A National Board Certified Teacher in the Principalship: A Qualitative Analysis of Leadership Behaviors

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Dedication

> My son, if thou wilt receive my words, and hide my commandments with thee, so that thou incline thine ear unto wisdom, and apply thine heart to understanding, yea, if thou criest after knowledge, and liftest up thy voice for understanding, if thou seekest her as silver, and searchest for her as for hid treasures, then shalt thou understand the fear of the LORD, and find the knowledge of God. For the LORD giveth wisdom: out of his mouth cometh knowledge and understanding. — Proverbs 2:1–6 (King James Version)

The endeavor of this dissertation was a quest for knowledge and understanding. Completing this work was a test of endurance, obedience, and faith. Therefore, I give all glory to God for giving me the strength to complete this arduous task, from which I have derived great humility. I am grateful to God, who gave me the inspiration to pursue my doctoral degree.

To Latrice Fatima Gee, my loving and dedicated wife; I am deeply grateful for your unending love, support, and patience. You have supported me throughout my doctoral studies and dissertation. Thank you, Latrice, for not allowing me to quit and for encouraging me when I lacked courage and strength. I sensed that you believed in me, subsequently I believed in myself. I honor my mother, Annie Ruth Leflore Dillard; by her example of persevering through tremendous trials and tribulations, she taught me how to endure great hardships. I thank my sisters, Christene Dillard and Ruthie Dillard, and my brother, Timothy D. Gee, who supported me from afar in Muncie, Indiana. I appreciate Jim Hopkins, Jerome Arrington, and Dr. Warren Stewart, my fellow golfers, for always asking how my dissertation was going and keeping me focused.

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Abstract of Dissertation

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The placement of National Board Certified Teachers (NBCTs) in school leadership roles emerged as a feature of comprehensive reform models and school improvement initiatives. Educational practitioners must verify the saliency of the National Board for Professional Teaching Standards (NBPTS) process in preparing NBCTs for school leadership, particularly how NBCTs demonstrate leadership behavior in the principalship role. These prompts inspired the central research questions of this study. How did an NBCT demonstrate leadership behavior in the principalship? What perceived role (if any) did the NBPTS process play in developing those leadership behaviors? I designed this single-case study to examine the leadership behaviors of one NBCT who ascended to the principalship.

Therefore, I investigated the influence of the NBPTS process to determine its role in developing the participant's leadership behaviors. In my initial analysis, I applied Pitner's (1988) conceptual path models to describe, categorize, and analyze, the leadership behaviors of the NBCT participant. These models depicted leadership behaviors as direct, mediated, reciprocal, and antecedent (DMRA). In my second analysis of the data, I pursued a thematic approach. I analyzed the data for code words and phrases that ultimately signaled the emergence of four major themes: setting the vision and mission, school and community relationships, religion, spirituality, and faith, and the 5 core propositions approach to school leadership. The four themes were instrumental in answering the central research questions of the study.

I used multiple interviews, observations, a survey, and documents to collect data. The resulting wide range of data captured a detailed picture of the participant, the school's operations, and provided an indication of the extent to which survey respondents corroborated the participants' perceptions. Findings indicated that the NBCT participant used each DMRA leadership approach; however those behaviors were subordinate to the five core propositions of the NBPTS. I concluded that the NBPTS process was vital to development of the participant's knowledge relative to curricula, instruction, assessment, and reflection; all were important components of the participant's school leadership behaviors. The findings represent a step toward confirming the unintended effect of the NBPTS process in preparing the participant for the principalship.

Table of Contents

Abstract v

List of Figures x

List of Tables xi

Chapter 1: Introduction 1

- Overview 1
- Statement of the Problem 4
- Purpose and Research Questions 5
- Statement of Potential Significance 6
- Epistemology: Empiricism 7
- Conceptual Framework 11
- Methodology 14
- Limitations and Delimitations 16
- Summary of Chapter 1 21

Chapter 2: Review of the Literature 22

- Introduction 22
- Establishing the NBPTS 24
- Education Reform in Illinois 35
- National Board Certified Educational Leader (NBCEL 38
- NBCT in the Principalship 40
- Pitner's Models 44
- Direct Effects of Leadership Research 46
- Mediated Effects of Leadership Research 55
- Reciprocal Effects of Leadership Research 59

Antecedent Effects of Leadership Research 71
Summary of Chapter 2 79
Chapter 3: Methodology 80
Overview of the Methodology 80
Triangulation of Data 81
Research Questions 82
Positivistic Epistemology: Empiricism 83
Boundaries 86
Susan's Effectiveness in the Principalship 88
Research Procedures 92
Informed Consent 94
Data Collection Methods 95
Data Collection and Analysis 108
Case Study Codes and Phrases 113
Clarification of Researcher Bias 114
Human Participants and Ethics Precautions 115
Summary of Chapter 3 117
Chapter 4: Results 119
Introduction 119
Survey Open Response Data 136
Identifying Codes and Themes 140
Case Study Coding Process 141
Four Major Themes 146
Summary of Chapter 4 188

Chapter 5: Interpretations, Implications, and Recommendations 190

Opening: The Purpose of the Study 191

Interpretation of Findings 191

Implications of the Findings 212

Recommendations for Practice 221

References 226

Appendix A: Recruitment E-Mail 235

Appendix B: Exemplar of Participant Letter of Invitation 237

Appendix C: Informed Consent Form 239

Appendix D: Demographic Information Collection Sheet 244

Appendix E: Interview Protocol NBCT 246

Appendix F: Observation Protocol Checklist 250

Appendix G: Survey Cover Letter 252

Appendix H: Survey Questions 254

Appendix I: Survey Data 256

Appendix J: Documents Table of Findings 260

Appendix K: Summary of DMRA Research 265

Appendix L: National Board for Professional Teaching Standards Process 269

List of Figures

Figure 1. An Interactive Model of the Research Design 88

Figure 2. Codes to Theory Model 112

List of Tables

Table 1 Pitner's 1988 Models 46

Table 2 AHS Faculty and Teaching Staff (N = 65) 129

Table 3 Survey Responses of the Teacher (T) Group 131

Table 4 Survey Responses of the Parent (P) Group 133

Table 5 T Group Performance and Appearance Ratings 139

Table 6 P Group Performance and Appearance Ratings 139

Chapter 1: Introduction

Overview

Historically, school-based leadership was limited to the principal, assistant principal, and the school counselor; teachers were merely classroom workers subjected to the principal's managerial efforts. Teachers were expected to obey and not question their superiors' authority. This expectation reinforced the perception that a teacher's influence be primarily limited to students, thus having little influence on educational practice and curricula (Shen, 1998). With the publication of the Carnegie report, *A Nation Prepared: Teachers for the 21st Century* (Carnegie Task Force on Teaching as a Profession, 1986), teachers' voices were considered in the debate about the improvements needed in education. The Carnegie report prompted the formation of the National Board for Professional Teaching Standards (Urbanski & Nickolaou, 1997).

The Carnegie Task Force on Teaching as a Profession (1986) made the following eight recommendations:

- create a NBPTS, organized with a regional and state member structure, to establish high standards for what teachers need to know and be able to do, and to certify teachers who meet that standard;
- restructure schools to provide a professional environment for teaching, freeing them to decide how best to meet state and local goals for children, while holding them accountable for student progress;
- restructure the teaching force, and introduce a new category of "lead teacher," with the proven ability to provide active leadership in the redesign of schools

and in helping their colleagues to uphold high standards of teaching and learning;

- require a bachelor's degree in the arts and sciences as a prerequisite for the professional study of teaching;
- develop a new professional curriculum in graduate schools of education leading to a master's in teaching degree, based on systematic knowledge of teaching and including internships and residencies in the schools;
- mobilize the resources of the nation to prepare minority youngsters for teaching careers;
- relate incentives for teachers to school-wide student performance and provide schools with the technology, services, and staff essential to teacher productivity; and
- make teachers' salaries and career opportunities competitive with those in other professions (Carnegie Task Force on Teaching as a Profession, 1986).

The NBPTS, made up of teachers, administrators, business professionals, and community stakeholders, was established in 1987 to set high and rigorous standards for what teachers should know and be able to do. These standards were codified as the five core propositions of the NBPTS (NBPTS, 2002). The NBPTS developed a process that nationally certified teachers who completed the yearlong certification process called the National Board Certified Teacher ([NBCT] NBPTS, 2002). Successful candidates demonstrated and documented a commitment to students, teaching and learning, and a commitment to thinking systematically and reflectively about their practice (Buday & Kelly 1996, Urbanski & Nickolaou, 1997).

The overall mission of the NBPTS process was to develop knowledge relative to curricula, instruction, assessments, reflection, and to professionalize teaching in the United States. In view of that objective, the NBPTS advocated a role for teachers to (a) become integrally involved in instructional leadership, (b) share in the analysis and selection of division-wide curricula, (c) coordinate instruction and assessment, and (d) spearhead the professional development of colleagues (Buday & Kelly, 1996).

NBPTS core propositions: The five core propositions (NBPTS, 2002) include the following tenets:

- teachers are committed to students and their learning;
- teachers know the subjects they teach and how to teach those subjects to students;
- teachers are responsible for managing and monitoring student learning;
- teachers think systematically about their practice and learn from experience (Reflection); and
- teachers are members of learning communities (Carnegie Task Force on Teaching as a Profession, 1986).

Considering the propositions, the NBPTS did not intend to prepare principals through its teacher certification process; it intended to prepare master teachers who would influence educational practices from the classroom (Appendix L).

Therefore, the following assertions were proposed from the outset of this single-case study that investigated the emerging effects of completing the NBPTS certification process: (a) the unintended development of instructional leadership knowledge that Marzano, Waters, and McNulty (2005) concluded is crucial to the principalship; and (b)

one result of completing the NBPTS process, NBCTs might bring a sharp focus on curricula, instruction, assessment, and reflection to the principalship (Marzano, Waters, & McNulty, 2005).

NBPTS: Alternate path to the principalship. The NBPTS process develops knowledge relative to successful school leadership (Deavers, 2009; Marzano et al., 2005). In view of that process of development, The Wallace Foundation funded the Illinois State Teacher Certification Board, establishing and implementing an alternate path to administrative certification known as the Alternate Route to an Administrative Certificate for National Board Certified Teachers (Illinois Public Act 094-1039, Section 25.313, 2007). Becoming law on July 1, 2007, this legislative approach focused on using state law to influence educational policy. Its primary goal was to improve principal preparation and school leadership by certifying Illinois NBCTs as principals. The law permitted NBCTs to bypass traditional principal preparation programs, thereby codifying the potential emerging effect of the NBPTS process in principal preparation. However, after seven years the Law was repealed effective May 6, 2014 when The Wallace Foundation funding ended.

Statement of the Problem

The placement of NBCTs in principalship could become a common feature to improve public schooling. As such, more can be learned about how NBCTs demonstrate leadership in the principalship. An analysis of those connections benefits educational leadership research. Educational researchers must confirm whether the NBPTS process contributes to the development of leadership behaviors integral to the principalship, nor can we assert the relevance of NBCTs in the principalship. Central to the purpose of this

study was the desire to learn from the experiences of the participant, thereby determining what role (if any) the NBPTS process played in the development of the study participant's leadership behaviors.

A review of the literature revealed a plethora of existing quantitative and qualitative research on the leadership of NBCTs in the classroom setting. There was a paucity of research investigating how NBCTs demonstrate leadership behaviors in the principalship, which might describe the possible connections to the NBPTS process. Investigations like this case study contribute to educational leadership research. The purpose of my research was to acquire knowledge to address the problem, in this case, the gap in the literature concerning NBCTs in the principalship.

Purpose and Research Questions

Purpose. The main purpose of this single-case study was to answer the central research questions and explain the links between theory and the NBCT participant's real-life context. Therefore, the primary objective of the case study was to observe, analyze, explain, and report how the participant demonstrated leadership behavior and describe what role the NBPTS process played in developing the participant's leadership behaviors. This research effort was explanatory and exploratory, investigating the experiences of only one participant. The purpose was not to provide generalizable information.

Research questions. I designed the research questions to garner data that would enable the description and explanation of the relationships among the variables in this case. The implementation of this single-case study was guided by the following research questions:

RQ 1: How did an NBCT demonstrate leadership behaviors in the principalship?

RQ 2: What perceived role (if any) did the NBPTS process play in developing those leadership behaviors in the principalship?

Statement of Potential Significance

In Illinois and North Carolina, the placement of NBCTs in school leadership roles emerges as a common feature of public schooling, comprehensive reform models, and school improvement initiatives. Faced with this knowledge, it is imperative that educational practitioners verify the saliency of NBCTs in educational leadership roles beyond the classroom. Consequently, more can be learned about how NBCTs demonstrate leadership behavior, particularly in the principalship. Such information highlights the influence of the NBPTS process regarding what role it plays in preparing NBCTs for school leadership beyond the classroom. Moreover, an analysis of the linkages between the NBPTS process and an NBCT's leadership behaviors in the principalship benefits educational leadership research. Researchers must adequately investigate such linkages. Existing research regarding NBCTs acquiring leadership positions beyond the classroom were adequately studied, yet there is a dearth of research specifically addressing NBCTs in the principalship.

Few studies were guided by explanatory models or employed a qualitative research technique designed to investigate this contemporary phenomenon within its real-life context. Therefore a gap exists in knowledge of how NBCTs approach leadership in the principalship. Researchers must confirm if the NBPTS teacher certification process contributes to principal preparation, i.e. the development of leadership behaviors integral to the principalship. This single-case study addresses the apparent gap and takes an

important first step toward confirming the NBPTS process as a viable principal preparation activity and may signal a direction for future research endeavors.

With appropriate caveats, this study annotates the emerging and unintended effect of the NBPTS process in preparing master teachers for the principalship. Regarding NBCTs entering leadership roles beyond the classroom, this unique research framework potentially explores a new perspective on a previously studied topic. A study such as this may widen our understanding of how an NBCT principal may approach leadership. It may also offer alternative approaches and conceptualizations of leadership behavior in the principalship from an NBCT's perspective. The findings may elucidate and commence future research regarding the influence of the NBPTS process on principal preparation. The findings may have potential policy implications regarding principal recruitment, induction, and training (Deavers, 2009).

Yin (2009) reported that case studies, like experiments, are generalizable to "theoretical propositions [describing theoretical relationships among variables] and not to populations or universes" (p. 2). Consequently, the importance of conducting this single-case study was that the findings support the efforts funded by The Wallace Foundation, and Illinois to utilize the NBPTS process as an alternate route to the principalship. Finally, replication of this study in a variety of contexts and designs could advance the theoretical understanding of the conceptual framework grounding this study.

Epistemology: Empiricism

Ornstein and Levine (2008) narrowly defined epistemology as a study of knowledge focused primarily on the following questions: What are the necessary and sufficient conditions of knowledge? What are its sources? What is its structure, and what

are its limits? Crucial to the conceptual framework guiding this study, the epistemological root of this case study was grounded in empiricism in that experience rather than reason is the source of knowledge. Locke (1690) argued that man's [*sic*] understanding of reality was ultimately derived from what was experienced through observation and the senses and that truth and knowledge resulted from a combination of internal and external experiences. Thus, experience and observation should be the foundation of all human knowledge.

Empiricism was an essential part of the scientific method emphasizing that all hypotheses and theories must be tested against observations of the natural world, rather than relying solely on reasoning, or revelation and in this sense it was opposed to rationalism. For any knowledge to be properly categorized or deduced, it was gained ultimately from one's sense-based experience. Empiricists in the positivistic era recognized the epistemological limits of empiricism in that perceptual experiences could be false. Locke's (1690) main argument was that experience not only included external sense perception, but it also encompassed introspection, memory, and reflection on such perceptions. Therefore, internal perceptions allow us to develop more abstract ideas and make inferences that can always be traced back to experiences (Baird & Kaufman, 2007). Empiricism then allows for inductive processes, but not in a strict sense.

In inductive reasoning, we begin with specific observations to detect patterns and irregularities to formulate a tentative hypothesis. Subsequent testing of the hypothesis may lead to the development of general conclusions and theories. By contrast, traditional empiricists would advocate deductive reasoning wherein we begin with a theory narrowed down into a specific hypothesis that we can test through observations. This

process leads us to be able to confirm or disprove the original theory. One process begins with observations that lead to theory development; the other begins with theory development that is eventually tested by observations (Baird & Kaufman, 2007).

Both processes are observation based, but inductive empiricism allows for knowledge acquisition through introspection or reflection from which inferences derive, and is therefore congruent with the data collection activities pursued in this study. Knowledge was pursued through (a) observation and experience of the study participant's leadership behavior, (b) interviewing the participant, (c) identifying, categorizing, and analyzing the participant's leadership behaviors, (d) surveying individuals within the boundaries of the case, and (e) collecting and categorizing the participant's professional documents. Similar to the interview methodology and document collection, I acknowledge that the survey methodology was not purely empirical but consistent with Locke's philosophy.

For example, in this post-positivistic era, empiricists argued that discovered truth emerges independently of direct experience and observation. All knowledge is either based on direct experience, reports on experience, or generalizations and inferences made from the experiences of others. However, this view not widely accepted among strict empiricists. Nevertheless, from Locke's perspective on introspection and reflection, I experienced the participant through my observations, interviews, documents, and the survey respondents.

Data analysis: positivism and post-positivism. According to Chenail (1994), qualitative research reports have at least one major story in them. On occasion, the story centers on a specific research finding, and sometimes it is based on a methodological

problem or challenge experienced by the researcher. Chenail advocated writing the report in an attempt to tell that story to the reader. I have such a story. In my growth as a qualitative researcher, I struggled with the limits of empiricism and Yin's (2009) approach to qualitative data analysis. Yin articulated specific practices and processes designed to introduce rigor in qualitative studies.

Although I felt constrained by Yin's recommended processes for data collection and analysis, I made specific case study findings and conclusions. However, the conclusions inadequately answered the research questions of the study, as there was a tremendous amount of data that went unaccounted for. Thus, I became aware of the limits of a deductive method of data analysis and underscored the potential criticisms of the findings. Hence, I elected to also conduct a second analysis of my data from an inductive perspective. To address rival interpretations of my data, I adopted a thematic method articulated by Saldaña (2009).

Saldaña recommended, "A streamlined code-to-theory model for qualitative inquiry" (p. 12). The process highlighted code words that were collapsed into a category from which themes would emerge and become identified. Based on Maxwell's (2005) work, Figure 2 depicts a model of my data analysis. Saldaña's (2009) process allowed me to account for all of my data and therefore adequately answered the research questions of the study. Of note, the data were collected from my previous deductive framework; therefore the findings and conclusions that resulted from my second analysis were limited by that data. I described my data analysis process in detail in Chapters 3.

Conceptual Framework

Maxwell (2005) asserted that the conceptual framework of a study is the system of concepts, assumptions, expectations, beliefs, and theories that support and inform the research study. Miles and Huberman (1994) noted that the conceptual framework "explains either graphically or in a narrative forms the main things to be studied, the key factors, concepts, or variables, and the presumed relationships among them" (p.18). Further, Maxwell (2005) proffered that "your conceptual framework is a formulation of what you think is going on with the phenomena you are studying, a tentative theory of what is happening and why" (p. 222). As depicted in Figure 1, the relationships among the seven primary components of my conceptual framework and research design include the research questions, the purpose of the study, data collection methods, data analysis, epistemology, Pitner's (1988) conceptual models, and validity and reliability.

Integral to the conceptual framework grounding this study was Pitner's (1988) conceptual models and Hallinger and Heck's (1998) theoretical support and extension of her work. Pitner (1988) described how principals play critical roles in directing, identifying, and supporting learning through structuring the social settings and coping with the daily internal and external activities of a school. Therefore, NBCTs in the principalship may match patterns of leadership behaviors depicted by Pitner's models and the behaviors exhibited by principals who followed traditional routes to the principalship.

To describe the leadership behaviors of principals, Pitner developed four basic conceptual models: direct, mediated, reciprocal, and antecedent (DMRA). Pitner believed that a principal's behavior often changes over time and situation, to act as a moderator of

various contingencies, and circumstances that arise within the school context. In this regard, a different model represented the corresponding behavioral approach to leadership. Pitner did not endorse one model over the others; rather, she articulated that principals work across each model situationally. Through their research investigations of Pitner's models, Hallinger and Heck (1996a, 1996b, 1998, 1999) extended her work. The following is a cursory overview of Pitner's conceptual models.

The direct effects model of leadership behavior depicts a direct approach or path, one in which the leader is effective through challenging and changing the organizational processes and setting the direction of the school through structural improvements that include developing and enforcing new policies and procedures. Interventions are structural at the organizational level of the school and often include changes to the physical structure of the school to improve its functionality and appearance (Hallinger & Heck, 1998).

For example, if Pitner High School scored poorly on the reading portion of a state standardized test, a direct approach to intervene might include changing to block scheduling to increase instructional time and reduce student transitions, providing direct supervision and observation of teaching, one-on-one modeling and mentoring, changing class schedules, conducting regular and ongoing teacher performance evaluations, and reassigning or dismissing ineffective or underperforming staff members.

The mediated effects model illustrates how the effect of school leadership traces intermediate paths, such as the classroom level of the school. Mediated approaches incorporate comprehensive instructional reforms, aligned curricula, math and reading programs; research based teaching techniques, and the introduction of technology tools at

the classroom level. The primary instrument for school change is pedagogy (Hallinger & Heck, 1998). To intervene in the Pitner High School scenario, the leader would implement reading and math achievement initiatives; align instruction with the state and federal standards, manipulate teacher-student pairings, institute a learning community, and team teaching strategies.

The reciprocal effects model of leadership behavior depicts the relationships between school leadership, intermediate variables, and achievement as interactive paths. Just as the leader influences the relationships, culture, and climate of the school, relationships, culture, and climate influence the leader interactively (Hallinger & Heck, 1998). Administrative interventions are systemic at the culture and climate level, with a focus on relationships and communication within and between the school and community contexts, especially communication with parents. Reciprocal approaches of leadership behavior actively use slogans, mascots, banners, posters, and awards ceremonies to influence the culture and climate of the school. Reciprocal approaches to intervene in the Pitner High School scenario would include improving the relationships among teachers, parents, and students by improving communication and managing conflicts, and scheduling opportunities for teachers to increase conferencing with students and their parents. Efforts to improve the culture and climate would include public award ceremonies for students and teaching staff. The engagement of stakeholders is an essential reciprocal approach.

The antecedent effects conceptual model of leadership behavior portrays leadership behaviors that influence the context of the school. Hallinger and Heck (1998) defined an antecedent as a thing or event that preexisted or logically preceded another

thing. Therefore, antecedents are preexisting and out of the direct control of the leader. The context of the school and the racial and gender makeup of the students and staff are antecedent to the leader; they have influence on leadership approaches. A context factor often cited is the mean socioeconomic status (SES) of the student population and the community (neighborhood) in which the school is situated. Other antecedent factors include the leader's gender; the physical structure of the school and other socioeconomic factors such as the level of funding the school receives from state and local resources (Hallinger & Heck, 1998).

Antecedent focused interventions include the leader's efforts to assuage the effects of poverty by connecting students and staff to community-based funding sources. Antecedent interventions are also situational, contingent, and solution-focused, often designed to level the playing field to create equal access to social, financial, and educational opportunities for each subgroup. Antecedent approaches to intervene in the Pitner High School scenario would include pursuing additional funding sources to increase staffing and sponsoring food and clothing drives for students.

Methodology

Yin (2009) identified five components of research design that are important for case studies: the questions of a study, its propositions, if any, its unit(s) of analysis, the logic connecting the data to the propositions, and the criteria for interpreting the findings. Yin (2009) defined a case study in two ways:

- A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.
- The case study inquiry . . . relies on multiple sources of evidence, with data

> needing to converge in a triangulating fashion, and benefits from the prior development of theoretical propositions to guide data collection and analysis. (p. 13)

To conduct this single-case study, data were collected through multiple site observations, three 60-minute interviews, a survey, and review of other pertinent documents. A survey was conducted to explore the bounded system of individuals including teachers, staff members, and parents.

Creswell (1998) described case study research as "the exploration of a 'bounded system' or a case over time through detailed, in-depth data collection involving multiple sources of information rich in context" (p. 61). He believed the main goal was to understand the case and its context. To accomplish this goal, the participant of the study assisted in implementation of the study and thereby presented the opportunity for understanding the bounded system and the environment in which the study was conducted.

Participant as research assistant (RA). To clarify the participant's role as a research assistant (RA), I found it necessary to seek guidance from the literature. Mills (2000) identified key components of the RA role; they

- have decision-making authority;
- are committed to continual professional development;
- want to reflect on their practice;
- use a systematic approach for reflecting on their practice; and they assist with
- identifying data collection targets and developing an action plan for completing the study.

Mills also advocated a role in which the RA assisted with the analysis and reporting of

the data. As the primary instrument in the analysis, and reporting of the data, I retained ownership of that role. However, the RA helped me (a) identify data collection targets, (b) collect document data, and (c) develop an action plan to complete the research study. Also, the participant as RA was committed to continual professional development and used a systematic approach to reflect on her leadership practices. I discussed participant's role as RA in detail in Chapter 3. Yin (2009) believed that it is essential to identify potential weaknesses common to case study research methodology.

Limitations and Delimitations

Yin (2009) asserted that all studies have limitations to their validity, generalizability, applicability, and transferability. Because individuals are inherently biased by their cultural experiences and worldviews, all measurement is fallible. Therefore, Yin emphasized the importance of multiple measures to gain a better understanding of the phenomena; but each measure may possess different types of error and hence the need to triangulate each source. Limitations are also the influences, shortcomings, and conditions that the researcher cannot control; such limitations place restrictions on the methodology and conclusions (Creswell, 1998).

Commonly identified limitations that are characteristic of case studies in general were also identified in this study: (a) its design; this case study focused on a single unit (b) participant selection; lack of representativeness leading to the problem of bias introduced by the subjectivity of the researcher and the participant in the case, and (c) its boundaries; this study was conducted within defined parameters, which limited my access to certain individuals, certain locations, and certain data within the research domain. Each

limits the ability to generalize the findings. Therefore, generalizeability of findings beyond the boundaries of this case is not claimed.

The definition of leadership behaviors was delimited by the concepts and characteristics defined by Pitner (1988) and Hallinger and Heck (1996a, 1996b, 1998, 1999). There are numerous researchers in educational leadership offering many definitions and models of leadership behavior and theory. However, Pitner's conceptual models were most appropriate for the design of this study because they depicted specific leadership behaviors that accounted for transactional and transformational approaches. In this way, Pitner's models differed from the majority of leadership theorists who focused on just one end of the leadership continuum, selecting either: (a) transactional or transformational leadership, (b) leadership or management, (c) people orientation or task orientation, (c) autocratic leadership or democratic, and (d) authoritarian or participative leadership behaviors (Tannenbaum & Schmidt, 1973). Pitner's models account for behaviors that represented the full range of behaviors on the leadership continuum. Further, Pitner's (1988) models specifically addressed leadership behaviors, processes, and practices in school organizations and thus had no historical basis in corporate or political arenas like many leadership paradigms.

This case study by design was limited to one NBCT who ascended to the principalship. The participant was selected through criterion or purposeful sampling methods that required the participant to be an NBCT currently serving in the principalship at the time of the study. I did not utilize an instrument to measure the participant's effectiveness, leadership skills, and leadership style. Such efforts were beyond the purpose, scope, conceptual framework, and design of this study. The purpose

of this study was to analyze an NBCT's leadership behaviors in the principalship and describe what role the NBPTS process played in developing those behaviors. I presupposed that an individual meeting the criterion to participate in this study was effective, thus originally, no measure of effectiveness was warranted or pursued. From my perspective, the effectiveness of NBCTs in the principalship was a different topic altogether and that it should be pursued as a specific research target in the future. However, in this case, I acknowledge the limitation of studying the leadership behaviors of an ineffective leader. Fortunately, it was inferred subjectively and objectively from multiple sources presented in Chapter 4 that the participant in this study was effective. The participant was awarded Principal of the Year honors for her state in 2012. Based on statements given by her superintendent; he assessed the participant as effective. A detailed assessment of the participant's effectiveness was discussed in Chapters 3 and 4.

The case study included self-reported data in the form of interviews, reflecting only what the participant was willing to share. The findings were limited to (a) the extent to which the participant understood the interview questions and accurately reported leadership experiences, (b) actual NBCT preparation experiences, (c) perceived leadership approaches within her role as a principal, and (d) the conceptual framework and theoretical lens grounding this study.

The findings were based on the participant's and researcher's perceptions. I presumed that the participant honestly and candidly answered the interview questions and that the appropriate questions were asked. The participant reported on her beliefs and experiences of the NBPTS process describing what role it played in the development of her beliefs about school leadership and her behavioral approaches in the principalship.

The study was conducted in the fall of 2012 in the participant's professional environment. Individuals within the boundaries of the case included teachers, school staff members, and the parents of students. Students were within the boundaries of this case, but they were excluded from all data collection activities.

Participant selection. I contacted the NBCT representative for the state by telephone and requested a list of NBCTs who were currently serving as a principal. The list was reviewed and assessed for addresses of individuals who were within traveling distance from my home. There were five individuals within three hours traveling distance from my home. Additionally, three other individuals were recruited by referral. E-mail was used to recruit potential participants for the study. Only one individual voluntarily agreed. The voluntary participant was asked to consent to multiple site observations in her professional environment, complete three 60-minute interviews, assist with the implementation of the survey that included three reporting groups (teachers, parents, staff members) and collect documents.

Data collection limitations. Common limitations in case study data collection methods were identified. Although consistent with the epistemology of the study, a potential limitation of engaging the participant in selecting and collecting data was that the activity could potentially skew and bias data. Threats of bias do not just come from the respondent. The researcher must ask the right questions and decide, "How much to make the report a story; how much to compare with other cases; how much to formalize generalizations or leave such generalizing to readers; how much description of the researcher to include in the report; and, whether or not and how much to protect anonymity" (Stake, 2005, p. 460).

Multiple site observations were used to observe the participant in the professional work setting conducting daily interactions, leadership, administrative, and management activities, including: social interactions, organizational leadership, and classroom observations (Appendix F). Observation advantages included the ability to personally experience the participant's behaviors and to corroborate interview data. Observation limitations included the potential for the participant to view the activity as intrusive (Stake, 2005). Interview data collection activities also had strengths and weaknesses related to threats of bias. The in-depth individual interviews were semistructured and face-to-face (Appendix E). I developed protocols for each data collection activity, thereby making replication possible (Appendix E). The survey had strengths and weakness endemic to survey methodology. Fewer than 100 individuals within the bounded system were surveyed. The process was conducted through an Internet-based questionnaire with an automatic collation of results.

Survey methodology allowed the collection of unavailable information; to conveniently sample individuals' perceptions of the participant without directly interviewing them. The survey data provided a secondary source, to corroborate or contradict existing data collected from the primary source. Common weaknesses of survey methodology could potentially limit the findings included (a) the survey findings relied on the perceptions of the respondents, (b) the findings relied upon the respondents' understanding of the survey questions, (c) the survey relied on the relevance and correctness of the questions asked, and (d) the findings relied upon the extent to which respondents honestly reported their perceptions of the study participant (Appendix H).

Pertinent documents were collected to corroborate or contradict interview and

observation data. Document collection advantages included the opportunity to capture the participant's language and words, and to review performance artifacts compiled by the participant (Creswell, 2003). A limitation in this method is that some documents may be protected, which would preclude them from being shared without informed consent. The participant's NBCT portfolio was a primary document to be reviewed; however, the NBPTS prohibits the review of an NBCT portfolio without the written consent of each individual referenced, including students.

