continued to have

multiple hard copies and electronic copies of all observations and interviews in well-managed binders and folders pertaining to each school location that was being studied.

The renowned Hawthorne effect might have been another limitation that could have arisen. Researchers have indicated that the Hawthorne effect is an unavoidable bias when research is occurring on human subject (Marefield, 2007). Marefield (2007) concluded that subjects were always modifying their behavior when they were aware that they were part of the experiment or research. This was a concern because part of the Schools to Watch® program was to allow and promote the sharing of all educational knowledge. The educators within the program could have been instructed or persuaded on how to deal with researchers or visitors within the building. It was my job to analyze and account for the Hawthorne effect during research.

The term *project-based learning* (PBL) can be a broad term that could range from high areas of effectiveness to low areas of effectiveness. With the loose terminology of PBL, I was challenged in defining and establishing PBL. I strived to use the definition by Savery (2006) for the basis of this study, which defined project-based learning as an instructional learning-centered approach that empowers learners to conduct research, integrates theory and practice, and applies knowledge and skills to develop a viable solution to a defined problem through authentic 21st century skills preparing them for the global market.

Marshall and Rossman (1999) indicated that the research rests on the researcher's and participants' worldviews. One of Merriam's (1998) major concerns with a case study is subjectivity of the researcher. Merriam (1998) warned that the researcher should be acutely aware of the bias that he or she could introduce to the research. In order to minimize and control for this, I used various data points (interviews, observations, document analysis of school

correspondence and data, etc.) to gather the findings for the research lending to a more historical

perspective for the study (Marshall & Rossman, 1999). I focused on the facts during the

observation and used clear data that was gathered to interpret the outcomes. The data were well

defined and presented in the finding that limits the amount of perspective from prior knowledge

that could have existed within me.

Study Participants

Research has indicated that knowledge gained through the case study method is based on

a specific sample population is more concrete, contextual, and more developed by reader

interpretation (Merriam, 1998). A case study researcher works to build an in-depth

understanding of a case that is based on multiple data points and reports a case description and

case-based themes (Yin, 2003). It is with this in mind that this sample was derived. The

participating schools for this study were schools with grades between Grade 5 and Grade 8 in the

Midwest that are currently members of Schools to Watch® (National Forum to Accelerate

Middle-Grades Reform, 1999). As such, they are schools that have exhibited high educational

standards for students with a strong understanding and implementation of project based learning.

The schools had to evidence the following characteristics during a stringent application process

before being selected as a member of Schools to Watch®. Schools to Watch® concentrates on

four main focus areas that the schools focus on and exhibit at a high level of efficiency:

1. Academic excellence: The school is academically excellent. It challenges all students

   to use their minds well.

2. Developmental responsive: The school is sensitive to the unique development

   challenges of early adolescence.

3. Social equity: The school is socially equitable, democratic, and fair. It provides every

    student with high-quality teachers, resources, and learning opportunities, and

    supports. It keeps positive options open for all students.

4. Organizational structures and processes: The school is a learning organization that

    establishes norms, structures, and organizational arrangements to support and sustain

    their trajectory toward excellence (National Forum to Accelerated Middle-Grades

    Reform, 1999).

The Schools to Watch® sample was purposefully selected due to the selection process

serving as a quality assurance mechanism that schools strive to be high-performing, challenging

to all students, provide the students with rigorous curriculum, rich instruction, and teachers are

trained at the highest levels with outstanding supports. These schools completed rigorous

training and development to achieve the status of being a Schools to Watch® member for the

2012-2013 school year.

The participants in this study were given the opportunity to remain confidential (Denzin

& Lincoln, 2005). Pseudonyms were used to protect each participant's identity during the study.

The data that were gathered were coded and evaluated only by me. All individual identifiers

were removed from the data to protect all participants. Data collection papers and audiotapes

were stored at my home in multiple locations in locked cabinets. The transcription of the data

was done personally by me with protected passwords and was located only on my personal

computer. Written permission was received before any access to information was achieved.

These items included faculty meeting minutes, school newsletters, or any other information that

was deemed relevant for the study (Creswell, 2007).

Research Questions

This study focused on capacity building as a component when implementing school change. In doing so, it strived to answer the question, "What components of capacity building are essential when implementing selected school change?" Subquestions included the following:

1. What capacities are needed to implement project-based learning at the middle school level?

2. What leadership characteristics are valuable to building capacities in implementing project-based learning at the middle school level?

3. What are the keys to sustaining successful change after implementation of project-based learning at the middle school level?

Data Collection and Instrumentation

This study focused on the use of interviews, observations, and document analysis to examine school capacity at the middle school level. The observations and document analysis were used to support the results of the interviews. I interviewed at least three individuals from each school and observed two school level meetings. I focused on identifying 20 more codes per each theme. These themes were established by analyzing all collected data and becoming intimate with the research that was conducted. I relied on the review of literature that established for a firm understanding of the study to lead the guidance for proper questioning and analysis.

Interviews

When conducting interviews in qualitative research, several types of interview designs can be used to gather and obtain data (Creswell, 2007). Three types that are commonly used are the informal conversational format, general interview format, and the standardized open-ended format. The focus was on the standardized open-ended interview, otherwise known as the

phenomenological interview format for data collection. Marshall and Rossman (1999) explained this as "the study of lived experiences and the ways we understand those experiences to develop a worldview" (p. 112). This format allows the researcher to ask participating individuals identical questions with the responses being open-ended (Gall, Gall, & Borg, 2003). This open-endedness allowed the participants to contribute as much as desired and allowed me to ask follow-up questions (Turner, 2010). The follow-up questions allowed the discovery of all aspects that may be pertinent to the data collection process. This process allowed me to identify common themes shared by the interviewees.

Interviews were conducted with the principal, assistant principal, and any other curriculum leaders within the schools' structures. One of the interviews was conducted with someone who had participated in the team meetings that were observed. Kahn and Cannell (1957) described interviewing as "a conversation with a purpose" (p. 149). These interviews were conducted in person, by telephone, or on Skype, if needed. The interview instrument that was used in this research study appears in Appendix A. These interviews were approximately 40 minutes long and were held at the interviewee's school. This location and the open-ended questions allowed the participants to answer in a relaxed atmosphere. The interviews were completely confidential and followed guidelines set forth by the Institutional Review Board. Each interview was audiotaped with recordings being completely transcribed verbatim at a later date with self-selected pseudonyms for each participant. The transcription was transcribed by me at my personal residence. The interview data was stored in multiple filing cabinets that were locked and located within my residence.

Within 30 days of the interview, each interviewee received a completed transcript so the interviewee could check it for accuracy. This email was sent using a read response and delivery

feature to ensure acceptance. If the interviewee indicated inaccuracies and adjustments were needed, the changes were made, and a new transcribed copy was sent within seven school days. Upon receipt of a confirmation by email that the interviewee agreed with the contents of the interview, the data coding began. If the interviewee desired a hard copy of the final transcribed interview, one was mailed within 30 school days of the final product through the United States Postal Service. During the process, all data components were stored in a locked filing cabinet within my home in multiple locations.

Kvale and Brinkman (2009) indicated that all interview questions should be short, simple, and open-ended. They indicated that the first question should be more concrete with each question more and more open. Taking this into account, the interview questions (Appendix A) were developed to uncover which capacities are present in instances of school change. The documentation during the interview is reported in Appendix B and compared to other transcriptions for common patterns or themes. If follow-up questions were needed, contact with the interviewee was made within seven school days from the start of the interview. The interviewees used a secured email address that they supplied to me. With this information, I set up a time to pursue follow-up questions if needed.

Observations

The observation portion of the data collection occurred during faculty meetings and other school team meetings. During this portion of data collection, no role other than that of observation and taking field notes were implemented. Merriam (1998) concluded that observation is a fundamental and highly important method of qualitative research. Observations were focused on systematic note taking and recording of events, behaviors, and actions that took place within the setting.

I entered the setting with no predetermined areas of interest or categories (Marshall & Rossman, 1999). Marshall and Rossman (1999) indicated that this value is to discover the recurring patterns or themes that are occurring in that setting. Once this information was disseminated, the search for particular patterns or themes that occurred during early observations was made. These patterns or themes were documented on forms found in Appendix C.

These observations were faculty meetings, leadership team meetings, and or any type of school meeting that was deemed important by me. I attended at least one faculty meeting or one other type of school meeting to identify patterns or themes that lead to capacities that increase school improvement.

After the observation, I interviewed a focus group from the team meeting, faculty meeting, or any other school level meeting that was just observed. The group was randomly selected by me after the meeting. The basics of the focus group were to determine the authenticity of the meeting. With the Schools to Watch® program based on opportunities for other educators to learn from their methods through schools frequently visiting, it was imperative that I determined the effects that could occur because people often visited the school. I focused on identifying any Hawthorne effects that could potentially have occurred due to the Schools to Watch® program or other factors within the confines of the school's culture. The interviews focused on eight questions that were patterned on discussing the true and authentic outcomes that traditionally occur because of the meeting. These questions can be seen in Appendix D.

Document Analysis

I also gathered and analyzed school documents for particular themes and patterns. Researchers have indicated that documents are public and private records that researchers can obtain to assist in qualitative research that includes school improvement plans, school level state

testing data, school newsletter, and faculty meeting minutes (Creswell, 2007). Multiple

researchers have concluded that documents assist in the strengthening of data (Merriam, 1998;

Yin, 2003).

Research has indicated that blocked access could be a potential obstacle during the

process of collection (Merriam, 1998). Merriam also indicated that the researcher has to focus

on keeping an open mind to potential new findings that could arise. Another issue that Merriam

(1998) indicated was the potential bias of selection that could occur during this process. If the

researcher requests school-specific information, it could be blocked, reported incorrectly during

the process, or not provided.

The documents that were requested during the study included school improvement plans,

faculty meeting minutes, agendas to PLCs, school newsletters, and other articles deemed

significant. These documents were analyzed and compared to other themes and patterns that

were present during the interview and observation portion of the research. Any questions or

concerns that arose from these findings that required follow-up were directed to the building

leader.

Data Analysis

The qualitative researcher often faces an overwhelming and difficult task of analyzing

data (Anfara, Brown, & Mangione, 2002; Patton, 1990). The term case study data comes from a

direct interpretation of data that is collected, patterned, and then generalized during the process

(Denzin & Lincoln, 2005). Data analysis is an interactive and simultaneous process that begins

with an interview; then the researcher observes and finally analyzes the documents (Merriam,

1998). Using a comparative method, Merriam (1998) explained the strategy as

The basic strategy of the method is to do just what the name implies which is constantly

compare. The researcher begins with a particular incident from an interview, field notes,

or documents and compares it with another incident in the same set of data or in another

set. These comparisons lead to tentative categories that are then compared to each other

and to other instances. Comparisons are constantly made within and between levels of

conceptualization until a theory can be formulated. (p. 159)

I did not use the grounded theory approach that generates a general explanation from a large

number of participants about a particular action or process during this study due to the multiple

forms of data collection that connect stronger to case study research (Creswell, 2007). I used a

theoretical sampling group during the process. These participants were selected for the interview

and were a member of a team that was observed. The reason for this was to "identify specific

groups of people who either possess characteristics or live in circumstances relevant to the social

phenomenon being studied" (Thompson, 1999, p. 816). This group was identified because they

allowed particular research of a specific aspect or behavior that could be relevant to the research

(Thompson, 1999).

Distinctive analytical procedures for data collection were used. These six phases from

Marshall and Rossman (1999) are organizing the data; generating categories, emerging themes,

and particular patterns; coding data; testing the emergent understandings; searching for

alternative explanations; and writing the report.

Organizing the Data

Organizing and establishing intimate knowledge by consistently reading and rereading

the data was imperative for me. I worked to quickly transcribe and code the information so to

allow plenty of time for follow-up questions and to strive for deep understanding of the

information. Through these means, the people, events, and quotes started to become more

manageable and allowed cleanup to an overwhelming process (Marshall & Rossman, 1999).

Patton (1990) indicated that qualitative research generates massive amounts of data, and

managing this process can become overwhelming. I needed to have the capabilities to decipher

the useable data from the unusable data during the process to remain organized (Marshall &

Rossman, 1999). Each school had a particular color interview form and folder. With the use of

this color organization by schools and personnel that were interviewed during the process, I

remained well organized and effective during the coding process and research analysis.

Generating Categories, Themes, and Patterns

Remaining extremely organized and intimate with the data, I was aided in generating

categories, emerging themes, and particular patterns. Researchers indicate that this process can

be one of the most complexes, difficult, and fun task a researcher endures (Marshall & Rossman,

1999). Marshall and Rossman (1999) indicated that this process calls for a high level of data

awareness, a complete attention to the data, and the ability to think openly about the

undercurrents of social life. Marshall and Rossman stated, "Identifying prominent themes,

recurring ideas or language, and particular patterns of belief that link people and settings together

is the most intellectually challenging phase of data analysis and one that can integrate the entire

endeavor" (p. 154). This challenge was what made questioning and reflecting upon the data

imperative during the process. I constantly focused on the patterns and themes that emerged

(Guba, 1978). Guba concluded that categories should be internally consistent but remain distinct

from each other at the same time. With multiple interviews being conducted at each of the three

school sites, the themes and patterns appeared because of with proper data collection,

organization, and knowledge of the data. I strove to uncover these themes by asking the how and

why questions (Yin, 2003). This allowed for proper identification of real-life context that the researcher was working to discover. Once these questions were answered, I focused on the details for understanding that focused on answering the questions of the research study.

Coding Data and Emergent Understandings

Coding data is a very difficult analytic thinking task that generates categories and themes that are used to mark passages in the data using codes (Marshall & Rossman, 1999). Researchers use a variety of methods to complete this process. Some researchers use software, and others might use colored dots in the field notes to distinguish different data points. Marshall and Rossman (1999) indicated that researchers should understand that while collecting the data the scheme will change and may reveal new understandings that could change the original plan. From these new understandings comes the process of testing and developing the probability of emergent understandings. Marshall and Rossman indicated that this causes the researcher to revisit the data for increased understanding and may include this data in the research if plausible and assist the researcher in answering the research questions. Once the interviews were transcribed, confirmed, and printed, the coding process began. Once the codes were established, they were grouped together to ensure that further analysis did not need to take place.

Searching for Alternative Explanations

As new understanding are introduced and researched, focus should remain on searching for alternative explanations. This would cause constantly evaluating and deciphering critical links that were established through the data analysis process (Marshall & Rossman, 1999). Marshall and Rossman (1999) explained that alternative explanations always exist, but it is up to the researcher to explore and describe how the most feasible explanation is plausible. As the data were being gathered, I focused on follow-up questions in a pursuit of checking alternative

explanations and clarifying details. These follow-up sessions were conducted within seven days of the original interview. Once this was completed, I sent a completed copy to the interviewee for confirmation of the details of the interview.

Writing the Report

Marshall and Rossman (1999) stated, "Qualitative data cannot be separated from analytic process" (p. 157). They indicated that the researcher is in the interpretive process of lending shape and form to substantial amounts of raw data. Qualitative data can be displayed in a variety of different ways. Van Maanen (1988) identified three ways of presenting qualitative writing. The Realist tales is a process of displaying a realistic account of the culture under study by a third-person voice. This presents a clear separation by the researcher from the research that has been reported. Marshall and Rossman (1999) pointed out that this set a certain standard for qualitative work in regards to credibility, quality, and respectability. Another qualitative genre is confessional tales, which are personalized accounts with "mini-melodramas of hardships endured in fieldwork" (Van Maanen, 1988, p. 73). Marshall and Rossman also indicated that this genre allows the researcher to demonstrate his or her capabilities of observation and display ways researchers build cultural descriptions. The final tale is impressionist, which displays the researchers own field experiences. Marshall and Rossman explained how the researcher and the researched data are blurred. This genre calls attention to the culture and the fieldwork experiences that take place during the process. This study is reported in the confessional tales approach as I focused on the observations and field habits of others.

Validity and Reliability

The case study design is focused on using multiple sources of evidence in a triangulation format to collect data to measure the same phenomenon (Yin, 2003). One factor that researchers

consistently mention is the ability to maintain a strong chain of evidence that will achieve a

persuasive account (Charmaz, 2006; Eisenhardt & Graebner, 2007; Strauss, 1987). Guba and

Lincoln (1981) echoed these thoughts as they indicated that the researcher should frequently ask

if the interviews were reliable and valid, if the content was properly analyzed, and if the

conclusions of the case study rest on the data that were gathered.

Multiple factors were in place to assist in the complete validity of the data. I used

multiple sites, from numerous interviews, and frequent observations to discover and exhibit

common themes that indicate the findings for the research (Appendix E). The study also used

multiple site participants that included school administrators, teachers, and school curriculum

leaders that allowed for triangulation too take place (Appendix F). These findings allowed for

generalization of the data that are connected to the research.

Personal Statement

I am currently an administrator in the Evansville-Vanderburgh School Corporation in

southern Indiana. I have been the principal at Plaza Park International Prep Academy for five

years. Over those five years, I have received PBL training from the Buck Institute. This was

very important as the school worked to implement PBL and focus on global cultures. The

training and leadership roles that I have received at Plaza could create potential biases during the

research. This could potentially offer difference of opinion or practices that might cause concerns

during the study. To limit this from occurring, I used data and actual findings for evidence

during the study. Another potential area of bias could be toward leadership traits and

philosophies of school management or leadership and I am a principal of a middle school. I only

reported the findings of the study and did not offer opinion about different leadership or

management traits. These biases were minimized by adhering to the data that were collected and not offering opinions during the process.

Summary

In this study, I strove to present the data with detail that allowed for themes to be easily identified. This occurred through the analysis of interviews, observations, and document analysis. This process occurred by identifying the commonalities that occurred within the three school locations that were being researched. I used a confessional approach while presenting the data in an attempt to remain completely neutral during the process.

The main focus of this chapter was to summarize the following components: research methodology, problem and purpose overview, research questions, research hypothesis, null hypothesis, population and sample, data collection and instrumentation, data analysis, validity, and reliability. This chapter explained the methodology and process that took place as the researcher strove to discover the capacities that are effective in implementing school change at the middle school level.

CHAPTER 4

PRESENTATION OF RESULTS

The purpose of this study was to examine what capacity-building factors are present in middle schools identified as successfully implementing project-based learning. This qualitative, multiple-site case study examined three schools that have implemented and led their schools through changes over the past few years. The participating schools for this study were schools that contained Grade 5 through Grade 8 in the Midwest that were currently members of Schools to Watch®. As such, they were schools that had exhibited high educational standards for students with a strong understanding and implementation of project-based learning. The School to Watch® participants were chosen from the more established members to newest members according to availability to participate in the study. These schools were selected from an urban, rural, or suburban setting with no guidelines set on socioeconomic status, gender, race, or ethnicity. During the selection process, no high-stakes testing or school leadership criteria were used.

This study focused on capacity building as a component when implementing school change. In doing so, the study strove to answer the question, "What components of capacity building are essential when implementing selected school change?" Additional research questions were as follows:

1. What capacities are needed to implement project-based learning at the middle school

level?

2. What leadership characteristics are valuable to building capacities in implementing project-based learning at the middle school level?

3. What are the keys to sustaining successful change after implementation of project-based learning at the middle school level?

School Descriptive Data

The participating schools for this study were schools with grades between Grade 5 and Grade 8 in the Midwest that were members of Schools to Watch®. As such, they were schools that had exhibited high educational standards for students with a strong understanding and implementation of PBL. The schools had to demonstrate the evidence of specific characteristics, which are listed below, during a stringent application process before being selected as a member of Schools to Watch®. Schools to Watch® concentrates on five main focus areas that the schools exhibit at a high level of efficiency.

The Schools to Watch® sample was purposefully selected with respect to this designation itself, as membership in that group served as a quality-assurance mechanism that participating schools strove to be high-performing, challenging to all students, infused with rigorous curriculum, imbued with rich instruction, and staffed with teachers who were trained at the highest levels with outstanding supports. These schools had completed rigorous training to achieve the status of being a School to Watch® member for the 2012-2013 school year.

Sample schools had all addressed the issues of change since they implemented PBL during the past few years, and this is a focus of the Schools to Watch® program. The enrollments of these schools ranged from 255 to 915 and included Grade 5 through Grade 8. The schools also had a variety of schedules, demographics, and other specifics that differentiated the schools.

To further explain these schools in the study's data analysis, the participants were identified in this study by using school (S) with a number designated to distinguish among the three schools. School 1 was identified as S1 in sequential order of each participating school. The individuals who participated were identified with a combination of school and a specified letter to each participant (S1A). The first two letters (S1) indicated the school, and the last letter indicated the individual who participated from that school. All of their identities were kept confidential. Table 1 contains participants involved in the study with descriptive information.

Table 1

List of Participants Involved in the Study

Participant	Position	Sex
S1A	Principal	M
S1B	Teacher leader	F
S1C	Assistant principal	M
S1D	Teacher (focus)	F
S1E	Teacher (focus)	M
S2A	Principal	M
S2B	Assistant principal	M
S2C	Teacher leader	F
S2D	Teacher (focus)	F
S3A	Teacher leader	F
S3B	Principal	F
S3C	Teacher	F
S3D	Teacher (focus)	F

School 1 (S1) was designated in 2010 for the Schools to Watch® program. The principal was in his second year at this school. The staff was experienced, with 49% of them having more than 11 years' experience. The demographics were somewhat unlike the population of the students, with 98% of the teachers being Caucasian and approximately 77% of the students being

Caucasian. This school had over 900 students, with 64% designated as qualifying for free and reduced price lunch.

School 2 (S2) was designated in 2011 for the Schools to Watch® program. S2 had a principal that was currently in his first year at the school. A majority of the teaching staff was experienced and stable within the school. A majority of the teachers were Caucasian, which directly matched the demographics of the entire school with 94% of the students being Caucasian. S2 served over 250 students, with 30% of the students in the free and reduced lunch rate.

School 3 (S3) was designated in 2011 for the Schools to Watch® program. The principal at S3 had been in place for over five years, which included the time that the school was accepted into the Schools to Watch program. At S3, 52% of the staff was Caucasian and 77% of the students were Caucasian. Table 2 is a summary of the three participating schools in the study.

Table 2

Summary of School Demographics Participating in the Study

School	School Grade	School Setting	School Enrollment	Free/ Reduced %	Diversity %
1	D	Urban	900	64%	23%
2	A	Rural	255	30%	6%
3	A	Rural	586	63%	23%

Analysis of Interviews

Interviews were conducted at each school with the principal, assistant principal, and any other curriculum leaders within the schools' structures. Once those were complete and I had

attended a team or faculty meeting, two people were selected to participate in the focus group

interviews. These interviewees were teachers or coaches who were involved in leadership

decisions within the school and were involved in the meeting that I observed. These decisions

were made upon my arrival to the school after having conversations with the school principal.

At least two interviews were conducted after each focus group had been observed. The interview

instrument that was used in this research study appears in Appendix A. These interviews were

approximately 40 minutes long and were held at the interviewees' school. This location and the

open-ended questions allowed the participants to answer in a relaxed atmosphere. The

observation portion of the data collection occurred during faculty meetings and other school

team meetings that were deemed important for school improvement. I also gathered and

analyzed school documents for particular themes and patterns.

Once the interviews from the participants were transcribed, the data were studied for

themes that could arise from the interviews of the school leaders and focus groups, and other

school artifacts were studied. The coding process began by me reading and labeling the findings

according to specific themes that arose. This process was continued when research was

concluded on the specific data of each participating school. Once the research and coding were

complete from the interviews, school data, observations, and document analysis, the results of

this information indicated that three themes presented themselves to the study. The three themes

were as follows:

1. These schools represented a we centeredness that imbued the professional

   responsibilities of leadership and staff with the use of available time in a search for

   academic improvement.

2. Coaching traits were widely discovered within the leadership of these buildings in an

attempt to increase teacher effectiveness and achievement.

3. A theme of data presented itself as the study progressed that indicated that presenting school data was a key component that led to conversation about changing the educational environment.

Theme 1

These schools represented we centeredness that imbued the professional responsibilities of leadership and staff with the use of available time in a search for academic improvement. The term we was commonly connected to the thought that we could all improve together during available time. This theme directly tied to the connection of the time needed to do the work during PLCs or at other convenient times for the staffs. The interesting fact was that when the educators started talking about improvement, they consistently referenced we.

One example of this is when interviewee S1A referenced the word we 20 times while answering one question during his interview response. S1A stated,

You know it's my role to make sure that not only do we carry on our building goals; we look at our ISTEP at NWA testing and know that we have to go through and lead, really in the area of language arts, and our kids doing non-fictional text and things like that. It's also my role to be a liaison that we are not just a 7-8 building, but it's a K-12 system. It's my job to make sure that we are also communicating with the elementary, and we have meetings set up with them to meet regularly. I also meet with the high school folks; we have data conversations, and we are in the process right now of saying "OK, what is it a 9th grader should look like at school S1?" Once we know what they need to look like, it's my job to make sure we are not just passing the ISTEP, and not just doing things here; we talk about not just being high-school eligible but also high-school prepared. We

communicate with the superintendent's office about leadership. We have other goals as

far as a vision and a mission and making sure those are continually brought up to staff.

For example, we have to use technology, we have to use assessment, we have to make

sure we use community partners, and we have to make sure we are making phone calls

home. The leadership here is not only making sure what we need to do but also making

sure that everyone understands and guides the big picture.

This was S1A's statement that originated in a question regarding leadership. He used we

20 times to connect the line between people and improvement within the thoughts of leadership.

S1A indicated that not only do they have goals and vision but also they can accomplish these

tasks together. This statement was made very early in the interview process and continued

during the entire visit from the statements and evidence provided below.

S1A later continued the we theme as he gave examples of how the staff has asked to take

on a certain task. I noticed how the teacher statements from his examples indicated that we will

try to accomplish this task or improve:

We have tried to do some things with our staff, where they build their own culture. I had

a group of teachers come to me and say, "We really like this idea of project-based

learning." "We would like to give this a shot." So, I let them research it, and now I have

a whole hallway; this first hallway down here is part of the New Tech network, called

APEX. These groups of PBL people say, "We love what *we* are doing." They have built

their own culture. They said, "We are going to make this work."

S1A felt also that teachers in his building were very open to conversations that elicited

teacher growth in a variety of ways. This statement provided a clear example of how the we and

the improvement come together through conversations that occur. This statement was evidence

of how the staff must be having conversations in the halls, at lunch, or even after school. As the

interview and observation continued, it was evident that when S1A referred to improvement, he

typically included we in that conversation.

S1A continued to echo his thoughts about improving with the connection to we by

stating,

> We joke that when you retire, "Do you want to say you have 35 years of experience or do
>
> you want to say you have one years' experience 35 times?" So it's very important that
>
> everyone continues to grow as education is changing. It's really important that you not
>
> go through these changes alone. It is stressful; you are a building leader, and you know it
>
> is stressful. If you let yourself go through it alone, it is going to be a tough road. PLCs
>
> are big.

S1A indicated through his statement that teaching in this school should be a we process. He

concluded that teaching is stressful and that we need to continue to grow and work together for

the good of everyone.

When S1A was asked about the decision-making of the school, he again referred to the

we concept that focused on how the school went about improving. S1A stated,

> When we first started looking into our redesign process, we had seven different
>
> committees. We had all these different committees, and in those committees, we had a
>
> group that traveled with the redesign process. We were in Georgia, Boston, California,
>
> Kentucky, Illinois, Ohio, and Philadelphia. We have been to a lot of places looking at
>
> what schools have done.

He continued to reinforce the findings of the we theme with this statement. S1A indicated that

when it was time to make school changes or look at how they can improve, we would take on the

decision. S1A indicated that "we first started looking" and "we were in . . . " These statements were all tied to the theme of we can improve together.

During a walkthrough following S1A's statements, he shared with me a clothesline display that he was preparing to symbolize the growth that they planned to present at the November Board of Education meeting. S1A shared his school's growth and stated that this was the results that "we have been able to accomplish because of TAP and PLCs." S1A went on to point out the positive results that they have had during the last year.

S1C and S1A had similar thoughts regarding the questions asked; however, one interesting note about S1C is the lower number of times he used the word we during the interview. He typically limited himself to using the word as he was referring to improvement or change that was connected to improvement. This even occurred when the question was not directly related to improving. S1C stated that

we also have Artful Learning, which I spoke about earlier. We are implementing those characteristics and frameworks of inquiring, experiencing, creating, and reflecting on our work that we are doing. We have two in the fact funding phases of a possible Global Learning community, but with all of those are structured through our TAP program. So, aligning all the attributes and seeing how they connect to the best practices is important. We also focus on professionally development for our teachers through our clusters, helping them see the value in building those concepts, skills, and resources for those teachers to take back and fit into the framework that we have. Instilling those learning communities is an important thing we are doing.