Summary of Chapter 1

Individuals who have completed the NBPTS process were assessed against nationally set norms of performance and leadership in the classroom. A case study was necessary to delineate what can be learned about how NBCTs demonstrate leadership in the principalship. Though there is a body of research investigating the NBPTS process and leadership development; research must adequately investigate the implication of NBCTs in the principalship. More can be learned about what role the NBPTS process plays in the development of leadership behavior linking to principal preparation. This research effort may contribute to the literature regarding the emerging value of the NBPTS process that seems to simultaneously develop master teachers and prepare principals. The findings of this study may highlight how individuals who complete the NBPTS process likely bring a focus on curricula, instruction, assessment, and reflection to the principalship (Deavers, 2009; Marzano et al., 2005). Chapter 1 included the introduction, statement of the problem, research questions, purpose of the study, significance of the study, conceptual framework, and limitations that grounded and informed the implementation of the study. Chapter 2 presents a review of the literature.

Chapter 2: Review of the Literature

Introduction

The purpose of this review of literature was to present, synthesize, and critique the research literature related to the NBPTS process and Pitner's (1988) conceptual models, including direct effects, mediated effects, reciprocal effects, and the antecedent effects (DMRA) models. A synthesis of the extant research literature was needed to identify, describe, explain, and inform (a) the conceptual framework articulated by Pitner regarding her DMRA models, (b) the definition and description of leadership behaviors under consideration, (c) the components of the NBPTS process, (d) the contribution of the NBPTS process to the development of leadership behavior, (e) the selection of the qualitative research design, and (f) the refinement of the theoretical lens for this single-case study. Therefore, the studies were organized by the major topics: the NBPTS process and Pitner's DMRA conceptual models.

References primarily focused on the following types of sources: journal articles, books, research reports, and doctoral dissertations. The key terms used to search for sources were teacher leadership and the NBPTS, principal leadership, NBCT leadership, Pitner, Hallinger and Heck, direct, reciprocal, mediated, antecedent, National Board Certification, and leadership behavior. From May 2008 to June 2015, multiple databases were reviewed using a keyword strategy. The databases included Education Research Information Clearinghouse, EBSCOhost, and Proquest Research. An initial search of those terms produced a variety of studies and copious literature on each topic. Multiple methodologies were examined in the literature including secondary analysis, case studies, studies on teacher leadership, NBCT effectiveness, and school leadership in general

emerged. Further investigation of the school leadership topic revealed studies that described and tested the paths, linkages, and behavioral approaches leading to school effectiveness, particularly those leadership approaches that espoused Pitner's (1988) conceptual models.

The studies were investigated under the topics of school effectiveness, school improvement, and comprehensive school reform. A critical review of those studies quickly revealed limitations endemic to qualitative or case study methodologies. Limitations were mostly related to the ability to generalize to the population, yet those studies were conducted in compliance with the tenets of case study methodology. A review of comprehensive school reform and school improvement topics was not exhaustive. Studies were selected on the criteria that they extended Pitner's (1988) work and informed this single-case study regarding (a) the identification of direct, mediated, reciprocal, and antecedent leadership behaviors; and (b) the case study methodology.

The first component of the literature review synthesized the history and background of the NBPTS. The second component presented a critical review of research studies related to each of the four conceptual models espoused by Pitner (1988). The studies were grouped as those relating to direct effects, mediated effects, reciprocal effects, and antecedent effects of leadership behavior. Searches for information on the leadership approaches of principals yielded many studies. None of the studies reviewed in this chapter were classified as purely experimental in design. Primarily, the overriding issue was not design type, but whether the reviewed studies (a) informed this single-case study, (b) were guided by the appropriate theoretical models, and (c) yielded data that were analyzed using the appropriate methodology.

Establishing the NBPTS

Prompting the creation of the NBPTS, the Carnegie (1986) report*, A Nation Prepared: Teachers for the 21st Century*, the teacher's voice was considered regarding the changes needed in education. The outlook for teacher leadership changed resulting in an increase of school leadership opportunities for teachers (Urbanski & Nickolaou, 1997). The mission of the NBPTS was to professionalize teaching in the United States by recognizing and promoting good teaching practices through advanced certification: the NBCT (Urbanski & Nickolaou, 1997). The NBPTS is an agency governed by a 25-member board of directors including teachers and administrators. The Nominating and Governance Committee seats candidates to the full Board as vacancies on the Board become open (NBPTS, 2009).

Originally established in 1987 with a 63-member board of directors, the NBPTS was established to set high and rigorous core standards for what teachers should know and be able to do (NBPTS, 2009). The board certifies candidates who complete the year-long certification process through which teachers must demonstrate and document that they are committed to students and student learning (Urbanski & Nickolaou, 1997). Teachers who successfully complete the process are awarded a ten year certification and have demonstrated and documented that they know how to learn from their experiences and think systematically about their practice (NBPTS, 2009). NBCTs are also required to become members of professional learning communities (Buday & Kelly, 1996).

In 1989, the NBPTS released a policy entitled, "*What Teachers Should Know and Be Able to Do*," which outlined the five core propositions (NBPTS, 2002). The five core propositions articulated the foundation and framework for the knowledge, skills,

dispositions, and beliefs that embodied NBCTs (NBPTS, 2009). The NBPTS (2002) stated the following in reference to the five core propositions:

> To this day, it remains the cornerstone of the system of National Board Certification and has served as a guide to school districts, states, colleges, universities and others with a strong interest in strengthening the initial and ongoing education of America's teachers. It also holds the promise of being a stimulus to *self-reflection* on the part of teachers at all levels of accomplishment as well as a catalyst for healthy debate and the forging of a new professional consensus on accomplished practice in each field of teaching. (p. 1)

According to the NBPTS (2009) the NBPTS process has four main components: (a) NBPTS applicants must create a portfolio with four classroom-based entries including samples of lesson plans and student artifacts, video recordings of classroom instruction, and activities with students, evidence of accomplishments within the community, direct evidence of teaching, and written documentation describing, analyzing, and reflecting on this evidence; (b) NBPTS applicants must compile a document accomplishment entry that describes work with families and caregivers; (c) NBPTS applicants must demonstrate participation in the professional community; and (d) NBPTS applicants must complete six 30-minute exercises at the National Board assessment center. The online assessment portion of the NBPTS process requires applicants to complete six exercises developed and designed by expert educational practitioners (NBPTS, 2009). See Appendix L.

The NBPTS (2002) sought to identify teachers who enhance student achievement and demonstrate the knowledge, skills, and commitments reflected in the five core propositions including:

- teachers are committed to students and their learning;
- teachers know the subjects they teach and how to teach those subjects to students;

- teachers are responsible for managing and monitoring student learning;
- teachers think systematically about their practice and learn from experience; and
- teachers are members of learning communities (NBPTS, 2002).

Further, the NBPTS advocated a role for teachers in which they become involved in the analysis and development of curricula, the coordination of instruction, and the professional development of colleagues (Buday & Kelly, 1996). Individuals who successfully complete the NBPTS process may continue as classroom teachers or realize vertical career movement by taking on administrative leadership roles within a school, school division (Urbanski & Nickolaou, 1997).

The NBPTS currently offers 24 certificates covering 14 subject areas: Generalist, Art, Career and Technical Education, English as a New Language, English Language Arts, Exceptional Needs Specialist, and Library Media. In the area of literacy: Reading Language Arts, Mathematics, Music, Physical Education, School Counseling, Science, Social Studies-History, and World Languages other than English. Within each subject area, candidates choose to focus on a developmental level including Early Childhood, Middle Childhood, Early Adolescence, or Young Adulthood (NBPTS, 2002).

NBCTs leaving the classroom to leadership. According to Danielson (2006) many NBCTs stayed in the classroom and achieved horizontal career movements or school-level leadership positions such as master teacher, team leader, and mentor teacher. Further, NBCTs also achieved vertical career movements to administrative-level school leadership roles such as superintendent, assistant superintendent, principal, assistant principal, department chair, staff developer, and curriculum director (Danielson, 2006).

Ostensibly, an unintended consequence of the NBPTS developing instructional leaders at the classroom level was the inadvertent preparation of instructional leaders at the principalship level. According to Bunch (2012) North Carolina led the nation with the most NBPTS certified teachers "with almost one fifth of the nation's 91,000 NBCTs teaching in North Carolina in 2010" (p. 1).

Therefore, Bunch (2012) investigated the development of NBCTs in North Carolina and highlighted their career progression from the classroom to school leadership positions. She conducted a qualitative study utilizing a snowball sampling technique. Such a method identifies subjects recommended by someone who knows someone else who fits the criterion. Bunch (2012) used purposive sampling to select candidates who met the criterion of her study: (a) taught in North Carolina Schools, (b) attained NBPTS certification, and (c) moved beyond the classroom to other educational leadership roles. "A minimum of 10 and a maximum of 15 participants were expected to be interviewed" (p. 105). She gathered data through 10 interviews with study participants utilizing a semistructured interview protocol and conducted a thematic analysis of the data to allow themes to emerge. According to Bunch (2012), several themes emerged from her analysis: "leadership, the National Board process, influencers, collaboration, new job opportunities, professional development, state role and accomplishments, networking, and others" (p. 5).

Bunch (2012) concluded:

> Leadership emerged from the data as the strongest theme to understand and respond to the primary research question: Does the National Board develop teacher leaders? The themes of process, influencers, collaboration, and job roles answered the subsequent research questions as to why teachers pursued the process and what led them into other educational leadership roles. Other themes

> that were revealed through the verbatim transcripts—professional development, state, networking, extras, and graduate work—were lesser discussed topics but, nonetheless, important in the overall story. (p. 165)

Bunch also concluded the following: (a) Participants considered the NBPTS process to be an effective and thorough professional development experience, (b) participants viewed the NBPTS process as one that informed and validated their reflective practice, (c) participants reported that the achievement of the NBCT led to leadership opportunities beyond the classroom, (d) participants noted the people who motivated and inspired them, (e) participants believed the NBPTS process to be professional development that personally challenged them to improve their practice through reflection, (f) participants held the 5 core propositions in high regard, continuously reflecting upon them in their practice, and (g) participants, "who were already leaders in their schools prior to attaining National Board certification, continued to acquire additional leadership roles after attaining National Board certification" (p. 173).

Bunch (2012) appeared to be well grounded in the research while adding qualitatively to the body of research addressing NBCTs' experiences in North Carolina. Limitations regarded the size and specificity of the sample in that they were 10 NBCTs in who taught in North Carolina who advanced to other educational leadership roles beyond the classroom in North Carolina. Further, different states may pursue various paths and incentives to support the attainment of National Board certification. Due to specific legislation enacted by Governor Hunt and state incentives offered to teachers in North Carolina to complete the NBPTS process, the results of the study may not generalize to NBCTs in other states. However, the findings of this study were accepted with confidence. The Bunch (2012) study was conducted with rigor and informed my research

regarding the career paths of NBCTs from the classroom to formal leadership positions including the principalship. It was also informative regarding what role the NBPTS process potentially plays in the development of leadership behaviors and partially bridges the gap in the research in that regard.

NBCTs and leadership development. A survey sponsored by the NBPTS and conducted by the Yankelovich Partners (2001) of NBCTs reported on what impact NBCTs had on educational leadership in public schools after certification. The survey research was based on 2,186 questionnaires returned by NBCTs. Surveys were mailed to approximately 4,800 NBCTs who achieved certification before November, 2000. The survey response rate was 45.5 %. Yankovich (2001) found that the educational leadership positions obtained by NBCTs most heavily focused on mentoring or coaching and on the development of programs, or focused on professional development activities.

Further, respondents reported that their educational leadership was primarily limited to participation in the mentoring or coaching of new, future, or struggling teachers and developing "peer review programs and teacher evaluation models" (p. 2). Respondents also reported that the achievement of National Board Certification (NBC) was a major contributing factor in the development of leadership behavior and obtaining educational leadership roles. Similarly, The Yankovich Partners (2001) investigated the roles achieved by NBCTs after certification. Primarily, NBCT leadership roles included mentoring teacher candidates seeking NBC, serving as consultants, policy experts on teaching and learning topics, leading special projects, and the assistant principalship (NBPTS, 2001).

Reflection. The fourth core proposition of the NBPTS focused on reflective practice. Dewey (1933) introduced the concept of reflection in education, defining it as the act of "persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends" (p. 9). Dewey believed that act of reflection begins when one encounters a situation that causes confusion, doubt, or apprehension and begins a process of introspection to overcome the dissonance. Schön (1987) asserted that reflection is directly tied to action in that action is the result of reflection. A leader may reflect on her actions and consider what worked, what could be improved, and then change her behaviors based on her self-assessment. In that regard, Polk (2006) found that NBCTs engaged in reflective practice and came to understand their own beliefs about teaching and learning and modified their behaviors accordingly (Bunch, 2012). Smikle (2004) found that the main difference between NBCTs and non NBCTs was the acquisition and implementation of reflection activities in their practice (Bunch, 2012).

Regarding reflection, Morgan (2007) found that reflection is (a) part of a continuous learning process, (b) a way to address change, (c) instrumental in problem solving, and (d) a way to self-monitor. Reflection also involves sharing with others, evolves with experience, can be formal and informal, informs instruction or leadership, and is most effective when it takes place in a nurturing environment (Bunch, 2012; Morgan, 2007).

Completing the NBPTS process and leadership development. Waller (2001) conducted a study to determine if there were differences in the leadership behaviors of teachers who completed the NBPTS process and teachers who were not candidates of the

process. Waller designed the study to measure the respondents' five dimensions of leadership behavior, including challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart (Kouzes & Posner, 2007). Waller investigated whether there were differences in leadership behaviors of 100 Mississippi teachers who successfully completed the NBPTS certification process and 100 Mississippi teachers who attempted but did not complete the NBPTS certification process. Waller's primary research question addressed whether the NBPTS certification process and a review of leadership characteristics and behaviors could assist in identifying teacher leaders.

Waller (2001) mailed a copy of the Leadership Practices Inventory (LPI) with an accompanying cover letter explaining the procedures to the participants. Waller coded each returned LPI and separated them into the two groups. Those invited were 100 NBCTs and 100 non-NBCTs. Of the 200 survey forms mailed to teachers, 86 of 200 (43%) were returned. Three of the respondents did not answer the question of NBCT status and were not included in the study. Waller completed the analysis on 83 of 200 (41.5%). Approximately half of those were NBCTs and half were not.

Data indicated that the mean for all five dimensions of the LPI were higher for NBCTs than for participants who were not completers of the process. Waller indicated that the main effect of the certification factor was significant. Waller (2001) failed to assert that this effect was causal despite concluding that the main effect of the NBPTS process contributed to the development of leadership behaviors. Limitations included the narrow scope of the sample and a need for additional data regarding NBCTs' dispositions prior to NBC candidacy. The sample focused only on Mississippi schoolteachers, the

majority of whom were Caucasian women in self-contained classrooms at the elementary level.

Waller (2001) failed to report if those teachers were currently in educational leadership or administrative roles. Due to the certification area, the study focused primarily on elementary level NBCTs. Supplementary qualitative studies of an NBCT's leadership development would provide more information regarding this phenomenon. In addition, a pre- and post-certification assessment of leadership characteristics may help to distinguish if the leadership characteristics identified in the Mississippi NBCTs were present prior to NBC candidacy.

The general purpose of the study was to determine if there were differences in the leadership behaviors of teachers who completed the NBPTS process and teachers who did not complete the process. Waller's (2001) conclusions supported the emerging effect of the NBPTS process that seems to simultaneously develop master teachers and develop the requisite leadership behaviors necessary for school leadership, therefore, informed the research questions of my study. However, school leadership also required knowledge of school management, codified by such topics as school law, school finance, educational administration, special education, and supervision (De Maeyer et. al., 2007). Sato, Hyler, and Monte-Santo (2002) found that successful NBPTS candidates derived increased confidence from National Board certification that subsequently led to new school leadership roles and validated their reflective practice and leadership in general.

Schuler (2004) extended Waller's (2000) study and studied specific practices associated with teacher leadership. Schuler used the Leadership Practices survey and individual interviews to collect data. The sample of the study comprised four NBCTs and

their four principals. Schuler selected an NBCT from 10 school districts by randomly drawing names. Though 10 NBCTs and their respective principals were invited to participate through a mailed invitation, only four NBCTs and their respective principals responded. Schuler failed to indicate a reason for the low response. The four principals were in their current positions for three years and worked with the NBCTs at the time each teacher engaged in the NBPTS process.

Schuler (2004) found the emergence of 14 leadership characteristics that included the following traits: (a) vision, (b) credibility, (c) reflection, (d) system perspective, (e) culture, (f) purpose, (g) motivation, (h) collegiality, (i) caring, (j) positive attitude, (k) listening, (l) values, (m) risk taking, and (n) celebration. Schuler asserted that the identification of the 14 leadership characteristics might provide identifying characteristics in teachers and be used to identify and develop teacher leaders. Further, Schuler (2004) recommended the use of NBC "as a professional development experience used to develop teacher leaders who remain in the classroom" (p. 192). The utility of the findings was limited due to the small scope and sample of the study. A pre-assessment of leadership characteristics may help to differentiate if the leadership traits identified in the four NBCTs were present prior to NBPTS candidacy. It was not clear how the sampling design (pairing of principals with the NBCT) affected the data analysis and conclusions. Due to the influence of the sampling design, the findings potentially resulted from bias.

Investigating the attributes of individuals who seek NBPTS certification and the motivation of such candidates, Dewitt (2007) found that NBPTS candidates are: (a) effective teachers, lifelong learners, and pioneers, (b) wanted validation, (c) driven by internal motivation, and (d) NBCTs believed the NBPTS process validated their teaching

practices. NBPTS candidates also reported that informal support and collegiality played an important role in successful NBPTS certification (Bunch 2012; Dewitt, 2007).

Berg (2005) investigated how NBCTs professionalize teaching through leadership roles and identified the ways in which board certification might give teachers control, influence, and ownership of the profession (Berg, 2005). Berg's qualitative study used a semistructured interview methodology to collect data. The sample of the study included 10 NBCTs with 6 to 10 years of teaching experience. Berg found (a) NBCTs experienced differentiated roles beyond the classroom as a result of completing the NBPTS process, including leadership roles within the school and district; (b) the NBPTS process helped them to build the capacity to be effective in their leadership roles beyond the classroom; and (c) NBCTs ascended to the principalship and other leadership opportunities after completing the NBPTS process. Limitations were the small sample and the qualitative nature of the study that restricted generalizing the findings.

However, according to Anderson (2010):

> Data based on human experience obtained through qualitative research is potentially powerful and sometimes more compelling than quantitative data. Subtleties and complexities about the research subjects or the topic at hand are potentially missed by deductive enquiries. Though data are collected from a few cases or individuals, findings can be transferable to another setting and might signal a direction for future research inquiries. (p. 2)

Therefore, according to Anderson (2010) qualitative inquiries potentially assisted researchers in determining the causation of a particular phenomenon (i.e., the role of the NBPTS in the development of leadership behavior) as the phenomenon is uniquely situated in personal experiences and bound in local contexts (Anderson, 2010). Therefore, I must acknowledge the contributions of both types of research for identifying causal

relationships among variables and the potential for both perspectives to elucidate the other. Experimental research designs may be better suited for determinations of causality; however such relationships may be explained in detail through qualitative inquiries.

The next section will present the formulation of The Illinois State Action for Education Leadership project (IL-SAELP), funded by The Wallace Foundation. It created an initiative called A Seamless Route to Leadership for Illinois NBCTs and focused on strategies to promote effective school leadership and leadership development in Illinois schools (IL-SAELP, 2010). Partnering with universities around the state who already supported NBCTs, the initiative was designed to develop a seamless route to Illinois Type 75 administrative certification for NBCTs who desired school administrative licensure (IL-SAELP, 2010). Consequently, NBCTs might professionalize teaching through acquiring school administrative leadership roles, thereby giving teachers the needed control, influence, and ownership of the profession (Berg, 2005).

Education Reform Illinois

Ronald Thorpe. In 2011, Ronald Thorpe became President and Chief Executive Officer (CEO) of the NBPTS. However, in 2001, he served as the senior program officer at The Wallace Foundation which has historically funded NBPTS initiatives to improve school leadership via national board certification. For example, The Wallace Foundation awarded grant funding to 16 states including: Connecticut; Delaware; Georgia; Illinois; Indiana; Iowa; Kentucky; Massachusetts; Missouri; Montana; New Jersey; Oregon; Rhode Island; Vermont, and Virginia. Through legislative maneuvers, most of the states developed alternate routes to administrative licensure and other educational leadership

focused reforms. Thorpe, a proponent of such initiatives advocated for education reforms that integrated NBCTs in school leadership (NBPTS, 2011).

Arne Duncan. Also in 2001, Arne Duncan was appointed the CEO of Chicago Public Schools (CPS) thus becoming the chief administrator of the Chicago Public Education Fund (CPEF). With the help of The Wallace Foundation grant funding, the CPEF raised $2.4 million for the NBPTS project in Chicago awarding hundreds of Type 75 General Administrative Endorsements to Illinois NBCTs (IL-SAELP, 2010). Under Duncan's direction, by 2007, the NBPTS project increased the number of NBCTs in leadership roles in the Chicago district from approximately 380 to 1,200 (IL-SAELP, 2010).

Alternate route to the principalship. Using The Wallace Foundation funding, Illinois created a seamless route to the principalship for NBCTs. In 2001, (during Arne Duncan's tenure in Chicago) the Illinois State Board of Education (ISBE) and Illinois Board of Higher Education (IBHE) convened a commission on school leadership preparation (IL-SAELP, 2010). The Illinois legislature appointed a task force called the Illinois State Action for Education Leadership Project (IL-SAELP) to develop policy recommendations, and draft new principal preparation criteria coinciding with university based programs (IL-SAELP, 2010). The task force reported that successful NBPTS candidates already demonstrated vast knowledge and specific skill sets around curriculum, instruction, and research (IL-SAELP, 2010). By partnering with colleges and universities around the state that supported NBCTs, Il-SAELP recommended the creation of an endorsement called: Seamless Route to a Type 75 General Administrative Endorsement for Illinois NBCTs (Il-SAELP, 2001).

The Public Act 094-1039 (2007) codified the emerging effect of the NBPTS process as integral to preparation of principals. However, by requiring the completion of such courses as foundations of educational administration, finance, supervision and evaluation, policy and legal issues, and supervision of special education programs, the Illinois State Board of Education recognized the value of the traditional principal route. The alternate route to the principalship incorporated five components:

- complete two years of teaching experience;
- complete the NBPTS certification process;
- obtain a master's degree in an education-related field;
- complete 15 hours of course work including foundations of educational administration, finance, supervision and evaluation, policy and legal issues, and supervision of special education programs; and
- pass applicable certification tests (Public Act 094-1039, 2007).

In May, 2006 Senate Bill 860 (Public Act 094-1039), was passed in the Illinois legislature. This new legislation created an alternative route to the principalship for Illinois NBCTs (Illinois Public Act 094-1039, Section 25.313, 2007). Becoming law on July 1, 2007, this legislation influenced educational policy regarding principal preparation and in effect, codified the NBPTS as a principal preparatory process for Illinois NBCTs. However, the Law was repealed effective May 6, 2014 when the Wallace Foundation funding supporting the CPEF ended.

Both Thorpe and Duncan moved to their current positions. In March 2014, Ronald Thorpe, President and CEO of the NBPTS and Arne Duncan, U.S. Secretary of Education made a major announcement of a new teacher leadership initiative called Teach to Lead.

Designed to advance teacher leadership, this federal initiative was pursued in partnership with the NBPTS. The primary goal of the new initiative was to empower teachers to lead, shape education policy, and prepare the next generation of teacher leaders.

James Hunt Jr., Governor of North Carolina. In 1985, Governor James Hunt Jr. co-chaired the Committee of 50, a group that eventually led to the creation of the NBPTS in 1987. Formerly the chairman of the NBPTS for 10 years, Governor Hunt enacted state legislation that offered several lucrative incentives to North Carolina's educators to pursue NBPTS certification. According to Bunch (2012)

> The state offered to (a) pay the $2,300 fee for teachers who had taught in the state for 3 years and were being paid from state funds, (b) fund a 12% increase in salary for teachers who achieved the certification, and (c) pay for up to 3 days release time for candidates to work toward the process. (p. 4)

The implementation of state and federal legislation supporting teacher leadership advances the primary goals of the NBPTS to have a voice in the policy decisions that affect student achievement and the teaching profession. The primary goal was to help NBCTs professionalize teaching through acquiring school leadership roles and give teachers control, influence, and ownership of the profession (Berg, 2005).

National Board Certified Educational Leader (NBCEL)

The NBPTS sponsored an effort to develop a national certification for accomplished principals and educational leaders. In 2007, the CPEF and The Wallace Foundation were primary investors in the new initiative with a multi-year, multi-million dollar investment. The NBCEL initiative shared the same fate as the alternate route to the administrative endorsement for Illinois NBCTs, both programs ended in 2014 due to a lack of funding. In 2010, the NBCEL initiative was the first national certification for

accomplished principals and was the first phase of an expanded NBCEL, ultimately to include assistant principals and teacher leaders. Its process was based on the NBCT process created in 1987.

The NBCEL initiative required candidates to: (a) reflect on their leadership practices and write about them, (b) conduct surveys and focus groups in their school communities, and (c) submit videos that showed candidates leading a meeting of their school leadership team. Neither process specifically addressed school management activities such as educational administration, staff supervision, school finance, school law, and special education (De Maeyer et. al., 2007). Because of the high cost and the high attrition rate of field test and pilot test participants, and lost Wallace Foundation funding, the NBPTS abandoned its efforts to create a national certification for principals. Participants reported that the NBCEL program did not provide them with sufficient feedback on their submissions, testing and artifacts. According to an *Education Week* article,

> The governing body for the National Board for Professional Teaching Standards voted this morning to scrap its nearly five-year-long, $3.5 million effort to create advanced certification for the principal profession. In a unanimous decision, the board of directors agreed that financial and administrative challenges had become too insurmountable to continue with the program said Ronald Thorpe, the president and chief executive officer of the Arlington, VA-based organization. (Maxwell, 2014, p.1)

The decision to terminate the program meant that the more than 200 principals who participated in the field and pilot-testing phases would not receive advanced certification (Maxwell, 2014). Nevertheless, candidates who completed the NBPTS process were likely to bring a greater focus on curricula, instruction, assessment, and reflection to the

principalship; therefore, as one result, they may be an invaluable resource for principal recruitment (Deavers, 2009; Marzano, Waters, Marzano, & McNulty, 2003).

NBCTs in the Principalship

According to Marzano, Waters, and McNulty (2005), there are four different kinds of knowledge that school leaders need: experiential knowledge (why), declarative knowledge (what), procedural knowledge (how), and contextual knowledge (when). Therefore, balanced decisions based on deep, broad-based 'knowledges' increased the likelihood of effective educational leadership (Marzano et al., 2005). Marzano et al. (2005) conducted a quantitative meta-analysis of 5,000 studies over 35 years of educational research (including doctoral dissertations) to identify school level leadership responsibilities and behaviors and its effects on student achievement. The 70 studies included in the meta-analysis were selected based on the criterion that they included student achievement data measured on norm-referenced tests. Student achievement was the dependent variable and teacher perceptions of leadership were the independent variable. The 70 studies involved 2,894 schools, approximately 1.1 million students, and 1,400 teachers (Marzano et al., 2005).

The researchers (2005) found an average effect size of 0.25 between school level leadership behaviors and student achievement. Marzano et al. (2005) also found a one standard deviation improvement in principal's 21 leadership behaviors corresponding with a 10 percentile point difference in student achievement on norm referenced tests (from 50th percentile to the 60th percentile) (Marzano et al., 2005). However, to be effective, those leadership decisions were based on broad-based knowledges (experiential, declarative, procedural, and contextual) (Marzano et al., 2005).

According to Marzano et al. (2005) school leaders initiated change in various ways, but not all change was of the same order. First order changes were those which build on existing conditions, were focused, and had research based support. Second order changes created new conditions, abandoned the past, were more complex, and createed systemic instability. School leaders must be able to recognize the different ways that change might shape their communities, and therefore identify and select leadership responsibilities and practices to implement change (Marzano et al., 2005).

Marzano et al. (2005) concluded that the principal played a vital role in creating a culture of change focused on improving student achievement. For first order change, two responsibilities, namely knowledge of curriculum, instruction, and assessment as well as involvement in curriculum, instruction, and assessment were ranked fourth and fifth by order of impact on student achievement (Marzano et al., 2005). For second order change, knowledge of curriculum, instruction and assessment ranked first as most important to student achievement (Marzano et al., 2005).

According to Marzano et al. (2005), by combining studies, (70) this meta-analysis increased the sample size and thus the power to study the potential effects. The outcome of this meta-analysis depended on controlling the potential threats of search bias. Searches of databases can yield long lists of studies. However, the databases only included studies that have been published. Such searches were unlikely to yield a heterogeneous representative sample, because studies that reported a positive result were more likely published than those that did not. Further, there was no report of an effort to include unpublished studies (Marzano et al., 2005). The researchers apparently had a goal

to develop their Balanced Leadership Framework. The author's company named McREL International established in 1995 funded the research study.

There was no overt evidence that the researchers were biased in their search and selection criteria. They reported that they included all studies (including doctoral dissertations) in their analysis. Although the findings were theoretical, asserting that if a principal identified and implemented 21 specific leadership behaviors, a corresponding 10 percentile point improvement in student achievement would follow (Marzano et al., 2005). Such an assertion was misleading and did not account for confounding contextual variables. The value of this study was the identification of the leadership behaviors (i.e. involvement with and knowledge of curriculum, instruction, and assessment) and therefore was informative to my study.

In a multiple-case study conducted by Deavers (2009) of five NBCTs who ascended to the principalship, Deavers found that NBCT principals reported that the five core propositions of the NBPTS intersected with their leadership practices at the school site (Deavers, 2009). The participants reported that the NBPTS process contributed to their leadership in the principalship in the following ways: (a) valuing the work of teachers, (b) understanding the vital role of collaboration, (c) recognizing the need for instructional standards, (d) engaging in the process and act of self-reflection, (e) understanding that teaching and learning are ongoing processes and recursive, (f) placing students at the center, and (g) allowing for and learning from mistakes (Deavers, 2009). A noteworthy finding in the Deavers (2009) study was that each participant cited that the NBPTS process contributed to their development of reflective practice in which they

engaged in a process of thinking about their leadership and how to improve their leadership practices and processes at the school site (Deavers, 2009).

Three of the participants in Deavers' (2009) study reported that the five core propositions and the NBPTS process "outline what effective schools can be and what they should do" (p. 116). Further, two participants cited that the five core propositions of the NBPTS validated their intentions to move teachers into professional learning communities (PLCs). Finally, each participant reported that completing the NBPTS process gave them confidence in the areas of curriculum, instruction, and assessment and validated what they knew to be true about teaching and learning (Deavers, 2009). The sample focused on five NBCTs.

Despite the low number of participants of this case study, it supported and corroborated previous empirical research (Marzano et al., 2005; Waters, Marzano, & McNulty, 2003) investigating the unintended effect of the NBPTS process in preparing principals (i.e., the development of knowledge relative to curricula, instruction, and assessment, which is crucial to successful leadership at the school site). Deavers (2009) research also supported Sato et al, (2002) findings that successful NBPTS candidates derived increased confidence from National Board certification that subsequently led to new school leadership roles and validated their reflective practice and leadership in general. A critique of the study indicated a need for additional data regarding NBCTs' dispositions prior to National Board certification. A pre- and post-certification assessment of leadership characteristics may help to distinguish if the leadership characteristics identified in the five NBCTs were present prior to National Board candidacy.

In summary, individuals who completed the NBPTS process shared common experiences in that candidates aligned their practices with a particular set of standards called the five core propositions. As such, according to the NBPTS (2009) the NBPTS process prescribed a consensus about what teachers should know and be able to do; it provided a means to evaluate teachers against standards; and provided teachers with the opportunity to strengthen their practice through self-reflection (NBPTS, 2009). By identifying, quantifying, and substantiating specific learning outcomes for teachers, achievement of the NBC may become recognized as an effective signal for teacher professional development and school leadership preparation (Deavers, 2009). These relevant studies conceptualized principal leadership to inform the current study.