S1C continued his thoughts about improvement and we by stating, "We all know that we are here to educate students, so as long as we keep the focus of the students in mind and doing

what is best for them, we can make the best decisions to move forward." S1C continued his

theme of improvement by stating, "We take risk every day. We take those risks when you are

implementing a new frame work of learning." S1C continued by later stating,

> The teachers are looking for ways to continue to improve. By providing the teachers with
>
> those resources and continuing to further grow, build their knowledge, and
>
> understanding, you are meeting their expectations that they require. By doing this you
>
> will not become stagnant. We are always looking at ways to reflect on the performance
>
> that we have had in the past and improve on the performance that we will have.

> S1B made some strong statements that were in line with the typical comments from

school S1 when she was referencing capacity building. She stated,

> I think it is really important. If we don't have that capacity building, we are a fractured
>
> group. We need to be a team working together so when one part of that is broken off or
>
> fractured from another part, we are not getting to the end result that we need.

S1B reinforced the theme that we are in this together. She even took it a step further and placed

her organization in a place that worked together to get the end result that they needed. It should

also be noted that S1B and S1C had both indicated that PLCs were a vital and important part of

the school process and were being mentioned with the we.

> She continued the theme from a question about PLCs:

> We have started Artful Learning in this hallway this year; I am still new to it. I only get
>
> about 10-15 kids that are actually in this hallway, so I get them from every other place. I
>
> don't do a whole lot with that right now, and we are still trying to work on different units,
>
> and those will all be done in the second semester. We are very new. We have meetings
>
> about once every two weeks; they are optional meetings for about 30 minutes just to talk

about what is going on and what has been implemented so we can get ideas off of each

other. I know that because I'm here, and I don't know in APEX what they do. We are

starting global learning; I don't know much about how far they have gotten with that. I

think they are still researching that.

Notice how S1B specified that their meetings were optional but occurring without the

administration mandating them. She indicated that they meet to learn from each other and

continue to improve the process that they were currently implementing.

This theme was continued as research was gathered in S2. S2B responded,

We started early with some training. A few years back, our principal at the time came to

handful of us and said, "I want you guys to look into this; I want you guys to tell me what

you think about this." So it was kind of, we were sent to professional development as

kind of, "Go tell me what you think." Many of us came back, "OK, we like that; let's

start implementing." We did it small-scale early on. A project here, a project there, I can

honestly tell you from my own experience, my first projects were not very good. I had a

lot to learn, but the small-scale attempts early on were rough. We eventually got to

where we were getting to the point where we could integrate social studies and language

at least once a semester. Some of us said, "Let's either do this, or let's not." We tried a

little bit more for it; we tried to find lots of different opportunities to pull that in. We

have had continuous training throughout; we have been given planning time to develop.

We have used PLC time to be able to kind of vent to one another's projects to get some

other ideas and suggestions.

Notice how often S2B used the word we in the sentences prior to this and how they were

connected to the fact that they wanted to improve. He talked about continuing to move forward

and how we were going to do this work. It was also interesting at how he indicated that the PLC time was used for improvement. S2B continued with,

> But to the point, we have the 8th grade language arts and social studies in one single humanities class, but it is pretty much entirely project-based; obviously you are going to have many lessons. You are going to have many things going on in there. For the most part, we have a project going, whether it is project-based or scenario-based, which we have looked into a little bit as well. We did that through [a local college]. So we have used a little bit of that as well. We used them in our science, which is also very similar.

This statement by S2B emphasized the connection between improvement and we. She made the statement about how they had continuous training and they were given the extra time to make this work effectively within the school. Once I noticed that extra time was important for the we, she started looking into this thought.

I was able to identify that all of the schools that used data to set goals as a major element of PLCs and in a movement toward improvement. S2A indicated, "After data is evaluated, the learning goals allowed teachers to have conversation that could facilitate change toward student achievement." These changes occurred with the collaboration of multiple people and were discussed during PLC time. S2A detailed that by stating,

> In order for the PLC to set these goals they needed time. This time allowed the PLC to break down the data and see what the goals really need to be. With these goals set, the PLC will then monitor the learning goals and identify the new data that appeared.

This is where the time, new knowledge, and data came together to form the effective PLC, and the term we appeared to actually come alive as a part of the organization.

This gave the impression that the connection between PLCs and we were believed to

make an impact within the schools. Earlier it was noted that S1A and S1C both concurred that PLCs were a vital part of improvement, as they appeared to be the main components that allowed the we to come to life. This statement again indicated that without the PLCs, it could have been difficult to have a we theme within the organization. This theme was further addressed as I attended the PLC meeting at S1. I noted during the observation that the leaders of the group made particular statements like "We noticed that the data indicated" and "We can gather that information and talk with everyone about that." At school S2, their PLC meeting offered several comments toward the we as well. Statements like, "we can look at our kids that have multiple . . . ." and "what we are talking about is if our students have an F, we meet with them and have a conference."

> S2C continued the thought that PLCs were connected to the we because
>
> PLCs help quite a bit at our school. Our PLC morning is on Wednesday. I can't say we
>
> have had a morning that hasn't been productive. Teachers are very open in those
>
> meetings when we have full meetings with everyone together. It is conversation about
>
> what is best for our students.

When situations warrant, PLCs allowed the time for all needed personnel to get together in small or large groups to discuss changes and make the plans for adjustments to situations. This could have been an example of Fullan's (2007) thoughts on improving student achievement by the use of increasing school capacity building. Fullan concluded that you could do this with the use of new knowledge, additional resources, and great motivation by people either working independently or as a group focused on student achievement.

These thoughts were reinforced with the comments from S2A. Evidence was gathered during document analysis of PLC minutes that further reinforced the PLC and the we concept

that had been observed. At school S2, the staff was involved in conducted a PLC on a strategy called "I Do, and then We Do." This PLC strategy was taught to the entire school and then was used in the classroom. Once this strategy was completed, staff members returned to the PLC and shared their thoughts on the activity.

Interviewee S3A indicated that PLCs were very important at their school and "they are always meeting to look at strategies or areas that they need to improve on." She went on to point out that the entire school was involved in PLCs that were extremely beneficial because "*we* are all in the same boat." This gave everyone the opportunity for suggestions and feedback that offered the staff a feeling that they were together on the issues. She added that PLCs make "the staff feels like they are part of a team instead of everyone being on their own." This statement about the team was another example of how we work together for the common goal of improvement.

S3A concluded that PLCs were beneficial because

I think some of it is just to feel like you are all in the same boat; *we* are all seeing the same things; *we* can offer suggestions and concerns. Like if something is not going well, you can sit and talk to people that are in the same boat. This usually makes you feel a little bit better and you can brainstorm different ideas. It makes you feel like you are part of a team instead of all out there on your own.

S3A echoed the theme that PLCs were important, but she also mentioned we in conjunction with the team.

School S3 routinely evidenced the we theme in their school's Google doc, reviewed during document analysis. It stated,

We have had many attend various training or served in other ways this summer.

- Project-Based Learning training or worked collaboratively to create PBL lessons

- Standards-Based Report Cards

- Technology Sessions

- IDOE Initiatives

- Literacy Block Training

In this weekly Google doc to the entire staff, S3 reinforced the we connection with two quotes from famous American authors like, "We are made to persist" and "That's how we find out who we are" by Tobias Wolff (Wolff, 1994, p. 157) and "We can choose to live today free from the failures of yesterday" by Gary Chapman (Chapman, 2009, p. 44). These quotes were consistently discovered in a weekly Google doc that went to every teacher within the S3 building for inspiration during the school year. Another example at school S3 continued the use of these words in a Google doc that is constantly updated to the staff:

> We are a group of continuous learners. We have a model this for our students. Our goal is to instill a love of reading and lifelong learning in our students. Our theme this year is HATS off for learning, which stands for Habits, Attitudes, Talents, and Skills. Each quarter we focused on a particular trait.

The theme of we was reinforced in S3's school mission statement as well, as it stated,

Commitments to students

- We see that decisions are based on what is best for students.

- We do whatever it takes.

- We utilize strategies that work.

Caring

- We respect and nurture one another.

- We value individual diversity.

- We demonstrate compassion, empathy, and tolerance.

High Expectations

- We have a challenging curriculum.

- We differentiate instruction.

- We communicate expectations.

- We prepare students to compete globally.

Team Player

- We make time to collaborate.

- We work cooperatively for the good of the whole.

- We help others in times of need.

- We embrace diverse thoughts and ideas.

- We build positive relationships.

Integrity

- We follow through.

- We are accountable.

- We are honest with one another.

- We behave honorably.

Enjoyment

- We celebrate success.

- We actively engage students in the classroom.

- We provide positive feedback.

- We promote a sense of belonging.

The mission statement at school S3 clearly focused squarely on improvement of both the students and improvement of the staff. The we statements from the mission statements included words like the following: collaboration, accountability, celebrate, and feedback. These words are the cornerstones to improvement, and they are embedded in the words and actions of the schools that were researched.

The theme of we is consistently present in school S3. They not only spoke toward the we, they also evidenced this in a variety of ways. If one were to talk to staff, read the school's Google doc, attend a PLC meeting, or read the school mission statement, one would walk away thinking that this school focused major efforts toward how we improve.

The we theme was continued in overall school vision statement of S1. The vision stated,

We will educate all of our students to face and embrace the world of the 21st century. We are a progressive school and community facing challenges together through collaboration and consensus building. Both staff and students understand that learning today is not the same as it was twenty years ago.

It is interesting to note that in S1's vision statement, the school mentioned words like collaborative, progressive, both, consensus building, and similar words or statements in S3's mission statement. S1 also continued the use of we in their newsletter when they stated, "One step we are taking to promote student learning and student attendances . . . " These actions were even continued when I visited the PLC meeting at S1. During this PLC meeting, the two leaders frequently referenced improvement and multiple times included we. One of the two coaches that were leading the PLC meeting stated,

Last nine weeks *we* really focused on looking at the rubric for particular indicators that *we* struggled with. This next nine weeks, *we* are going to shift our focus to our kids. *We*

are going to focus on our first student strategy where *we* take some new learning here and actually apply this strategy to our students.

This statement by a PLC coach during an observation is a great example of how the theme came together. The PLC leader mentioned that we have taken information—that we have struggled with and have acquired new knowledge by talking about how we struggled. This work was completed during PLC time and focused on improving their instruction. Then she indicated how it was time to learn how we took this information back to the students, which should have allowed the students to improve. This example, along with the various other types of research presented above, indicated that these schools often talked about improvement and when they mentioned improvement they refer to we during the conversation. They also evidenced that this we time occurs typically during the PLC time.

I initially noticed the we theme when entering the principal's office of school S1 for the first interview. As the principal explained his clothesline of school data to me he commonly referred to the we theme during his conversation. This theme was reinforced by school walkthroughs, document analysis of meeting minutes, school mission statements, and numerous interviews. These consistent findings with the use of we while referring to improvement and extra time were common throughout these three building. The we seemed to be a way of life for these three schools.

Theme 2

Coaching traits were widely discovered within the leadership of these buildings in an attempt to increase teacher effectiveness and achievement. I noticed through conversations and interviews that these school leaders were exhibiting a large number of replies that were similar responses that a coach would offer. A pattern of coaching traits were widely evidenced when the

collection of statements from interviewees within the schools were analyzed. S1B stated an example with, "I am there to support them" as well as when S1A from the same school stated, "I am always talking to teachers to give them the feedback." I also documented evidence from multiple statements gathered at school S3. S3A stated, "We are part of a team." Other examples like teamwork, we, and get the most out of people formed underneath the concept of leadership were collected from multiple participants from the three school sites where the interviews took place. It seemed that coaching fell under the umbrella of being a good leader from the perspective of the interviewees at the schools.

The school leaders who were interviewed also used a variety of words that were commonly used with regard to leadership. Words like democratic, open-minded, shared, led by example, and steady all appeared during the interviews. These words also connected back to coaching and pointed directly toward Lambert's (1998) thoughts on leadership. Lambert indicated that leadership is broader than the sum of its leaders, for leading should involve everyone and focus on shared responsibility. When looking at the words that were common during this research, you see words like teamwork, feedback, and we were scattered all through the documents. These words and statements mentioned about coaching directly related to Lambert's thoughts on leadership. Several of the interviewees mentioned parts of Lambert's six components of leadership capacity that also connected to coaching.

S1C indicated that leadership was

being firm, fair and consistent. It's maintaining that role, looking forward to being able to make those calls and at the same time being able to be collaborative and listen to your teachers and your students. You should really look to understand what is going on within

the building—the climate and the culture that is occurring—so that you can make those well-informed decisions that inevitably have to be made.

When I first heard these statements, it really did not hit home that leadership and coaching could be similar or even connected within these sites. Once the statements from S1C were reflected upon, it was apparent that this is the exact way a coach might handle a team in most situations. S1C also indicated that collaboration is one of the most important aspects of leadership that occurred in the school district. S1C added,

Collaboration might be one of the top ones; it has been instilled in use from our cooperation. Once you have collaborated, there are steps that need to be taken to move forward. It is not always the easiest decisions to make, but when you are listening you are collaborating and involving all stakeholders in the decision-making process, so it makes it easier. I talk to a lot of students, staff, parents, community members, and school board [members]—not forgetting about all those pieces to the puzzle and making sure you are well informed before making the best decision for student growth.

This statement from S1C indicated to me exactly how similar coaching a team and leading a group of people actually is. He mentioned "pieces of the puzzle." It is important for coaches and leaders to understand and have a strong working knowledge of how the pieces of the puzzle fit together to gain momentum. A lot of leadership and coaching is about momentum and making the correct decisions. A strong coach or leader will gather all the evidence possible and make the best decision possible for everyone involved to reach the goal. If a school leader makes too many poor decisions, all momentum will be lost, and the team or school could struggle.

It did seem that in this statement, the interviewee had evolved to a higher level of reasoning according to the response. I explained, a coach would most likely not collaborate with players on certain specifics but in school leadership that is another story. It appeared he has realized that having everyone's opinion or statement before a decision is made is in his and the school's best interest. It would appear that this would be an evolution from coaching that should be helpful as a school leader.

S1C indicated that coaching was important to improvement by stating,

Teachers experience the steering cluster and then those are turned in to the cluster follow-up person. I have a group of people that I am assigned to follow up with. They will submit those to me and then I continue to converse with them back and forth. I will give them feedback on what it was that they submitted. That is one form of it; there could be an actual scenario where they are implementing something new. I would then go into the classroom and observe their implementation of the capacity that was built during cluster and then provide follow up from that as well.

S1C indicated that he would offer feedback and conversation about projects and activities once the PLC leader had taught the teachers during their cluster or PLC time. This follow up and conversation was an example of not only their accountability but also the collaboration or coaching to get the best out of their activities.