Pitner's Models

Pitner's (1988) direct, mediated, reciprocal, and antecedent (DMRA) conceptual models illustrated the linkages through which principals demonstrate leadership behaviors and provided a conceptual basis for analysis of leadership behaviors. According to Pitner (1988), a principal's behavior may change over time based on the situation, to moderate various contingencies, contexts, and circumstances. In this regard, a different DMRA conceptual model would represent the corresponding behavioral approach to leadership. Following Pitner (1988), Hallinger and Heck (1996, 1998, 1999) extended her work by adding explanations and clarification of each DMRA component of her model. The researchers described the effects of leadership on school outcomes and hypothesized the potential relationships between leadership and achievement. Pitner's models were descriptive; in this regard, principals could feasibly identify their leadership behaviors and reflect on their leadership practices.

For example, based on the principal's desired outcome goals, selected interventions could be structural (direct), strategic (mediated), systemic (reciprocal), or contextual and solution focused (antecedent). Each leadership approach provided a specific, albeit narrow range of behaviors, ideas, techniques, and processes. It is important to note that school leaders may use any of the four approaches and may even simultaneously use a combination of DMRA approaches as they complete daily work tasks (Hallinger & Heck, 1998).

Consequently, Pitner (1988) proffered the direct-effects with antecedents (Model A-1) to illustrate how antecedents such as the principal's gender and the corresponding leadership acts influence interventions pursued to attain desired educational outcomes. The most commonly cited antecedent, (socioeconomic status) influences the scope of capital improvements, academic interventions, and certain school and community relations tasks. In effect, antecedent concerns influenced direct, mediated, and reciprocal interventions (Hallinger & Heck, 1998).

The identification and categorization of DMRA leadership behaviors was critical in the analysis of the research participant's leadership. Yin (2003) recommended pattern matching to increase case study rigor. Pattern matching assessed how well predicted patterns (theory) converged or diverged from observed patterns (research) (Yin, 2003). In a deductive process, subsequent iterations corroborated possible links between theory and observation by comparing or contrasting rival patterns (Yin, 2003). Such pattern matching compared the participants observed patterns of behavior with patterns predicted in the research and based on Pitner's 1988 models. I found alignment between the participant's leadership behaviors and those predicted in the literature. Therefore, in the

following sections, I will review and critique existing research to identify DMRA leadership behaviors based on Pitner's (1988) DMRA conceptual models. A cursory overview of Pitner's (1988) DMRA models is presented in Table 1.

Table 1.

Pitner's 1988 Models

DMRA	*Direct*	*Mediated*	*Reciprocal*	*Antecedent*
Focus	Organization	Classrooms	Climate	Context
Interventions	Structural	Strategic	Systemic	Solution Focused
Central Concepts	Compliance: Standardization Enforcement The Facility Setting Vision	Pedagogy: Curricula, Assessment Instruction, Reflection	Interaction: Relationships Communication School Climate School Culture	Alignment: Matching school compositional factors with school resources
Leadership Challenge	Improve facilities, Enforce safety protocols, student discipline, policies & procedures. Induction, supervision, mentoring & school budget	Improve instructional strategies, alignment of curriculums, use of technology tools, developing a professional learning organization	Initiating & cultivating relationships and communication, connecting people, parent & community engagement, managing and eliminating conflicts	Situational and contingent based on school composition factors like: location, race, gender, SES, division funding & staffing levels

Direct Effects of Leadership Research

Research studies that investigated direct effects of leadership on educational outcomes analyzed the linkages from leadership to school outcomes. Pitner's (1988) direct effects conceptual model depicted a direct relationship between the principal's leadership behaviors and student achievement (Graczewski, Knudson, & Holtzman, 2009; Hallinger & Heck, 1998; Ylimaki, Jacobson, & Drysdale, 2007). However, Barker (2007) disagreed. He conducted a case study to examine the effects of transformational leadership behaviors on educational outcomes. He intended to challenge rather than confirm the theory that certain types of leadership directly produced improved student

attainment. From Barker's perspective, there was no reliable empirical evidence supporting the belief that a principal's leadership and student achievement outcomes were directly linked. He argued that that there was an indirect relationship.

Barker (2007) selected the Shire School (pseudonym) because it was judged by Her Majesty's Chief Inspector to be one of the best schools in England because it experienced sustained, exceptionally strong leadership. Barker believed the school represented a case in which leaders most likely transformed the school, where school outcome variables could be easily tested. He used a qualitative design that included 17 staff members from the Shire School in England as study participants. Participants were selected for interviews and observations. A survey of 3,500 students was conducted (Barker, 2007).

The 17 staff members selected for interviews were based on the criteria that age, gender, length of service, status, and role (teaching or administration) was reflected within the sample and were determined by the availability of individuals. During the analysis phase of the study, emergent concepts were identified. Interviews were compared and contrasted. Data were collated and codification provided triangulation of respondents' opinions using concepts originating from the literature (e.g., distributed leadership, trusted to complete tasks, and participatory group decision making).

During the observations of teacher participants, eight classes were visited so that three lessons were observed in English, two in mathematics, two in science, and one in geography. The number and choice of lessons was inhibited by the timetable and other teacher commitments. Barker identified the following variables as typical leadership actions described in research literature to be associated with transformational leadership

models including (a) mobilizing commitment to an explicit educational vision; (b) coaching and mentoring designed to support individuals and increase leadership capacity in general; (c) visible dispersing of leadership responsibilities throughout the staff group with members who were trusted to initiate and complete tasks; and (d) group decision making that was highly participatory, open, and democratic (Barker, 2007).

Barker (2007) found that the principal's role as the selector and developer of staff was widely perceived to be critical to the school's success because it directly influenced the performance of the school and the implementation of the educational program. Data were consistent across the sample, emphasizing that the principal had (a) established a clear, shared vision; (b) created greater interconnectedness; (c) widely distributed school leadership; (d) distributed decision-making empowered staff at all levels; (e) engineered opportunities to give people responsibility; and (f) demonstrated leadership behaviors that were consistent with a transformational style (Barker, 2007).

Barker (2007) concluded that leadership induced organizational conditions that were positive for colleagues seeking to enhance the quality of teaching and learning. Teachers had high expectations for pupils with varying abilities and achieved high standards of academic performance through good teaching (Barker, 2007). The case study data supported assertions that the principal succeeded in developing characteristics reported in the literature to be strongly associated with school effectiveness and through student achievement. Student achievement was measured by student grades and performance on nationally normed reading and math tests. Based on school inspection reports and interview data, the case study evidence supported assertions that the principal had successfully produced relatively small gains in organizational effectiveness and

student outcomes by enhancing commitment and vision, dispersing leadership responsibility, increasing leadership capacity, and by improving procedures that lead to improved organizational effectiveness (Barker, 2007).

Barker (2007) also concluded that the principal succeeded in inducing no more than a limited improvement in measured effectiveness. For example, the student population of higher SES at enrollment seemed to explain a good part of the increase in the proportion of students achieving higher grades between 1994 and 2005 (Barker, 2007). Once social background and prior attainment were considered, the degree of improvement to be explained became quite small. The research data gave consistently low estimates of the extent to which the school contributed differentially to pupils' performance. Barker's (2007) conclusion disparaged evidence of a direct principal level effect on student achievement through transformational behaviors.

Barker's (2007) study had limitations endemic to case studies. The student population of higher SES at enrollment seemed to explain a good part of the increase in the proportion of students achieving higher grades between 1994 and 2005. This condition was an indication that the principal had a relatively small direct effect on student achievement despite his transformational leadership approaches (Barker, 2007). Barker noted that transformational leadership behaviors were exceptional in this case and seemed to have produced a small gain in organizational effectiveness, as measured by the responses of the participants, academic outcomes, and the findings of Her Majesty's Chief Inspector (Barker, 2007).

The Barker (2007) study could benefit from a pre-assessment of background and contextual variables to strengthen the saliency and utility of the study findings.

Conversely, the available empirical data regarding transformational leadership seem to corroborate studies that have found a small, indirect impact on organizational effectiveness and student outcomes. However, a single case study cannot confirm or refute general propositions. Nevertheless, according to Barker (2007), certain types of leadership directed at organizational structure tend to produce much better test and examination scores.

Although interview methodology was appropriate for this study, it further limited the findings of the study because interviews may add to the risk of subjectivity and bias implicit in social investigations. Also, surveys and interviews depend on the interpretations of witnesses for our understanding. Qualitative researchers have limited alternatives when forming judgments on the basis of the best evidence that can be gathered using case study methodologies. Despite the limitations of this study, it was primarily useful in providing evidence to confirm the continuing relevance of a principal's leadership behavior on organizational variables that potentially lead to student achievement. This impact, however, was indirect rather than direct, and was mediated through middle leaders, particularly teachers, and the internal organizational structure level conditions that developed (Barker, 2007).

Graczewski et al. (2009) investigated the direct effect of instructional leadership on comprehensive instructional reform practices (e.g., organizational professional development) that led to improved instruction and student achievement. The study examined whether the leadership behaviors of instructional leaders actually had a direct influence on instruction. The sample included nine San Diego, California, elementary schools. The researchers conducted interviews with the principal, vice principals, peer

coaches, and 12 randomly selected teachers at each grade level. A survey was administered to teachers throughout the district that included the entire population of the nine San Diego County Schools (SDCS) elementary schools.

Graczewski et al., (2009) found (a) professional development, when directly connected to the larger organizational goal of improved teacher learning was directly linked to overall student learning; (b) principals who directly engaged teachers in content-focused professional development, with an emphasis on subject-area curriculum and assessment, were critical for sustained student achievement; (c) instructional leadership directly influenced both professional development and classroom instruction and in turn influenced student achievement mediated through classroom-level variables (Graczewski et al., 2009). Schools in which the principal established a coherent school-wide vision were more likely to exhibit relevant professional development directed at the organizational level. At schools in which the principal engaged in instructional leadership, there was a greater likelihood that the professional development offered at those schools focused on content and curriculum (Graczewski et al., 2009).

The researchers did not report rival explanations nor did they conduct a pretest analysis of the context. Despite the limitations of Graczewski et al.'s (2009) study, the findings inform my case study. The value of this study was in studying the leader's direct approach efforts to pursue organizational goals through structural interventions. This study also supports and informs my research study regarding the instructional focus espoused by the NBPTS and pedagogy as a primary instrument for school change (Hallinger & Heck, 1998). The principal directly engaged teachers in content-focused professional development at the organizational level of the school. An effort to improve

the functionality of the school through structural improvements was identified by Hallinger and Heck, 1998 as a direct approach.

Ylimaki et al. (2007) investigated how effective principals and head teachers in the United States, England, and Australia made a difference in challenging, high-poverty schools using direct approaches to leadership. The researchers applied a multiple case study methodology incorporating observations, surveys, and interviews of teachers, support staff, parents, and the principals themselves to collect data concerning individuals' perceptions about the principal's work in designing the organization of the school (Ylimaki et al., 2007). Sites were chosen based on low student performance on state or national standardized tests. The study included participants serving in challenging high-poverty schools in the United, England, and Australia; of the 13 challenging schools included in the study, four were in the United States, four were in Australia, and five were in England (Ylimaki et al., 2007).

Ylimaki et al. (2007) found (a) strong, even directive, instructional leadership was an essential role of the principal in disadvantaged circumstances; (b) principals used similar direct leadership approaches to improve student performance in challenging schools; (c) instructional leaders directly influenced failing schools by improving the organizational structure in the following ways: created safe, orderly, and positive school environments; developed and communicated a clear and focused mission; established high performance expectations; increased student time on tasks; and maintained positive home-school partnerships (Ylimaki et al., 2007).

According to Ylimaki et al. (2007), school leaders in England used more directive or authoritarian leadership styles in schools with serious problems. Similar studies in

Australian schools reported that principal leadership was primarily democratic, but also directive and purposeful during early stages of school improvement. Studies conducted in Australian schools found that the heroic leadership model was able to make an early impact; however, distributed leadership was necessary for sustained improvement (Ylimaki et al., 2007). The researchers did not indicate how long the improvements were sustained. According to Ylimaki et al. (2007), in the most challenging school contexts, effective leaders exhibited four core direct approaches that were necessary, but insufficient, for success: (a) setting directions; (b) developing people; (c) redesigning the organization; and (d) managing the instructional program (Ylimaki et al., 2007).

Ylimaki et al. (2007) found, in setting direction, leaders developed and communicated shared goals, a sense of common purpose, and high performance expectations. In challenging schools, this approach required that achievable goals be set, often beginning with improvements in the physical environment. In the United States, principals focused on the creation of safe and orderly school environments through rules, rituals, routines, the establishment of policies and procedures, and setting high expectations for all children. Direction setting by principals in challenging Australian schools was characterized as more of a shared responsibility; however, the principals' first directions typically concerned improvement of the physical structure as well as student behavior (Ylimaki et al., 2007). This finding supported Hallinger and Heck's (1998) assertion that such behaviors resulted from direct effect of leadership approaches.

Ylimaki et al. (2007), also found, in redesigning the organization, principals of challenging schools in all three countries were frequently depicted as authoritarian or directive as they sought to bring order to chaos in their schools, but after safety and an

improved physical environment were achieved, they became more democratic and redesigned their schools as professional learning communities to increase professional collaboration and dialogue among teachers (Ylimaki et al., 2007). Further, in managing the instructional program, principals directly supervised curriculum and instructional improvement through four direct approaches: (a) staffing schools with teachers well matched to school priorities; (b) provided instructional support, monitored school activity; and (c) buffered staff from distractions to protect instructional time. Principals fostered teacher leadership by sharing the responsibility for curriculum innovation (Ylimaki et al., 2007).

The study by Ylimaki et al. (2007) had limitations endemic to case study research. However, these case study findings generalized to theoretical suppositions underpinning my case study. The study was further limited by its reliance on the veracity and the trustworthiness of the survey responses and the respondents' interview narratives. Although the study had limitations, it was conducted with appropriate methodological techniques and strategies. The study findings revealed the direct approaches of leadership behaviors demonstrated by principals in challenging contexts, highlighting efforts to improve the organizational structure of schools. The findings were informative regarding the ways NBCTs may demonstrate leadership in the principalship.

Summary of direct-effects research. Direct approaches influenced the organizational and social structure and facility design. When problems surfaced, the leader intervened structurally through specialized tasks, sequential work, and close supervision, thereby solving problems through organizational and procedural

restructuring. The school leader focused on vision, setting directions, and managing the instructional program (Hallinger & Heck, 1998; Ylimaki et al., 2007).

Mediated Effects of Leadership Research

Hallinger and Heck (1998), articulated that the mediated effect of school leadership goes through intermediate, classroom-level variables such as teachers, curricula, students, and the overall instructional programs. The impact attained by principals using mediated approaches occurs through manipulation of or interaction with features of the school organization at the classroom level (Wallace, 2002). Wallace investigated the mediated effect of distributed leadership focused at the classroom level. The sample included primary schools in the United Kingdom. Wallace used a postal questionnaire survey of 150 head teachers (principals) in schools with more than 300 students. Wallace conducted a survey of schools with school management teams (SMTs). Nine out of 10 schools had such a team with 10 or more teachers whose members claimed a commitment to teamwork. The selected SMTs believed that teamwork was essential for providing effective instruction (Wallace, 2002).

From that sample, Wallace (2002) conducted a multiple case study of SMTs. Semistructured interviews (58) comprised the data sources (8 with head teachers, 20 with other members of the SMTs, 26 with a sample of other school staff members, and 4 interviews with chairpersons of school governing bodies). The researcher also conducted observations of 12 SMT meetings and 10 other meetings at which SMT members were present, and a small document archive was collected. Based on the data, Wallace (2002) found that effects of school-level leadership and management were mediated by internal and external contextual and situational factors influencing the classroom-level practices.

Also, though leadership and management played a crucial role in student achievement, it was viewed by survey respondents as making less of a difference to student learning than classroom-level processes. Survey respondents corroborated that teaching, rather than leadership and management, promoted student achievement. Yet, Wallace concluded that principals or head teachers had an indirect impact on student learning outcomes mediated by classroom-level processes such as teaching and learning.

The limitations of Wallace's (2002) study were those endemic to survey and interview methodologies. Both methodologies relied on the veracity of the respondents and that the right questions were asked. The survey used in the Wallace study provided data from head teachers that diverged from the responses of their SMTs, colleagues, or outsiders regarding the role the SMT played in student achievement. Also, the Economic and Social Research Council, a research organization in the United Kingdom with the stated purpose to shape policy and society funded the study. The potential to fund research that was favorable to its organizational goals made the findings subject to potential bias. Therefore, the findings were accepted with caution.

An empirical investigation of mediated effects of manipulating teacher-student pairings could shed light on the effect of leadership on student achievement (Hallinger & Heck, 1998). Cavalluzzo (2004) conducted a study to assess the saliency of the NBPTS process as an effective signal of teacher quality. Her research investigated the strategic pairing of teachers with students and the professional characteristics of teachers (NBCT or non-NBCT). She examined the contributions that teachers made to student achievement in mathematics in grades 9 and 10. Student gains were then analyzed in school years 1999–2000 to 2002–2003.

In Cavalluzzo's (2004) study, teacher characteristics under consideration were as follows: (a) whether the teacher was new or experienced; (b) if the teacher had a regular state certification in high school mathematics; (c) if the teacher held a teaching position in mathematics or had another primary job assignment; (d) the teacher's highest degree; (d) the selectivity of the teacher's undergraduate school; and (e) whether the teacher had NBC, pending applications, or failed, or withdrew from the NBPTS process. The study was designed to group participants who attempted or completed the NBPTS process and compare students of NBCTs with students of non-NBCTs who had no involvement with the NBPTS process (Cavalluzzo, 2004).

Cavalluzzo (2004) analyzed grades 9 and 10 math achievement data and found that students with otherwise similar teachers made larger gains if the teacher had earned NBC and smaller gains if the teacher failed or withdrew from the NBPTS process. Cavalluzzo reported:

> With the exception of undergraduate school quality, which can be interpreted as an indicator of the academic ability of the teacher (a factor often associated with student success), each of the teacher quality indicators made a correctly signed and statistically significant contribution to student outcomes. When compared with students, the coefficient for failure or withdrawal from the NBC process was significant only at the 10 percent level. (p. 2)

According to Cavalluzzo, "Using a multivariate framework that takes into account differences in teacher and school attributes and after taking into account differences in the characteristics of students, such comparisons confirmed the finding" (p. 7). Students with new teachers who lacked a regular state certification and those with teachers whose primary job assignment was not mathematics instruction made the smallest gains

(Cavalluzzo, 2004). A noteworthy finding regarded the variety of factors operating to cause differences in the achievement of students. Cavalluzzo (2004) reported:

> Each student record was linked to his or her subject-area teacher to create a rich data set containing information on teacher characteristics, student background and behavior, and school environment. Student gains were then examined. (p. 1)

As a result of this dataset, Cavalluzzo (2004) extrapolated data on teacher assignment and noted that effective teachers were assigned to better schools. This finding could also be interpreted as effective teachers created better schools.

The implications of the findings were accepted with caution as funding for this study was provided by the National Science Foundation and by the NBPTS. Some of the differences reported in the data could be the result of how students and teachers were paired. Cavalluzzo (2004) reported that effective students were likely assigned to effective teachers, potentially confounding her finding that NBCTs were effective. The data suggested that students and teachers were not randomly paired, but that principals paired academically successful students with highly qualified teachers. Cavalluzzo's goal was to study the effects of intentional teacher student pairings. Therefore, in this regard she accomplished the primary goal of her study. Due to student assignments, achievement indicators that correlated with assignment to an NBCT were potentially biased and thereby skewed the estimates of the actual effect of teacher attributes on student outcomes. It was feasible that Cavalluzzo overestimated the contributions that NBCTs made to student achievement in mathematics. A pre-assessment of the math achievement data present prior to NBCT assignment could strengthen the design. Although Cavalluzzo designed the study to control factors that impacted student performance, it was possible that unobserved differences in student readiness to learn were unaccounted.

However, (Cavalluzzo (2004) shed light on mediated approaches and school leadership efforts to manipulate classroom-level factors such as teacher student pairings.

Summary of mediated-effects research. Mediated approaches focus on the implementation of instructional reforms at the classroom level by incorporating a commitment to teamwork, by managing the instructional program, and by developing teachers through intensive training for struggling teachers. Administrative interventions were strategic at the classroom level through the strategic pairing of teachers and students (Cavalluzzo (2004). In support of Deavers (2009) and Marzano et al., (2005) findings, a focus on curricula, instruction, assessment, and reflection highlight a mediated approach to school leadership wherein pedagogy is the primary instrument of school change leading to student achievement (Hallinger & Heck, 1998).

Reciprocal Effects of Leadership Research

The reciprocal effects of leadership on educational outcomes focused on cultivating the relationships between individuals within and outside the system as a whole. As part of the principal's vision, these relationships defined and created the school's culture and climate (Hallinger & Heck, 1998; MacNeil, Prater, & Busch, 2009). The leader occupied the central position; from there, efforts to improve communication and the school's climate were made by arbitrating internal and external demands. The reciprocal-effects model conceptualized the flow of leadership as multidirectional rather than linear as in the previous models (Hallinger & Heck, 1998). From a central position, the leader and the various parts of the system relate interactively forming the culture and climate. As the leader acted on the system, the system, in turn, acted on the leader (Hallinger & Heck, 1998).

Reciprocal leadership behavior was defined in terms of influence and exchange. This exchange was multi-directional, indicative of a recursive relationship (Anderson, 2004; Leithwood, 2004). These causal relationships were described as multidirectional, nonlinear, and changed over time. Additionally, Hallinger and Heck (1998) emphasized that reciprocal leadership was conceptualized as "a mutual influence process, rather than as a one-way process in which leaders influence others" (p. 346).

The reciprocal approach to leadership behaviors differed from each of the previous approaches: direct approaches of leadership behaviors focued on the organizational level variables, and mediated approaches of leadership behaviors focus on the classroom level variables. In contrast, reciprocal approaches focued on school culture level variables. Based upon the principal's vision, reform efforts that were designed to improve communication and relationships were initiated, resulting in enhanced student achievement through culture and climate (Hallinger & Heck, 1998).

Researchers Kruger, Witziers, and Sleegers (2007) investigated the influence of school leadership factors on teacher level effectiveness in an attempt to validate a causal model, Pitner's (1988) reciprocal-effects model through empirical research. The study was conducted to contribute to our understanding of the school culture level variables and linkages, which connect the principal, the organization, and student achievement outcomes. Pairs of compatible schools were formed by means of the guaranteed variable caliper matching of Althauser and Rubin (1970). Matching took place on the basis of characteristics like school type, school size, urbanization, principal's age, duration of principalship, the composition of the management team, composition of the teachers, and the makeup of the student population (Kruger et al., 2007).

The researchers conducted a secondary analysis using the data from an empirical comparative study among school principals in secondary education in The Netherlands. All women principals that were traced in the Dutch secondary education were requested to participate, 82% responded. The study participants consisted of 98 principals and 49 school pairs. There were 52 principals in general secondary education, 26 principals in vocational secondary education, and 20 in adult education, forming 26, 13, and 10 paired cases, respectively. In addition to the questionnaires presented to the principals, 10 students and nine teachers selected at random in each school were also requested to complete a questionnaire to measure the effects of the principalship. Kruger et al. (2007) constructed a survey instrument in the form of Likert-scales; efforts to validate the instrument were reported. A sample of 858 students and 637 teachers replied to the invitation to participate in the study (Kruger et al., 2007).

According to Kruger et al. (2007), the following variables came from the initial study: gender; school size; school location; principal's age; principal's vision; percentage of female teachers; percentage of young teachers; and the definition of the degree of urbanization. The number of teachers in the school indicated school size. Possibly due to population, the number of inhabitants in the city or village where the school was located indicated school location. All variables, except gender were standardized (Kruger et al., 2007). Further, the variable (vision) was operationalized as the principal's task orientation, identified by the importance attached to performing instructional versus administrative tasks. The principal's vision also influenced the quality of the school's organization, culture, and climate (Kruger et al., 2007).

Kruger et al. (2007) data analysis investigated gender differences in the principalship regarding the paths and chain of variables from context factors via the principal's visions and behaviors. Those paths were not uncovered by means of univariate and multivariate analyses. To test Pitner's (1988) reciprocal-effects model, a path analysis was conducted to assess the causal contribution of (directly observed) variables linked to other variables (Kruger et al., 2007). The researchers used structural equation modeling to estimate the path analysis model.

Kruger et al. (2007) initially found that they needed to utilize a more complex causal model to analyze the principal's role in school effectiveness. The researchers then applied the direct-effects with an antecedent model in which gender differences and other contextual variables accounted for school effectiveness (Kruger et al., 2007). Although these results shed an important light on antecedent variables, it was noted by the researchers that the data fit poorly. However, the researchers then tested the fit indices of the reciprocal-effects model in which causal relationships were systemic, multidirectional, change over time, and even be nonlinear (Hallinger & Heck, 1998; Kruger et al., 2007). The researchers found that it fit the data. This conclusion was supported by the following fit measures: probability density function (PDF), and root mean square error of approximation (RMSEA) (Kruger et al., 2007).

A noteworthy finding was that a range of antecedent variables related to the school context, student and staff gender, and socio-economic factors had more effects on the school culture and student achievement than educational leadership had (Barker, 2007; Kruger et al., 2007). However, the principal's vision had a substantial reciprocal influence her on leadership behaviors. The findings suggested the importance of selecting

the appropriate model to analyze the complex chain of variables through which principals have an effect on school effectiveness and student achievement. According to Kruger et al. (2007), the impact of educational leadership on school culture was indirect and recursive through the perceived quality of the school organization. The results revealed that antecedent variables, like the number of female teachers and the number of female students with high SES, had a greater impact on the school culture than educational leadership (Kruger et al., 2007).

According to Kruger et al. (2007), a third key result indicated that the principal's vision had a substantial impact on the behavior and strategies used by principals in the school. The principals' task orientation (the extent to which they attached importance to educational leadership) had an impact on their activities and on their instructional leadership behavior (Kruger et al., 2007). A fourth key set of findings indicated that educational leadership was affected by a range of antecedent factors in addition to gender such as institutional and contextual factors, like school size, school location, gender of teachers and race of students (Kruger et al., 2007). According to Kruger et al. (2007), a reciprocal relationship was found between teachers, student commitment, and strategic leadership. The researchers surmised the implications of their study and reported that principals improve teaching and subsequently student outcomes by (a) recruiting high-quality teachers, (b) providing teachers with a career continuum, (c) implementing teacher-led professional development, (d) establishing a rigorous teacher accountability system, and (e) granting commensurate compensation based on position, skills, knowledge, and performance (Kruger et al., 2007).

The Kruger et al. (2007) findings were accepted as the results of previously conducted research into the nature and effects of transformational leadership indicated it had a positive impact on teacher motivation, and professional growth (Leithwood & Jantzi, 2006). Transformational leadership also had a weak yet important influence on a variety of organizational conditions, including school culture, contributing to educational change in schools, recursively (Leithwood & Jantzi, 2006). The Kruger et al. (2007) study informed my study and revealed efforts to validate Pitner's (1988) reciprocal-effects model. This is a noteworthy accomplishment because reciprocal-effects research is a rare research paradigm in educational leadership literature (Hallinger & Heck, 1998).

Anderson (2004) studied the reciprocal effects of leadership behavior on systemic relationships in a school organization. His study focused on the reciprocal influences between teachers and principals. Teacher influence could be positive or negative depending upon the situation or context and could potentially exert a supportive or destructive force on school culture and climate. The results of this study underscored the importance of conceptualizing leadership behavior from a reciprocal approach with particular reference to understanding power and legitimacy within leadership relationships (Anderson, 2004).

Anderson (2004) used the concepts of leadership reciprocity, as articulated by Gronn (2000), to analyze the relationships in his study. Leadership reciprocity is defined as the mutual and reciprocal relationship between leaders, the context, and followers. Reliance on followers, particularly the immediate subordinates, makes the leader both dependent and dominant (Gronn, 2000). Leadership reciprocity created mutual and reciprocal relationships and formed the basis of the culture of a school. Anderson (2004)

conducted a multisite qualitative case study that included interviews of key informants. Respondents were interviewed regarding their perceptions of teacher leadership in their schools. In his study, Anderson defined a teacher leader as an individual who exercised influence. The study incorporated six schools in Chicago noted for teacher leadership; 28 participants were interviewed. Anderson (2004) analyzed the interview data based upon three theoretical models of mutual influence or leadership reciprocity articulated by Gronn (2000): the buffered model, the interactive model, and the contested model. Anderson described the relationships that existed at the research sites. Each of the relationships created a different school culture and climate at the six schools in Chicago, Illinois.

Anderson described the theoretical application of each model. According to the buffered model, the buffered principal surrounds herself with a small, selected group of teacher leaders and is relatively isolated from the other teachers in the school. According to Anderson (2004) "These foot soldiers form a phalanx to protect the principal and are used to exert pressure on the staff to carry out her decisions, thereby lowering potential resistance to her decisions" (p. 19). The influence exercised by such teacher leaders was potentially negative. In the interactive model, the interactive principal distributed decision-making power throughout the faculty to create interactive and extensive faculty involvement. According to Anderson (2004), this model was characteristic of transformational leadership because it "Creates interaction between all levels of formal and informal leadership structures" (p. 19). The influence exercised by teacher leaders was potentially positive.

According to the contested model, the principal stood outside the recursive loop and against teacher leaders. This model was characterized by the teacher leader's attempts to usurp the locus of decision making used by the principal (Anderson, 2004). "This state is indicative of a new principal, a female principal with male teacher leaders, and principals who share leadership but possess inadequate skills and have no foot soldiers" (Anderson, 2004, p. 19). The negative influence exercised by contested teacher leaders was potentially destructive, eroding teacher and staff member communication and relationships, and consequently eroding school culture and climate.

Anderson (2004) reported the findings of his interviews of key informants regarding their perceptions of teacher leadership. Anderson (2004) found that teacher leaders in informal leadership roles influenced the principals with their computer technology expertise and their experience with completing special projects. Teacher leaders were instrumental when influencing the faculty to buy into a new or potentially unpopular decision. The principal also influenced teacher leaders by using their formal leadership roles, particularly when assigning, conducting, and carrying out special projects and initiatives. The main finding of Anderson's (2004) study was that his analysis of the relationships between the principal and teacher leaders in his study best fit the interactive model. The interactive principal distributed decision-making power throughout the faculty to create extensive faculty involvement (Anderson, 2004).

Anderson (2004) defined a teacher leader as an individual who exercised influence and suggested that the teacher leaders in his study fit Leithwood and Jantzi's (1997) leadership prototypes as follows: younger and less experienced female teachers

are more likely than male teachers to possess leader prototypes, which include female traits and transformational leadership practices (Leithwood & Jantzi, 1997).

Likewise, Anderson (2004) found that informal teacher leadership roles in his study were adopted by female teachers and less experienced teachers. He also found that: (a) female teachers were more likely to possess leadership prototypes than were male counterparts, which included transformational leadership practices; (b) younger and less experienced teachers in his study were more likely to use transformational leadership behaviors; and (c) the elementary teachers in his study more likely to possess transformational leadership prototypes than were secondary teachers (Anderson, 2004).

Anderson (2004) concluded that school leadership could be described in an integrated way. The interactive principal distributed decision-making power throughout the faculty to create interactive and extensive faculty involvement. The interactive principal demonstrated characteristics of transformational leadership and created interaction between all levels of formal and informal leadership structures. Formal teacher leadership roles were an important element for interactive principals. The actions of the school leader occupied a central place in the reciprocal effects model, whereby the school leader influences the school through systemic or web-like connections and exchanges. These exchanges created an interactive and reciprocal relationship between the principal, teachers, and teacher leaders. The interactive principal systemically focused leadership behavior on relationships to accomplish her desired educational outcomes (Anderson, 2004).