S1C went on to specify that he looked to change the school by means that could be considered coach-like components. S1C stated,

You have that first year of everybody getting to know each other, identifying those bumps. The second year was cutting teeth and having those difficult conversations (not saying you did not have those the first year) by the third year, everybody was in the same

understanding, same direction, same mode, and same direction, and it worked. It was phenomenal.

S1C indicated that through observation and then adjustments (conversations), over three years they had everyone headed in the same direction. This would indicate that the S1C evaluated the situation, had conversations with people that aligned with the plan to improve, and then set the pieces in motion. One thing that leaders and coaches love is when a plan comes together. Like S1C stated, "It was phenomenal."

S1C continued to mention aspects of coaching by specifying,

Those conversations can be frustrating. I think it is acknowledging where the areas are that you need to kind of target and look at. It's not just going in and blasting people and laying them down; this is terrible. It's what is it you are looking at trying to get to and how do you build that capacity to get them to that level. It's not putting anybody down, but it's clearly establishing those expectations up front, and when you see those expectations not being met, it's having those critical conversations. It's really about instilling that motivation within them, helping them understand the direction and why the things are what they are. Not forgetting their point of view, they have their own unique set of circumstances and experiences, so you need to be cognizant of that and try to help guide them along in that process.

S1C sounded just like a coach when stating, "going in and blasting people" and "to help guide them." This was a typical coach, but S1C went a little deeper than that. He indicated that one should instill motivation and help others understand the direction they are headed. S1C also touched on the why aspect. He seemed to understand that the why might be able to motivate them to do more.

S1A revealed his definition of school leadership as a shared approach that does not include just one person. S1A said,

To me leadership is being able to take a group of people, let them understand what it is that you have in mind, where it is you want to go, and being a constant reminder or a constant pusher. You should always base your decision on what's best, but it may not be what's best for everybody. Being in a leadership role is someone that people can trust, and it's not one person; it is where the building's going and making sure that everything they do is in that realm.

This statement is comparable to the one that S1C made earlier about laying out a plan and helping everyone accomplish that plan. The term "constant pusher" really caught my attention. Again, this is a statement that a coach would traditionally make.

According to S1A, being steady was a focus of his leadership style. He indicated that through past experiences, he has learned to manage people in certain situations. He concluded,

I'm not someone that is going to come in and scream and yell. I try to be steady. I almost go back to when I coached football and wrestling. I also played football in high school, played football in college, understand the rah-rah stuff. The big eye opener to me was when I also coached girls' softball one year. You can't yell at girls; otherwise, they shut down, and so as we go through, you have to show people not only how to deal with the things that they are doing that is inconsistent, but you also have to celebrate the small wins. For example, the scores we had this year, we increased in every category, even though we didn't jump up to 80% like we wanted to be, it's been a steady increase. Those are the things you have to celebrate.

S1A indicated several components that exhibited how coaching and leadership had come together. S1A mentioned that schools should celebrate wins. That concept aligned with Kotter and Cohen's (2002) sixth step of implementing change. Kotter and Cohen's eight steps included establishing a sense of urgency, pulling the team together, establishing a sensible vision. Step 4 is sharing the vision, a precursor for empowering people; step 7 is celebrating short-term wins which creates momentum, continuing to push with the momentum, and finally making the change stick. This is the most difficult step to establish.

S1A went on with his coaching parallels when he revealed that he believed that the most important component of leadership within a school was getting better each and every day. He specified that all school personnel should look at results and reflect on them so they can improve their teaching and student achievement. In conjunction with Kotter and Cohen's (2002) steps, S1A mentioned that he "would be steady and make improvements" and that "it was important to celebrate the small things as you move along." It would be interesting to know if S1A had a background in coaching.

S1B stated,

Leadership is something that you have somebody who is in a position to where they guide people. Whether it is a school, the teachers, or the community, they should guide them in a direction either for change if that is what you are looking for or to guide them on whatever the goals are of that area.

She indicated that the leaders in an organization should lead toward the goals that have been established for that situation. S1B concluded that her role in the school environment was to offer support, guide people, and encourage reflection. This purpose directly connected back to the leadership capacity aspects that Lambert (1998) identified because of the reflection and

collaboration. Her leadership role revolved around assisting teachers with their ideas and how they could resolve those ideas so that they could increase a teacher's practice and, in turn, increase student achievement. She indicated that a school leader should be someone who has his or her goals in mind with a solid plan and timeline that would allow the school to reach certain goals. She understood that sometimes everyone may not agree, but often a decision just had to be made with the information that was available.

S1B concluded how important it is to have a plan by stating,

I think that would go back to my ideas about leadership, and there has to be a plan there, and you have to build capacity. If I understand that correctly, you would have to have some buy-in. The whole positive aspect would need to be there. You would have to have a true leader who could guide people in that direction, so that people will buy into whatever you are doing. I think it is really important. We need to be a team working together.

This response from S1B was similar to S1A's response. It seemed that several of these school leaders had a similar approach to change. It appeared several of them believed a leader should have a game plan or a school plan that would allow the principal to guide people in a particular direction. Not only did S1B mention having a plan and guiding people, but she also mentioned that getting buy-in was vital. She closed with a statement that was very coach like when she said, "We need to be a team working together."

S2B said,

Leadership is something that is a skill, but it's also sometimes how you interpersonally relate with others. It is your ability to get others to work with you, work for you, and to kind of organize and cooperate with things.

One aspect of coaching could be identified by knowing when to do particular actions and who should accomplish these actions. S2B defined his leadership style with components that could be considered coaching attributes. His definition was someone who had to push and get people to perform at a very high level by possible initiating ideas. S2B added that knowing the educational philosophies of the groups or coworkers was important in being able to facilitate ideas and move them forward. S2B specified that it was important to be very thoughtful and deliberate in making decisions about the individuals that worked together. Sounding like a coach, he added to the idea about having a plan as stated earlier by S1A and S1B while indicating that he thought using a strategic outlook while planning was very important when placing people for positive outcomes. Leadership had become synonymous with a statement by Collins (2001), "You have to have the right people in the right seats" (p. 41) or as in coaching; one would have to have a successful plan with the correct people in the correct places to be effective. Not only is it important for coaches to have the correct people in the right places, but also it is also important to get the most out of people, as the interviewees have stated.

S2B surmised that the most important component of leadership within a school was the following, when stating,

> I would say that my focus or goal is maybe a little different than what a typical administrator would be. My job is to get the most out of the people that I am working with, and it depends on whom the other individuals are. I am looking at the strengths and weaknesses of the group. Maybe kind of initiating some things, being the one that kind of initiates or suggest why don't you take this role, or why don't you take this role. I tend to be a big picture kind of person; I'm not the overly organized nuts and bolts kind of person. I tend to be the one that has the big scheme ideas.

S2B provided more evidence to the connection between leadership and coaching ideas by stating,

> We looked at more of the strategic outlook, when we pick individuals who we thought would be good on that technology committee. We looked at people's overall skills and their placement and also people that we knew would be willing to serve and be positive.

This type of evidence was noted several times during the interview. It appeared that various leaders or coaches could make statements that indicated that they were thoughtful in their placement of people and their overall decisions.

Not only was it important to have the right people in the correct places and motivate them properly, but also to also have that shared approach that allowed people to talk to each other about situations. Without this shared opportunity, making adjustments to the plan and reaching the set goals would be overly difficult. S2C revealed that a leader was

> someone that people can feel like they can confide in and people see as the go to point person and that they feel confident that they can come to me; there is so much more to it. It's the everyday dealing with teachers and students that I feel is so important, even parents.

S2C echoed this thought with the statement that relationships are probably one of the top pieces that are important.

S3A continued the theme of finding the correct people and coaching those people to make the best decisions for school improvement. She indicated that leaders should "focus on finding the strengths of the staff and using that information to direct the leaders to make positive decisions within the school." She mentioned, just like S1C and S2C, that a leader consistently offered "suggestions and praise to the staff." This would be the exact same thing a coach would

do when working to strengthen a team. She stressed that these suggestions should be done in a "constructive way," so people would take the idea, incorporate it into their own teaching philosophy, and improve from the comments.

S3B concluded that she was a "team player," and that when working with people sometimes you have to get in the dirt with them. She noted that it was her style, and it has worked well. These thoughts by S3B are exactly what a coach would think and act like. This response of a team player fell right in line to numerous statements made by others during this theme. The research indicated that relationships, being reflective, and placing the correct people in the right seats were all components of coaching. It would appear through this research that these leaders knew their people, that they had a plan, and that they constantly adjusted that plan through coaching these individual along the way toward improvement.

When S2C was asked how she challenged other teachers, her response was very similar to S1C. S2C stated,

> I feel motivated to get better and always be better. I know there are some people out there that need that motivation. I haven't had a lot of dealings with that this year, trying to motivate, but I do try as much as I can to get around and talk about instruction and talk about doing walkthroughs and having conversations about what can make things better. Let them reflect and maybe help them reflect a bit on instructions; help them reflect on pieces that can make that lesson go better the next time they have it.

S1C combined two aspects of coaching that one must have in order to be successful: relationships and motivation. Both of these aspects can be evidenced with great coaches and leaders.

S2C's response was very similar to S1C, but she went deeper with her explanation. She not only mentioned motivation, but she added conversation and reflection. Her thoughts on reflection echoed the point of view of Lambert's (1998) leadership capacity. As anyone who follows big time sports would know, the key to development at the highest levels is being able to reflect. Without this reflective component, any kind of activity, whether coaching or teaching, could struggle to improve.

One key component that was gathered during the observations was that S1 and S2 schools have academic coaches. These leaders were in charge of the agendas and making sure that the teachers were held accountable. During the observation they introduced the topic and then presented the lesson. Once this had occurred, they set the guidelines for the next few weeks so everyone would have a clear direction. In both of these situations, these two leaders would review the requested evidence and then offer suggestions or support wherever it was needed to complete the assignment.

Schools S1 and S3 were very focused on the reflective piece. The document analysis portion of the research yielded significant findings at these schools. At school S1, PLC meetings took place weekly, and these meetings were heavily documented which allowed me to evaluate the meeting minutes. Of the 15 document meetings that were researched from S1, only three of those documents did not contain a feedback portion to the lesson. The meeting minutes from school S1 stated, "Schedule a 15-minute segment for your assigned TLT member to observe and provide feedback to Chunk 2's Critical Attributes."

At school S3, they had very high level of reflections. During the walkthrough of the building, S3A indicated that the teachers must have people come and observe their lessons once a quarter and then have a feedback discussion that allowed the teacher to improve. This

documentation was kept for the entire year, and they reflected back on this as they prepared for the following year.

At school S1, I observed how they exhibited a very high level of coaching during their PLC time. During the observation, it was noted that the coaches within the school would present the new strategy and then challenge the teachers to work on implementing the strategy. Once the teacher had created the lesson plan for implementation, then a coach would come and observe the lesson. When the lesson was over, the two of them would conference together for a reflection. After that step was taken, it was discussed what the next step would be. The options for this next step were to continue with the strategy, to observe others, to receive individual assistance, or to discontinue. One key component that they used during these meetings was student data.

The focus group response at S1 indicated that they followed a protocol during the PLC time that was centered on improvement and included coaching aspects. S1E indicated,

The lesson begins by identifying a need. Once the need has been established, the teachers will be taught the concepts in a classroom type environment with the coaches modeling the strategy. After that, we take the strategy to the classroom. A coach will come and observe the strategy so we can discuss the lesson and provide feedback.

S3D indicated that the PLC times were very beneficial. She concluded that this time was used for growth and improvement. She went on to mention that during these meetings, they establish strategies that are then monitored, and then they receive feedback. She indicated that other people come in the classroom and observe her during the lesson. Once the lesson is over, they will meet and discuss the items they feel she can improve on.

Now that I had presented my evidence, I addressed the notion, "I wonder how many of these interviewees have coaching experience?" As the theme of coaching developed, I noticed this and decided to send a follow-up email to investigate this thought further. The question that was posed on the follow-up email was, "Have you ever coached a team (athletic or otherwise)? If so, how many years have you coached?" All interviewees were sent an email, with my receiving 10 responses back. Of the 10 respondents, nine of them had coached at some time during their careers. The average coaching time of the nine respondents was 7.2 years of coaching. Also of note, these nine coaches that responded had won a total of three state championships. It appeared that leadership could be directly influenced by a coaching philosophy within these three schools.

Theme 3

A theme of data presented itself as the study progressed, indicating that presenting school data was a key component that led to conversation about changing the educational environment.

Data was a consistent part of these three schools' activities. When I entered S1A's office, he had constructed a data clothesline to present to his school cooperative board the following week. When people entered, the building's data goals were visibly posted on the walls. School S2 had ISTEP data for the school corporation posted on the wall so visitors could see the progress that occurred according to the data. This theme was continually observed during every meeting that I attended, as the focus of the meetings involved persistent reflection back to student data. Data were everywhere and were talked about constantly within these school walls. The evidence that exhibited itself through research became overwhelming, as these schools used data to make school decisions that drove instruction, the implementation of change, and their

messaging to people with respect to how they stood with achievement. It was evident that a culture of data had been established.

One of the top ways that change was implemented in these schools was through the use of data. When S2C was asked about how she would implement change or a new program, she responded,

If I have data, I would try to show what kind of growth data. That would be a major part of my discussion. That is part of the reason why S2 went to Marzano because he has so much data and studies out there that show the methods that he has works. The teachers have bought into that and they want to see the data. They want to know why: "Is this going to make my classroom better?" "Am I going to be a better teacher because of this?" I have to sell them on the fact that they will be better instructors for it.

Burke (1995) pointed out that the creation of new knowledge and data changed the way the world reacted from that point forward. It seemed to put the blame somewhere else and allowed the teachers to see how they could improve and make instruction stronger. S2C indicated that the data was used during the PLC time. She stated, "I believe since they started PLCs, the major component of our PLC was for them to really look at the data. That data has been a major piece of it."

She indicated that this information would be deciphered and would lead to conversations about how and where they needed to change due to the new information that was gathered. This action was actually observed during the visit at school S2. The PLC team had created a database that included students and the number of failures that the students had during the first grading period. This database was also cross-referenced with other indicators that included past ISTEP scores and several other data points. The team would discuss the students' grades and other data

points and then made a decision about what the next step for the student would be according to the data.

During the interview, S2B concluded that when they needed to implement change, one of the best ways was to "look at the test data." He indicated that with these positive results, people were more open, and it was easier to get buy-in this way. S2B also mentioned that when they had success they "sometimes [showed] off the students work and celebrate[d] results." This activity of observing student work was noticeable within the school walls. If one walked through a classroom or down some of the halls, student work was visible. He went on to indicate that any type of success could motivate and encourage people to move in the direction in which the focus was attempting to move.

Data was indicated by S2A as an important component of change. He specified that the data would sometimes be different from what they had anticipated, and adjustments would need to be made. This change reverted back to the creation of new knowledge that Burke (1995) documented.

S1B indicated that data was a major aspect of change. She concluded that certain staff members were always looking at the data. I noticed that this statement was most likely because of the amount of evidence within the PLC noted at school S1. S1B went on to mention that the teachers would evaluate prior data and compare that to the current data to determine in which direction they needed to precede forward. The teachers would then discuss the current situation, make the changes, and then monitor the students as they moved forward. S1B indicated that they "typically [waited] until they [had] enough information and knowledge in their toolkit to make the needed adjustment."

S1C indicated that one of the most important aspects of changing a building is using the data. He stated,

> Looking at the data is the first step. It has to guide you in that direction and allowing those difficult conversations. You are obviously looking for a group of teachers and students that are putting forth their best effort. How do you go in and start to break down those areas and why they are not performing as well as anticipated on the difficult part. So really, it is taking that information and going in the direction that is needed according to the data. You should also be cognizant on what the people are thinking that you are working with. You should focus on how you harness that understanding and direction that they feel needs to be taken along with what you feel need to be done to move forward.

S1A pointed out that due to ISTEP data, the school was able to increase the TAP program opportunities and celebrate a win for the school. S1A stated,

> I don't just tell people we need to go out and do this. Here is data, you are going to see it today in our cluster meeting, professional development; you are going to see our teachers. The master teachers are going to show them the released ISTEP questions and how our students scored overall. They will look at the sample question, how our students scored, and why it is that our goals that we have are because of what they did. So, that really builds capacity. Teachers say that it's not just the state; it's not the NWEA that several states take, and it's what our students are doing on the ISTEP test. So you build capacity by not just showing them the data but showing them the proof of what is going on. I can tell you that "Hey, we need to work on language arts; we only went up .5 % in 4% in language arts; we didn't go up very far, so let's work on language arts." What does that

mean? So you build capacity by going through and showing them why you need to work

on those things.

After interviewing S1A, I went to observe a cluster or PLC meeting at school S1 and was

able to get a better understanding of what S1A was referencing. During this meeting the focus

was clearly on data. S3A was the leader of the group and started the meeting by presenting the

goal for the day and mae several statements about student data. S3A stated, "Today we will take

some new information and rollout to the teachers. This information is about student data and

how we can use this data to improve."

This thought about discussing data was continued during the focus group meetings at S3;

the group constantly talked about student data with an overall focus on student improvement.

They also mentioned that these meetings were beneficial for student growth and that this was a

typical meeting.

S1D indicated during her focus group interview,

We are data driven, so PLC's gives us the time and purpose of what we are going to be

working on, how it affects our students, and then we have time to practice. With our state

basing so much on achievement scores, we have to look at the data to see what best meet

the students to prepare them for test. We spend a lot of time on our data.

Theme 3 fell right in line with one Lambert's (1998) six critical features of the leadership

capacity. Lambert indicated that inquiry-based use of data was a vital capacity. These three

schools consistently evidenced this use of data in numerous ways. All of the observations that

took place with these three schools were based around data. The participants were focused on

understanding the data and then having collaborative discussions about how they could move

student achievement forward from this point on.

With analysis of documents, it was clearly evident that these schools focused on data routinely. S1's faculty meeting agenda was set up to reflect, give feedback, and make adjustments according to the data. The November 6th agenda noted that the teachers would review ISTEP+ data trends, and on the November 20th PLC meeting agenda noted that teachers should collect focus class pre-test data for data wall and then reflect upon key errors and strategies analyses. This was typical of most meeting minutes within this school.

The data theme continued when one visited these three schools' websites. School S1 had a section that was dedicated to being proud and stating why they were proud. It stated that ISTEP+ scores rose in math and English/language arts in 2012-2013. This increase was a 13% increase in 8th grade math scores. They went on to mention that 96% of algebra students passed the end-of-course assessment in 2013. This information was posted on the front page of the school's website on December 15th. The theme continued as of February 1st at school S3; they had this statement posted on their website,

> In the past couple of weeks, S3 teachers have been conducting data meetings to discuss the spring 2013 ISTEP achievement with their students. Students are shown a document, which shows their ISTEP scores over the years as well as their growth percentage. This document will be sent home with students on Monday, January 27 along with their Qt 2 report card. Please look for the Monday folder, which should include both of these documents.

As one can see, both of these schools were very serious about spreading the news about data within their buildings. Not only did they practice using data inside the building, but also they were proud of the data and wanted to inform parents and everyone else about their data achievements.

When looking at school S1's PLC meeting notes, one quickly gets an understanding of how much they believed in using data. Statements can be gathered, such as, "Collect focus class pre-test data for the data wall," and "By the end of the cycle, all students will increase their scores by at least 25% on the teacher-made assessments, and students performing at the highest levels will maintain their scores." These statements were just a few of the data statements made on the meeting minutes. Of the 15 PLC meeting minutes sheets that I reviewed, every one of the sheets contained components of data like the ones listed above.

At school S3, in the Google doc to teachers, it was common to see data items mentioned, for example, "The growth data which will compare 2012 and 2013 results will be available on Sept. 17th for our conversations," and "On October 7, the DOE will release the teacher effectiveness ratings based on growth model data to districts." Numerous other statements were in the Google doc that linked the data back toward conversations that could allow improvement.

One consistent theme that arose during every meeting I attended, almost every interview, or just walking through the building was data. It was clearly evident that the three schools welcomed data and allowed data to inform their practices. It was even evident that all three of the schools were proud of their recent data and publicly acknowledged this improvement to the community and parents.

Summary

Chapter 4 presented three main themes after review of the transcribed interviews, observations, and data analysis with three members of the Schools to Watch® program:

1. These schools represented a we centeredness that imbued the professional responsibilities of leadership and staff with the use of available time in a search for academic improvement.

2. Coaching traits were widely discovered within the leadership of these buildings in an attempt to increase teacher effectiveness and achievement.

3. A theme of data presented itself as the study progressed that indicated that presenting school data was a key component that led to conversation about changing the educational environment.

Chapter 5 allows for the development of conclusions, implications, recommendations, and further questions regarding the content of this study.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this qualitative, multiple-site, case study was to examine what capacity-building factors are present in middle schools identified as successfully implementing project-based learning. With schools continuing to fall short of No Child Left Behind standards and with other movements just around the corner, educators must identify and make positive changes in schools. Researchers must work to recognize and exhibit how student achievement is fostered and inform educators of options on how to move in a positive direction. Darling-Hammond (2010) emphasized how educational changes must be student focused in a manner that strives to develop the potential and personalities of all students. She indicated that the job market for students has drastically changed and will continue to be in flux with the addition of global markets. With the proper capacities in place, schools will be able to prepare students for these demands.

DuFour and Marzano (2011) indicated that after studying thousands of cases, they have yet to encounter a single extraordinary act of student achievement that did not involve a multitude of people. Researchers consistently explained that no one person has the knowledge and skills to meet the needs of every student with whom they come in contact. This example exemplifies the need for leaders to instill school capacities for the sake of improvement over time.

This study identified schools that had recently implemented project-based learning into the curriculum and what, if any, school capacities were established to assist in this school change. Lambert (2003) concluded that effective leaders learn together toward a common goal so they can work on particular task. She further indicated that if school leadership is defined as developing capacities within teachers and other school leaders, this typically lends itself to increased student achievement. This phenomenon is imperative for sustained improvement. This study focused on the capacities that are consistently implemented that lead to successful school change.

This study sought to answer the following question: "What components of capacity building are essential when implementing selected school change?" Additional questions included

1. What capacities are needed to implement project-based learning at the middle school level?

2. What leadership characteristics are valuable to building capacities in implementing project-based learning at the middle school level?

3. What are the keys to sustaining successful change after implementation of project-based learning at the middle school level?

The qualitative, multiple-site, case study examined what capacities existed during a time of positive school change in middle schools. The focus of this research was on schools that had implemented PBL between the last two and 10 years. Multiple sites were used to identify any common logics of replication that occurred and allowed positive capacities within schools. I purposefully selected the Schools to Watch® sample due to the common theme of the selection process into the program and resultant descriptions of schools admitted as successful. These

schools had completed rigorous training and development to achieve the status of the Schools to

Watch® membership for the 2012-2013 school year. I used triangulation of data from structured

interviews, field observations, and document analysis to ensure validity during the process.

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Results

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The three themes as articulated in Chapter 4 exhibit characteristics of Mitchell and

Sackney's (2001) spheres of capacity. Consistent evidence was yielded that indicated that these

schools focused on the personal sphere through a we-centeredness, through a interpersonal

sphere with respect to coaching, and through the organizational sphere with respect to its data,

which worked together in the context of high level school functioning. As these results were

recognized, a conceptual model began to materialize. Figure 2 exhibits this conceptual model in

terms of the themes we, coaching, and data, illustrated to depict how they work together to

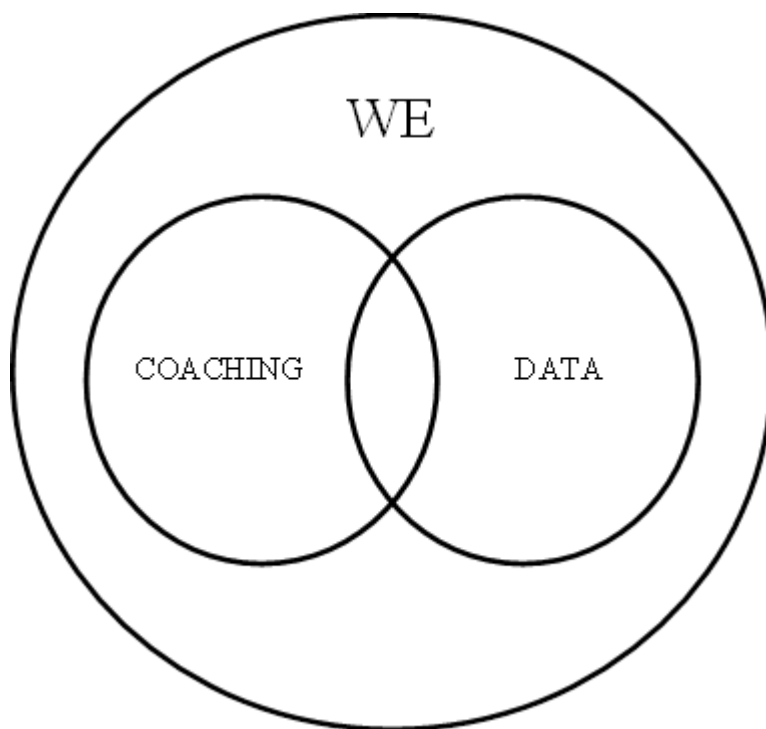enhance the capacities for improvement within a school.

Figure 2. Conceptual model of outcome.

The model exhibits how the we encompasses both the coaching and data while also indicating that coaching and data merge to form internal components that work together for the purpose of improvement. These results are explained below.

Theme 1 developed through conversations during the interviews, observations, walkthroughs, and document analysis. The theme of we presented itself in both the words and contexts through which participants shared information and carried out their duties. This theme was widespread during the interview conversations, as it appeared the interviewees referred to the notion of we whenever they were discussing improvement or change that involved desired improvement. This connection of we directly connects to the organizational sphere as these schools consistently exhibited a shared and support leadership approach that allowed them to work toward solutions together that would show improvement.

This theme was further reinforced when I more deeply scrutinized the document analysis and observed PLC meetings within the three schools. It was evident through looking at school meeting minutes, school visions, and Google docs that the school was focused on improvement, taking on this work with a we perspective. This we theme was also evidenced during meetings and conversations that occurred throughout the research within the schools. It did not seem to matter to whom one was talking; conversations typically steered themselves toward the we to improving school in the available time that they had to do so.

The second theme surfaced mainly during the interview process and grew from that point. I kept identifying such words and phrases as teamwork, guided, and gets the most out of people during conversations and observations regarding leadership. Once sufficient evidence was collected, numerous participants seemed to exhibit coaching traits that presented themselves with respect to the leadership of these buildings. It seemed that leaders in the buildings had been or

were using coaching tactics to implement change. After I made this initial observation and after

pouring through transcriptions of notes collected, I sent a follow-up email to ask the participants

who were interviewed if they had ever coached before. Of the 10 respondents, nine responded

that they did have coaching experience. It was evidenced that the leaders within these buildings

operated under leadership capacities that included coaching tendencies to make needed changes

within the school. These confirmed coaching traits again reflects back toward Mitchell and

Sackney's (2001) interpersonal sphere of capacity.

Theme 3 focused directly on data and how conversations around data led to changes to

the educational environment. Everywhere during the research process, I came into contact with

conversations, observations, and written artifacts regarding data of some sort. In every meeting,

conversation, and even within the walls of the buildings, one could find evidence of data.

During the observed meetings, data was the energy for the conversations that were being

discussed to implement change. Whenever I asked about how the respondents should implement

change, the consensus response was that they started with the data. Then once change was

implemented, data provided the platform for reflection to ensure that improvement had occurred.

It appeared that data was a fiber of being in the schools studied. Organizing data is a large

undertaking for school leaders. The organization and opportunities for data to be inserted into

the school would fall under the organizational sphere from Mitchell and Sackney (2001). School

leaders need to remain focused on this aspect and make certain school personnel have adequate

resources to take advantage of data within their schools.

These results indicate that these schools perform at a high level just like other schools

that focus on improvement and the implementation of change. The difference between these

schools and others is the level of detail and fidelity that they exhibit during school improvement.

These schools consistently exhibit the spheres of capacity that influences the actions of the personnel within them. It was evident through research that these schools focus on a we perspective, exhibit coaching tactics that connect to leadership, and use data at the highest levels to implement change that is meaningful and directed by the use of the three elements within these buildings. Other buildings may claim to use these three elements, but if they truly want to improve, they should focus on instilling these characteristics with a clear authentic direction and purpose toward improvement.

Conclusions

As several key elements emerged, it became apparent that school leaders needed to exhibit a variety of characteristics that would give them the opportunity to be effective. Building upon the three key components toward being effective—a we-centered approach, a coach-like leadership persona, and data—I now offer conclusions that may be useful to leaders desiring to enhance the improvement processes within their schools.

The first conclusion is that school leaders should strive to create a sense of urgency for school improvement not with a task-centered approach to leadership and management, but instead with a focus on relationships to ensure that they work toward similar results as the schools in this qualitative study. Particularly, the schools could benefit if the focus on relationships would engender a we-centered approach within the school atmosphere. This conclusion is further solidified by the following observations made with respect to the education profession today.