A limitation of the Anderson (2004) study that restricted the utility of the conclusions was his definition of a teacher leader. A teacher leader, Anderson asserted,

was someone who merely exercises influence. Such influence failed to lead to effective outcomes. Anderson offered a rival explanation. Teachers possessing strong personality traits could explain the perception of those so-called teacher leaders as influential rather than possessing actual leadership skills or abilities. Followers were potentially intimidated by the so-called teacher leaders (Anderson, 2004). Many of the teachers interviewed who were perceived as teacher leaders were either the most outspoken or most aggressive staff members, rather than individuals with actual leadership influence. Finally, Anderson (2004) found in the schools studied, formal teacher leadership roles did not exist. These formal roles were an essential component in the analysis of the interactive model of leadership reciprocity.

I will note that this study took place during Arne Duncan's tenure as the CEO of Chicago Public Schools that raised $2.4 million for the NBPTS project in Chicago (IL-SAELP, 2010). Under Duncan's direction, by 2007, the NBPTS project increased the number of NBCTs in formal leadership roles in the Chicago district from 380 to 1,200. It was not clear why there were no formal teacher leadership roles at the six Chicago public schools represented in Anderson's (2004) study. The utility of Anderson's (2004) study was it extended Gronn's (2000) interactive models of leadership reciprocity and Leithwood and Jantzi's (1997) leadership prototypes. The models and prototypes offered a way of analyzing and conceptualizing the relationships of an NBCT in the principalship role with teachers. Thus, the reciprocal effects of leadership on educational outcomes focused on the relationships and interactions between individuals within the school's context (Hallinger & Heck, 1998).

MacNeil, Prater, and Busch (2009) investigated the effects of school culture and climate on student achievement. The sample included 29 schools as the units of analysis located in a large suburban school district in southeast Texas. The Texas Education Agency assigned one of three ratings to schools based on the performance of 24,684 students on the Texas Assessment of Academic Skills (TAAS). The TAAS is a criterion-referenced test designed to measure the academic skill levels of students in reading, mathematics, and writing. Based on student test results, the schools were categorized in rank order of performance as exemplary, recognized, acceptable, and low-performing. No schools were judged as low-performing and were not included in the sample.

The purpose of the study was to investigate whether the schools differed in their school climates, as measured by the 10 dimensions of the Organizational Health Inventory (OHI). A total of 1727 teachers from each of the schools rated the organizational health of their respective schools using the OHI. The OHI consisted of 80 Items, 8 for each of the 10 dimensions, with each being rated on a 5 point Likert-type scale (MacNeil et al., 2009). The 10 dimensions of the OHI included goal focus, communication adequacy, optimal power equalization, resource utilization, cohesiveness, morale, innovativeness, autonomy, adaptation, and problem-solving adequacy. These 10 dimensions characterized aspects of school climate related to the successful interaction among the members of the organization as well its ability to deal with stress from the internal and external environments (MacNeil et al., 2009).

A percentile score was assigned to each of the 10 dimensions gathered from the raw scores of the OHI. For statistical analysis, the percentile scores were converted to normal curve equivalents (NCE) and were used to report the means and standard

deviations on each of the 10 rating scales across the three types of schools (MacNeil et al., 2009). For each of the 10 dimensions of organizational health, statistical significance was found, indicating that exemplary schools out-performed recognized and acceptable schools on student achievement, as measured by the TAAS (MacNeil et al., 2009). In each of the schools that demonstrated higher student achievement, they also demonstrated healthier climates as measured by the higher rating of organizational health (MacNeil et al., 2009). The researchers also found that the dimensions, goal focus and adaptation were most effective in discriminating between the cultures of recognized and acceptable schools (MacNeil et al., 2009). No statistical significance was found between exemplary and recognized schools. Statistical significance was found, with recognized schools out-performing acceptable schools on the organizational health dimensions of goal focus and adaptation (MacNeil et al., 2009). Finally, key differences were found on all 10 dimensions of the OHI, with exemplary schools out-performing recognized schools and acceptable schools (MacNeil et al., 2009).

The ability to generalize the findings of this study was limited in that the sample was small (n = 29 schools) and there were no low-performing schools included in the sample. In addition, the sample comprised high schools, middle schools, and elementary schools. A larger, homogeneous sample potentially strengthened the study. However, the findings potentially transfer to similar school settings and may inform future research of the reciprocal effects topic. The findings informed my study regarding the leadership behaviors that enhanced school culture and climate, leading to student achievement.

Summary of reciprocal-effects research. These studies were selected on the criteria that they extended Pitner's (1988) work and informed this single-case study

regarding the identification of reciprocal leadership behaviors. The studies focused on variables that influenced school culture and climate such as the principal's vision, transformational and distributed leadership acts, and a focus on cultivating school relationships primarily through interaction characterized by communication, goal focus, and adaptation (Anderson, 2004; MacNeil et al., 2009). Further, these reciprocal variables characterized aspects of school climate that attended to the successful interaction among the members of the organization as well its ability to deal with stress from the internal and external environments (MacNeil et al., 2009). From this perspective, leadership acts that focused on the engagement of teachers contributed to overall perceptions of organizational quality, an essential reciprocal approach. According to Kruger et al. (2007), a reciprocal relationship was found between teachers, student commitment, and strategic leadership. The researchers surmised that principals improved teaching and student outcomes by recruiting high-quality teachers, implementing teacher-led professional development, and granting commensurate compensation based on position, skills, knowledge, and performance (Kruger et al., 2007).

Antecedent Effects of Leadership Research

Conceptually, the antecedent effects model revealed context factors (those factors that existed prior to and independent of the leader) that influenced the leadership approach selected by the school leader. According to Hallinger and Heck (1998), theoretically, school leaders using antecedent approaches focused on coalition building; they assessed the distribution of power and interests, built connections with stakeholders, used persuasion first, and then negotiation and coercion only if doing so became necessary. The most powerful antecedent factor influencing the effectiveness of a school

was SES (Hallinger & Heck, 1998). In addition, the ethnic and the gender makeup of the student body, the gender of the teaching and leadership staff, a rural as opposed to an urban school setting, all represent powerful antecedent and contextual-level variables (Hallinger & Heck, 1996a, 1996b, 1998). Therefore, antecedent interventions were contingent and solution-focused, designed to fit each specific situation and context. By matching internal (school) conditions with the external (neighborhood) situations, antecedent leadership approaches manipulated various contextual and situational school influences (Harris, Chapman, Muijs, Russ, & Stoll, 2006).

Harris et al. (2006) conducted a study of improving schools situated in challenging contexts. The sample included children from low-income families in six secondary schools and two primary schools located in the former coalfield areas in England. The researchers conducted an in-depth case study including contextual, performance, and site inspection data. Semistructured interviews were conducted with head teachers (principals) subject leaders, classroom teachers, support staff, and groups of pupils at each school. A number of key themes concerning strategies for raising attainment were identified across the eight case study schools (Harris et al., 2006).

Harris et al.'s (2006) findings were consistent with other empirical research findings included in this review of the literature. Drawing upon contingency theory, improving schools needed to find a best fit between their internal conditions and the external contingency factors with which they are confronted. Notably, Harris et al. (2006) highlighted that the external conditions identified by respondents in the study were not under the direct control or influence of the school (e.g., demographic shifts, changes in employment patterns, external intervention, and funding).

According to Harris et al.'s (2006), SES conditions was widely acknowledged by respondents working in areas of utter poverty. Although socioeconomic conditions varied quite considerably from school to school; staff within each of the eight schools shared a view that the external environment of the school was both instrumental and powerful in influencing their ability to improve or raise attainment (Harris et al., 2006). Harris et al. (2006) reported that attainment reflected that changes in employment opportunities or the provision of better housing changed the social mix of parents in the locality of the school. This change brought more middle-class parents into the locality and effectively altered the social composition of the neighborhood (Harris et al., 2006). As a result of this change, a new influx of pupils with higher expectations and aspirations to achieve entered the school (Harris et al., 2006).

Based on contextual, performance, and site inspection data, Harris et al. (2006) reported that a change in the student composition of the school to include more children of high SES, corresponded with a change in the school's potential to raise pupil performance and attainment. The compositional mix of students changed for the better in four out of the eight schools included in the study (Harris et al., 2006). At the other schools, such favorable changes in the compositional mix of students failed to take place, yet they demonstrated improvement (Harris et al., 2006). This finding suggested that changes in composition were not the only factor that could influence school improvement. Harris et al. (2006) reported that administrators at schools where the compositional mix did not change used strategies to match internal contingencies with external demands to raise attainment by (a) using strategies to improve literacy and numeracy, (b) focusing on teaching and learning, (c) using data for tracking and target

setting, and (d) extending professional development to teachers and support staff (Harris et. al., 2006). These contingent-focused leadership acts alleviated the antecedent variables of SES to improve school outcomes (Harris et al., 2006). Conducting a small-scale study of six secondary and two primary schools, the possibilities for generalization were inevitably limited. Generalizing findings was not claimed; instead, the study offered some insights into the strategies for raising attainment that schools in challenging contexts adopted and believed contributed to school improvement (Harris et al., 2006). There was no evidence of efforts to improve the SES of students or match effective teachers with lower achieving students (Harris et al., 2006).

De Maeyer, Rymenansa, Van Petegema, Van den Bergh, and Rijlaarsdam (2007), investigated educational leadership and pupil achievement asserting that the actions of the principal were influenced by the context of the school. The purpose of the study was to validate Pitner's (1988) antecedent-effects conceptual model. The researchers analyzed the antecedent effects of integrated leadership on school climate. De Maeyer et al. (2007) defined integrated leadership as a form of shared or distributed leadership practices designed to empower teachers to share instructional leadership with the principal.

The researchers conducted a secondary analysis using the data from an existing Belgian dataset of a previous school effectiveness study. The dataset was composed of pupils from the fourth grade (15 or 16 years of age) and the sixth grade (17 or 18 years of age). Students within the same school took tests on different output measures. The sample was representative for all Flemish schools providing technical education. The researchers analyzed the following variables including (a) vision and goal setting; (b) organizational structure and social networks; (c) human capital; (d) organizational

culture; (e) integrated leadership; (f) pupil background variables such as gender, IQ, and mean SES; (g) context variables at school level, such as percentage of girls, mean IQ, mean linguistic ethnic background (LEB), and grade level. LEB is a combination of three indicators: (a) the language spoken at home, (b) father's nationality, and (c) mother's nationality (De Maeyer et al., 2007). De Maeyer, et al. (2007) utilized structural equation modeling (SEM) as a statistical approach making path analysis possible on multilevel data. The basic idea for this technique was the decomposition of the individual pupils' scores from the groups' mean score. According to De Maeyer et al. (2007), the statistical tests confirmed that Pitner's (1988) antecedent-effects model fit the data better than the "the direct effect model, the indirect effect model, the direct and indirect effect model, and, the antecedents model" (p. 139). De Maeyer et al. (2007) reported:

> The analyses show that the antecedent model fits best with the data. This model is based on the assumption that integrated leadership has a direct, as well as an indirect, effect on pupil achievement. Furthermore, it was hypothesized that integrated leadership and academic climate are both influenced by the context characteristics of a school. From the analysis we learn that integrated leadership has only an indirect effect, through academic climate, on pupils' reading proficiency. The only context characteristic that influences the other school characteristics is the percentage of girls in the pupil body. (p. 140)

Noteworthy was that the variance in mathematics achievement. De Maeyer et al., (2007) reported that the scores resulted from the percentage of girls enrolled. In addition, there was a strong correlation between SES and LEB (De Maeyer et al., 2007). Thus, integrated leadership failed to have a direct or indirect effect on mathematics achievement, student composition accounted for the difference in math achievement. Most notably, antecedents such as SES, the number of female students, and other internal and external contextual variables influenced educational outcomes (De Maeyer et al.,

2007). Therefore, De Maeyer et al. (2007) concluded that school leadership was influenced by internal and external antecedents and other contextual factors like academic climate and the percentage of girls in the student population. The De Maeyer et al. (2007) study took steps toward validating Pitner's (1988) conceptual models and Hallinger and Heck's (1988) extension of her work. The value of this study was in the comparison of Pitner's (1988) conceptual models. The researchers strengthened the study by considering rival explanations.

Guldemond and Bosker (2009) investigated the antecedent effects of SES and conducted a study of socioeconomically disadvantaged students. The study analyzed the growth trajectories of students with a disadvantaged background, investigating the effect of school composition as an antecedent variable (Guldemond & Bosker, 2009). The researchers asserted that despite the additional funding and staffing received by schools with a large population of students who were of low SES, their achievement scores remained disappointing. According to Guldemond and Bosker, (2009), the 600 Dutch primary schools received a budget according to their weighted student population, in which a regular student had a weight of 1.00, a student from an indigenous low-SES family 1.25, and a student from an ethnic minority, low-SES family 1.90 (Guldemond & Bosker, 2009). This weighting scheme created a funding formula as follows: for every four students from indigenous low-SES families, schools were funded as if they were five students if a school consisted of at least 36% such students (Guldemond & Bosker, 2009). For every 10 students from an ethnic minority, low-SES family, schools received funding as if they were 19 students (Guldemond & Bosker, 2009).

Guldemond and Bosker (2009) selected a linear growth model, in which it was presupposed that students gain as much between kindergarten and Grade 2 as they do between Grade 2 and Grade 4 and between Grade 4 and Grade 6 (Guldemond & Bosker, 2009). This methodology resulted in measurements in kindergarten, Grade 2, Grade 4, and Grade 6. For this study, the researchers used the cohorts that started in 1994 and 1996. Only 1,125 students in 103 schools remained for the cohort that started in 1994. For the cohort that started in 1996, full data were available for 941 students in 81 schools. For both the 1994 and 1996 dataset, 67 schools were included (Guldemond & Bosker, 2009). Conclusions reached by Guldemond and Bosker (2009) illuminated the powerful antecedent effect of SES, in that (a) positive or negative school compositional effects had to do with differences in achievement levels already present at enrollment, (b) low-SES students had growth trajectories that differed from those of other students, (c) low-SES students from ethnic minority families made up for some of the initial arrears with school interventions, and (d) students with limited language proficiency fell further behind (Guldemond & Bosker, 2009).

The researchers assessed that the Dutch educational priority policy to increase funding and staffing was not a complete failure. The extra funding, and the extra staffing, potentially caused the school compositional effects to be mitigated (Guldemond & Bosker, 2009). Findings based on studying growth curves showed no school compositional effects, and their absence may be due to the influence of the Dutch educational priority policies. Compositional effects were potentially alleviated because schools that had a disproportionate number of students from low-SES families received extra funding (Guldemond & Bosker, 2009). Based upon the Dutch educational funding

policy, the extra staff that schools hired counterbalanced the negative school compositional effects (Guldemond & Bosker, 2009). The researchers failed to explain the difference between schools based on the composition. The researchers could explain the difference based on the Dutch educational policy formula that prescribed funding levels for schools. Some groups of students steadily succeeded, and certain groups of students consistently failed to reach their potential despite funding (Guldemond & Bosker, 2009).

Findings in the Guldemond and Bosker (2009) study were limited and accepted with caution. A prerequisite for following PRIMA cohorts was that the schools and students making up those cohorts had to remain intact. Many of schools stopped participating in the study, and many students either moved to another school or repeated a grade, resulting in attrition in the sample. The findings of the study held for students who progressed through primary education without delays.

Summary of antecedent-effects research. Antecedents were factors that existed prior to and independent of the leader and influenced the performance of the school and the leadership approaches selected by the school leader (Hallinger & Heck, 1998). Leadership interventions were situational and contingent (Hallinger & Heck, 1998). Primary antecedents were SES, gender of the school leader and teaching staff, the number of female students enrolled, and the neighborhood in which the school was situated (De Maeyer et al., 2007; Guldemond & Bosker, 2009). Common antecedent approaches included improving literacy and numeracy, influencing school funding and resource allocation, and manipulating the compositional mix of students and other contextual variables (De Maeyer et al., 2007; Guldemond & Bosker, 2009).

Summary of Chapter 2

This literature review addressed the central research questions for this single-case study grounded in the NBPTS process and Pitner's (1988) conceptual models. These models illustrated the long-chain connections through which principals demonstrated leadership behaviors and provided a conceptual basis for analysis. Leaders used any of the four approaches to reach desired educational outcomes. Although there was considerable research available in educational leadership regarding the principal's leadership approaches and behaviors, the literature search revealed a paucity of studies that examined the leadership approaches and behaviors demonstrated by NBCTs in the principalship. Research of this kind is needed because NBCTs in the principalship represent a unique educational phenomenon. The behavioral connections were inadequately investigated or confirmed. Research is needed to elucidate this phenomenon. A thematic analysis of the linkages through which those leadership behaviors are demonstrated benefits educational leadership research.

Finally, this literature review informed this single-case study regarding the NBPTS process and its potential to contribute to the development of leadership behaviors integral to the principalship. Therefore, the purpose was to describe how the participant demonstrated leadership behaviors and analyze what perceived role the NBPTS process played. Chapter 3 focused on the methodology for the study and Chapter 4 includes the results and analyses of data which were crucial in shedding light on the propositions of the study. Chapter 5 contains summary, interpretations, implications of the findings, and recommendations for further research.

Chapter 3: Methodology

Overview of the Methodology

As a component of my conceptual framework, I selected the single-case study methodology because it was a form of qualitative descriptive research that looked at an individual, drawing conclusions only about the individual and only in her specific context (Yin, 2009). Case studies have at least four applications; the most important is to explain the presumed relationship among variables-or the presumed causal links in real-life contexts. This relationship is explained by asking "how" or "why" questions too complex for the survey or experimental strategies (Yin, 2009, p.13). In describing the purpose of a case study, Yin (2009) noted the case study is intended to, "describe a phenomenon or a contemporary set of events and the real-life context in which it occurred" (p. 13). Finally, the case study can be used to, "enlighten those situations in which the phenomena being evaluated have no clear, single set of outcomes" (Yin, 2009, p. 13).

The flexible nature of qualitative research should be embraced, but strategies to ensure case study rigor must be in place (Yin, 2009). Yin also recommended that case study researchers conform to four tests to strengthen case study rigor including construct validity, internal validity, external validity, and reliability. Yin argued that these tests should be applied throughout the case study process during design, data collection, data analysis, and reporting. "Following these recommendations will, increase the quality of your case study tremendously, and overcome traditional criticisms of the weakness of case study research" (Yin, 2003 p. 245).

This single-case study was configured to align with the four tests. First, the study was strengthened by construct validity. In data collection, I used multiple sources of

evidence that could be triangulated (interviews, observation, a survey, and documents). I established a chain of evidence by audio taping and transcribing the interviews and I invited the participant to review a draft of the interview narratives prior to coding and thematic identification. Second, I pursued internal validity by engaging in pattern matching to explain the potential causal relationship among variables. Third, to strengthen external validity, I defined the domain to which the findings of this study could generalize and the degree to which inferences could be made. In this case, the findings generalized to the components of the conceptual frameworks and boundaries on which the study was based and not to populations. Finally, to strengthen the reliability of this case study, I used interview and observation protocols and I described the operations of my data collection and analysis procedures so they could be repeated (Yin, 2009). Following Maxwell's (2005) recommendations, Figure 1 displayed the components of my conceptual framework and depicted a model of my research design.

Triangulation of Data

Qualitative research answers questions in a holistic approach based on the available information provided by individuals within the context and cross-verifying multiple sources of information. The process often involves continual drawing of tentative inferences throughout the ongoing data collection and verifying those inferences with the subsequently collected data (Yin, 2009). The data collection activities of interviewing, observations, survey, and document analysis were used to collect data to provide multiple sources of evidence that were triangulated. Yin (2003) noted,

> The most important advantage presented by using multiple sources of evidence is the development of converging lines of inquiry, a process of triangulation, thus any finding or conclusion in a case study is likely to be much more convincing

and accurate if it is based on several different sources of information, following a corroboratory mode. (p. 98)

Research Questions

I initially conducted a deductive analysis of the NBCT participant's leadership behaviors based upon Pitner's (1988) conceptual models and Hallinger and Heck's (1996a, 1996b, 1998, 1999) theoretical extension of her work. The flexibility of case study research allowed for revisions and expansion of the central research questions and allowed the ability to discard research question three. In my first analysis, research question three prompted my selection of the best fitting conceptual models depicting the participant's leadership behavior. I compared the participant's leadership behaviors with DMRA behaviors predicted in the research. From such an analysis we could infer that NBCT principal's leadership behaviors align with DMRA approaches. I successfully answered research question three in my first analysis of my data. However, when I elected to pursue a secondary analysis of my data from an inductive and thematic perspective, research question three became superfluous and therefore was discarded. Research questions one and two remained relevant and therefore were retained and answered from both perspectives.

To answer the central research questions of this single-case study, a collection and presentation of detailed information about the NBCT participant was provided that included a rich description of the participant's personal accounts, beliefs, feelings, and attitudes regarding experiences with the NBPTS process. Occupying the center position of my conceptual framework and research design, the research questions of this single-case study were as follows:

RQ 1: How did an NBCT demonstrate leadership behaviors in the principalship?

RQ 2: What perceived role (if any) did the NBPTS process play in developing those leadership behaviors in the principalship?

Based on the review of the literature presented in Chapter 2, there was a scarcity of research on the leadership behaviors of NBCTs in the principalship. As such, it was difficult to state how NBCTs in the principalship demonstrated leadership behaviors. Consequently, there was a need for investigations of this nature because this single-case study filled an important gap in the research. Hence, the main purpose of this study was to answer the central research questions to provide insights into the participant's leadership behaviors in the principalship. In this regard, the purpose and goals of this study were satisfied through the purposive sampling method and the single-case design. Corresponding with case study design, the epistemological roots of this single-case study were grounded in empiricism, wherein knowledge was acquired through observation, experiences, reflection, and introspection (Ornstein & Levine, 2008). Therefore, data were collected through multiple site observations, three 60-minute individual interviews, a survey, and a collection of pertinent documents.

Positivistic Epistemology: Empiricism

Locke was a 17th-century English philosopher who articulated the theory of knowledge known as empiricism. Locke (1690) asserted that man's [*sic*] understanding of reality was ultimately derived from what was experienced through the senses. Thus, the basic thesis of empiricism was that, "Legitimate human knowledge emerged from what was provided to the mind by the senses or by introspective awareness through experience" (Baird & Kaufmann, 2008, p. 28). In other words, experience and observation should be the foundation of all human knowledge.

From a positivistic perspective, empiricism emphasized the role of observation and experience, especially "sensory perception, in the formation of theories" (Baird & Kaufman, 2008, p. 29). Locke emphasized those aspects of scientific knowledge as discovered in observation and in experiments. I found myself constrained by my epistemology in that the connections between the participant's espoused practices and her practices in use were often not directly observable. I relied on the reports of other individuals within the boundaries of the case. In other words, I did not observe many of the initiatives she described in detail in interview sessions. Consistent with my positivistic epistemology, when I designed the study, the interview data were intended to corroborate observational data as observation was most consistent with my epistemology of empiricism. Subsequently, when I pursued a thematic method of data analysis, my data analysis became generative and inductive and therefore the interview data became my primary source.

Empiricists argued that truth was discovered independently of direct observation and experience, because all knowledge is either based upon direct experience, reports on experience, or generalizations and inferences made from the experience of others. Locke (1690) argued that experience not only included external sense perception, but it also encompassed introspection and reflection on these perceptions. Thus, internal experience allowed one to develop more abstract ideas that can always trace back to direct experience or the experiences of others (Baird & Kaufman, 2007). This view was not widely accepted among empiricists, but Locke's perspective supported my use of interviews, a survey, and a collection of documents to gain knowledge. As such, empiricism is a part of my conceptual framework.

Empiricism was a fundamental part of the scientific method that all hypotheses and theories must be tested against observations of the natural world, rather than relying exclusively on perceptions, reasoning, intuition, or revelation (Baird & Kaufman, 2007). Yet, empiricism is not purely observational, it is also experiential. Observations and experiences are fallible; therefore to make inferences, observations must be triangulated with multiple sources of evidence (Baird & Kaufman, 2007). This method is consistent with Yin (2009) who recommended the use of multiple sources of data that could be triangulated. Thus, empiricism allowed for inductive processes through reflection from which inferences are made, therefore compatible with the data collection activities pursued in this study. For any knowledge to be properly inferred or induced, it ultimately derives from one's sense-based experience (Ornstein & Levine, 2008). As a result, empiricist researchers use knowledge and experiences through observation both deductively and inductively to interpret reality.

Connecting epistemology to methodology. Consistent with the epistemology of the study, legitimate human knowledge was derived through (a) observation of the study participant's leadership behavior, (b) interviewing the participant, (c) collecting and analyzing the participant's professional documents, and (d) by surveying individuals within the boundaries of the case. I acknowledged that interview, survey, and document collection methodologies were not purely empirical in the strictest sense, but consistent with Locke's philosophy in that as a researcher, I experienced the participant through perceptions of others.

Conducting this case study, the implementation of the theory of empiricism corresponded with expectations of qualitative research inquiry, which required data

sources to converge in a triangulating fashion. To accomplish this objective, Yin (2009), presented four principles of focus. First, the researcher should show that the analysis relied on all the relevant evidence. Second, the researcher must include major rival interpretations in the analysis. Third, the researcher must address the most significant aspect of the case study. Fourth, the researcher must use his or her prior expert knowledge to further the analysis (Yin, 2009). Though initially constrained by the epistemology and the DMRA conceptual framework, my subsequent inductive analysis of the data allowed case study themes to emerge and ultimately answered the research questions. In this respect, I relied on all relevant evidence, included major rival interpretations, and uncovered the most significant aspect of the study. Of note, the findings and conclusions achieved through my inductive analysis was based on data gathered through my deductive approach.

Boundaries

Suggestions on how to define a case include: (a) by time and place (Creswell, 2003); (b) time and activity (Stake, 1995); (c) by definition and context (Miles & Huberman, 1994) and (d) by conceptual framework (Maxwell, 2005). The single-case study was bounded by the research questions that guided the study. In addition, the case study was bounded by time, location, and participant selection. It was also bound and defined by the conceptual framework guiding this study.

The study focused on one NBCT from one school. The study was conducted in the fall of 2012, in the NBCT's professional environment. Information was collected regarding the NBPTS process, the participant's experiences, and how the study participant demonstrated leadership behaviors in the principalship. A survey of

individuals within the boundaries of the case (an NBCT principal and her school) was conducted including teachers, school staff members, and parents of students.

Miles and Huberman (1994) stated that the conceptual framework serves several purposes; it (a) identifies who will and will not be included in the study; (b) describes what relationships may be present based on logic, theory, and or experience; and (c) provides the researcher with the opportunity to gather general constructs into intellectual "bins" (p. 18). One part of my conceptual framework was based upon Pitner's (1988) work that included (a) organizational-level variables (school), (b) classroom-level variables (teachers and students), (c) school cultural-level variables (relationships and communication), and (d) contextual-level variables (school and community in which the case is situated). These variables were included in the boundaries of this case. Therefore, my conceptual framework was comprised of several components. Each component was related and interacted at multiple levels.

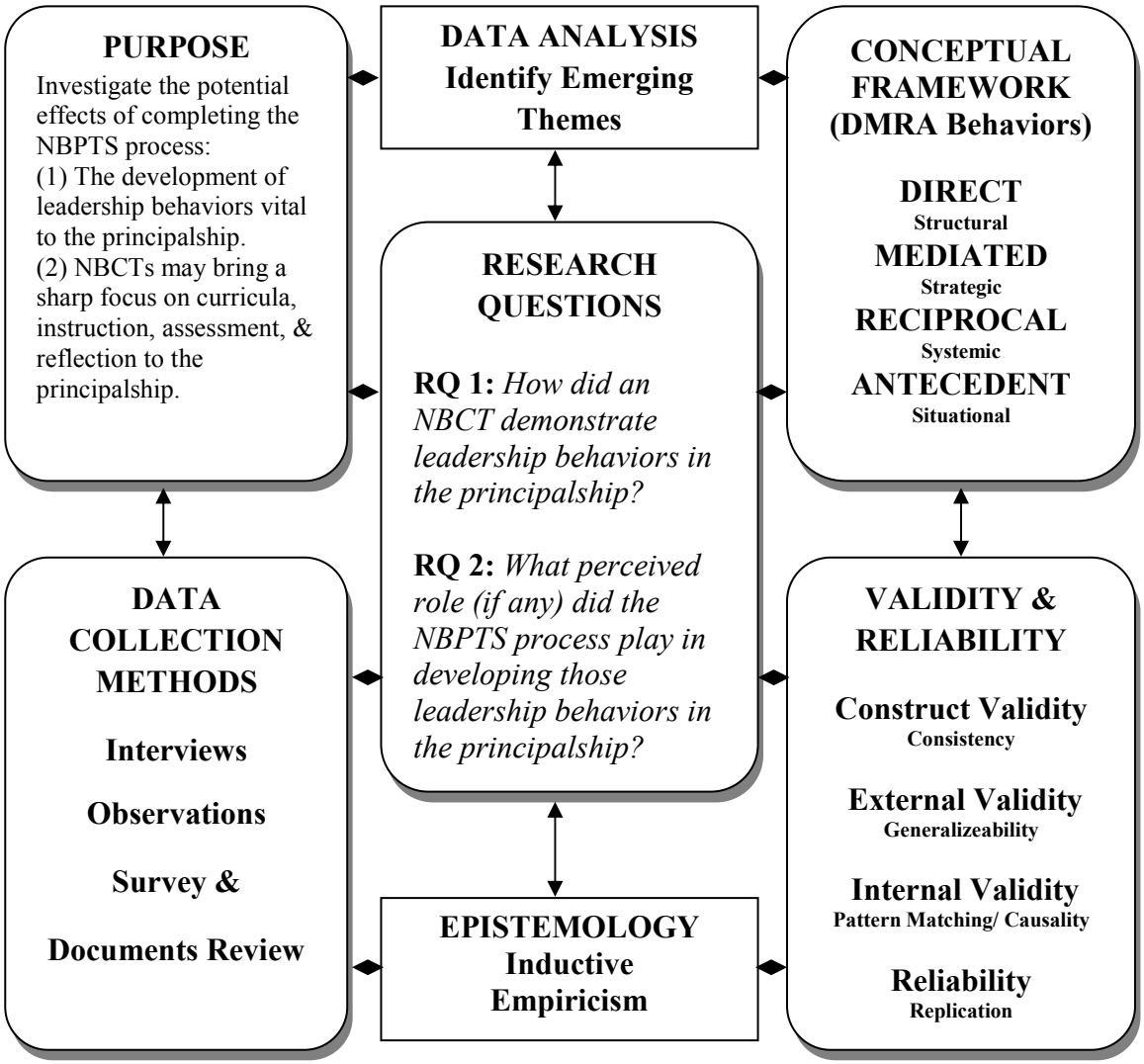
As recommended by Maxwell (2005) the different components of my "research design formed an integrated and interacting whole, with each component closely tied to several others, rather than being linked in a linear or cyclic sequence" (p. 4). As depicted in Figure 1, the relationships among the primary components of my conceptual framework and research design included the research questions, the purpose of the study, data collection methods, data analysis, epistemology, conceptual framework, and validity and reliability. According to Maxwell (2005):

> In this model, in contrast to some other views of research design, the research questions are not the starting point or controlling piece of the design, to which all other components must conform. Instead, they are at the *center* of the design; they are the heart, or hub, of the model, the component that connects most directly to all of the other components. They not only have the most direct influence on the

other components, but are also the component most directly affected by the others; they should inform, and be sensitive to, all of the other components. (p. 4)

Figure 1.