With the stresses and strains that accompany teachers, it is no wonder that teachers run the risk of becoming disheartened with teaching. Because of the demands on improvement, teachers become focused on survival rather than improvement. Many are in fight-or-flight mode,

influenced by pressures from outside of the school walls (Fullan, 2001). School leaders have to ask themselves what they can do to reverse this trend. It could appear to a true leadership opportunist that a focus on relationships is exactly what schools need to turn the situation around. The opportunity lies in the school leader's ability to build relationships that fosters a sense of the we-centered approach so as to turn this occasion into a positive event.

School leaders have at their disposal a variety of potential strategies that would assist in making a we-centered approach a reality at their schools, yet as noted with this conclusion, the main cornerstone of the we-centered mentality is relationship building. Relationships are the key to the process. School leaders must focus on the fact that building relationships to foster a we-centered approach will increase everyone's ability to improve. With proper relationships, leaders have an opportunity to take schools to new heights, and they must use every opportunity to start this process, even though they are presented with severe time constraints. By focusing on the we concept, staff will feel more empowered and energized to lead the school in positive directions.

This process of relationship building and establishing a we-centered approach for improvement could begin by being more present in the hallways, in classrooms, or at extra-curricular events. It does not matter where the connection occurs; it is more about the relationship building over everything else in this situation. Leaders need to get to know their employees and let them know that they do care about them and be very supportive about their school activities. This process could be lengthy for some, but it will be well worth it in the end.

Yet, this goes beyond making people feel good. The relationship piece is vital if the school leader wants to have a real understanding of the school environment that will allow for the knowledge to move the school forward. It allows for a wider lens with which to make decisions, as the contextual understandings that have to do with people and situations are applied

more effectively. With a focus on relationships, teachers better appreciate the fact that school leaders have their sincere concerns at heart when dealing with issues and people. With this understanding, teachers can be more focused on the tasks at hand that have to do with student achievement.

Once leaders have the pulse of their employees, a multitude of opportunities will present themselves. This is where tacticians thrive. With a clear understanding of how everyone operates, then the school leader has the opportunity to select a topic that creates a sense of urgency and rallies the troops. This is where the connection of we and improvement join together to allow the school to start exhibiting practices that allow advancement in multiple areas. During this process school leaders can look to give their staffs a clear reason of why. The why can be anything that allows the staff to be totally invested in the school improvement possibilities that present themselves. This could be anything addressing school grades, low school cultural scores, or rival schools having greater successes. Whatever the why is, with a focus on relationships, school leaders can better ensure that they have the opportunity to lead others in positively affecting the schools down to their foundations.

After the school leader has created a sense of urgency and has provided the *why,* it is time to move toward Conclusion 2. Conclusion 2 focuses on leaders as recruiters and talent scouts. School leaders in today's world must transition from the management days into the realm of the 21st century. It is no longer expectable for leaders to sit behind their desks; they must focus on what aspects of their schools can be enhanced to maximize potential. Leaders' jobs never stop, as they should always be on the lookout for potential candidates or recruiting the next great teachers. Whenever leaders are at events or talking to coworkers, they should be focused on improvement through the addition of great people. This is much like a coach who is always on a

recruiting mission in the off-season. These opportunities could arise at any time, and it is important for leaders to know whom that next hire would be if they had a position available. Today's leaders should not only be on a constant lookout for new talent, they should also invest the time to promote their buildings whenever given the opportunity, much as a coach always promotes his or her team.

In the competitive world of education, leaders should invest extended amounts of time to build relationships that promote positive regard within the community. The ability to connect to the community is vital because of the public perception of the school. With schools paying for performance, teachers will begin to move toward the schools that give them the best opportunities to be successful, as well as those that are best reflective of vibrant, supportive communities. This is why building strong relationships with staff is critical. With these strong relationships and staffs' believing in their leaders, teachers will become recruiter, themselves, by talking about what great places their schools are to work. Not only should leaders have strong relationships but they should also take every opportunity to promote any and all positive happenings that occur within the school atmosphere, such as calling the local television station or newspaper and posting the great happenings online. Leaders should always look to improve their schools' names in an attempt to win the public relations battles of education. These examples demonstrate how leaders can capitalize on the notion of leaders-as-coaches and move an institution forward.

Once leaders have openings on the faculty, they should encourage known teaching candidates to apply for the positions if they would be a great addition to their teams. Leaders, as coaches, must be proactive in recruiting. After interviewing and offering the position to a teacher, that candidate will most likely ask around to find out about how good the school is and

whether or not to accept the offer. This is when it is imperative that the community and teacher perception is positive, with much of that having been influenced by the leader. To be able to have the best teachers on board for the children of any community, the school and school leaders must have a positive perception that is communicated to newcomers vying for positions.

Once school leaders have been able to hire new talent, they should establish a support system that allows teachers to quickly improve and reach their potential. The days of hiring someone and providing a key to the room—just occasionally walking through thereafter—are over. Leaders need teachers to produce from day one. The educational environment is competitive, and it is imperative that school leaders invest the time and needed resources to enhance their teachers' abilities. Children are counting on teachers for a winning education. That is why it is imperative that leaders build in beneficial time to establish mentor systems and professional development and induction opportunities that assist the new staff members with curriculum issues, classroom management issues, and time management. This beneficial time should focus on key aspects that will give new faculty members a real opportunity to be successful. This time should be directed on the new faculty members' skills and address any weaknesses that they possess. With these opportunities, the new teachers should quickly advance through and beyond survival mode toward becoming highly effective. With these supports in place, new teachers will have a great opportunity to improve rather than just to survive their first years of teaching.

Once a school leader has the proper supports in place, it is time to set the example for all employees by modeling pivotal behaviors. This requires coaching. The days of instructing teachers to do a task and walking away is fading. School leaders must focus on modeling effective behaviors and being involved in activities. If a new initiative comes along, the leaders

of the school should be sitting at the table during this process. In fact, leaders should, as any good coach would, demonstrate the process. By being involved, leaders establish creditability so that they can continue to coach, establish high expectations, build upon existing relationships, and focus on addressing areas that need improvement.

During the process of modeling and being involved, the school leader should look to identify people who are highly effective. Once these people have been identified, the school leader should look incorporate these strong teachers into leaders within PLC activities. In a sense, they can become team captains or squad leaders. Leaders have to learn how to take advantage of the strong teacher leaders within the building and build upon those capacities. With the use of highly effective people, along with modeling and coaching during PLC time, the opportunities are endless.

With effective teachers on board, this opens the door for other initiatives that can be implemented. The interesting aspect about these initiatives is that the opportunities for buy-in and using a shared approach is greatly enhanced because the school leader has identified quality people and put structures in place to allow them to lead and coach the others. With all the financial limitations that exist within a school, it is imperative that leaders focus on developing these structures. It seems that the days of sending a large number of teachers to professional development meetings are starting to decline. That is why school leaders must establish capacities that strengthen their teachers from within. School leaders must be focused on stepping forward with new initiatives or stepping aside. The rigors and accountability have turned education into an arena that is quickly evolving. School leaders must have the fortitude to recognize the opportunities that exist for teachers and students.

Conclusion 3 focuses on providing leadership in the reconfiguration or even the reconceptualization of the structures and operations of schools in order to maximize the use of data to enhance the improvement of the school. School leaders must focus on implementing a variety of different strategies that allow the school staff to focus on that which tells them how they are doing and what they must do to enhance performance. Two of the major obstacles within a school day are dealing with the limitations of time and teamwork. School leaders have to become creative in scheduling so that teachers have established blocks of time to focus on collaboration, communication, and analysis of that which provides them a barometric read on performance data. School leaders must treat this time as sacred time that strictly focuses on raising student achievement and improving the teachers' instructional practices.

Teachers' schedules must focus on blocks of time that allow teachers to meet in curriculum areas and grade-level teams. These blocks of time can be either during PLC time or faculty meetings that occur after school on a weekly basis. School leaders need to identify particular schedules that promote modeling, data analysis, critical conversations, and faculty collaboration with key members of the staff. These meeting times and participants should be strategically planned so that everyone's efforts are maximized. This time must be tightly guarded and led by highly effective personnel who understand the use of data within a building. Leaders should look to protect this time by ensuring that the data or PLC meetings have clear goals and norms. The short-term goals that the PLC teams establish should fall under the umbrella of the overall goals that the school has established for their long-term goals.

During PLC time, the teams should consistently be focused on teaching the standards and using data that support whether or not they are being effective according to the data. If the data do not show improvement, then faculty and staff should break down the instruction and have

discussions about what went wrong and move toward a solution. Within the confidential settings of PLCs, these conversations should reinforce the capacities in establishing a teamwork approach within the school. This increased focus on establishing increased and valued time should allow teachers to have vital conversations and build the capacities within the school that are imperative for student achievement.

Teamwork in the school environment is vital to the improvement of schools. It has been well established that time is important, but once time has been established, the next component is teamwork. A reconceptualization of the structures under which schools operate can help here as well. With increased pressure on improvement, teacher evaluations taking center stage, and a burnout at an all-time high (Dworkin, 2001), it would be easy for teachers to just simply close the door and move toward isolation within the school day. This should be the last the last thing that occurs. Actually what has appeared within the findings of Theme 3 pertaining to data is yet another opportunity to rally the troops. Leaders can step forward with real-time, evaluative information and state the fact that this is going to be a lot of work, but all in the school can and will do this work together as a team. When leaders step forward with this real-time data, the door is open for authentic and transparent coaching opportunities. With the more recent data in hand, leaders will have opportunities to provide meaningful coaching tips that will lead toward increased student achievement. A real positive result from this approach is the intent of improvement on the practice of instruction rather than a personal comment directed at a single individual. Staying transparent and focused on improvement for the good of increased student achievement is imperative during this process.

Leaders should focus on how teamwork, guided and informed by data, is actually going to strengthen teaching and allow everyone to improve together. Here is where the notion of

leader-as-coach and the critical nature of data combine. Teachers should be told that evaluations could actually be used to reinforce the use of data, PLC time, and enhancement of instruction for all. Leaders should have meetings that clearly state the expectations and procedures that need to occur in order for them to be rated as highly effective. Leaders have to remember that "people change what they do less because they are given analysis that shifts their thinking than because they are shown the truth that influences feeling" (Kotter & Cohen, 2002, p. 1). According to this, leaders should focus on explaining how their work will improve instruction, which, in turn, will increase student achievement as well as fulfilling personal satisfaction through teaching students toward performance at a higher level.

This reminder of why the teachers are teaching will go a long way toward getting teachers to think more about the students than themselves. By focusing on the students, school leaders will help minimize professional insecurities that sometimes limit the teachers' abilities to have open conversations about their instruction. When leaders focus on student performance and measured growth through deft use of data instead of the notion, "They have already taught that, and students did not get it," then the teachers are open to conversations regarding teaching and learning with others. These are the real opportunities for PLCs to grow and allow all teachers to improve on their instructional practices.

Once the teachers have focused on the aspect of student learning, teachers can then proceed to placing more of the responsibility of learning on the students. This can be accomplished by holding individual student and teacher conversations over data, in particular through growth chats and goal setting. If a school is able to move students to the level of taking ownership in their own learning, then the opportunities for improvements are greatly increased. Data chats would not only serve as a growth component for improvement, the conversations

could strengthen the relationships between students and teachers. This relationship could then

assist the school in a variety of ways even beyond data improvement. Once the data chats have

occurred between the student and teacher, it would appear that data has traveled full circle within

the school, establishing data as a foundational item along the way within the building.

Summary of Conclusions

In the three conclusions, the focus was on creating better relationships that could enhance

and expand upon a we-centered approach, using talent scouting and teambuilding to further the

notion of leader-as-coach in school operation, and re-conceptualizing the structures and

operations of schools to maximize the opportunity for all in PLCs to use data to increase the

professional capacities within a school for enhanced teaching and more robust learning and

performance. I indicated that these conclusions are vital to the improvement of the staff and

most importantly the students within our nation's schools.

Recommendations for Further Study

The findings of this study indicate that additional research in the following areas could be

useful. A follow-up study could be conducted on what capacities exist during a time of positive

school change at the elementary and high school levels. These data would be vital as a

comparison between the elementary, middle, and high school studies. With those data, a

comparison between levels from kindergarten through 12th grade would be valuable. These data

could then be used to evaluate the capacities that are needed for all grade levels. This impact

could allow school improvement to occur that could dramatically increase the impact on student

achievement and the ability to sustain those results.

A follow-up comparison could also be drawn between the schools according to their

demographics as cited by the department of education within each state and its school

accountability grades. This grouping could allow more details as to why schools with similar resources and demographics have different results on high stakes test, or conversely, how schools with dissimilar demographics have the same or different levels of performance. One could look to answer the questions, "How is this 'A' school different from this 'D' school?" "What are the leadership differences in these buildings?" "What are the school cultures and climates within these buildings?" and "Does the different culture in the buildings affect student achievement?"

Another follow-up study could be conducted on how leaders lead by being deliberate or crafty in making decisions that affect school growth. With all the decisions that leaders make, it would be interesting to see data that indicate the type of decisions that school leaders make and how these decisions affect student achievement. It would be interesting to compare how decisions are made, how long it takes leaders to make those decisions, and if those decisions are calculated or made quickly with little regard for consequences or consistency. After collecting that data, I could take the information and compare it to school achievement data and see if any patterns arise.

<center>**Summary**</center>

The participants in this study exhibited the characteristics that are essential for implementing project-based learning or change within a school environment. With these schools being participants in the Schools to Watch® program, it was interesting how they strove to perform above and beyond those expectations to best serve their student's needs. Some of the common threads that were documented from all three participants during the research included a concept that we is associated to improvement, aspects of how coaching can effect improvement, and the existence of conversations that occur about data which leads to improvement.

Conclusions included the need to focus on relationships toward optimal collaboration, concentrating on recruiting for talent and nurturing such once new faculty are on board, and re-conceptualizing the structures and operations of schools toward a more efficient and effective manner of professional collaboration that would bring about better performance results. The participants in this study shared with candor the main reasons for their schools' current levels of performance with respect to student achievement and the culture of the buildings—information most useful for current and future leaders intent on making positive improvements in their schools and communities.

REFERENCES

Adelman, H. S., & Taylor, L. (1994). *On understanding intervention in psychology and education.* Westport, CT: Praeger.