An Interactive Model of the Conceptual Framework and Research Design



Susan's Effectiveness in the Principalship

Of note, the conceptual framework of this single case study's design originally did not include an assessment of Susan's effectiveness in the principalship. I acknowledged the futility of studying the leadership behavior of an ineffective leader,

there would be little value in that research inquiry. Therefore, I acknowledged the value of introducing some measure of effectiveness as a backdrop or present some sort of qualitative framework with which to heuristically assess Susan's effectiveness in the principalship. However, such a pursuit derived from knowledge gleaned from transcripts of Susan's interviews, my observation notes, and survey respondents.

Based on my conceptual framework and research design, the most useful evaluation of Susan's effectiveness was her alignment with DMRA leadership interventions that were highly predicted in the literature. Those interventions were structural (direct), strategic, (mediated) systemic, (reciprocal) and situational (antecedent). Hallinger and Heck (1998), asserted that such interventions lead to improved student achievement in long-chain linkages. Furthermore, Susan's leadership behavior also aligned with the Interstate School Leaders Licensure Consortium (ISLLC) standards.

According to The Wallace Foundation (2009) study, over 40 states adopted learning-based leadership standards based primarily on the ISLLC standards, or some version of them. These standards provided a uniform foundation for the assessment of principal effectiveness. The researchers asserted that the ISLLC standards were grounded in behaviors linked to improving student achievement. Originally developed in 1996 and revised in 2008, ISLLC established six standards for school administrators.

For example, the Pennsylvania Department of Education (PDE) codified the ISLLC standards in four categories and assessed their principals as effective when they engaged in the following behaviors: (a) strategic cultural, (b) systems leadership, (c)

leadership for learning, and (d) professional community leadership (Pennsylvania Department of Education, n. d.). Note the alignment with DMRA interventions (Table 1).

One might argue that the most obvious measure for principal effectiveness is student outcome measures; specifically, student performance on achievement tests. I recognized that test scores could be used as one component of performance data in evaluating principal effectiveness, however Reeves (2004) argued against the use of student test scores as a primary measure of principal effectiveness. According to Reeves, using test scores fails to highlight the efforts pursued by multiple individuals within the input/ outcome linkage. For example, Reeves argued:

> The presumption of any model, whether using mean test scores or value-added models, is that the relationship between leader, teacher, and student is an imponderable black box and thus only the output can be examined. Any other discipline in the natural or social sciences that took such a facile approach would be subject to well-deserved ridicule. (p. 29)

In this section, I will assess Susan's effectiveness based on the qualitative data derived from my interviews, observations, and survey respondents. I will assess Susan's behaviors for alignment with the ISLLC standards as a framework and by that, will determine if Susan exhibited behaviors that are deemed effective by ISLLC based evaluation models. I will also comment on Susan's DMRA interventions and behaviors that Hallinger and Heck (1998) touted as effective for improved student achievement.

Standard 1: An education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders. Using direct approaches, Susan set the vision and mission of AHS and communicated that vision to stakeholders. This finding was corroborated by survey respondents in both reporting groups.

Standard 2: An education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth. As a reciprocal approach, Susan initiated and cultivated school and community relationships by improving communication within and between teachers and especially parents. The school culture and climate was family-like. This assertion was corroborated by survey respondents in both reporting groups.

Standard 3: An education leader promotes the success of every student by ensuring management of the organization, operation, and resources for a safe, efficient, and effective learning environment. Susan's direct approaches developed policies and procedures to design a well organized school that focused on student discipline to form an orderly environment. This was corroborated by observation and survey data.

Standard 4: An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources. Susan's reciprocal approaches led to her practice of "visibility" and "accessibility." She attended multiple speaking engagements in the community to speak about the success and needs of AHS students. Observation, document, and survey data corroborate.

Standard 5: An education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner. Susan used antecedent approaches designed to treat everyone fairly and to "level the playing field" to provide equal access for all students despite race, SES, or handicapping condition. Also, her character and the character education model she espoused were centered on the Golden Rule; "Treat others

as you would like to be treated." This finding was corroborated by interview and observation data.

Standard 6: An education leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context. The five core propositions of the NBPTS process addressed a teacher leader's efforts to influence educational practice through effective teaching and becoming a member of a learning community. A goal of the NBPTS is to gain the needed control, influence, and ownership of the teaching profession and discover ways in which National Board certification might lead to leadership positions beyond the classroom. Susan brought a focus on curricula, assessment, instruction, and reflection to the principalship. She promoted the success of every student and influenced educational practice.

Research Procedures

According to Patton (1990), a useful step in the purposeful case selection process is to refer back to the purpose and goals of the study and look for a case that would (a) satisfy the purpose of the study, (b) answer the research questions, (c) meet some specific criterion, and (d) allow the researcher to gain the most information. When selecting cases from a large universe for in-depth case study analysis, random sampling is not typically a viable approach, especially when the total number of cases to be selected is relatively small. Hence, attention to purposive sampling methods were needed in pursuit of the goals this study and satisfied through a single participant design.

Participant selection. I contacted the NBCT administrative offices for the state and requested a list of NBCT principals in the mid-Atlantic region of the United States. The list was reviewed and assessed for addresses of individuals who were within

traveling distance from my home. The criteria for selecting the participant for this single-case study were that the participant was an adult, current NBCT who ascended to the principalship, and acted as principal in a school. There were five individuals within three hours traveling distance from my home. Additionally, colleagues referred three other individuals. The list was reduced to five potential participants who met the criteria of the study.

One by one, the potential participants were then recruited by e-mail invitation (see Appendix A). Each candidate was given 2 weeks to respond. The e-mail communicated the following information: (a) the purpose of the study, (b) an invitation to be a participant in the study, (c) the potential risks and benefits of participation, and (d) the participant safeguards (see Appendix B). The voluntary participant was asked to consent to multiple site observations in her professional environment, complete three 60-minute interviews, assist with the implementation of the survey, and collect documents.

The voluntary participant was invited to debrief after each observation, as needed, to clarify observations and to verify transcripts of the interviews prior to coding, categorization, and data analysis. Only one individual voluntarily agreed to be a participant in the study. I offered this explanation as conjecture, perhaps due to the in-depth nature of the study, only one candidate responded favorably and agreed to become the participant in the study. The time demands on a high school principal are extreme. However, I asked potential participants to consent to three interviews, multiple observations, act as a research assistant, implement two survey launches, collect pertinent documents, and verify interview transcripts, all conducted over a 9 to 12 week period.

Such a dedication to personal professional development is notable. Any participant consenting to such a time and effort commitment is remarkable.

Informed Consent

In compliance with The George Washington University, Institutional Review Board (2010) specifications, I gained the participant's informed consent. Prior to the implementation of this single-case study, I contacted the participant by phone and scheduled a face-to-face meeting to present and obtain a copy of the participant's informed, written consent to be a participant in the study (see Appendix C). The consent form covered the following topics: (a) risks and vulnerabilities (b) right to participate or not, (c) rights of review and withdrawal from the process, (d) anonymity, and (e) dissemination of findings (Seidman, 1998). The participant signed the informed consent document (see Appendix C) and completed a demographic information document (see Appendix D). To protect her anonymity and that of the school, the participant selected the pseudonyms (Susan) and Atlas High School (AHS).

Participant as RA. Based on Mills (2000), I identified five fundamental guiding principles governing Susan's activities as a RA. First, Susan would have decision-making authority. Second, Susan would use a systematic approach for reflecting on her practice. Third, Susan would determine data collection targets and assist in developing a plan for completing the study. Additionally, in her role as the study participant, Susan was invited to review interview transcripts for clarification and to debrief after observations, as needed, to clarify what was observed. The research plan included (a) dates and time for each observation, (b) dates and times for each interview, (c) the date for launching the survey to parents, (d) the date for launching the survey to the teachers and staff members,

(e) the list of documents to collect, and (f) the study completion and debriefing date. The study was conducted over nine weeks in Susan's professional environment during the fall of 2012 and concluded in January 2013.

A potential limitation of engaging Susan as a RA was that the activity could potentially bias the observation data as a primary data collection target and therefore data analysis, and the final thematic interpretation of the data. However, the activity was consistent with the goals of the study. The potential threats for bias were delimited by triangulating interview, documents, and survey data. Such secondary sources of data were collected in a corroboratory mode in congruence with the epistemology of the study (Yin, 2009). Though Susan provided many of the documents I requested, I found multiple documents independent of her influence. Further, Susan had very little influence on the interview questions that were posed and no apparent influence on the survey participants because they responded anonymously. Finally, Susan did not assist with data analysis. As the primary tool in designing, implementing the study, interviewing, transcribing, analyzing, thematic identification, verifying data sources, and reporting the study data, I retained responsibility for that role.

Data Collection Methods

Observation. According to Yin (2003), "observational evidence is often useful in providing additional information about the topic being studied" (p. 93). I designed an observation protocol (Appendix F) as recommended by Yin to introduce rigor in case study research. To avoid observer drift (becoming inconsistent in the observation criteria used), the observation protocol was designed to capture detailed descriptions of behaviors, events, situations, and interactions between Susan and individuals within the

boundaries of the case (Yin, 2009). Although Yin, recommended an observation protocol for use with multiple case designs that employ multiple researchers, I elected to develop a protocol to focus my efforts and because I planned to conduct multiple observations.

I collaborated with Susan and discussed the types of activities I wanted to observe so that we could gather a comprehensive understanding of her daily work activities. We decided to plan to observe her conducting the following activities: (a) walk through classroom visits, (b) a teacher observation cycle to include a pre-conference, an observation, and a post-conference, (c) parent teacher conference, (d) faculty meetings, (e) leadership meeting, (f) community engagement, (g) student interaction, (h) special education team meeting, (i) meeting with central administration, (j) walk through visit of the alternative school and classrooms, (k) telephone calls, and (l) school tour. Finally, Susan and I planned a day so that I could shadow her. The activity gathered emergent, corroborative, or discrepant data. I also conducted an observation without Susan.

Following the observation protocol checklist, I recorded Susan's behavior as it was happening. Observation goals were (a) to provide a description of the site and context in which AHS was situated, wherein Susan was employed; (b) to provide specific incidents and specific behaviors to use as reference points during the debriefing exercises and subsequent interviews; (c) to provide information regarding direct and indirect interactions with individuals in the professional work environment; and (d) to experience and note how Susan demonstrated leadership behaviors. When conducting observations, I did not act as a participant observer (Rubin & Rubin, 2005). Instead, I focused on (a) the physical setting; (b) conversations; (c) word usage; (d) nonverbal communication and

physical clues; and (e) my behavior, thoughts, feelings and impressions as the observer (Merriam, 1998).

The observation protocol contained a checklist of behaviors under each DMRA approach. To protect from bias, the checklist also allowed me to document evidence of discrepant or emergent behaviors. Recorded as emergent coding (EC), I documented incidents of leadership behaviors that were not consistent with DMRA leadership approaches. By engaging Susan as an RA, observation times and days were scheduled to make each observation as unique and distinctive as possible, potentially enabling me to experience her demonstrating various DMRA or emergent leadership behavior or none at all. Conducting prescribed observations also minimized the potential threats of bias that could inaccurately skew the data toward one of the DMRA models, though principals may use all DMRA behaviors simultaneously. The observations were scheduled to have multiple opportunities to observe each of the four DMRA approaches on multiple days in various contexts to reach saturation. The saturation point was reached when the daily events were unchanged. In the RA role, Susan directed me to rich observation targets, from which the most knowledge was gained. Based upon the literature, I described the behaviors to be observed, for example, administrative activities. Susan would schedule observations that allowed me to observe her carrying out administrative duties.

Following the observation protocol, specific incidents of DMRA EC leadership behaviors and interactions with individuals at the site were noted. I could not control or predict what activities occurred on a given day; however, by collaborating with Susan in her role as RA, observations were scheduled on days when certain activities and corresponding leadership and management behaviors were more likely to occur without

undue interruption. I avoided days when Susan was required to attend meetings conducted outside the school.

Using the observation protocol, I documented incidents of Susan's leadership behaviors in narrative form as field notes. Detailed memoranda about the observation were written that included nonverbal and verbal data, professional demeanor, and work ethic remarks. Debriefing exercises were conducted, as needed, to clarify what was observed. Information from my observation field notes and debriefing activities was reproduced in a narrative format. Each page of the narrative was numbered with an Arabic number, as was each line of the narrative.

Interviews. Qualitative interviewing represented the art of hearing data (Rubin & Rubin, 2005). Merton, Fiske, and Kendall (1990) recommended the focused interview process wherein participants are interviewed on several occasions for short periods of time. According to Yin (2009), the interview "required the researcher to operate on two levels at the same time: satisfying the needs of the lines of inquiry, while simultaneously putting forth friendly and nonthreatening questions" (pp. 106–107). Following the interview protocol (see Appendix E), I conducted three 60-minute, face-to-face, semistructured interviews.

By design, the research literature pertaining to the DMRA conceptual frameworks was used to develop the content of the interview questions, thereby increasing case study rigor through reliability and validity (Yin, 2009). This effort was potentially constricting, limiting, and biasing because it potentially created DMRA data only. However, I also asked about school leadership in general, the NBPTS process, and by design, I asked open ended questions that could elicit data coded as EC defined as data that did not

conform to DMRA topics. To my benefit, Susan did not limit her discussion to the topics I raised in the interviews, but expanded her discussion to cover multiple topics related to school leadership, her beliefs and philosophy.

To assist in the formation of the interview questions, I subjected the interview questions to a pilot test. "The pilot test is not a pre-test; the pilot is a formative process, assisting the development of relevant lines of questions" (Yin, 2003, p. 92). Therefore to evaluate the clarity, efficacy, and saliency of the interview questions, they were piloted with members of my doctoral cohort, members of my dissertation committee, a principal, and with an NBCT candidate. Questions were modified to improve clarity and utility.

Interview process. Although some of the interview questions were prewritten and structured by a protocol, I followed a generative process. One interview was conducted after the first observation, a second interview around the midpoint of the observations, and the final interview after the observations and survey were completed. Following the interview protocol (Appendix E), the first interview session questions were designed get to know Susan and to garner information concerning her direct approaches to leadership behaviors. The second interview was designed to gain knowledge regarding Susan's mediated and reciprocal approaches. The third session of interview questions was designed to elicit an understanding of Susan's antecedent approaches. Each interview was approximately one hour in duration and was conducted at AHS, during the school day, in Susan's office.

Though the interviews were audio-recorded and the interview questions were prewritten, I took detailed notes. Note taking was an important aspect of the interviewing process and served several purposes: note taking allowed me to note possible follow-up

questions to "help pace the answers of the conversational partner" (Rubin & Rubin, 2005, p. 111). Taking notes also helped me to concentrate on what Susan was saying and allowed me to revisit questions or thoughts later in the interview. Finally, note-taking allowed me to intersect, confirm, clarify, and to shift to new topics that emerged.

Therefore, during the interview process, I (a) asked clarifying questions, (b) followed up on what Susan stated, (c) asked to hear more about a particular line of inquiry to saturation, (d) listened more and talked less, (e) avoided leading questions, (f) encouraged Susan's storytelling, (g) asked for focused and concrete details, and (h) to a lesser extent, provided opportunities for direct observation (Rubin & Rubin, 2005). I relied on audiotapes to record verbatim the specific content of the interview. The recordings were transcribed and the transcripts were provided to Susan for review and clarification prior to coding, analysis, and the identification of the major themes.

After rereading passages, reoccurring statements and phrases allowed encoding to occur. To identify emergent themes, I considered the following questions: "What is the subject of the marked passages? Were there words or a phrase within the passage itself that suggested a category into which the passage might fit?" (Seidman, 2006, p. 107). For thematic coding, certain encoded and categorized words were highlighted yellow, green, purple, or blue, thus allowed the case study themes to become identified. Data analysis proceeded in this manner for each of the interview transcripts, observation notes, and survey open responses. This analysis procedure was instrumental to the identification of the major themes of this single-case study.

Survey development. I conducted a survey primarily to (a) sample the perceptions of members within the boundaries of the case; (b) to gain insight regarding

the internal operations, health, or climate of AHS; and (c) to enrich my understanding of the way staff members and parents viewed the organization. For survey questions, see Appendix H. The goals of the survey were to direct me to other data collection targets and corroborate or contradict previously collected data, thereby adding insight into Susan's leadership and management practices in general.

The survey was conducted through an Internet-based questionnaire with automatic collation of results (Dillman, 2000). Therefore, The SurveyMonkey website was used to collect and collate the results. Survey respondents were required to read the informed consent letter (see Appendix G) that contained a link to the survey website. By clicking on the link, respondents indicated their consent to participate in the survey. By design, no more than 100 individuals were surveyed. A representative sample of teachers (37 of 39) responded indicating that I could report their results with confidence.

The content of the survey questions was based on the research presented in Chapter 2 regarding the DMRA conceptual framework and school leadership practices in general. The 30 survey items were divided into five sections that included (a) Section 1: Direct Approaches (six items); (b) Section 2: Mediated Approaches (six items); (c) Section 3: Reciprocal Approaches (seven items); (d) Section 4: Antecedent Approaches (six items); and (e) Section 5: Open Response (five items). As the content of the survey questions originated from the research presented in Chapter 2, in my initial analysis data were similarly coded and categorized based upon DMRA concepts. The EC data were derived from the survey open response section. The survey questions (1 through 25) were formulated as a Likert scale. Questions (28-30) asked the respondents to rate various aspects of AHS "low," "medium," or "high." As ordinal data, no meaningful mean or

standard deviation was calculated therefore, I elected to report frequencies and percents for each item and reporting group (Tables 3 and 4).

Survey reliability and validity. The survey instrument was not assessed for test-re-test, alternate form, or internal consistency thus; reliability of the survey instrument (the degree of stability exhibited when a measurement is repeated under similar conditions) cannot be claimed (Dillman, 2000). However, with regard to reliability, the survey instrument consistently reported the same answers for each item across each reporting group. With little variability, survey responses generally clustered around strongly agree and agree. In view of that, the survey was reliable. Therefore, the basic levels of survey instrument reliability were met.

The instrument also met the basic levels of validity (how well it measured what it was intended to measure). It was not claimed that the survey measured every aspect of the DMRA construct; however it reflected the perceptions of individuals regarding Susan's leadership behaviors at AHS. Further, the instrument was strengthened through face validity, or the extent to which the survey questions appeared to measure a particular construct as viewed by laypersons, examinees, test users, or other stakeholders (Dillman, 2000). For example, cursory reviews of the survey items were pursued through members of my doctoral cohort, members of my dissertation committee, a principal, an NBCT candidate, and a parent.

Despite the imperfections of the survey instrument with regard to content validity and reliability, the primary goals of the survey were accomplished. Moreover, reliability and validity also involved the usefulness of the data, and in this case, the data derived from the survey were vital for independently corroborating Susan's statements made in

the interviews. It facilitated my efforts to sample the perceptions of multiple individuals and it provided corroboratory information. In this regard, the data derived from the survey instrument was useful and informative (Dillman, 2000).

Survey process. To identify survey dates, times, and locations for the survey launch, I collaborated with Susan. We decided to launch the parent survey at a parent-teacher conference and AHS open house. Respondents were required to click on the link in the informed consent to access the survey website. The parent survey was conducted from the computer lab of AHS. We also decided to launch the teacher and school staff member survey at an all-faculty and staff meeting. The teacher and staff member survey was conducted from their individual laptop computers, or they could access the survey from the computer lab of the school. The informed consent letter was e-mailed to the entire faculty and staff, enabling them to click on the link in the informed consent to access the survey website. I acknowledge the potential limitations resulting from the implementation of the parent survey in that the respondents were potentially a convenience sample of active and engaged parents.

Survey sample. Data were collected from a census of AHS teachers. Data were also collected from a convenience sample of school staff members, and current parents of AHS students. These groups were within the boundaries of the case that included Susan's interactions with individuals at three levels: (a) the school's staff; (b) the classroom teachers; and (d) parents. In the teacher (T) group, 37 survey respondents identified themselves as a teacher. There were 39 teachers employed at AHS, therefore 95% of the teacher population at AHS responded to the survey. Given my survey response rate, 37 of 39 (95%), I claimed that my (T) sample accurately represented the views of the (T)

population. I achieved a census of teachers and therefore a representative sample.

At the time of the study, AHS served approximately 700 students in grades 9-12. Given the student population, I could not accurately estimate the population of parents. Assuming that both parents attended the open house, I approximated that 1400 individuals comprise the AHS parent population. This indicated a response rate of 2%. Note that the parent (P) group was derived from a convenience sample of parents that attended an AHS parent teacher conference and open house. All parents that attended were invited to participate in the survey, 29 responded. I collected a document indicating that there were 367 parent teacher conferences that evening (School Newsletter, Document I, Appendix K). This suggested an approximate response rate of 8%, therefore failing to achieve an acceptable response rate. Consequently, the P group results were not representative and accepted with caution.

The survey of individuals within the boundaries of the case was composed of three reporting groups: (a) teachers ($n_T = 37$), (b) school staff members ($n_{SSM} = 4$), and (c) parents ($n_P = 29$). Due to the low number of the SSM group, I did not report its survey results in Chapter 4. However, just 4 of 26 (15%) responded. Some members of this group (custodians, cafeteria staff, and specialists) likely did not attend the staff meeting or the AHS open house wherein the survey was launched. Therefore, I did not achieve a representative sample. I may only claim that findings represented the opinions of those individuals in the sample.

The 4 individuals consistently responded “Strongly agree” or “Agree” with the statements in the survey. They rated AHS in the “High” range in appearance and performance. I am not certain why the response of the SSM group was low because each

staff member at AHS had an individual laptop computer, the survey could be accessed in the computer lab at AHS; each computer in the school had access via a link to the survey. Staff members could potentially access their email from their home computer. I offer this explanation as conjecture, given the multiple opportunities to complete the survey perhaps members of the SSM group were uncomfortable with the survey or simply not interested in completing the survey. It is acknowledged that the absence of data from this important reporting group limits the potential to learn about Susan.

Survey data analysis. The survey data were analyzed by their respective groups and the responses were reported in tables by Likert response as (%) strongly agree, (%) agree, (%) neutral, (%) disagree, (%) strongly disagree, and (%) I don't know (Appendix I). I completed the calculations of percentages for each item, each Likert response, and each reporting group. I added the percentages for strongly agree and agree; neutral and I don't know; and disagree and strongly disagree. Therefore, data were reported as agreement, neutral, and disagreement. High incidents of respondent agreement, neutrality, or disagreement potentially corroborated or contradicted interview and observation data. Each item was analyzed individually, cross comparisons among items and between groups was avoided.

Documents. Documents were used primarily to corroborate observation and interview data. As Yin (2009) explained,

> For case studies, the most important use of documents is to corroborate and augment evidence from other sources. . . . Can provide specific details to corroborate information from other sources. . . . If the document is contradictory rather than corroboratory then you need to pursue the problem by inquiring further into the topic. (p. 103)

Documents provided historical information that led to a better understanding of the case in question and provided a diverse wealth of information from a wide variety of sources (Yin, 2009). Documents included memos, letters, e-mails, website information, web pages, and the student and faculty handbooks.

Susan, in her RA role, collected and provided many of her professional documents for review. Merriam (1998) asserted that "it was the investigator's responsibility to determine as much as possible about the document, its origins and reasons for being written, its author, and the context in which it was written" (p. 121). Therefore, I included documents that survived internal and external criticism and those that were pertinent to the study. By collecting many of the documents directly from the Susan, I ensured the genuineness of each document in that each originated from her as a primary source.

I acknowledged that this procedure exposed the document collection process to potential threats of bias (only including documents that cast Susan in the best light); however, many of the documents aligned or were identical to information provided on the AHS website and consistent with the documents I collected independently. After the documents were authenticated, I concluded that the source of the documents was authentic and accurate, and the writer or creator (Susan) was competent, honest, and unbiased. The documents were primarily administrative and regarded programs, initiatives, directives, handbooks, master schedules, announcements, and pedagogical directives. I collected hundreds of pages of documents and recorded them in a documents analysis table (Appendix J). They were electronically formatted and therefore easily stored and aggregated into D, M, R, A, and EC categories.

I formatted the table numerically (1-7) in seven sections headings on the vertical axis including: professional portfolio, NBPTS teacher orientation, bulletin boards, school newsletter, letters of memorandum, school website, and school improvement plan. Documents fitting each heading were labeled alphabetically (A-Z). On the horizontal axis, the table was designed to denote the type, format, date, subject, and DMRA, EC codes. I identified 92 pertinent documents for review.

Identical to the frequency count processes, I pursued with the observation and interview data, I calculated percentages for each DMRA, EC category to assess and identify Susan's alignment with a particular DMRA, EC approach. From a deductive perspective, I assessed the frequency of a particular content or subject matter of Susan's documents to identify what specific documents she often published. For example, there was a high frequency of documents pertaining to NBPTS inspired pedagogical initiatives and administration of her instructional pursuits.

This result corroborated previous observation and interview findings of a preference for mediated approach leadership behaviors. In this case, I observed Susan's focus on pedagogy and she talked about it extensively in interviews. Survey respondents in both reporting groups corroborated Susan's focus on teaching and learning by indicating strong agreement with survey statements, and Susan produced and published a high frequency of documents pertaining to pedagogy and instructional initiatives. Many of those documents were coded D and M.

In contrast to the deductive perspective, I also pursued a secondary analysis of my document data from a generative and inductive approach. Using a thematic color coding process, I highlighted each document yellow, green, purple, and blue. Each color came to

represent a case study theme. Such an approach allowed themes to emerge that answered the research questions of the study. In the following sections, I will describe the process I used to conduct a second analysis of my data from a thematic perspective. The process was articulated by Saldaña (2009).

Data Collection and Analysis

Yin (2009) recommended two strategies for data analysis: "rely on theoretical propositions of the study" and "analyze the evidence based on propositions" (p. 10). A theoretical proposition was understood as a qualitative study hypothesis, a prediction about the relationship between variables that is not directly observable. The hypothetical relationship was inferred through multiple deductive processes (Yin, 2009). From this perspective, it may become theoretically possible to predict behavior in similar settings without actually observing that behavior. In other words, make inferences; particularly when the behavior in said setting closely aligns with conceptual models and behaviors predicted in the research literature. Yin (2009) stopped short of claiming the ability to generalize to populations, yet he claimed that case study findings generalize specifically to theoretical propositions and to research in general.

I originally designed this study to overcome two of the primary criticisms of qualitative research regarding bias and the lack of rigor. I adopted the approach described by Yin (2009). To introduce rigor, the standards of quantitative research were applied to the qualitative methodology. It is important to note at this point that my deductive approach to data collection was effective in that it yielded a tremendous amount of data. Conversely, my deductive approach to analyzing the data ineffectively accounted for the richness of the data and insufficiently answered the research questions of the study.

Initial analysis. Consistent with my epistemology of empiricism and based on the DMRA conceptual models, I initially classified and grouped similar data objects and conducted frequency counts to make connections and inferences that ultimately lead to answering the central research questions. My codes originated from the DMRA conceptual model and did not emerge from my data (I will discuss the process in detail in following sections). I acknowledged that counting frequencies was a quantitative analysis procedure and not qualitative. However, my case study research included both. I will note that my initial analysis was based on the premise of Yin's (2003) description of multiple iterations, advocating replication, not sampling logic. He described iteration as the repetition of a procedure applied to the result of a previous application. He recommended iterative tabulations (counting) of evidence for each code to sharpen a construct's definition, validity, and measurability. Conducted across multiple data collection iteration, these tabulations confirm the analysis. Therefore, I selected frequency counting as an appropriate deductive analysis approach of analyzing the data and confirming my analysis. From Yin's perspective, building knowledge resulted from collecting evidence from multiple sources, so that the data were triangulated and thereby the findings may be strengthened.

From my deductive approach, I analyzed the data by creating data tables with DMRA and emergent coding (EC) headings allowing frequency counts. To analyze the interview data, the audiotapes were transcribed verbatim and each line of the transcripts was labeled DMRA or EC. Each page of the interviews transcripts and observations notes was labeled with an Arabic number, as was each line number of the narratives so that I could conduct counts and report the frequencies. For initial and theoretical coding as part

of my deductive analysis, a drop-down box was inserted on each line of the interview transcripts and observation notes that included the letters D, M, R, A, and EC. From the drop-down box, each passage was labeled and thus categorized by selecting a corresponding option: D, M, R, A, or EC.

Except for the survey data in which the items were appraised separately, I completed a frequency count for each label and tallied the count in a table. I created a bar graph and pie chart to assess Susan's alignment with DMRA leadership approaches. A high frequency count would indicate high alignment with behaviors predicted in the literature. The interviews and observation followed strict protocols, and though constrained by those protocols, a tremendous amount of data was yielded. Documents were also labeled and categorized DMRA or EC and were recorded in a frequency count table (Appendix K). From such an analysis, I selected the best-fitting DMRA conceptual model depicting Susan's demonstration of leadership behaviors at AHS.

Second analysis. In contrast to positivism espoused by Yin (2003) and consistent with my epistemology, to analyze the data from an inductive perspective, I sought guidance from Chenail (1994) and Saldaña (2009). Chenail recommended the use of lengthy excerpts as a way to invite the reader to become a part of the conversation and Saldaña recommended a thematic approach for analyzing case study data derived from the identification of encoded words and phrases. From a thematic approach, each data collection and analysis activity involved a generative and inductive learning process that lead to knowledge construction.

My deductive analysis of the data did not adequately answer the research questions, focused too heavily on DMRA approaches, and did not allow for rival

interpretations. As recommended by Yin (2009), considering rival explanations increased the rigor in qualitative research. Therefore, I conducted an inductive analysis of the interview and observation data. I described the process later in this chapter. For each interview and observation, narrative code words and phrases were grouped and led to the identification of the major themes of this single-case study. Case study themes were used to answer the research questions of the study.

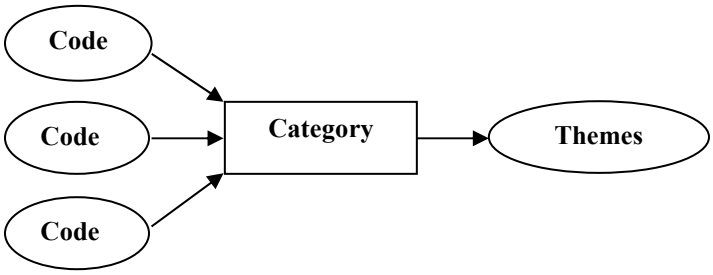
Coding data sources. According to Saldaña (2009), to pursue a second analysis of my data, "The coding process may become a heuristic activity, from the Greek, meaning to discover" (p. 8). Saldaña recommended an "Exploratory problem-solving technique, without specific formulas to follow" (p. 8). Coding was thus a method that enabled the organization and grouping of similarly coded data into categories, because they shared specific characteristics (Saldaña, 2009). He asserted that coding was not a precise science; it was primarily an interpretive act. Coding was the transitional process between data collection and more extensive data analysis (Saldaña, 2009). In my second analysis, coding was not a deductive activity, the activity helped to analyze, interpret, summarize, and condense the data, not simply reduce it (Saldaña, 2009).

Saldaña (2009) wrote that qualitative research methodologists disagree on the amount of the data corpus (the total body of data) that should be coded. Saldaña (2009) asserted that some researchers believed that every documented field note detail was worthy of consideration. However, there will always be brief passages of trivial commentary scattered throughout interviews and field notes that are not worthy of consideration (Saldaña, 2009). Saldaña (2009) remarked these notes be coded as NA or not applicable. I elected not to code the entire data corpus, and did not code

inconsequential or trivial passages. Figure 2 depicts a model of my coding process based on Saldaña's (2009) "A streamlined code-to-theory model for qualitative inquiry." (p. 12)

Figure 2

Codes to Theory Model



After reading the passages multiple times, the repetition, force, and specificity of recurring statements and phrases allowed code words to emerge and become identified. The following questions were asked when identifying emergent themes: "What was the subject of the marked passages? Were there words or phrases that seemed to describe them, at least tentatively? Was there a word within the passage itself that suggested a category into which the passage might fit?" (Seidman, 2006, p. 107). Once the categories of words were grouped, I analyzed the groups for unifying or dominant ideas, often referred to as themes (Saldaña, 2009). While completing the secondary analysis, I noticed a pattern that previously coded DMRA and EC phrases were grouped by my themes.

Theme identification. Regarding themes, Saldaña (2009) explained that a theme is an outcome of coding, categorization, and analytic reflection. The final number of major themes or concepts should be held to a minimum to keep the analysis consistent and there is no standardized or magic number to achieve (Saldaña, 2009). Wolcott (1994), an anthropologist, advised, throughout his writings, that "three of anything major seemed an elegant quantity for reporting qualitative work" (p. 10). Although guided by

Wolcott, I identified four major themes to answer the research questions of this study. In the focused coding phase, I compared codes and phrases within and across each of the interviews and multiple observations to determine which code words were frequently repeated. Next, consistent with the conceptual coding phase, frequently repeated code words were grouped together and categorized.

Case Study Codes and Phrases

The following introductory example was kept simple and direct, yet ultimately led to theme development and answering research questions. The following encoded phrases derived from the interview and observation data led to the identification of the theme of setting the vision and mission:

- Set the vision;
- Ace Time initiative;
- Get people on board to accomplish the mission with me;
- One-to-One initiative.

According to Saldaña (2009), "codes were short phrases that were symbolically assigned a summative, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). This data analysis process was followed for each interview and observation text and was described in detail in Chapter 4. Hence, in my second analysis of the data, I selected emergent and thematic data analysis designs in the tradition of qualitative research. In that regard, the data analysis process was not predetermined. Like my research questions, revisions to my data analysis process were made until the direction I took afforded the greatest potential for discovery and meaningful answers to the research questions were achieved (Yin, 2009).

Following the encoding and categorization process, the yellow highlighted text was identified as setting the vision and mission theme (SVM). Similarly, the green highlighted text was identified as the school and community relationships theme (SCR). The blue highlighted text was identified as the five core propositions approach to school leadership theme (NBPTS). In a subsequent review of my encoding process, a new category was extracted from the school and community relationship category. Multiple references to Susan's religion, spirituality, and faith emerged from that data. Because Susan's religion, spirituality, and faith motivated many of her leadership activities and seemed to play a vital role in her career decisions in pursuit of school leadership roles; the religion, spirituality and faith (RSF) theme was identified. I highlighted the interview and observation text purple to identify the emergent theme. Corroborative document data was also highlighted purple. In Chapter 4, these themes were ultimately used to answer the central research questions of the study.

Clarification of Researcher Bias

Merriam (1998) iterated that "the researcher was the primary instrument of data collection and analysis" (p. 42). Therefore, it was critical to identify and clarify potential personal biases at the outset of the study. As a former head principal for 5 years, I have a definitive idea of an effective school. I am biased toward a highly structured and orderly school environment in which there are well-defined and followed policies, procedures, rituals, and routines. In such a school, teachers must provide discipline, structure, and close supervision of students. An effective school aligns its instructional practices, curricula, pacing guides, and assignments with the state and local standards. To be an effective school, a balanced approach in school leadership (making new things happen)

and management (keeping things going) must be pursued, believing that favoring one approach over the other potentially limits the effectiveness of a school (De Maeyer et. al., 2007).

With regard to Pitner's (1988) models, direct and mediated approaches are favored most (organizational structure and pedagogy). Antecedent approaches are second (contextual focus), and least favored are reciprocal approaches of leadership (relationships and communication), yet acknowledged as essential. To minimize the potential threats of bias; my personal and professional predispositions were disclosed to Susan. The possibility of favoring the demonstration of a particular conceptual model espoused by Pitner (1988) not observed with Susan was acknowledged. Using member checking and debriefing exercises as needed after observations. According to Maxwell (2005):

> This respondent validation or member-checking method of soliciting feedback from the study participants is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being an important way of identifying your own biases and misunderstandings of what you observed. (p. 111)

I constantly monitored how those biases affected the analysis and interpretation of the data. Also, Susan received a copy of the transcribed interviews for member checking and members of my dissertation critiqued my interpretations of the data. I found it necessary to pursue a second analysis to address a rival explanation from a thematic perspective.

Human Participants and Ethics Precautions

A fictionalized name or pseudonym was selected for the school (Atlas High School) and for Susan to maintain her confidentiality. Data were stored in a locked file and electronic data were stored in a password protected computer system. All identifying

data were de-identified or redacted from documents. Susan potentially experienced risks and benefits. The risks included the potential for the loss of confidentiality and negative feelings stemming from the feedback of survey respondents. Benefits included Susan's potential for personal and professional development because (a) she potentially received further validation in the principalship; (b) the case study process potentially refined her personal approach to leadership; (c) Susan potentially increased her self-confidence and willingness to take risks and try new things; (d) in the RA role, Susan could feel more empowered to provide opportunities for meaningful interactions with teachers, staff, parents, and community members through professional involvement; (e) Susan's work as a RA potentially provided a sense of credibility; (f) Susan potentially furthered the research in educational leadership where a gap existed regarding the leadership behaviors of NBCTs in the principalship; (g) Susan could present the research at professional conferences; and (h) Susan could gain an insight into her performance as a leader based on Pitner's (1988) conceptual models and the four major themes identified in this single-case study.

Anticipated ethical considerations were addressed in this study by conveying the purpose of the study in a forthright, direct manner to avoid unintentional deception (Appendix C). I also communicated that the research was for a dissertation and not sponsored by outside institutions or organizations. Further, Susan took part in the study voluntarily and had the right to withdraw at any time. Additionally, Susan was informed of the procedures in the study so that she could have a reasonable expectation of what she would experience. She was encouraged to ask questions, and was provided with a copy of the interview transcripts. Susan's confidentiality was maintained throughout the

implementation of the study. To avoid personal bias, the study was conducted with honesty and integrity, and followed the approved methodological steps that were submitted in the dissertation proposal. The study was not conducted until all procedural safeguards were implemented.

Summary of Chapter 3

My case study inquiry relied on multiple sources of evidence, with data needing to converge in a triangulating fashion (Yin, 2009). To collect data, qualitative research methods were used including interviews, observations, a survey, and a collection of documents. The survey data were organized into three reporting groups: (a) teachers (T), (b) school staff members (SSM), and (c) parents (P). Survey data corroborated interview and observation findings and provided insight into Susan's leadership and management practices in general. Finally, multiple documents were collected that corroborated the interview and observation data. The wider range of data collection methods provided a detailed picture of the operation of the school.

Throughout the implementation of this case study, I consulted with members of my dissertation committee who read multiple drafts of my data analysis and my eventual case study report. Based on their feedback and my eventual reflection on their rigorous critiques, my case study evolved in three significant ways. Fortunately, the flexibility of case studies and qualitative research in general allowed me to deviate from my original design. I discarded research question three and modified research question one in connection with my refined lens for inductive data analysis.

In this chapter, I addressed the following topics: (a) data collection methods, when and how data were recorded, analyzed, and reanalyzed, (b) how the data influenced

subsequent data collection activities, (c) how the second data analysis design evolved to become generative and thematic, (d) the potential threats of bias due to the researcher, the interview, survey, and research questions I asked, the research participant, the study design, and data collection and analysis procedures, (e) the interventions applied to protect the study from those threats, (f) ethics precautions and how the identity of the participant and site of the study was protected, (g) the potential risks and benefits of participating in this single-case study, (h) the potential ethical considerations were pursued by disclosing the purpose of the study, and (i) how Susan's role in this study was reframed as a RA based on the assumptions of the co-researcher role (Mills, 2000).

Chapter 4 includes a presentation of the results of this study. Consistent with the historical trend in qualitative research to present lengthy excerpts from the transcripts, Chenail (1994) wrote:

> I believe that the data, which have been painfully collected, should be the star in the relationship. By this I mean; the main focus in qualitative research is the data itself, in all its richness, breadth, and depth. . . . So, it only seems natural that when it comes time to present the fruits of your labor, you should make every effort to feature the data in your presentations. . . . By re-presenting plenty of the data, you will also allow the reader to see what they [sic] can see in the data. It is a way to share the wealth and to invite another to continue the inquiry and conversation. (p. 3)

Lengthy excerpts were presented from the interview transcripts to allow Susan to speak and allow the reader to join the inquiry and conversation. The presentation and analyses of data were crucial, leading to the conclusions, suggestions, implications of the study, and recommendations for further research presented in Chapter 5.

Chapter 4: Results

Introduction

The purpose of this chapter is to present the results of my data collection activities. As described in Chapter 3, data were analyzed through multiple levels of coding, including initial coding, focused coding, and conceptual coding (Chenail, 1994; Saldaña, 2009). In this chapter, I will describe in detail how those data sources were coded and how those code words and phrases were collapsed into four major themes to ultimately answer the central research questions of this study. In the following section, I will introduce Susan and provide a description of the setting in which she worked. I will then introduce the survey data to provide a backdrop and framework to which other sources of data may corroborate or dissent. This will allow the reader to contextualize excerpts from my observation notes and quotes from Susan's interview transcription.

Description of the participant. I first met Susan on a sunny evening in the fall at AHS. The school was located in a rural and historic and farming city in the mid-Atlantic region of the United States. After touring the city, I arrived at AHS. Upon entering the school and main office area, Susan greeted me with a smile, confident eye contact, and a firm handshake. Susan was alone at the school and indicated that she needed to follow up on a few e-mail contacts prior to departing to our scheduled community engagement with the Lions Club, a secular, volunteer based community service organization.

Susan's office was efficiently and neatly appointed with typical office furniture: a desk, chairs, and two conference tables. There were only a few decorations on her walls but her office did not appear stark, it appeared businesslike and professional. I noted that Susan kept a spiral notebook of tasks to complete and observed that she had several pages

of notes on previous and pending engagements. It was 6:00 p.m. I asked Susan about her work schedule and if long days such as this one were common. She explained that a typical day for her began at approximately 5:00 a.m. and often ended late in the evening and that 12-hour days were not out of the ordinary. Susan indicated that she had one more e-mail to send before leaving for the evening. It regarded a student in her alternative school that scored 100% on an assignment. Susan explained that the Apex (educational) software pushes into her e-mail account, providing real-time updates on student progress, and explained how she used this feature, saying,

> They do a lot of work online and . . . I have Apex software pushing right into my e-mail so I get an update every hour or two of how they are doing. One of the things they can do on their little quizzes is get a perfect score so I e-mail them back a "congratulations" throughout the day when they get that perfect score. Just trying to boost them a little bit. . .

After Susan completed her tasks for the evening, we departed to the Lions Club community engagement to present her educational initiatives, make requests for community support, and to answer questions about the needs and challenges of the school. The engagement was held at a local church. Driving through the city, its historical character was noted. The narrow, tree lined streets were flanked by large historical homes complete with white painted, columned porches.

When we arrived at the large church building, I noted that it was also a historical building featuring ornate exterior, large white painted columns, concrete steps, and a large, wooden main door. We were warmly greeted by the custodian and escorted to the basement where the meeting was to be held. There were several rows of chairs facing the stage and podium in one area and several tables were set up for dining in another area of the large room. As Lions Club members began to arrive, several individuals warmly

greeted Susan, some with handshakes and some with an embrace. She canvassed the room seeming to make contact with each individual.

She introduced me to several individuals, many of them she seemed to know personally, including the school superintendent. Based on this observation, it seemed that Susan was very popular in the city, well known, and deeply respected and admired. Several individuals spoke with me and described a long history of interactions with Susan. Some spoke about the improvements at Atlas High School particularly how good the school looks and how well it was run. Others spoke of how she is turning it around academically. My suspicions about Susan's popularity were confirmed when multiple individuals described Susan as "great," "awesome," "tough and fair," "the best person for the job," "dedicated and committed," and "hard working."

After the Lions Club members completed their ceremony, the school superintendent introduced Susan by listing her numerous accomplishments, awards, and honors. The superintendent reported, "Susan has engaged in lifelong leadership activities from a drum major in high school to a leadership position in central administration." Prior to becoming an elementary school principal, Susan was a social studies teacher for several years but completed her NBPTS certification in early adolescence and English language arts in 1999. She stayed in the classroom for a few years but longed to be in a school leadership role. Susan then ascended to the principalship at an elementary school and served in that role for 10 years. She then transitioned to the high school principalship in 2010. She was serving in her second year at AHS at the time of the study.

Though she never returned the classroom, Susan renewed her certification in 2009 and reported that the NBPTS certification process was a vital contributor to her

preparation as a principal (e.g., the development of instructional leadership behaviors integral to her role as the school principal). Susan described her commitment to teacher leadership and commented on the influence of the NBPTS process:

> What I took away from the process was the importance of teacher leadership; and so I know that a lot of what I do as a leader is promoting teacher leadership. It came because I understand it having gone through National Boards.

Susan cited the NBPTS process as an invaluable professional development activity that encouraged reflective leadership practice that was integral in the development of her confidence in the area of curriculum, instruction, assessment, and reflection. She noted that her motivation to complete the NBC was not monetary but intrinsic, that it was guided by her desire to be in educational leadership roles.

The NBPTS took steps to develop a national certification process for principals entitled the NBCEL. Similar to the NBPTS process for teachers, it was in the process of developing a portfolio assessment process for principals and educational leaders. The NBPTS abandoned its development of the NBCEL. Susan was one of the many principals who were not able to complete the new certification. However, Susan regarded her experience with the NBCEL as significant and meaningful. What is more, Susan was a member of the committee that developed the core standards for the NBCEL. Susan discussed her experiences with the NBCEL field test stating:

> When I worked on the field test for the principals' standards, it wasn't hard work. I'm not saying it wasn't hard work; but it was nothing that I thought, "why in the world are they making me do this . . . There was none of that [petty, busy work required by non NBPTS certifications] in the principal's portfolio.

Susan compared the five core propositions of the NBCT and the core standards of the NBCEL indicating that there was some overlap because they were under the same umbrella of the NBPTS.

The NBCT core propositions focused on teachers and were based on curriculum, assessment, instruction, and reflection; but the NBCEL core standards were leadership based. Susan however drew little distinction between instruction and leadership stating, "But they do go hand in hand." Susan explained:

> I'll tell you a story about that because I've served on the committee to write the core standards and the core props. We had a long discussion over several meetings about whether or not the leadership standards or core props were the same as the teacher standards. Are those five the same for the principal? And what was the overlap, and should they be the same, and should they be different? And many hours of discussion led to the core props for the principals that are stand alone. They can be right by themselves. But, you got to have your teacher piece too. And those of us who were NBCTs that were serving on that committee were voicing that. I mean there was some discussion, do we just leave it the same and just have this new set of standards under those five core props.

Susan argued that the five core propositions and the NBCEL core standards were not very different in that both addressed leadership and instruction stating:

> It does. It does. There's a big piece in there [NBCEL] about instructional leadership and being the instructional leader and how you put those systems and processes in place for it to happen … how you set the vision, things like that … it's embedded in everything that we do. What we did find interestingly enough is that from the [five] core props, the [NBCEL] standards almost mirror them in the same number and title and that kind of thing. Then we were like "whoa" is this right and then we were like, "well we think it is," because it's working.

I asked Susan if she would be the same type of leader having gone through the NBCEL instead of the NBCT process. Susan stated, "I don't know because see I've done both." Susan continued:

> I can tell you that those of us that were NBCTs on that committee did have a different perspective than those who had not been through the process. And those that had not been through the process, often looked to us to say "what would you say about this, how would it be perceived in the schools," etcetera, etcetera. But I can't separate them. I do feel like that of course . . . I do feel like having gone through the process as a teacher that I had a clear perspective of how to go through the process as a principal.

Susan's human side. The forthcoming presentation of Susan's accomplishments and work ethic may potentially portray her as fabricated. Therefore, the following is shared to humanize my findings. In this section, I will present excerpts that show Susan's human side: her sense of humor, the difficulty of her work schedule, and the impact of the principalship on her health, personal, and family life. Susan offered vivid and detailed answers to my interview questions and at times addressed multiple topics. Susan was very engaging and authentic; she often revealed her sense of humor when answering interview questions. About her retirement and work ethic, Susan stated,

> I've got five years until I retire, so I want to get it [AHS] straight before I retire. [Laughing]. . . . You know, with the demands of work at sixty and seventy hours a week . . . still doing my community work, my church work, having a family; I can certainly understand why people don't stay high school principals long. So if you do it right, it will wear you out. I don't know how [I do this]. . . . I think I am just an automotive kind of thing [laughing].

Susan also commented on the impact of the principalship on her personal and family life, how they cope, and how the family has found humor in her work schedule, she stated,

> . . . My kids are not grown. I have one still here [AHS] in high school and one in college. But as far as needing momma there to change the diapers and that kind of thing, they don't need that. They can handle themselves. I have a very supportive husband . . . he works seventy five miles from (Redacted). So he has a long day as well . . . but he has the kind of job that you have to leave it at work. . . . We all joke that they have to come here to see me or have dinner with me or whatever. We just kind of changed the dynamics of our family to some extent.

Susan also discussed how the demands of the principalship impacts her health, she stated,

> The other piece is eating right. You know when you work these long hours and you are heading home it is easy to stop at Chicken Kitchen and get a bucket of chicken to take home so I don't have to cook. I'm not eating nearly as healthy as I did- we're really getting on a tangent now [laughing]!

Regarding exercise, Susan stated,

> I need to exercise. Everybody says you walk up and down these steps and you're everywhere. . . . At the elementary school I used to wear a pedometer. I'd walk five miles a day during work time. I mean, I'm probably walking way more than that here [AHS], but you're not getting your heart rate up . . . over short distances.

Susan commented on how she copes with the demands of her work in connection with her holistic view of leadership.

> The other thing is a good night's rest. I try to go to bed every night at eight thirty. I require a lot of sleep. I love naps on a Saturday afternoon and Sunday afternoons. The two things I know I need to do [eat right and rest] and I haven't been able to really fit it in . . . . this is the holistic view of leadership . . . .

Regarding the holistic view of leadership, from Susan's perspective, it appeared that finding and maintaining a balance between her professional tasks, personal/ self care, and family relationships was the key to achieving long-term sustainability.

Atlas high school. Atlas High School (AHS) was situated in a rural historic community, in a state and school district that employed and promoted NBCTs to the principalship. The state consisted of an NBCT principal population that was large enough to permit use of purposive sampling to identify the NBCT principal participant. The AHS site was coincidental to the selection of Susan as the participant. The site was accessible enough to conduct several site observations, three 60-minute interviews and ongoing conversations, to launch a survey, and to gather documents; thus, proximity to the site was crucial to the study. Thus, the research site for this single-case study was Susan's professional work environment at AHS.

AHS had a student population of 700 students and approximately 65 faculty and staff members (Table 1). In 2011, AHS had a graduation rate of 82% and a dropout rate of 18%. At the time of the study, 52–60% of the students received free or reduced-price lunch, indicating that a large population of AHS students subsisted in poverty. I observed

evidence of changes to the physical structure of the school to improve its functionality and appearance. Susan indicated that the main office area was one of her primary improvement projects. I asked Susan if she took before and after photographs. She stated that she did not but wished she had taken photographs.

I noted that the main office area had been renovated with new windows, doors, furnishings, paint, and flooring. Susan recounted a story about her arrival at AHS, indicating that none of the trees and plantings in the courtyard of the school existed when she arrived. She stated the grass was "knee high" and the flowerbeds were "overgrown with no shrubbery." I observed that the grounds of the school, its lawn and landscaping, appeared to be well maintained, manicured, and attractive. The trees, plantings, flowerbeds, and shrubbery appeared to be professionally installed and maintained. The external physical structure and school facilities at AHS appeared to be well maintained despite the age of the historical school building. There were no broken windows, graffiti, damaged bricks, or broken walkways.

The only facility that appeared to be in need of maintenance and updating was the student commons building (area outside the gymnasium). On two consecutive visits to the site, the boys' restroom had a sign indicating that it was out of order. The tile floors did not shine in that location and the walls appeared that they had not been recently painted. The renovation and maintenance of the area in question was inconsistent with the other areas, facilities, and structures of the school.

Susan described other renovation projects such as the dull tile floors, the multiple painting projects, provision of new teacher desks, teacher computers (laptop computers for each teacher), and the renovation of facilities such as the school library and media

center. I observed that the classrooms furnishings appeared new. Each classroom observed, had modern furnishings and equipment, particularly the library and media center. The school hallways appeared vibrant with bulletin boards, posters, message boards, murals, banners, student work samples, and slogans.

I observed multiple bell transitions; each appeared to be orderly and businesslike, with most students completing the transition before the tardy bell rang. Bell transitions were supervised by staff members strategically located outside their classroom and outside the school building to monitor student transitions and behavior. The students moved toward their destinations in an orderly manner, stating, "Excuse me," if they bumped one another in the crowded hallways. Several students stopped at lockers to retrieve books, while others briefly congregated in small groups near their classrooms, talking with teachers or peers. When too many students gathered together, a teacher quickly dispersed them, redirecting them to transition to their locations.

Many students greeted me stating, "Hey!" or "Hello, who are you?" or "Are you going to work at our school?" During one observation of the transitions, I was introduced to the football coach of AHS, whose team was undefeated at the time of the case study; he coached at AHS for over 35 years. He was responsible for monitoring the main hallway transition. He stated that he had known Susan her entire school career and much of her life. He stated, "Susan is tough and tells it like it is, and that she is a great person . . . she is the best person you could have selected for a research participant."

The main office area was recently renovated and contained freshly painted walls, new windows, carpet, doors, and furniture. The hall floors shined and were free of debris. The 39 outer doors had keypad and FOB keyless entry locks, as did many of the inner

doors and classrooms. Essential staff members and security were observed carrying radios for communication devices. Reflecting the culture of the school, each school personnel (teachers and security) greeted me in a cordial and professional manner.

The armory. Located on school grounds were the city's fire station and the armory of the city. The Armory, also a historical building, was located about 30 yards from the main school building. The facility was equipped with modern furnishings and computers. Despite the age of the facility, it appeared updated and well maintained. It was clean and free of graffiti, debris, and there was no apparent structural damage. It was used as the alternative school for AHS students who were serving long-term suspensions for discipline problems. Students in grades 9-12 were served there. The Armory building also housed classrooms for AHS students serving in-school suspensions. Fifteen students were assigned to the Armory alternative school at the time of this case study. I observed students sitting at computers completing lessons prescribed by the Apex educational software. Teachers were monitoring and assisting students who raised their hands.

Also housed at the Armory was the Navy Junior Reserve Officers Training Corps (NJROTC) program. The Commander divided cadets into two groups, the classroom instructional group and the drill and practice group. Instructional activities were primarily conducted in one classroom away from the alternative school area. However, the second group of cadets performed drills and practiced their routines in the gymnasium area adjacent to the alternative school classrooms. One group received classroom instruction while the other group practiced drills, inspections, and competition routines. The cadets only spent part of their day at the Armory and had no physical contact with students in the alternative program.

AHS staff. Susan indicated the there were about 50 faculty and staff members on campus. A subsequent review of the AHS website revealed a list of faculty and staff members. The website listed approximately 39 individuals who were identified with the position title "teacher" and 26 individuals who were identified with other position titles and were noted as faculty. Table 2 displays AHS faculty and teaching staff.

Table 2.

AHS Faculty and Teaching Staff (N= 65)

Position Title	
Assistant Principals	2
Cafeteria Staff	1
Custodians	4
Guidance	5
Library staff	1
Nurse	1
Principal	1
Secretaries	2
Support staff	7
Teachers	39
Unidentified Individuals	2

If there were no changes in staffing patterns at AHS between the time of the study and my search of the website, I approximated that the population of teacher respondents was 39. As discussed in Chapter 3, because 37 of 39 teachers completed the survey, a claim of a representative teacher sample was made. The other 26 individuals listed on the website were identified as assistant principals, counselors, custodians, and other school staff members.

In the next section, the survey data are presented. Individuals were surveyed to assess the perceptions of agreement and disagreement to statements about Susan's leadership behaviors. Perceptions regarding the performance, and appearance of AHS were prompted in the EC section of the survey (Questions 28-30). Survey respondents

initially included three reporting groups: (a) teachers ($n_T = 37$); (b) parents ($n_P = 29$); and (c) school staff members ($n_{SSM} = 4$). To participate in the survey, I invited teachers (N = 39); parents (N = 367) and school staff members (N = 26). Though I invited a large enough group of school staff members, only four responded. I elected not to report the SSM data due to the size of the group and to protect their identity. They may potentially become identified because they were distinguishable from the teachers who attended the staff meeting wherein the survey was launched.

AHS teacher survey data. The survey instrument facilitated the collection of data as follows: (a) the perceptions of individuals within the boundaries of the single-case study; (b) the culture and climate of AHS; and (c) the perceptions of the appearance and performance of AHS. The survey data were collected via the SurveyMonkey website, using an Internet-based questionnaire with automatic collation of the results (Dillman, 2000). As discussed in Chapter 3, data were collected from a census of AHS teachers and a convenience sample of school staff members, and current parents of AHS students. These groups were within the boundaries of the case that included a principal's interactions with individuals at four levels: (a) the school; (b) the classrooms; (c) relationships, culture, and climate; and (d) parents of AHS students.

The survey was designed to include five sections: (a) Section 1, questions 2–7 were designed to appraise perceptions of Susan's direct approaches; (b) Section 2, questions 8–13 were devised to consider perceptions of Susan's mediated approaches; (c) Section 3; questions 14–20 were posed to allow respondents to report on perceptions of Susan's reciprocal approaches; (d) Section 4, questions 21–27 were aimed to judge perceptions of Susan's antecedent approaches and; (e) Section 5, questions 28–30 were

designed as open-ended response choices allowing respondents an opportunity to provide further information. Survey responses for the AHS teacher group are depicted in Table 3.

Table 3.

Survey Responses of the Teacher (T) Group

Item	% (*f*) SA & A	% (*f*) N & IDK	% (*f*) D & SD
2. The principal is the instructional leader.	84 (31)	11 (4)	5 (2)
3. The principal has designed a well organized school.	79 (29)	13 (5)	8 (3)
4. The principal closely supervises school employees.	97 (36)	3 (1)	0 (0)
5. The principal enforces student discipline.	87 (32)	5 (2)	8 (3)
6. The principal enforces safety procedures.	92 (34)	5 (3)	0 (0)
7. The principal sets high academic performance expectations for students.	95 (35)	5 (2)	0 (0)
8. The principal provides opportunities for teachers to collaborate with each other.	95 (35)	5 (2)	0 (4)
9. The principal provides the resources needed to teach at this school.	92 (34)	5 (2)	3 (1)
10. The principal provides instructional development for teachers.	100 (37)	0 (4)	0 (4)
11. The principal sets high expectations for teaching.	97 (36)	3 (1)	0 (4)
12. The principal communicates the school's mission to the school employees and parents.	100 (37)	0 (4)	0 (4)
13. The principal quickly responds to questions from parents.	87 (32)	2 (1)	11 (4)
14. The principal is responsible for creating a positive school climate.	85 (31)	5 (2)	10 (4)
15. The principal works with community members.	86 (33)	14 (4)	0 (0)
16. The principal ensures that the school recognizes the importance of diversity.	89 (33)	11 (4)	0 (0)

17. The principal effectively utilizes programs for low performing students.	81 (30)	14 (5)	5 (2)
18. The principal effectively utilizes programs for poor or disadvantaged students.	68 (25)	27 (10)	5 (2)
19. The principal pairs the best teachers with low performing students.	43 (16)	46 (17)	11 (4)
20. The principal makes school test scores a priority for teachers.	89 (33)	8 (3)	3 (1)
21. The principal spends money to improve student performance.	100 (37)	0 (0)	0 (0)
22. The principal provides training for school employees.	92 (35)	5 (2)	0 (0)
23. The principal communicates her vision to school employees.	100 (37)	0 (0)	0 (0)
24. There is a positive school climate.	62 (23)	19 (7)	19 (7)
25. The principal provides opportunities to recognize ethnic diversity.	70 (26)	27 (10)	3 (1)
26. The principal effectively utilizes school test scores in resource allocations.	70 (26)	30 (11)	0 (0)

Note. T = Teacher ($n_T = 37$).
Note. f = Frequency.
Note. SA = Strongly Agree; A = Agree; N = Neutral; IDK = I Don't Know; D = Disagree; SD = Strongly Disagree

AHS parent survey data. The survey instrument facilitated the collection of perceptions of Susan's leadership practices from parents within the boundaries of the single-case. Parents also reported their perceptions of the appearance and performance of AHS. Noted was the result to Question 5 regarding Susan's enforcement of student discipline, 100% of parents strongly agreed or agreed with the statement. To Question 13 regarding Susan's quick response to parents' questions, the P group combined scores either strongly agreed or agreed (83%) with the statement in the survey. Also noted were the three disagree and strongly disagree responses to the statement. Survey responses of parents are displayed in Table 4.

Table 4.

Survey Responses of the Parent (P) Group

Item	% (*f*) SA & A	% (*f*) N & IDK	% (*f*) D & SD
2. The principal is the instructional leader.	86 (25)	11 (3)	3 (1)
3. The principal has designed a well organized school.	94 (27)	3 (1)	3 (1)
4. The principal closely supervises school employees.	79 (23)	21 (6)	0 (0)
5. The principal enforces student discipline.	100 (29)	0 (0)	0 (0)
6. The principal enforces safety procedures.	86 (25)	14 (4)	0 (0)
7. The principal sets high academic performance expectations for students.	97 (28)	3 (1)	0 (0)
8. The principal provides opportunities for teachers to collaborate with each other.	69 (20)	7 (2)	24 (7)
9. The principal provides the resources needed to teach at this school.	83 (24)	17 (5)	0 (0)
10. The principal provides instructional development for teachers.	69 (20)	31 (9)	0 (0)
11. The principal sets high expectations for teaching.	94 (27)	3 (1)	3 (1)
12. The principal communicates the school's mission to the school employees and parents.	94 (27)	3 (1)	3 (1)
13. The principal quickly responds to questions from parents.	83 (24)	14 (4)	3 (1)
14. The principal is responsible for creating a positive school climate.	91 (26)	6 (2)	3 (1)
15. The principal works with community members.	76 (22)	21 (6)	3 (1)
16. The principal ensures that the school recognizes the importance of diversity.	76 (22)	21 (6)	3 (1)
17. The principal effectively utilizes programs for low performing students.	72 (21)	21 (6)	7 (2)
18. The principal effectively utilizes programs for poor or disadvantaged students.	66 (19)	31 (9)	3 (1)

19. The principal pairs the best teachers with low performing students.	41 (12)	52 (15)	7 (2)
20. The principal makes school test scores a priority for teachers.	76 (22)	21 (6)	3 (1)
21. The principal spends money to improve student performance.	55 (16)	38 (11)	7 (2)
22. The principal provides training for school employees.	52 (15)	48 (14)	0 (0)
23. The principal communicates her vision to school employees.	69 (20)	31 (9)	0 (0)
24. There is a positive school climate.	83 (24)	10 (4)	7 (2)
25. The principal provides opportunities to recognize ethnic diversity.	66 (19)	31 (9)	3 (1)
26. The principal effectively utilizes school test scores in resource allocations.	50 (14)	49 (14)	3 (1)

Note. P = Parent (n_P = 29).
Note. f = Frequency.
Note. SA = Strongly Agree; A = Agree; N = Neutral; IDK = I Don't Know; D = Disagree; SD = Strongly Disagree

Note the responses for Item 7 regarding the high academic performance expectations for students; (f_T = 35, 95% & f_P = 28, 97%). This result was predicted in the literature, particularly for a leader who was new to an underperforming school (Hallinger & Heck, 1998). Noteworthy was the responses of the P group to Questions 8, 9, and 10.