Adelman, H. S., & Taylor, L. (2000). Moving prevention from fringes into the fabric of school improvement. *Journal of Educational and Psychological Consultation, 11*(1), 7-36. Retrieved from http://smhp.psych.ucla.edu/pdfdocs/psych188a/24%20moving%20 prevention%20from%20the%20fringes%20into%20the%20fabric.pdf

Adelman, H. S., & Taylor, L. (2007). Systematic change for school improvement. *Journal of Educational and Psychological Consultation, 17*(1), 55-77. Retrieved from http://smhp.psych.ucla.edu/pdfdocs/systemic/systemicreport.pdf

Anderson, E. M., & Maehr, M. L. (1994). Motivation and schooling in the middle grades. *Review of Educational Research, 64,* 287-309. doi: 10.3102/00346543064002287

Anfara, V., Brown, K., & Mangione, T. (2002). Qualitative analysis on stage: Making the research process more public. *Educational Researcher, 31*(7), 28-38. doi: 10.3102/0013189X031007028

Argyris, C. (1999). *On organizational learning.* Malden, MA: Blackwell.

Argyris, C. (2010). *Organizational traps: Leadership, culture, organizational design*. New York, NY: Oxford University Press.

Baldwin, M., Keating, J., & Bachman, K. (2006). *Teaching in secondary schools: Meeting the challenge of today's adolescents.* Upper Saddle River, NJ: Pearson.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York, NY: W. Freeman.

Barber, M., & Mourshed, M. (2007). *How the world's best-performing school systems come out on top.* London, England: McKinsey & Company.

Barrows, H. (2002). Is it truly possible to have such a thing as PBL? *Distance Education, 23*(1), 119-122.

Bass, B. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications.* New York, NY: Free Press.

Berman, P., & McLaughlin, M. W. (1978). *Federal programs supporting educational change* (Vol. 8). Santa Monica, CA: Rand Corporation.

Black, J. (1997). *Dictionary of economics.* New York, NY: Oxford University Press.

Bruner, D. Y., & Greenlee, B. J. (2000). Measures of work culture in high and low performance schools. *Research in the Schools, 7*(2), 71-76.

Bryk, A. S., Sebring, P. A., Kerbow, D., Rollow, S., & Easton, J. Q. (1998). *Charting Chicago reform.* Boulder, CO: Westview Press.

Burke, J. (1995). *The day the universe changed.* New York, NY: Little & Brown.

Chapman, G. (2009). *The 5 love languages: The secret to love that last.* Northfield, MA: Northfield.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* London, England: Sage.

Cheng, Y. C. (1993). Profiles of organizational culture and effective schools. *School Effectiveness and School Improvement, 4*(2), 85-110. doi: 10.1080/0924345930040201

Coleman, J. S. (1966). *Equality of educational opportunity.* Washington, DC: Office of Education.

Collins, J. C. (2001). *Good to great.* New York, NY: Harper Collins.

Collins, J. C. (2005). *Good to great and the social sectors* [Monograph]. New York, NY: Harper
Collins.

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches*
(2nd ed.). Thousand Oaks, CA: Sage.

Crowther, F. (2011). *From school improvement to sustained capacity.* Thousand Oakes, CA:
Corwin.

Darling-Hammond, L. (2010). *The flat world and education.* New York, NY: Teachers College
Press.

Datnow, A. (1999). *How schools choose externally developed reform designs* (Report No. 35).
Baltimore, MD: John Hopkins University, Center for Research on the Education of
Students Placed At Risk.

Datnow, A., & Stringfield, S. (2000). Working together for reliable school reform. *Journal of
Education for Students Placed At Risk, 5*(1&2), 1-32. doi:
10.1080/10824669.2000.9671386

Day, C., Harris, A., Hadfield, M., Toley, H., & Beresford, J. (2000). *Leading schools in times of
change.* Buckingham, England: Open University Press.

Deal, T. E., & Peterson, K. D. (1998). *Shaping school culture: The heart of leadership.* San
Francisco, CA: Jossey-Bass.

Denzin, N. K., & Lincoln, Y. S. (2005). *The handbook of qualitative research* (3rd ed.).
Thousand Oaks, CA: Corwin.

DuFour, R. (2004). What is a "professional learning community?" *Educational Leadership,*
61(8), 6-11. Retrieved from http://www.allthingsplc.info/pdf/articles/DuFourWhatIsA
ProfessionalLearningCommunity.pdf

DuFour, R. B., DuFour, R., & Eaker, R. E. (2008). *Revisiting professional learning communities*
at work: New insights for improving schools. Bloomington, IN: Solution Tree.

DuFour, R., & Marzano, R. J. (2011). *Leaders of learning*: *How district, school, and classroom*
leaders improve student achievement. Bloomington, IN: Solution Tree Press.

Dworkin, A.G. (2001). Perspectives on teacher burnout and school reform. *International*
Educational Journal, 2(2), 69-78. Retrieved from:
http://www.flinders.edu.au/educational/iej.pdf

Edmonds, R. R. (1979). Effective schools for urban poor. *Educational Leadership, 37*(1), 15-64.
Retrieved from hthttp://www.ascd.org/ASCD/pdf/journals/
ed_lead/el_197910_edmonds.pdf

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and
challenges. *Academy of Management Journal, 50*(1), 25-32. doi:
10.5465/AMJ.2007.24160888

Finnan, C. (2000, April). *Implementing school reform models: Why is it so hard for some schools*
and easy for others? Paper presented at the meeting of the American Educational
Research Association, New Orleans, LA.

Fiol, C. M., & Lyles, M. A. (1985). Organizational learning. *Academy of Management Review,*
10, 803-813. doi: 10.1.1.128.8678

Fullan, M. (1997a). *Leadership for change: The challenge of school change*. Arlington Heights,
IL: Skylight Training and Publishing.

Fullan, M. (1997b). *The complexity of the change process. The challenge of school change.* Arlington Heights, IL: Skylight Training and Publishing.

Fullan, M. (1999). *Change forces: The sequel.* Philadelphia, PA: Falmer Press.

Fullan, M. (2001). *Leading in a culture of change.* San Francisco, CA: Jossey-Bass.

Fullan, M. (2005). *Leadership and sustainability: System thinkers in action.* Thousand Oaks, CA: Corwin.

Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York, NY: Teachers College Press.

Fullan, M. (2008). *The six secrets of change.* San Francisco, CA: Jossey-Bass.

Fullan, M., & Pomfret, A. (1977). Research on curriculum and instruction implementation. *Review of Educational Research, 47,* 239-247. doi: 10.3102/00346543047002335

Fyans, L. J., & Maehr, M. L. (1990). *School culture, student ethnicity, and motivation.* Urbana, IL: National Center for School Leadership.

Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction* (7th ed.). Boston, MA: A & B Publications.

Goleman, D. (2000). Leadership that gets results. *Harvard Business Review.* Retrieved from http://www.edplus.canterbury.ac.nz/school_leadership/documents/hbr_leadership_gets_results_(goleman).pdf

Graham, P., & Ferriter, W. M. (2010). *Building a professional learning community at work: A guide to the first year.* Bloomington, IN: Solution Tree.

Grissom, J. A., Loeb, S., & Master, B. (2013). Effective instructional time use for school leaders: Longitudinal evidence from observations of principals. *Educational Researcher, 42,*433-444.

Guba, E. G. (1978). *Toward a methodology of naturalistic inquiry in educational evaluation* (Monograph 8). Los Angeles, CA: University of California at Los Angeles, Center for Study Evaluation.

Guba, E. G., & Lincoln, Y. S. (1981). *Effective evaluations: Improving the usefulness of evaluation results through responsive and naturalistic approaches.* San Francisco, CA: Jossey-Bass.

Hargreaves, A. (Ed.). (1997). *Rethinking educational change with the heart and mind: 1997 ASCD yearbook.* Alexandria, VA: Association for Supervision and Curriculum Development.

Hargreaves, A., & Fink, D. (2006). Redistributing leadership for sustainable professional learning communities. *Journal of School Leadership, 16*, 550-565.

Hatch, T. (2000). *What happens when multiple improvement initiatives collide?* Menlo Park, CA: Carnegie Foundation for the Advancement of Teaching.

Hatch, T., & White, N. (1998). *What does it take to break the mold? Rhetoric and realty in new American schools*. Unpublished manuscript, Carnegie Foundation for the Advancement of Teaching, Stanford, CA.

Hess, F. M. (1999). *Spinning wheels: The politics of urban school reform.* Washington, DC: Brookings Institution.

Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review, 16,* 235-266. doi: 10.1023/B:EDPR.0000034022.16470.f3

Hopkins, D., & Jackson, D. (2003). *Building the capacity for leading and learning.* In A. Harris, C. Day, M. Hadfield, D. Hopkins, A. Hargreaves, & C. Chapman (Eds.), *Effective leadership for school improvement* (pp. 84-104). London, England: Routledge Falmer.

Hord, S. M. (2003). Professional learning communities: Communities of continuous inquiry and improvement. Austin, TX: *Southwest Educational Development Laboratory.* Retrieved from http://www.sedl.org/pubs/change34/plc-cha34.pdf

Huber, G. P. (1989, January 3-6). *Organizational learning: An examination of the contributing processes and a review of literature.* Paper presented at Organizational Learning Conference, Carnegie-Mellon University, Pittsburgh, PA.

Hurst, D. R., & Zimmerman, B. J. (1994). From life cycle to eco-cycle: A new perspective on the growth, maturity, destruction, and renewal of complex systems. *Journal of Management Inquiry, 3,* 339-354. Retrieved from http://jmi.sagepub.com/content/3/4/339.full.pdf

Kahn, R. L., & Cannell, C. F. (1957). *The dynamics of interviewing.* New York, NY: John Wiley.

King, M. B., & Newmann, F. M. (2001). Building school capacity through professional development: Conceptual and empirical considerations. *International Journal of Educational Management, 15*(2), 86-94. doi: 10.1108/09513540110383818

Knight, J. (2007). *Instructional coaching: A partnership approach to improving instruction.* Thousand Oaks, CA: Corwin Press.

Kotter, J. P., & Cohen, D. S. (2002). *The heart of change.* Boston, MA: Harvard Business School Press.

Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviews.* Los Angeles, CA: Sage.

Lambert, L. (1998). *Building leadership capacities in schools.* Alexandria, VA: Association for

    Supervision and Curriculum Development.

Lambert, L. (2003). *Leadership capacity for lasting school improvement.* Alexandria, VA:

    Association for Supervision and Curriculum Development.

Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences*

    student learning. New York, NY: The Wallace Foundation. Retrieved from

    http://www.wallacefoundation.org/wf/knowledgeCenter/KnowledgeTopics/

    EducationLeadership/

Leventhal, D. A., & March, J. G. (1993). A model of adaptive organizational search. *Journal of*

    Economic Behavior and Organization, 2, 307-333.

Levin, B. (2010). Education improvement in Alberta. *Phi Delta Kappan, 91*(7), 81-82. Retrieved

    from http://www.kappanmagazine.org

Marefield, R. (2007). Usability studies and the Hawthorne effect. *Journal of Usability Studies,*

    2(3), 145-154.

Marshall, L., & Rossman, G. B. (1999). *Designing qualitative research.* Thousand Oaks, CA:

    Sage.

Meece, J. L. (2003). Applying learning-centered principles to middle school education. *Theory*

    Into Practice, 42(2), 109-116. Retrieved from

    http://sgstudentcenteredresearch.wikispaces.com/file/view/Applying+learner+centered+p

    rinciples+to+middle+school+education.PDF

Merriam, S. B. (1998). *Case study research in education: A qualitative approach.* San Francisco,

    CA: Jossey-Bass.

Mitchell, C., & Sackney, L. (2001). *Profound improvement: Building capacity for a learning community.* Downington, PA: Lisse, Swets, & Zeitlinger.

Mourshed, M., Chijioke, C., & Barber, M. (2010). *How the world's most improved school systems keep getting better.* London, England: McKinsey & Company.

Myatt, L., & Kemp, P. (2004). Taking stock: A decade of educational reform in Massachusetts. *Phi Delta Kappan, 86*(2), 139-144. Retrieved from http://www.ccebos.org/PDK_Myatt _Kemp_10.04.pdf

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform.* Washington, DC: U.S. Government Printing Office.

National Forum to Accelerate Middle-Grades Reform. (1999). *Schools to watch*[®]. Retrieved October 12, 2012, from http://www.middlegradesforum.org

National Middle School Association. (1995). *This we believe: Developmentally responsive middle schools.* Columbus, OH: The Book Tree.

Newmann, F. M., King, B. M., & Youngs, P. (2000). Professional development that addresses school capacity. *American Journal of Education, 108,* 259-299. Retrieved from http://www.wcer.wisc.edu/news/coverStories/professional_development.php

Newmann, F. M., & Wehlage, G. G. (1995). *Successful school restructuring: A report to the public and educators by the Center on Organization and Restructuring of Schools.* Madison, WI: Center on Organization and Restructuring of Schools.

No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 115, Stat 1425 (2002).

Organization for Economic Cooperation and Development. (2006). *Education at a glance: OECD indicators*, *2006*. Paris, France: Author.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park,

    CA: Sage.

Peterson, K. D. (1999). Time use flows from school culture: River of values and traditions can

    nurture or poison staff development hours. *Journal of Staff Development, 20*(2).

    Retrieved from http://www.nsdc.org/library/jsd/peterson202.html

Ravitz, J. M. (2010). Beyond changing culture in small high schools: Reform models and

    changing instruction with project-based learning. *Peabody Journal of Education, 85,* 290-

    312. doi: 10.1080/0161956X.2010.491432

Redding, S. (2006). *The mega system: Deciding, learning, connecting.* Lincoln, IL: Academic

    Development Institute.

Rohlen, T. P. (1999). Social software for a learning society. In D. Keating & C. Hertzman (Eds.),

    Developmental health and the wealth of nations (pp. 251-273). New York, NY: Guilford

    Press.

Sackman, S. A. (1991). *Cultural knowledge in organizations.* Newbury Park, CA: Sage.

Sammons, P. (1999). *Coming of age in the 21st century.* Lisse, Netherlands: Swets &

    Zeitlinger.

Sarason, S. B. (1971). *The culture of the school and the problem of the change.* Boston, MA:

    Allyn & Bacon.

Sarason, S. B. (1996). *Revisiting the culture of school and the problem of change.* New York,

    NY: Teachers College Press.

Saul, J. R. (1997). *Reflections of a Siamese twin.* London, England: Penguin Books.

Savery, J. R. (2006). Overview of a problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-Based Learning, 1*(1), 9-20. doi: 10.7771/1541-5015.1002

Schein, E. H. (1992). *Organizational culture and leadership.* San Francisco, CA: Jossey-Bass.