To Question 8 the P group reported disagreement regarding teacher collaboration (f_P = 7, 24%), neutral responses to Item 9 regarding the provision of resources to teach (f_P = 5, 17%), and Question 10 regarding teacher instructional development (f_P = 9, 31%). I also noted the responses for designing a well-organized school Question 3; (f_T = 29, 79% & f_P = 27, 94%). For Item 3, I noted the neutral responses and the disagreement reported by the T group (f_T = 5, 13% neutral & f_T = 3, 8% disagreement). Overall, T respondents' indicated agreement that Susan demonstrated leadership behaviors consistent with a focus on pedagogy.

These behaviors also intersected with the five core propositions of the NBPTS. Of note were the T results for Questions 10 and 11 regarding instructional development for teachers. Respondents' combined scores of strongly agreed or agreed; (f_T = 37, 100%) were recorded for Question 10. For Question 11, setting high expectations for teaching, the T group members' combined scores were strongly agreed or agreed; (f_T = 36, 98%) with the statement. Survey respondents in the T group were in the best position to report on the classroom-level processes engaged by Susan in that they were required to implement her classroom-level initiatives.

Therefore, the result of the T group was reported with confidence. The P group's responses to Question 11 (f_P = 27, 94% agreement) were consistent with the reports of the T group regarding high expectations for teaching. Survey respondents reported neutral and disagreement for Question 19, "The principal pairs the best teachers with low performing students;" (f_T = 17, 46% neutral and (f_T = 4, 11% disagreement). Members of the P group reported (f_P = 15, 52% neutral & f_P = 2, 7% disagreement), indicating a low result for this statement.

Individuals in the P group seemed unaware of Susan's teacher-student pairing strategies. Susan reported in an interview that through her Ace Time initiative, she attempted to pair students with teachers to improve academic achievement and to, "Get to their hearts." Based upon the survey responses, the T and P groups were apparently not aware of Susan's efforts to form specific teacher-student pairings. However, the T respondent group reported agreement to questions 14, 17, and 20.

Responses to the statements were as follows: (Item 14), the principal is responsible for creating a positive school climate (f_T = 31, 85%); (Item 17) used programs

for low-performing students (f_T = 30, 81%); (Item 20) and made school test scores a priority for teachers (f_T = 33, 89%). Despite the result for Question 18 regarding the effective use of programs for poor or disadvantaged students, (f_T = 25, 68%) agreement and (f_P = 19, 66%) agreement, Susan's interview data described her multiple efforts, programs, and initiatives to "Level the playing field" and to "Provide equal access for all." Perhaps the survey respondents were not aware of Susan's efforts and programs.

Both groups reported relatively high combined "neutral" and "I don't know" responses (f_T = 10, 27%) and (f_P = 9, 31%). The T and P respondents reported agreement with statements that Susan recognized diversity but also reported high neutral and I don't know responses. For Question 25, recognizing ethnic diversity (f_T = 26, 70%), and Question 26 regarding resource allocations, survey respondents in the T group reported (f_T = 26, 70%); a low result. Overall, the T group did not report disagreement with Items 24, 25, and 26.

Survey Open Response Data

The open-response section of the survey permitted the respondents an opportunity to make comments about the school or the principal not covered by the survey questions. The intent of this section was to garner discrepant data; however, the comments served to corroborate interview and observation data and were consistent with the setting the vision and mission and school and community relationships theme. In the following section, the comments made by the T and P reporting groups are presented.

Teacher (T). Responses were collected to the question, "Is there anything else I should know about this school or this principal?" One member of the T respondents commented, "The principal has only been at this low performing school since last

semester." Another member of the T group noted, "The principal is trying very hard to improve Atlas H.S. But sometimes it is too much too fast." Another member of the T group commented, "She wants the best for the students and has high expectations for the students and staff." Yet another member of the T group reported, "She is doing a great job." Another T respondent noted, "We are in transition with a full year of her role at the end of this semester." Another T respondent reported, "We have had a lot of turnover." Comments made by individuals within the T group corroborated interview and observation data.

Parents (P). Individuals in the P group corroborated many of the sentiments reported by individuals in the T group and comments made by individuals who spoke to me about Susan during observations. Members of the P group also responded to the following question: "Is there anything else I should know about this school or this principal?" One member of this group noted, "Answers # 28 & #29 are only medium to the continuing positive changes that I notice from where we were 3 years ago. I would expect these to be both rated at "high" in another year or so if things continue in the direction they are going." Another member of the P group responded,

> Our high school had fallen below my expected standards in the past years. Since [Redacted] has been principal, I have seen things turn around. She is making a real difference. The bar has been raised and I am once again proud of my alma mater.

Another member of the P group responded, "Yes, I would like to known [know] are there any after school programs that are proived [provided] for students to earn exrra [extra] credit?" Another member of the P group said,

> She has just got in this position and I think she has done a good job, I have worked with her over many years at several schools and she is always willing to work with me and answer any questions I may have.

One member of the P group said, “The principal doesn’t seem to be a peoples [people] person.” This comment diverged from the statements made by others respondents. Another member of the P group responded, “Principal is doing the best she can to elevate the level of learning, the environment, hire excellent teachers, etc. She has a long way to go, but is committed and devoted to learning.” Another member of the P group noted,

> The science and math dept. need ALOT of work in particular. No one is getting turned on by science at this school. I also hate that more and more on line courses are taking the place of having AP classes; I feel an excellent teacher can do so much more than an on line course.

The state in which Susan is employed was moving toward more virtual courses, this individual seemed to disagree with that trend. Another member of the P group stated, “She has done an amazing job in the short time she has been here. Improvements are obvious.” Susan was beginning her second year as principal of AHS. A member of the P group responded, “She is passionate about her students and is a hard worker.” Respondents were asked to rate the test score performance of the school, the appearance of the school, and to rate the school overall on a scale of high, medium, and low. The intent of these ratings was to gain an understanding of the perceptions of the academic performance of the school, Susan’s capital improvement initiatives, and to corroborate perceptions around how satisfied individuals were with Susan’s performance at AHS. Responses to this question are presented in Tables 5 and 6.

Table 5.

T Group Performance and Appearance Ratings

Item	% (*f*) High	% (*f*) Medium	% (*f*) Low
28. Rate the test score performance of this school.	3 (1)	65 (24)	32 (12)
29. Rate the appearance of the school.	24 (9)	65 (24)	12 (4)
33. Rate the school overall.	16 (6)	84 (31)	0 (0)

Note. T = Teacher (n_T = 37).
Note. f = Frequency.

Table 6.

P Group Performance and Appearance Ratings

Item	% (*f*) High	% (*f*) Medium	% (*f*) Low
28. Rate the test score performance of this school.	21(8)	72 (21)	7 (0)
29. Rate the appearance of the school.	42 (12)	55 (16)	3 (1)
33. Rate the school overall.	45 (13)	52 (15)	3 (1)

Note. P = Parent (n_P = 29).
Note. f = Frequency.

A noteworthy result was that a single teacher (f_T = 1, 3%) rated the school high on test score performance and 12 teachers rated the school low on test score performance (f_T = 12, 32%). Of note was that (f_T = 31, 84%) of T respondents rated the school overall as medium, and the P group (f_P = 15, 52%) also rated the school overall as medium. Despite Susan's efforts to complete office renovations, multiple clean-up days, painting projects, new furniture and equipment, shined floors, beautified grounds, and new technology tools, only (f_T = 9, 24%) of respondents of the T group rated the appearance of the school as high. This finding might signal that teachers expected more improvements to be made to improve the appearance of AHS. Regarding the appearance of the school, (f_P = 12, 42%) rated the school in the high range. This finding provided evidence that the P group

seemed to report appreciation for Susan's efforts to improve the physical structure and the academic performance of the school. This result was also consistent with the comments captured in the open-response section of the survey.

Identifying Codes and Themes

Interview and observation data were analyzed through multiple levels of coding, including initial coding, focused coding, and theoretical and conceptual coding (Chenail, 1994; Saldaña, 2009). From this process, codes were collapsed into categories from which case study themes emerged and were eventually identified. During the initial coding phase, as described in Chapter 3, Susan's audiotaped interviews and my observation notes, were transcribed and converted into narratives and encoded line by line. Codes were collapsed into categories based on their similarities. Categories were then highlighted with color codes. Yellow highlight represented setting the vision and mission (SVM), green represented school and community relationships (SCR), blue represented the five core propositions of the National Board for Teaching Standards (NBPTS), and purple represented religion, spirituality, and faith (RSF). Documents and the survey narratives were similarly analyzed, encoded, categorized, and color coded.

In the focused coding phase, I compared codes and phrases within and across each of the interviews and multiple observations to determine which code words were frequently repeated with force and specificity (a function of repetition). By analyzing these categories of grouped code words and phrases, four identified themes emerged to answer the following research questions:

RQ 1: How did an NBCT demonstrate leadership behaviors in the principalship?

RQ 2: What perceived role (if any) did the NBPTS process play in developing those leadership behaviors in the principalship?

From Yin's (2003) perspective, I initially designed this study to analyze Susan's direct, mediated, reciprocal, and antecedent (DMRA) leadership behaviors and assess how closely those behaviors aligned with behaviors predicted in the literature. Further, I also intended to select the best fitting DMRA conceptual models that best depicted Susan's demonstration of leadership behaviors. Given that I elected to report the findings of my second analysis from a thematic perspective, the research question regarding the best fitting DMRA models was discarded. If DMRA were the only leadership approaches coded, other approaches were likely ignored. Accordingly, I revised my research questions to account for leadership approaches that may emerge from generative or thematic data analysis. The generative coding process articulated by Saldaña (2009) allowed case study themes to emerge and become identified.

Case Study Coding Process

The coding process is an intermediary activity that occurs between data collection and data analysis (Saldaña, 2009). The following introductory examples derived from interview transcripts and observation narratives were kept purposely simple and direct, yet ultimately led to theme development and answering the central research questions. The following encoded phrases were categorized in yellow highlight were drawn from the interview transcripts and led to the identification of the theme of setting the vision and mission (SVM):

- Set the vision;
- One-to-One Technology initiative (Chromebooks);

- Forward thinking and thinking on your feet;
- Put the steps in place;
- Rally the troops;
- Putting out the fires;
- Get people on board to accomplish the mission with me;
- Instruction is the most important thing.

In Saldaña's (2009) words, in my secondary analysis, the codes were short phrases that were based on relevant, prominent, and essence-capturing portion of language-based or visual data (Saldaña, 2009). The following yellow highlighted category was encoded phrases drawn from the observation narratives (visual data) was identified with the theme of SVM:

- Student use of cell phones and IPods in school;
- Recent renovation projects and clean and shining floors;
- Courteous and professional staff;
- Freshly painted walls;
- Orderly student transitions;
- Putting out the fires; and
- Instruction is the most important thing.

In the initial and theoretical coding phase, passages of data were deciphered to determine their core meaning. An appropriate code was determined and labeled in the encoding phase. According to Saldaña (2009), collectively, these encoded phrases allowed themes to emerge and to be identified. In this case, encoded phrases regarded direct approach leadership strategies such as vision, direction setting, organizational

development and restructuring, managing people, planning, and initiating and enforcing policies and procedures.

Pursuing a thematic inspired analysis of my data, interview transcripts and observation narratives were categorized in green highlight and collectively led to the emergence of the SCR theme. Susan's charitable efforts and her efforts to level the playing field to create equal access and equality at Atlas High School (AHS) were borne out of her religion, spirituality, and faith and converged with the SCR theme. However, upon closer analysis, the RSF theme emerged to account for Susan's faith in God. Hence, highlighted purple, code words from the previously identified SCR theme were extrapolated and gathered together to identify the RSF theme. I will present the code words for the SCR theme and the RSF codes will follow.

My secondary analysis coded and categorized in green highlight the following quoted phrases from Susan's interview transcripts to converge into the SCR theme:

- It boils down to building relationships;
- Ace Time is certainly going to help teachers build relationships;
- To build community relationships; visibility and accessibility, those are the two biggest;
- I have an open-door policy; people can stop by and talk to me;
- If they're struggling, I'm going to do everything I can to help them;
- I'm going to be in there coaching; and
- I got to help my teachers build relationships with kids.

These encoded phrases allowed the theme concerning initiating and cultivating relationships to emerge.

Visual data supported the SCR theme. The following code words were drawn from observation narratives and highlighted green to collectively identify the SCR theme:

- Hallway conversations with teachers;
- Provided a baby shower and gifts to replace items lost in a house fire;
- Collected donations for the house fire loss;
- Lion's Club presentation; and
- With rival principal, Susan promoted sportsmanship at football games.

These encoded phrases regarded Susan's observed efforts to establish and maintain relationships with individuals in the school and community.

Highlighted purple and extracted from interview transcripts and observations narratives, the following encoded phrases signaled the emergence of the RSF theme:

- Level the playing field to create equal access, equity, and academic equality;
- Treating everybody the same;
- They have to know you care before they can learn from you, get to the hearts;
- Do unto others as you would have them do unto you;
- Changing hearts through character education;
- Prayer, Holy Spirit, Believers;
- This is my mission field, a heart for African American male students; and
- I felt The Lord speaking to me, a tug in my heart.

Susan's religion, spirituality and faith approach to school leadership may be organized under the tenants of the Golden Rule as it is in harmony with many of the major religions of the world. "Do unto others as you would have the do unto you" (Luke 6:31; KJV). The RSF theme will be discussed in detail in the following sections.

Finally, the five core propositions of the NBPTS process theme emerged as a result of multiple lines of interview transcripts and observation narratives category were color coded in blue highlight. Particularly the lines regarding the NBPTS process, the five core propositions, and classroom related concerns such as curriculum, instruction, assessments, and reflection. Susan often discussed instructional activities in reference to the NBPTS process in pursuit of what she called a five core prop building. Quoted from Susan's interview transcripts, I grouped those words and phrases and identified them collectively as the five core propositions approach to school leadership theme. I noted that a finding of the five core propositions approach was achieved from both data analysis perspectives. The encoded words and phrases from Susan were as follows:

- In 1998, I pursued my National Boards;
- To walk in the steps of my teachers, I needed to complete the (NBPTS) process;
- The whole process is so powerful;
- It's been an asset throughout my career;
- The best staff development I have ever been through by far;
- Push yourself against a set of standards (five core propositions);
- This [NBPTS process] . . . . shaped my career;
- It is who I am . . . . you embrace those standards; you understand them;
- It's just immersed in who I am, I don't know how to separate it;
- The five core props are so ingrained in what I do that I don't even think about it; and
- It's just the way I do business and the way I want my school to do business.

These phrases allowed the five core propositions approach theme to emerge and become identified. This theme was consistent with mediated leadership approaches that focus on classroom-level processes such as (a) pedagogy or teaching and learning practices and processes; (b) curricula, instruction, and assessment; (c) the five core propositions; and (d) reflection exercises.

The following phrases were drawn from observation narratives and highlighted blue to collectively identify the emergence of the five core propositions approach theme. These coded words and phrases derived from interview narratives and supported the NBPTS process theme; Susan stated:

- It (five core propositions approach to teacher development and supervision) came because I understand it, having gone through National Boards;
- I know that a lot of what I do as a leader is promoting teacher leadership;
- A take-away from the process that I use is the assessment piece;
- It pushes you to reflect and be the best you can be;
- I always think of this whole curriculum, instruction, and assessment; and
- What I took away from the process was the importance of teacher leadership.

According to Saldaña (2009), "Themes are a result of coding, categorization, and analytic reflection;" the final number of major themes should be restricted to assist the reader's understanding of the data analysis (p. 13).

Four Major Themes

Four major themes were identified for this single-case study to ultimately answer the central research questions. According to Saldaña (2009) the identification of each theme was related to how repetitive the code words supporting a theme emerged in the

text, how persistent themes were across each data collection iteration, and the degree to which the expressions were connected to specific contexts or individuals within the boundaries of the case (Saldaña, 2009). Resulting from my secondary thematic analysis, the themes, SVM and SCR answered Research Question 1, How did an NBCT demonstrate leadership behaviors in the principalship? I will present data in the form of lengthy quotes from Susan's interview transcripts regarding how she set her vision and mission at AHS. I will also refer to observation narratives, survey data, and documents to corroborate her statements.

Setting the vision and mission. Susan demonstrated leadership in the principalship by setting the vision and mission of AHS. Susan spoke at length about her One-to-One initiative to provide a computing device for each student. As part of her overall vision for instructional technology, implementation, and utilization, Susan iterated the importance of her students being prepared for the 21st century. I asked Susan, "What is your job, first of all?" She responded,

> Set the vision. . . . So, like with the One-to-One . . . my job is to help set the vision and to explain why we need to go One-to-One. Why it needs to be purchased by the school system versus [students] bringing their own device.

Survey respondents (Items 12 & 23) in the T group strongly agreed or agreed that Susan communicated the school's mission to the school employees and parents (f_T = 37, 100%). To Item 9, T respondents strongly agreed or agreed that Susan provided the resources needed to teach at AHS (f_T = 34, 92%). Similarly, (Item 12) regarding Susan communicating her vision and mission, (f_P = 27, 94%) of the respondents in the P group strongly agreed or agreed with Item 12 and strongly agreed or agreed with item 9 (f_P = 24, 83%).

One-to-One initiative. Regarding her technology initiatives and vision for AHS, Susan presented a PowerPoint presentation to her faculty during the 2012-2013 school year opening ceremony (Professional Portfolio Document Q, Appendix J). As part of Susan's professional portfolio, her PowerPoint presentation addressed the overall implementation of her technology initiative, professional development in the use of the Chromebooks, and her goal to provide a computing device for each student (Professional Portfolio Document J, Appendix J). When asked to sum up her vision statement as it related to her One-to-One initiative, Susan said,

> It is to ensure that our kids are prepared for the 21st century and that's certainly the tools but it is also the skills, and the knowledge base. They're gonna be the leaders of tomorrow. They've got to be a productive citizen . . . that's where we are headed. . . . I want us to be the best we can be so that our kids get everything that they need. And that means that we make decisions that are best for kids. We have to be on our A-game every day and if we are . . . seeking to be the best, then we can provide the best education for our kids.

To Item 7, survey respondents in the P group strongly agreed or agreed that Susan set high academic performance expectations for students (f_P = 28, 97%). Respondents in the T group also reported agreement (f_T = 35, 95%). Pursuing her One-to-One initiative; Susan identified the importance of forward thinking in her leadership and referred to her efforts to establish policies, practices, and procedures in her faculty handbook (Professional Portfolio Document J; Document Q; Document Z, Appendix J). Aligning with the codes of setting the vision and mission, Susan stated,

> A couple of things come to mind, a characteristic I think that helps me in my leadership is forward thinking. I have the ability to see what's happening and dream if you will, where I want to be so that it's better. And then be able to put the steps [procedures] in place for that to happen. The thing I enjoy the most about leadership especially at the school level . . . having to think on your feet and putting out the fires . . . just the business of the day and going to the situation and providing assistance. . . . I have the ability to rally the troops.

Regarding procedures and organization of the school (Item 3), survey respondents in the T group strongly agreed or agreed that Susan designed a well organized school (f_T = 29, 79% & (f_P = 27, 94%). Susan discussed how she piloted her One-to-One initiative and how she required several interested teachers to apply for the pilot by writing NBPTS style reflection questions (School Newsletter, Document J, Appendix J). Teachers would supervise leased laptops for every student, provide instruction in the use of the device, and provide professional development on 21st Century skill and pedagogy regarding the device. The selected teachers would also advocate for the project with their peers.

Shared leadership. Susan discussed how she encouraged teacher leadership and engaged faculty and staff relationships to help sell the One-to-One initiative and stated,

> I've got these three people who are going to pilot it, and . . . it's gonna be your responsibility—yes, you're going to a pilot it, but you're gonna become the people who were going to do the staff development for the rest of the staff when we go One-to-One. You're going to be helping to troubleshoot . . . we got a lot of stuff we gotta do . . . parent meetings that gotta happen and the paperwork for those meetings—so these folks are gonna be doing a lot while they are developing lesson plans and learning to use . . . these Chromebooks. So, they will become the three advocates . . . they had good submissions to their paperwork. But they are also strategically in three different places in the building and they are in three different departments . . .

In the T group, (Item 22) members strongly agreed or agreed that Susan provided training for school employees (f_T = 35, 92%).

Susan stated that her intent of the technology initiatives and vision was to improve teaching and learning at AHS. Survey respondents reported on their perceptions of Susan as the instructional leader at AHS. To Item 2, T respondents reported (f_T = 31, 84%) agreement and (f_T = 2, 5%) disagreement. To the same item, members of the P group reported agreement (f_P = 21, 86%) and neutral or I don't know (f_P = 3, 11%). Susan published a school newsletter outlining her One-to-One initiative (School Newsletter,

Document C, Appendix J). Regarding her One-to-One initiative and how it would help to change or improve pedagogy, Susan stated,

> With my teachers, I have staff development on Monday and part of that will be taking a lesson and upgrading it to 21st Century and that will definitely include using a device . . . it is also changing that pedagogy in the classroom so that they are embracing collaboration and project-based learning and . . . *Revised Bloom's Taxonomy* and all of those things that are happening over here in the curriculum to make sure that our pedagogy is matching, and that our technology matches, and that everything is in the right spot of where it should be—everything connecting . . . Giving them the One-to-One tool would be a biggie to help change that . . . some will be kicking and screaming, but that's okay.

Susan not only discussed her effort to retain her familiarity with learning theories and instructional strategies articulated by Bloom's Taxonomy she seemed aware of current events in American education.

Current issues in education. Susan discussed her focus on curriculum and instruction and the changing standards at the state and national levels. I found interview and observational evidence of Susan's awareness of the common core curricula debate as it related to her instructional goals at AHS. She stated,

> Content . . . that's a biggie for us because we . . . have changed the entire curriculum . . . we have common core and essential standards. . . . We are on the cusp of the change right now with common core and of course the jury is still out on whether we have made the right decision. . . . Probably in 20 years somebody will come back and then tell us we did it wrong, but it is always putting the kids first you know if you do that everything else is going to fall in place.

Susan discussed the common core standards in relation to the NBPTS standards stating,

> The standards, of course I worked in the area of English Language Arts it will be interesting to see that now that so many states have adopted the common core English standards . . . at the National Board level . . . I would say that those standards were ahead of the common core and they will match nicely. As far as standards across other curriculum areas . . . I am not as well versed in them but I certainly know how to point teachers to them, and have access to them, and to use them . . . It's knowing how to get to them and how to help teachers with them more so than just having them memorized . . .

Susan was aware of how the common core standards impacted her state standards and discussed the benefits of common core standards to military or transient families stating,

> . . . I read an article just this past week, from a military mom . . . the kids were from . . . four different states. . . . And they were all talking about the History (courses) . . . and the tests they were getting ready to take in that particular state at the end of the year. She realized how all of them were different. Now the common core standards only apply to English and math right now so that all the states across the nation who adopt them, the kids will be having the same course of study. We hope that it will spread to other subjects as well.

As a result of her state adopting common core for English and math, Susan developed a strategy to implement the standards:

> So we are on a mission at AHS to make sure that we are following the common core and for (Redacted her state) and for all other subjects it's called the Essential Standards . . . ensuring that our kids have the same content they would anywhere else across this state and in English and math across the nation. So that those kids, who are in the military, or for whatever reason, move around, would have the same basic content no matter where they were going to school.

IPods. Susan discussed student use of IPods as part of her overall technology initiative at AHS. I observed several students using their iPods during classes or while transitioning to classes. I asked Susan how iPods fit into the overall technology initiative. Susan stated that some students used an iPod as part of their individual behavior management plans; others used them because Susan was in favor of teaching the responsible and appropriate use of technology. I observed a bulletin board posting of the Positive Behavioral Intervention and Supports (PBIS). The document called a matrix summarizes a continuum of agreed upon behavioral interventions to enhance academic and social behavior outcomes for students. One such intervention was the student use of iPods (Document A, PBIS Matrix, Appendix J). Regarding iPod usage as part of her overall behavior management and technology vision, Susan stated,

> It is part of everybody's plan. Everybody, I am very much in favor of technology. I do not want the kids to have to power down when they come into school. And my thing is you embrace it instead of fight it. And so we're teaching them the appropriate times of when they have their technology and when they cannot . . . taking a test, if the teacher allows you to listen to your iPod music, then you can.

I observed a classroom incident when two students had their ear buds in their ears listening to music on their iPod during direct instruction. The teacher stopped instruction several times to redirect those students to put their iPods away. The rule at AHS was to have the ear buds out of the ears during direct instruction, or when being addressed by faculty and staff. But, students could wear ear buds to listen to music between classes or during class with the teacher's permission when completing assignments. Susan stated that she did not want students to have to "power down" when they entered the school building and the school should teach the appropriate use of technology tools and devices. Susan stated that her One-to-One initiative would provide opportunities to teach the appropriate use of technology.

Gaining buy-in. Susan revealed a familiarity with research on setting the vision and mission of a school and discussed how she gained buy-in; she talked about the need to identify important community stakeholders: "All the literature talks about that you set the vision and . . . you go through all the processes of getting buy-in from your staff, and your kids . . . community, and parents."

> I am working with my central office, my school board members and a community group to move One-to-One in this school which means everybody would have a device. I had teachers apply for those and the instructional leadership team selected where those Chrome Books should be. We're not gonna take those home right now but you know we are moving towards that because we want them [students] to have the device 24 hours a day.

To Item 15 regarding the principal working with community members; the T group reported (f_T = 33, 86%) and the P group reported (f_P = 22, 76%). The lower result in the P

group was because of the multiple responses of neutral or I don't know to the statement (f_P = 29, 79%). I noted that parents are a vital target for Susan's community relations efforts.

I asked Susan to comment on how she gained staff acceptance and buy-in of the vision and mission and her leadership in general. She commented on how some faculty members initially resisted her leadership. Susan also discussed one of her primary methods of seeding vision to get faculty and staff on board. She used a practice she referred to as hallway conversations and stated,

> Behind the scenes, those hallway conversations . . . because that's how you get people on board. You build those relationships. . . . People will follow sometimes because I say they have to and sometimes because they want to, but I can get people on board to want to accomplish the mission with me, so to speak . . . . They're going to come by and say, "Well, I thought about this and I wanna ask you about this." . . . I call those my hallway conversations . . . they're quick—they very rarely happen in this office . . . the best place is in their classroom or in the hallway where I am just putting those seeds out where we are headed and what we we're going to do.

I observed Susan engaging in hallway conversations with multiple teachers; those hallway conversations happened just outside their classroom doors. The conversations appeared to be informal and cordial, however business-like. Susan commented further on the purpose and scope of the interactions, particularly how the hallway conversations helped promote teacher support of the vision. Susan stated,

> You talk to them one on one. You give them a voice. You help them shape your own vision you know without taking you off course, but . . . to some extent, they know what's going to work and what doesn't. I also capitalize on their expertise you know, I'm not an expert in science, but I know who my person on campus is. . . . So you pick up on the expertise of the people, listen to parents; try to fold their voice into the school.

Susan continued describing how she used faculty and staff members to help seed and cultivate the vision and mission. She stated,

> I'm beginning to have those teachers that I can trust with personal information such as . . . this person hasn't quite caught the vision, can you go out to lunch with them, go talk to them during their planning period, whatever . . . so I am starting to have those people that trust me and I trust them and we can have those conversations.

Though Susan believed in leading by example, from an NBPTS perspective, she also valued the development of teacher leadership and promoted it through hallway conversations. Susan stated:

> Lead by example . . . develop teacher leadership; I am very big on having behind-the-scenes conversations with people to foster support and also help them get their own juices running in their own brains so they can challenge me in a way that will be healthy to the organization.

Susan also discussed how she could promote parent and students buy-in regarding her One-to-One initiative and stated,

> I have 52% of kids on free and reduced [-price] lunch. So it's problematic for half of my families to send a [computer] device to school, you know, so we need to provide it. At the same time, you gotta have parent and student buy-in so we're looking at, like, setting up our own little insurance policy . . . $50 a year . . . so they have some vested interest in it. And if a kid coming in here at ninth grade spends $50 a year for their [*sic*] computing device, at the end of their [sic] senior year, we want them to be able to purchase it for another $50 dollars if they want to. You see, that puts money back into the account to buy the next device.

I did not find objective data to support claims of parent or student buy-in of the One-to-One initiative. The initiative was in the early stages of implementation. More time in the field would likely allow the data to emerge.

From good to great. According to Susan, she quickly identified, reassigned, or dismissed ineffective or underperforming staff members to improve the functionality of the school and overall student achievement. Survey respondents also reported that the school had experienced a high staff turnover. She stated that there was a need to get the

right people on board the bus referring to the Collins's (2001) book, *Good to Great*, she continued by stating,

> I want to move One-to-One, which means that every kid in this school would have their own computing device. I have resisters [*sic*] on campus. I know I have resisters [*sic*] on campus . . . they have got to come on board eventually. . . . We'll give them time and space, but there comes a time that you either have to be on board or you get off the bus, as Collins would talk about it in *Good to Great.* You know; if you're not on the bus; you have to get off. Now I'm going to help you but I'm also going to help you get off the bus if you don't need to be here. Alright, so I had to replace 15 people last semester, over the summer. Fifteen people quit. . . . I got about 50 on campus. Fourteen of them either needed to go or . . . well they all needed to go. If you don't want to be here, you need to go.

Individual survey respondents commented on the changes at the school, noting how quickly the changes were being implemented, "The principal is trying very hard to improve Atlas H.S. But sometimes it is too much too fast."

School culture and climate. Susan discussed how school culture and climate involve how a school feels, looks, and operates. Survey respondents reported different perceptions about the climate of AHS. To Item 24, there is a positive school climate; respondents in the T group reported agreement (f_T = 23, 62%); neutral (f_T = 7, 19%); and disagreement (f_T = 7, 19%). Also the P group reported agreement (f_P = 24, 83%); neutral (f_P = 4, 10%); and disagreement (f_P = 2, 7%). To Item 14, the majority of respondents in the T group reported that it was Susan's responsibility to create a positive school climate (f_T = 31, 85%) agreement and (f_T = 4, 10%) disagreement. Members of the P group responded that there is a positive school climate (f_P = 26, 91%) and that the principal is responsible to create a positive climate (f_P = 24, 83%).

I observed and experienced the culture of AHS. I sensed a family-like atmosphere and a welcoming environment. I felt comfortable in the school. In an observation, I noted how cordially I was greeted by faculty and staff, particularly the office staff and how well

I was greeted and treated respectfully by students. I collected and catalogued multiple school newsletter documents (B; F; G; and I, Appendix J) regarding Susan's effort to establish a family-like atmosphere at AHS. The documents concerned faculty prayer gatherings, birthday celebrations, and fundraising for needy faculty.

Feel. Susan discussed how a healthy organization should feel, stating,

> It should be welcoming . . . the hardest thing to describe is the culture of your school because you have to feel it. You have to . . . experience it. We're not where I want us to be yet . . . to me there's got to be a big sense of family. And we're building that, but we're not there yet, and sometimes it truly does take 2 to 5 years to get that going.

Look. Susan, new to an underperforming school, initiated structural interventions, which included changes to the physical structure of the school to improve its functionality and appearance. I observed that the school facility was aesthetically pleasing historical building. The facility appeared preserved, especially in the renovated sections of the school. Susan published her renovation initiative and plans in her School Improvement Plan document (School Improvement Plan, Documents Q & R, Appendix J). Susan described her efforts to improve the appearance of the school, stating,

> How it should look. . . . I'll do the physical plant first and that is that it should be well cared for, it should be pleasing to the eye. We're in a 1950s building but that doesn't mean that it has to be dilapidated and so the big part of my first semester here was helping folks understand that, yes, it's an old building but now we're at the point it's a historic building, so, you know, let's do something about it to preserve it and make it look the best that it can.