Schwahn, C. J., & Spady, W. G. (1998). Why change doesn't happen and how to make sure it does. *Educational Leadership, 55*(7), 45-47. Retrieved from http://www.ascd.org/publications/educational-leadership/apr98/vol55/num07/Why-Change-Doesn't-Happen-and-How-to-Make-Sure-It-Does.aspx

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization.* New York, NY: Doubleday/Currency.

Simon, H. A. (1957). *Administrative behavior* (2nd ed.). New York, NY: Macmillan.

Snyder, K. J., Acker-Hocevar, J., & Snyder, K. M. (2008). *Living on the edge of chaos: Leading schools into the global age.* Milwaukee, WI: ASQ Quality Press.

Stacey, R. (1996). *Strategic management and organizational dynamics* (2nd ed.). London, England: Pitman.

Stoll, L. (2009). Capacity building for school improvement or creating capacity for learning? A changing landscape. *Journal of Educational Change, 10*(2), 115-127. doi: 10.1007/x10833-009-9104-3

Strauss, A. L. (1987). *Qualitative analysis for social scientists.* Cambridge, United Kingdom: Cambridge University Press.

Strobel, J., & van Barneveld, A. (2009). When is PBL more effective? A meta-synthesis of meta-analysis comparing PBL to conventional classrooms. *Interdisciplinary Journal of Problem-Based Learning, 3*(1), 44-58.

Thompson, C. (1999). Qualitative research into nurse decision-making: Factors for consideration in theoretical sampling. *Qualitative Health Research, 9*(6), 815-828.

Torp, L., & Sage, S. (1998). *Problems as possibilities: Project-based learning for K-12 education.* Alexandria, VA: Association for Supervision and Curriculum Development.

Turner, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report, 15*(3), 754-760. Retrieved from http://www.engin.umich.edu/ teaching/crltengin/engineering-education-research-resources/turner-qualitative-interview-design.pdf

Tushman, M. L., & O'Reilly, C. A., III. (2002). *Winning through innovation: A practical guide to leading organizational change and renewal.* Boston, MA: Harvard Business School Press.

Tynjala, P. (1999). Towards expert knowledge? A comparison between a constructivist and a traditional learning environment in the university. *International Journal of Educational Research, 33,* 355-442. doi: 10.1016/S0883-0355(99)00012-9

Van Maanen, J. E. (1988). *Tales of the field: On writing ethnography.* Chicago, IL: University of Chicago Press.

Wagner, T. (1994). *How schools change.* Boston, MA: Beacon Press.

Wagner, T., Kegan, R., Lahey., C., Lemons, R. W., Garnier, J., Helsing, D., Howell, A. & Rasmussen, A. (2006). *Change leadership: A practical guide to transforming our schools.* San Francisco, CA: Jossey-Bass.

Wolff, T. (1994). *In pharaoh's army: Memories of the lost war.* New York, NY: Vintage Books.

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed., Vol. 5). Thousand Oaks, CA: Sage.

APPENDIX A: INTERVIEW QUESTIONS

1. How would you define leadership?

2. What is your leadership role this school environment?

3. Define your leadership style?

4. What do you think is the most important component of leadership within a school?

5. Explain your level of involvement in regard to academic school decisions?

6. Explain the process for decision making in this school?

7. How would you define capacity building?

8. How important do you think capacity building is in this school?

9. How do you foster capacity building within your school?

10. What is the most important or unique capacity within this school?

11. How do you sustain effective capacities within this school?

12. Explain your definition of school culture?

13. Is the school culture in this building positive or negative?

14. How do you foster positive school culture in this school building?

15. How would you overcome a negative school culture if you had one?

16. How long do you think it would take to change your school culture?

17. What is your definition of Project-based Learning (PBL)?

18. What were the steps taken to implement PBL at this school?

19. How do you sustain effective PBL activities in this school building?

20. What is your school's definition of a successful student?

21. What do you think makes teachers successful in the classroom?

22. Explain how a successful teacher behaves?

23. Does your school have Professional Learning Communities?

24. Describe these Professional Learning Communities that exist within your school building.

APPENDIX B: INTERVIEW FORM

Time of Interview: Date: Place:

Interviewer: Interviewee: Position of Interviewee:

I= Interviewee

R=Respondent

Question:

1.

2.

3.

4.

5.

6.

7.

8.

9.

APPENDIX C: OBSERVATION AND NOTES

Location:

Date:

Start Time:

End Time:

Name of Event:

Participants:

| Descriptive Notes	Common Themes

APPENDIX D: FOCUS GROUP INTERVIEW QUESTIONS

1. Who was in charge of the meeting today?

2. Is that person typically leading the meeting?

3. Approximately how many _____ meetings have you attended this school year?

4. How do you feel the meeting went today?

5. Was this the typical format and type of meeting that occurs?

6. Do you feel that people are on board with the discussion that occurred during the meeting?

7. Do you feel that these meetings are valuable?

8. Why?

9. Do you have PLC's in this school?

10. Are they effective?

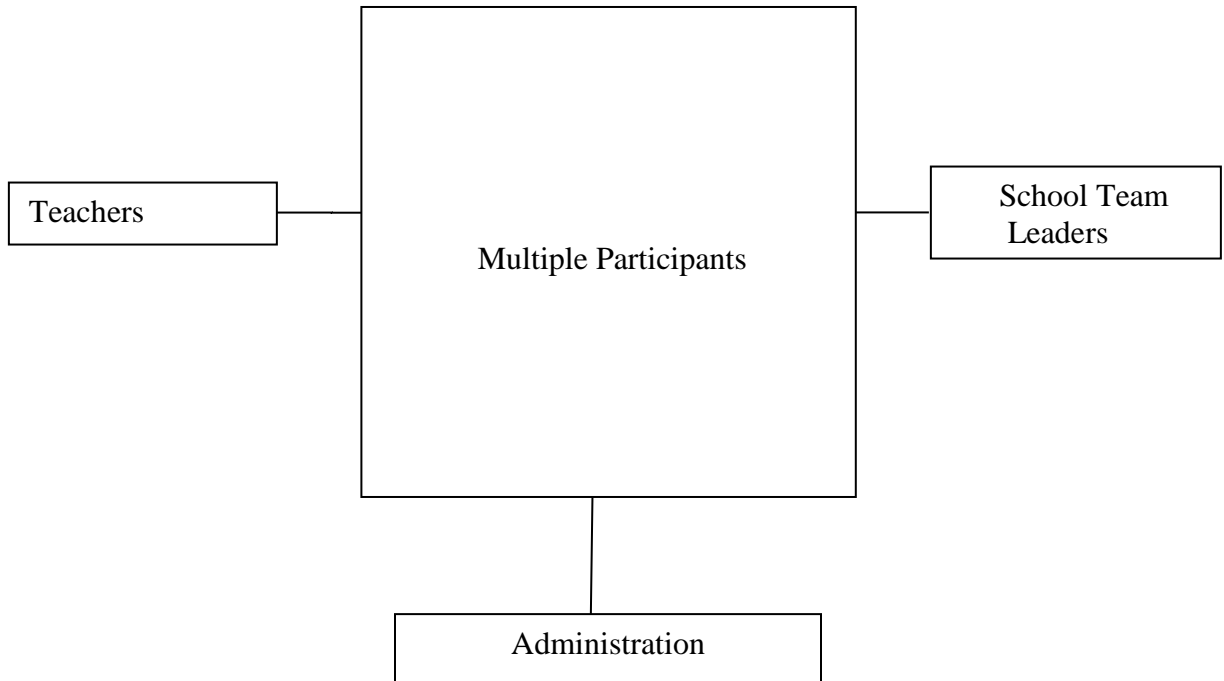11. Does the leadership promote conversation during these meetings?

APPENDIX E: SOURCES OF DATA COLLECTION

This study will focus on capacity building as a component when implementing school change. In doing so, it will strive to answer the question, what components of capacity building are essential when implementing selected school change? Sub questions include the following:

1. What capacities are needed to implement project-based learning?

2. What leadership characteristics are valuable to building capacities in implementing project-based learning at the middle school level?

3. What are the keys to sustaining successful change after implementation of project-based learning?

Interviews

Observations

Documents
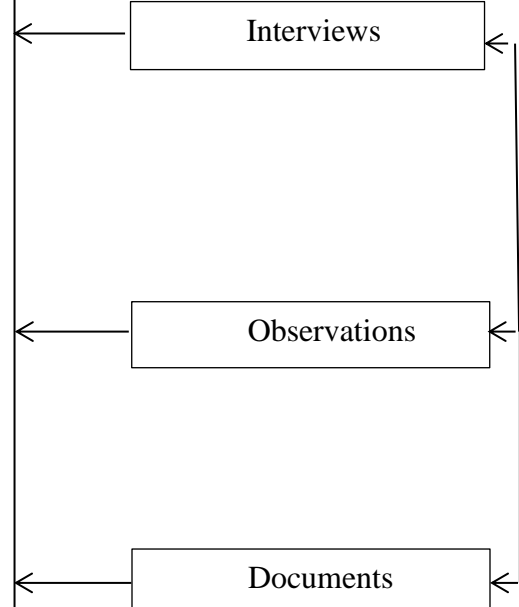
APPENDIX F: MULTIPLE PARTICIPANT CLUSTERS

Teachers	Multiple Participants	School Team Leaders
	Administration	

APPENDIX G: CONSENT FOR RESEARCH STUDY

Capacities Facilitating School Change Involving Project-based Learning at the Middle School
Level

   You are asked to participate in research conducted by Shane Browder, Ed. S., a doctoral
student under the supervision of Dr. Ryan Donlan at Indiana State University, Department of
Educational Leadership. Please read the information below and if you have any questions or
concerns about the process please contact Shane Browder.

   I understand that the school's participation in this study is completely voluntary and all
results will be presented with a pseudo name and are completely confidential. You have been
asked to participate because of your school's acceptance in the Schools to Watch® program that
focuses on improved academic excellence.

PURPOSE OF THIS STUDY

   The purpose of this qualitative, multiple-site, case study is to examine what capacity
building factors are present in middle schools that implement project-based learning. With
schools continuing to fall short of No Child Left Behind and other changes just around the
corner, educators must identify and make positive changes in schools. Researchers must work to
recognize and exhibit how student achievement is fostered and inform educators of options on
how to move in a positive direction.

   This study will focus on schools that have recently implemented project-based learning
into the curriculum and what, if any, school capacities were established to assist in this school
change. This qualitative study will focus on the capacities that are consistently implemented that
lead to successful school change. I will be focused on identifying common themes and patterns
that participating members of Schools to Watch® commonly exhibit.

DATA COLLECTION

The data collection piece of this study will focus on observations, interviews, and document analysis.

- Observations – The researcher would like to observe at least one of the following meetings: faculty meetings, leadership meetings, or school meetings that last at least thirty minutes in length. All notes from these meetings will be recorded and later transcribed within 30 days of the meeting. Once this occurs the researcher will seek the approval of the school administrator before processing the data for codes and themes. These notes will be confidential and the observer will not take part in any of these meetings except to take notes.

- Interviews – The questions will focus on the capacities that have made change possible in your building. The interviews will be conducted at your school and include three of the following; the principals, counselor, school leaders and/or a member of the team meeting that was observed. This process should not exceed forty minutes and all contents will be confidential. The interviewee will receive all transcriptions of the interview and have the opportunity to remove any problematic content that is noted. The interview will consist of approximately 40 questions. The interview will be recorded and transcribed by the researcher. The researcher will have 14 days for follow up questions and will have the final copy of the interview back to the interviewee within 30 days for approval.

- Documents – The researcher would like to request faculty meeting agendas, school improvement plans, newsletter, professional learning community agendas and other documents that the researcher deems imperative and agreed upon by the administration of the school.

RISK OF PARTCIPATING

The risks of participating in this study are minimal. The respondents will all have the right to refuse participation in the observations and/or interviews. Moreover, if the respondents become uncomfortable at any moment during the research, the researcher will discontinue the research with that participant and the research that was provided by that participant will be destroyed.

POTENTIAL BENEFITS TO SUBJECTS

The benefits of this study will focus on elaborating on the recent research that has been gathered on capacity building within a middle school that has implemented project-based learning. School personal have never faced such change and this study will focus on allowing leaders to improve student achievement while implementing change in middle schools. By studying these schools, future school leaders will be able to draw from these findings to better prepare for future success.

CONFIDENTIALITY

All participants in the research of this study should understand that the information that is gathered during the study will not be released to any other parties without my permission or be used in any data presentations. The participants will be requested to keep all shared information confidential after the interview.

Constant measures will be taken to effectively protect all participants during the study. The participant's names will not be used in any way for this study. Pseudonyms will be used to protect any and all identities that contribute to the research. All identifiers will be removed from the study to protect the confidentiality of all participants. The research evidence will be stored in the researcher's home in a locked filing cabinet during and after the study.

The interviewee will be ask to provide a personal email contact so the transcribed copy can be approved by the interviewee within thirty days. If the interviewee elects to add more information or the interviewer would like follow-up information this should occur within 14 days of the interview. The final copy will be sent to the interviewee within 30 days of the interview. At that time the interviewee will approve or ask for changes to the final copy. Once these changes have occurred to the interview documents, the final copy will be emailed to the personal email address of the interviewee within 45 days of the original email. If a copy is requested by hard copy one will be mailed to the participant.

PARTCIPANTS AND WITHDRAWAL

All participants should understand that that they will not be compensated, financially or otherwise, for any participation in this research study. If you have volunteered to be in the study, but elect to withdraw you can at any time. All research evidence that participant provided will be destroyed. Participants also have the opportunity to not answer any questions during the

interview or ask to be released from team meeting, faculty meeting, or other meetings that are observed.

IDENTIFICATION OF INVESTIGATORS

If any participant has any questions arise regarding the research study or procedures, they can contact Shane Browder, at 7301 Lincoln Ave., Evansville In. 47615, via telephone (812)431-0471 or (812)476-4971, or via email (shane.browder@evsc.k12.in.us) for answers. If they have further questions, they can contact Dr. Ryan Donlan at Indiana State University at (812) 237-8624 or by email at Ryan.donlan@indstate.edu.

RIGHTS OF RESEARCH SUBJECTS

If any participant has any questions about his/her rights pertaining to the research subject, they can contact the Institutional Review Board (IRB) at Indiana State University in the Office of Sponsored Programs, Terre Haute, IN 47809 or by phone at (812) 237-8217 or email at irb@indstate.edu. They will discuss and work to answer your concerns or questions. The IRB has approved the research for this study.

I hereby consent to participate in the research that is described herein.

_____   _____

Sign   Date