Susan was observed engaging in daily activities. She rarely stopped to sit, and rarely sat in her office. She ate lunch while moving through the school environment. The classrooms I observed reflected teachers that were engaged in instruction and students appeared to be engaged in learning. Susan published multiple documents setting the expectations for teaching and student engagement (School Improvement Plan,

Documents N & P, Appendix J). As part of the school culture, Susan commented on modeling the behavior she expected from her teachers and students, saying,

> The other piece of how it should look is, when you go in these classrooms, you should see teachers as facilitators, kids who are truly engaged in their learning, that learning should be meaningful for now and also in the future . . . everybody should be busy, you know. It's not time to sit behind the desk, or a custodian sitting in a closet, or cafeteria worker sitting at the table the whole time . . . you should be up working and I model that.

I observed teachers engaged in direct instruction; however I was unable to identify if teachers were functioning as facilitators. With the exception of a few students, I observed students engaged in instruction in that they were completing assignments and attentively participating in discussions. I did not observe any faculty and staff sitting idle.

Operate. Susan's professional portfolio and school improvement plan revealed procedures and processes that indicated the importance of instruction and the establishment and enforcement of protocols. Regarding the school's culture and climate, Susan commented on how a school should operate, and stated,

> Operate . . . systems and procedures should be in place, I mean, everything has to have a protocol and you know that that's a daily chore, right now, to put those things in place. In the operation of the school, there has to be a sense that instruction is the most important thing. That learning is happening . . . you just have to be determined to protect that instructional time.

Susan's professional documents corroborated her statements (School Improvement Plan, Documents A, G, U; Professional Portfolio, Documents P, W, Y, Z, Appendix J)

Five core propositions building. Susan indicated that the five core propositions of the NBPTS played a role in her vision and mission, particularly in the operation of schools she leads. Codified as what teachers should know and be able to do, Susan presented the five core propositions as part of her new teacher orientation activities in August 2012. A collection of multiple documents corroborated her goal to develop a

"five core prop" building (Section NBPTS, Documents A, B, C; Professional Portfolio, Documents N, O, P, Q, R, Appendix J). In those documents, Susan articulated that teachers should be committed to students and their learning, know the subjects they teach and how to teach them, manage and monitor student learning, reflect on their practice and learn from their experiences, and be a member of a professional learning community (PLC). Susan envisioned that the school would mirror the five core propositions of the NBPTS and discussed how this vision was introduced to the faculty and staff. She stated,

> In my opening meeting with them [faculty and staff] last January, we talked about the [5] core props. We're embracing . . . being a member of your learning community. I'm gradually helping them reshape what there're doing in department meetings from a business meeting to a curriculum instruction meeting. I kind of wanted that to move faster, because I was so used to it happening at my other school that I had to put my own brakes on to realize that what we did in nine years can't happen in one year, and one semester . . . so I had to slow down.

One survey respondent in the school teacher group corroborated Susan's comments regarding slowing down and wrote that the changes were, "too much too fast." To Item 8 regarding teachers collaborating with each other, T group respondents reported agreement with the statement (f_T = 35, 95%). To Item 10, regarding the principal providing instructional development for teachers, the T group responded agreement with the statement (f_T = 37, 100%).

Reflection exercises. Consistent with core proposition number four, Susan reported that reflection exercises were a methodology used by the NBPTS to improve a candidate's instructional leadership, instructional content knowledge, and content delivery. I observed Susan using NBPTS inspired reflection exercises during a post-conference with one of her new teachers. Regarding the influence of the NBPTS process, Susan stated, "I'm trying to think what else we've done with [5] core props. So of course

there is a reflection piece, the formal reflection piece. . . . . The instructional practices, all of that piece . . . with pedagogy . . . we're working on it."

Equity issues. Susan discussed her vision for meeting the academic needs of the subgroups at the school including: gender, race, academic ability, and SES. By improving the number of minorities participating in honors and advanced placement (AP) courses, Susan would provide equitable academic opportunities, stating,

> Well, certainly teaching and learning is what we are all about and that focus needs to be on achievement, no matter what their background is, what their race is, what the religion is, any of that . . . we need to give everybody a fair shake. . . . In a high school, you are tracked a bit because of your honors and AP courses. I have taken a look at, like, my African American [*sic*] population in my AP classes. I can tell you right now, I have two African American males [*sic*] in my AP calculus class. Well, that's not good enough for me when I've got 20 kids sitting in there . . . working with my staff to try to help these kids see that they can actually succeed in these classes. I want them to see themselves there because if they can see themselves there, they can see themselves going to college.

Susan talked about how she challenged her honors English teacher to change the organizational process to include a greater number of minorities in her classes. Susan's student learning goals were corroborated by (Professional Portfolio, Document S) regarding how to increase SAT, ACT, End of Course (EOC) scores, improve 9th grade performance and reduce dropouts. To achieve her vision and mission, Susan stated,

> I am working with my English teacher for next semester. She has already looked at her class list and she's got some kids in regular class that she wants to move to the honors level. And this is what she's said to me . . . "I know they will struggle. . . . I'll differentiate the work. I want them to see good role models in the honors class because I believe that can turn them around." Now that's what I want to hear, that's about heart more than . . . what she knows. She knows they're going to struggle, but she will put that aside and help them to let them see what studious kids look like.

Susan discussed her vision and personal mission to change the research regarding the disproportionate failure of minority students, particularly African American male

students. Susan discussed the academic achievement gap of African American male students, she stated,

> . . . [By increasing SAT, ACT, EOC scores, improving 9th grade performance, and reducing dropouts at AHS] . . . that's going to take care of the whole realm—in this case, the Black male [*sic*], so you know that will take care of research. It will turn around. I want to make sure that everybody has access [to higher level classes]. So that will be a big piece [of Susan's vision]. Helping them believe in themselves, my counselors believe in them, and the teachers believe in them, that they actually can be successful. . . . So I want to make this a place where kids want to be. All of them . . . I want everybody to find their [*sic*] niche at Atlas High School. Find out where they fit and we make sure that they have a spot that they fit, so they want to come here. . . . They shouldn't not want to come.

Susan set the vision and mission of a school through the interaction with or manipulation of organizational-level variables. Susan accepted much of the responsibility to bring about the necessary changes to improve the school. Regarding who was responsible to make changes in the systems, processes, and practices to meet the needs of AHS subgroups, Susan stated,

> Yeah, well ultimately, it's on my shoulders, but I like to spread the wealth, everybody has to get involved . . . for those who have that mindset, you capitalize on it, and for those who don't, you help change it, but ultimately, it's on my shoulders.

Transforming AHS. I asked Susan, "If you could develop or transform your school in any way you wished, what three things would you do to heighten its effectiveness and overall student achievement?" Susan stated,

> For kids, I would put that computer in their hands and give them equal access. For staff, I would make sure that their heart is in the right spot that they are truly here for the kids that they want to be all they can be so that kids can be successful. And my third thing . . . . that I'm probably focusing in on . . . . things I am really doing, not just lofty things, would have to be facility. . . We are in a 1950s building with a lot of additions . . . . making sure that . . . we present ourselves well, even though this is a historic building. So it's clean, it's painted . . . . trash is picked up, it's taken care of—all those kinds of things.

Based on the multiple observations, Susan's espoused vision was consistent with her efforts; there was evidence that an attempt was made to accomplish the stated vision and mission (Professional portfolio, document M; school newsletter, documents E, F, G, H, J; letters of memorandum, documents L, M, N; School Improvement Plan, document K, Appendix J). The next section highlights Susan's philosophy and practices of developing school and community relationships (e.g., relating to her students, staff members, parents, and community stakeholders). I will present evidence of Susan's efforts to interact with the cultural, climate, contextual, and systemic variables of AHS.

School and community relationships. The SCR also answered Research Question 1: How did an NBCT demonstrate leadership behaviors in the principalship? Susan demonstrated leadership in the principalship by initiating and cultivating school and community relationships. In my second analysis, words and phrases were encoded and categorized in blue highlight to identify the SCR theme emerged. I found evidence of Susan's efforts to (a) improve the relationships among teachers, parents, and students; (b) improve communication to manage conflicts; (c) schedule opportunities for teachers to increase conferencing with students and their parents; (d) engage community stakeholders in providing donations and community service at AHS; and (e) ease some of the effects of the powerful antecedent variables of SES. Susan revealed values and beliefs with regard to a relationships focus.

Relating to students. Susan shared efforts to personally connect with African American male students to somehow prevent them from falling through the cracks in the system and stated,

> You probably won't believe the group that I will tell you that I connect with the most . . . it's African American males [*sic*] and I am a Caucasian female [sic] . . . . I have a passion—I was sitting there processing . . . this morning and reflecting on that and I told her [a teacher], I said I think my passion comes from the fact that research tells us that those kids are going to fall through the cracks, they're gonna not be successful, they are gonna end up in jail. . . . Well, I want my kids to be on the other side of that, I want them to be the folks that folks write about and say, "But look right here—here is somebody who is successful."

To potentially illustrate Susan's efforts with African American male students, I observed an incident of her walking up to a large African American male student wearing beads, ear buds, and listening to music on an iPod. The student was instructed to report to the main office and sit down, but instead walked around the office and walked in and out of the office door. He refused to sit down despite the office manager's multiple requests. Susan was called to the main office to intervene. She approached the student and blocked the doorway and stopped him from leaving the office. She showed no fear. She talked with him calmly and firmly, and redirected the student to a safe area in keeping with his behavior management plan. Susan discussed her methods of connecting with African American male students and her ability to successfully work with them, and discussed a desire to get faculty on board. She stated,

> You gotta know who to connect with—you gotta be able to read their body language, facial expressions—and not back them [African American male students] [*sic*] into a corner. See, that's what I feel like some of my teachers do. If they back them into a corner, well, a kid is gonna come out fighting. Because when their parents back them into a corner, they come out fighting. I asked that kid, "What do you need?" When you look at this situation—I mean, here I am, this little tiny Caucasian woman [sic] that they're, like, thinking that I am crazy anyway—and who am I to ask a 15-year-old African American male [*sic*], or tell a 15-year-old African American male [*sic*] what you're supposed to do . . . . So, that's the group [African American male students] I probably connect the most with. Getting my faculty on board has been a bit problematic here . . . each teacher, each person—I just have to keep working with them.

Survey Items 5 and 6 address perceptions of Susan enforcing student discipline and safety procedures. Respondents in the T group reported agreement for student discipline (f_T = 32, 87%) and reported (f_T = 34, 92%) agreement for safety. To Item 5, members in the P group reported (f_P = 29, 100%) agreement for discipline and (f_P = 25, 86%) agreement for safety procedures (Item 6). During an observation of the Navy Junior Reserve Officers' Training Corps, Susan was summoned to the alternative school at the Armory. I observed Susan intervening with an angry African American female student who became disruptive and disrespectful toward the classroom teacher. When Susan attempted to intervene, the student began to curse and yell at her. Calmly and firmly, Susan spoke with the student and managed the situation by setting clear limitations and providing specific directions. Susan asked the student to discontinue cursing, return to class, and complete assignments. During an observation, Susan mentioned that she would not be able to successfully reach the hearts of every student she encountered; unfortunately this was one of those instances.

Making connections. Susan discussed her desire to help teachers develop relationships. She also discussed how connecting to differing racial groups and recognizing diversity through modeling were important. Susan commented that it was important for individuals to understand each other and show acceptance despite differences. She stated,

> It's just each one—you gotta work with each one. And it's the flip side, you know, some of my minority teachers need to be more accepting of my [*sic*] Caucasian population, you know. It's understanding each other, and learning each other in spite of color, sex, religion, whatever. . . . I Model, model, model . . . . and I might have shared this with you before . . . . helping people understand people who are not like them, you know, that's the key. . . .

To Item 16 of the survey, members of the T group agreed that Susan ensured that the school recognized the importance of diversity (f_T = 33, 89%). The P group reported (f_P = 22, 76%) agreement and (f_P = 6, 21%) neutral and I don't know. However, survey respondents reported less agreement (Item 25) that Susan provided opportunities to recognize ethnic diversity (f_T = 26, 70%) and (f_P = 19, 66%). I noted that the several members of the T group reported neutral and I don't know (f_T = 10, 27%); the P group reported neutral and I don't know (f_P = 9, 31%).

Susan talked about her initiatives, programs, and processes designed to help teachers build relationships through connecting with them so that students could be successful at AHS (School Improvement Plan, Documents A, D, F, L, N, P; School Website, Document B, Appendix J). Susan's primary initiative for cultivating positive teacher and student relationships was her Ace Time initiative (Document L, Appendix J) and her Homeroom initiative (Document P, Appendix J). Those initiatives were designed to manipulate teacher-student pairings to reduce homeroom sizes to permit teachers more opportunities to develop positive relationships with students. To Question 19, "The principal pairs the best teachers with low performing students;" survey respondents seemed unaware of Susan's efforts to manipulate teacher student pairings through the Ace Time and Homeroom initiatives. The T group reported (f_T = 16, 43%) agreement and neutral or I don't know (f_T = 17, 46%). Members of the P group reported (f_P = 12, 41%) agreement, and neutral and I don't know (f_P = 15, 52%). However, Ace Time is an initiative scheduled at fifth bell (84 minutes) and designed to improve student academic achievement and relationships between teachers and students.

Survey Item 17 addressed perceptions of the principal effectively utilizing such programs for low performing students. Survey respondents in the T group reported (f_T = 30, 81%) agreement and (f_T = 5, 14%) neutral or I don't know, and disagreement (f_T = 2, 5%). Respondents in the P group reported (f_P = 21, 72%) agreement, (f_P = 6, 21%) neutral or I don't know, and (f_P = 2, 7%) disagreement. By design, the Ace Time initiative provided students an opportunity to meet with teachers, attend tutoring, complete missed assignments, engage in remediation sessions for low performing students, work on research projects, and meet with school counselors. Susan explained,

> What I want to do is . . . help my teachers build relationships with kids across the board. Some are really going with it and some aren't; so we have decreased homeroom size and they'll follow those kids through all four years that they're here; so hopefully they'll build relationships that way. Ace Time is certainly going to help with building relationships because you have small groups of kids in your room when you are tutoring . . . it boils down to building relationships. They've got to know you care before they go and learn from you. It's bottom line . . . I know it's a local cliché thing, but it is so true and I need all my teachers to get that.

Consistent with beliefs about building relationships and reaching hearts, Susan described how relationship building could also influence the dropout rate and stated,

> You know, the dropout rate is too high in this county . . . if one kid drops out, it's too high. That's how I look at it. But . . . somebody asked me, "Why is the dropout rate high?" . . . . We're at about 18% . . . and this is how I described it, and it's a sad way to describe it, but this is how I describe it. Kids don't want to be here. So . . . why come? And if I don't have a parent that's encouraging me to come, or I don't have the desire to go to college, and I don't want to get a job. . . . Why come?

Regarding her outcome goals resulting from the relationships she and teachers developed with students, Susan stated,

> To make sure that they're college- and career-ready . . . our guidance counselors are diligently working with every single kid on an individual basis to make sure that they get the right courses in place on their transcript to do whatever it is they want to do. So we start talking to them . . . particularly in eighth grade. "What do

> you think you wanna do? What college do you wanna go to?" Not, "Are you going," "Do you think you might," but "What college are you going to?" So we set that in their minds that we expect you to go to college. Not everyone will, not everybody needs to, but we want that to be available to them in the end.

I observed Susan using community relationships to engage in multiple fundraising activities for a staff member, a member of her church, and students. Susan reiterated her methods of connecting students who subsisted in poverty to school-based and community-based financial resources to ensure that everyone had equal access to extracurricular activities, and stated,

> My cheerleaders . . . have to pay for their warm-up suit . . . so I prepared my coaching staff for next year to say, "We're going to make sure that everybody has access because right now I don't see everybody having access to that." The kids know it's gonna cost about $400 to be a cheerleader [and many] families can't afford it, and that's not right. . . . I've told my cheerleading coaches, this will change. I will do whatever I have to do to make sure that they can [cheer] . . . whether it's athletic budget, school budget, people donating from their personal budgets, or I will just find somebody to sponsor that person. You just gotta find the right people, whether it's sponsored, somebody in the school or outside of the school will sponsor that person or that situation. You know, it's just making those connections with who has the money and who doesn't . . . it takes money to live.

Survey Item 18 addressed the perceptions of Susan effectively using programs for poor or disadvantaged students. Respondents in the T group reported (f_T = 25, 68%) agreement and (f_T = 10, 27%) neutral or I don't know. Members of the P group reported (f_P = 19, 66%) agreement and neutral and I don't know (f_P = 9, 31%). In this section, data are presented regarding Susan's philosophy and practices when relating with stakeholders like her teachers, community members, and especially parents.

Relating to parents. Susan reported, "There are some parents who are not happy with me" I was approached by four African American female parents during the launch of the survey at the AHS open house and parent teacher conference. They corroborated Susan's statement indicating they were, "not happy with the new principal." This

information was unsolicited. They informed me that Susan replaced an African American male principal, a person they liked and enjoyed working with. They stated that he was abruptly and unfairly removed. The parents also reported that Susan replaced several teachers and staff members they liked. One of those parents stated that Susan was not a "people person. I found no evidence corroborating their statements. Susan indicated that the former principal was retired and was serving in an acting role until a suitable replacement could be found. To Question 13, regarding the principal quickly responding to questions from parents, survey respondents in the T group strongly agreed (f_T = 32, 87%) and members of the P group agreed (f_P = 24, 83%); disagreed and strongly disagreed (f_P = 4, 14%).

Enrollment meeting. I observed Susan act as chair of an Individualized Education Plan (IEP) transfer and placement meeting and covered the agenda efficiently. Two students arrived without an IEP change of placement, they lived out of district, and they would have to be transported several miles to school each day. This would be difficult for the students because of their disability and the associated behaviors. The parents stated that she and the boys were not happy at the other school and they wanted them to return them to AHS to work with Susan and their former teachers.

Susan directed the guidance counselor to get a schedule completed immediately and arrange for transportation by the end of the day. Susan directed the social worker to get the file from the other school immediately and make sure the IEP had the appropriate change of placement. Susan directed the nurse to get the medical releases signed by the parent and get the prescriptions for the medications to be taken at school. Susan directed

the special education teacher to begin reviewing the IEP and prepare lessons for the boys when they arrive at school the following day.

In the spirit of treating everyone the same, Susan then gave directives to the parents, "I expect your sons to follow the school rules like any other student, and I expect them to come to school on time every day and complete all of their school work." After the observation, Susan indicated that she had a history of working with the family over several years and was quite familiar with the two brothers and their challenges. She explained that the students had been enrolled at AHS until the family moved into another school district across the county.

To communicate with parents, Susan talked about how she used the All Call system to communicate with parents regarding cell phone usage while in school. Though Susan supported students' use of technology on school grounds, she described circumstances when it could create problems. For example, she said,

> I sent out an "All Call" to my kids and families last night that said we have had a number of incidences where kids are misusing their cell phones [technology], which includes parents calling and texting during the day. Please refrain from doing that and talk to your kids about it. So it's a combination of the ease of being able to contact your own kid but they can't be a class disruption. So you know we've had two kids get in trouble this week because they're on the phone with their mama and they say, "And the teacher said, 'Hang up your phone.'" [Implies student said] "But it's my mama, it's my mama." And so how do you fight that, you know, your mama versus your teacher, you know . . . so stop calling your kids during the school day!

The All Call communication device also contacted parents with daily attendance updates including when students were absent from a bell on their course schedule.

Relating to teachers. Throughout the interviews, Susan indicated a focus on curricula, assessment, instruction, and reflection, sharing her philosophy on how to help teachers improve their instruction (NBPTS, Document A; Professional Portfolio,

Document P, Appendix J). Consistent with the goals of the NBPTS, Susan engaged in relationships with faculty and staff members to improve pedagogy through connecting people in the PLC (Professional Portfolio, documents N, O, R, Appendix J). Susan's professional learning community and school improvement team met regularly to share expertise and worked collaboratively to improve teaching skills and the academic performance of students. Susan described a philosophy and approach to improve teaching and learning processes, relying upon relationships. She stated,

> My philosophy is everybody can get better at something. So . . . just about everybody gets a suggestion. Now I will tell you when I got here that was very hard for my veteran teachers, who were doing fine . . . they had not had a suggestion in 10 years, and it could even be small, and I mean it freaked them out. And I had to go back and stroke them and say, "You're fine, but I want you to be better."

Susan described her informal process of coaching and advising approach to cultivate and develop relationships with staff. Susan also stated how she used informal coaching to connect teachers within the PLC to help them improve pedagogy, she stated,

> Coaching, and I don't have all the answers but I can point them to the people who might, especially moving into this high school curriculum. . . . I don't make any claims whatsoever to know all the content. But I can tell on my campus who my gurus are and I can point them in that direction. And I certainly can help them with the pedagogy. Now, on a high school campus I can feel the push-back of folks, thinking that my pedagogy is too elementary . . . but see, what they don't understand is that best practices are best practices. And you adapt them and tweak them for that particular grade level. . . . So, yeah, it's a coaching piece. That's my approach.

Corroborated by my observations, to support school relationships, Susan indicated that she made herself available to faculty and staff to assist them with personal and instructional needs. She said,

> I have an open-door policy and I think you have seen that, just being here with me, you know, if people can stop by and talk to me, if they can find me in my office. They stop you and share, and I . . . try to be accessible to them and make

> sure they have what they need. You know, let me know what's going on in their classrooms and with kids and that kind of thing. . . . Certainly, any kind of curricular or instructional issues or questions they might have, anything I can do there to help them. Many times, it's someone needing help with a student or a family.

To develop relationships with staff members, Susan shared methods of supporting and assisting staff with personal and professional needs by stating,

> Certainly trying to take care of the personal needs teachers have. Just in the last 24 to 48 hours, I've got one teacher expecting twins and now has to go to the doctor twice a week, so we have been e-mailing back and forth how to handle that. I had one that had a house fire, so we have been dealing with that. We have the car accident, and so we have been dealing with that. Any number of things, be they trauma or situations in somebody's life or a celebration.

I observed such a celebration during a faculty and staff meeting. Susan provided food and gifts to the staff member who had had a child and provided gifts to the assistant principal who lost her home to a fire. I also observed Susan coordinating multiple fundraisers. Susan shared a belief in the importance of taking care of people and making connections with staff (School Newsletter, Documents F, G, H, Appendix J). She said,

> Our assistant principal's house burned this fall and we have been doing fundraisers for her and she doesn't know it but we got a group planning to do a surprise shower for her. We're gonna shower her with household gifts, just as you would for a new bride. We hope to be able to pull that off before the holiday; just recognizing those kinds of things to take care of your people, so to speak.

I observed a meeting with the AHS leadership team wherein Susan led a planning session to raise funds to assist the principal. I noted that the meeting was formal, efficient, and task oriented. Susan wasted little time completing her agenda; however she carefully considered each question or comment raised by members of the leadership team. I also observed a faculty and staff meeting wherein Susan coordinated a shower and provided the gifts to the principal. I noted that meeting was festive and celebratory. Susan made her way around to each table to greet everyone in attendance.

Susan communicated the importance of initiating and cultivating relationships, but apparently not at the stake of an effective school. Susan provided close supervision using walk through visits, growth plans, and action plans. She shared the importance of getting the right people on the bus. Soon after she arrived at AHS, one-third of the staff members either resigned or transferred to another school. Susan discussed how to get the wrong people off the bus:

> If we're going to dismiss somebody, we would, by law we have to tell . . . them ahead of time so they can write a letter of resignation if they want to . . . some of those people . . . did choose to write a letter. I had some to outright quit . . . I had some go to another school system . . . if they're struggling, I'm going to do everything I can to help them. I'm going to be in there coaching. I'm going to provide a mentor person . . . if they don't have a mentor because they are a veteran, I will assign a buddy to them. We'll . . . get in there and do walk-through [visits] and try to provide them with feedback that will be helpful . . . I will put them on a monitored growth plan, a directive growth plan, and then the top one is an action plan. . . . It could be any of those three levels.

Survey respondents in the T group corroborated this statement (Item 4). They agreed that Susan closely supervises school employees ($f_T = 36$, 97%). They also agreed ($f_T = 36$, 97%) that Susan sets high expectations for teaching (Item 11).

Building trust through distributing leadership. Susan supported and developed teacher leadership by distributing leadership through the school improvement team (SIT). As many of the members of the SIT were department heads and instructional gurus, they were responsible for administering various instructional decisions such as the One-to-One pilot. The SIT was also responsible for various instructional budgetary decisions. Susan discussed how she built trust through distributing leadership to the SIT.

> I am currently dealing with a faculty who were not used to making decisions, and so they are still a little leery, they are still a little shaky as far as . . . is Susan really going to let me make this decision? . . . So, Monday at the school improvement team meeting I opened up the budget book and I went department by department of how much you have left . . . I said do not be afraid . . . you will

> still get an allocation next year and we will go through this same process. So, the whole level of trust right now is still out there, they're not quite sure. Really making those decisions about . . . in this case budget. . . . Why should I be the one making all the decisions from the office level? They know what they need.

Survey Item 21 regarded the principal spending money to improve student performance. Respondents in the T group agreed (f_T = 37, 100%). However, to Item 26 regarding the principal effectively utilizing school test scores in resource allocations; members of the T group agreed (f_T = 26, 70%) and neutral and I don't know (f_T = 11, 30%). Regarding Susan making test scores a priority for teachers, members of the T group agreed (f_T = 33, 89%) to Item 20.

Relating to the community. In this section, Susan's philosophy and practices of initiating and cultivating relationships with the community are presented. I observed Susan at a community engagement with the Lions Club, where she appeared to be quite adept at public relations. I asked Susan if the NBPTS process influenced her work with the community, she shared that the NBPTS process had a tremendous impact, stating, "Entry 6 was working with your community . . . the entries, as well as the standard, push you to do things . . . [the NBPTS process] did help with refining my practice."

She shared her initiatives and requested the support of the community to reach her goals. She said,

> Tonight, we're gonna share a few things with you that we are doing at AHS and maybe a few ways that you can see where you can plug in and help us as well . . . You helped us with some kids already who were having vision issues, and you've helped us with getting some glasses for some kids; and I certainly thank you for the scholarship that you provide each year as well.

Susan continued her presentation and shared her overarching goal at AHS and how the community could assist her. She said,

> At AHS, there are two basic things that we want to accomplish. We have goals under these goals. But the two things that when you look at everything we are doing is about making sure that every kid graduates and making sure that kids are college- and career-ready; so that no matter what they want to do in life, we have provided that basic foundation for them.

Susan indicated that visibility and accessibility were her primary methods of connecting with the community and developing relationships. She said,

> Visibility and accessibility, those are the two biggest. And I use that with my staff and the parents and all that kind of stuff, too, but those are definitely two key characteristics that I force—they come naturally to some extent but I have to consciously make a decision to do that as well . . . be available for that PR piece that we are doing, the political piece that you have to do in this job.

Regarding the multiple community engagements she attended and how she managed the public relations piece in her role as principal, she stated:

> I get invitations to go speak to the Rotary Club, the Kiwanis Club, the Ruritan Club, this club or that club, and I go and do that. I have a presentation I use; I do tweak it because as we are moving through this continuum of improving the school, things change and things are checked off, you know. And I always ask for their support . . . here's what you can do to help. . . . It is nothing for me to go to any event in this community right now and somebody walk up to me that's not even connected to the school . . . and thank me for coming to the [Atlas] school and making the changes we are making. So that warms my heart and kind of keeps me going. Because you don't get those "thank yous" too much and mostly what you get when somebody talks is, "Here's the problem, now go fix it."

Susan's teacher leaders presented various AHS programs and initiatives to the Lions Club members. Susan answered questions about the programs and invited them to participate in the Gear Up Federal Grant. The grant was designed to improve academic performance, assist first generation college students, engages community members in mentoring projects, assists students in completing financial aid forms and applying to colleges. Susan also presented the Graduation Project initiative designed to engage community representatives to serve as mentors and judges for senior projects. The initiative also

assisted seniors who were not college bound but prepared them for career readiness through local apprenticeships. Susan stated,

> We have several opportunities . . . The first opportunity is with the Gear-Up program that is just starting . . . to put a community member one-on-one with a student who particularly is a first generation college [student]. They would be the first person in their family to go to college. It doesn't have to be, but that is the person Gear-Up is targeting. Help that kid catch the vision to go to college . . . from filling out their financial aid forms with them to filling out their college application forms. That's one piece and that doesn't take a long time.

Susan continued by discussing her other initiatives:

> The other piece is with our senior projects. We are constantly in need of people who can work with our kids, especially our struggling kids. And they are the hardest to work with. I will tell you, a couple of the guys who came last year said, 'you know, I just can't get them over the hump, and I said, 'we have been trying to get them over the hump for twelve years.' . . . Taking an interest in them and holding their hand through their senior [graduation] project and serving on the judging panel, which I know some of you have done that over the years.

A Lions Club member asked Susan, "What is the graduation project?" Susan stated,

> The biggest thing that's happening this year is that [a student] who wants to be an emergency medical technician- paramedic type person is going to have the East Care helicopter land on our football field on November the fifth. . . . That's his project . . . having them come in and . . . listen to the paramedics talk about their career . . .

The championship game. I observed Susan navigating a potentially serious community relations problem regarding an important football game to be held at AHS. There was a significant rivalry between AHS and the opposing team. Both teams were undefeated and rated numbers one (rivals) and two (Atlas) in the state rankings. Atlas HS, rated number two, defeated the city rival on their home field by a field goal and angered many of their players, parents, community members, and coaches. The defeat prompted the field to be stormed and a mass brawl nearly ensued. Susan reported that she went out on the field to corral and protect her players and coaches. Susan clarified how she intended to prepare for the championship football game, she stated,

> You know, you just heard me talking to the principal at the other school getting ready for a football game tomorrow night that we might have 5 or 600 people come to our football game. This is second round of the playoffs and the other team is close. They are our rival and we are expecting between 2 and 3,000 people tomorrow night. So that's a huge job for us, so there's a lot of preplanning. You heard a lot of things that we have to do to make sure that we are ready.

Susan provided background information on the game and how she managed the conflict with the rival school principal. She explained,

> Not to mention, that the last game we won and it ended poorly because we ended up not shaking hands on the field, which is totally against my philosophy! . . . If you win, or lose, or whatever, you shake hands. But there was a lot of skirmishing going on out there. It was almost, you know, we didn't want it to fall into a fight, so both teams were pushed away from each other by coaches and law enforcement. . . . I've been working with my coaches and my team to make sure they're not using profanity, and I asked the other gentlemen last week, the other principal, and said, "I understand if there was some profanity," I said, "Did you hear any?" "Did your fans report any?" "You know anything?" And he said, "No." And I said, Well that's good, because we have been working on it." I said, "We know that there was some profanity on that field so, therefore, it was your team." Well, when I told him that on the phone, he refuted it again. So I will soften my letter before I send it to him, but I know there was profanity on that field and I know it came from their side. So he can write me a letter and say we were unsportsmanlike, but I am writing him one back that says he was unsportsmanlike.

I observed Susan successfully negotiate a mutual agreement with the principal of the rival school for the management of the championship game.

I deemed the negotiation as successful because they reached the following agreements: (a) Susan suggested that they both speak to their respective players, coaches, band members, and spectators to ensure that behavioral expectations were set and followed; (b) Susan recommended that they set the expectation that each player and coach refrain from profanity and taunts; (c) Susan suggested that both principals shake hands in the middle of the field to model expectations for their players; and (d) Susan also recommended that the players and coaches should be expected to shake hands in the

middle of the field before the game and after the game despite the outcome. The rival principal agreed to Susan's suggestions and recommendations.

To keep fans and bands separate, Susan arranged with the rival principal to have separate restroom portables, separate entrances to the stadium, a separate concession stand for the opponent, delegated officials for both teams, and separate radio station space in the press box for the opposing team's announcers. Susan also asked if the rival principal could assist with providing law enforcement officers. Susan asked the rival principal to encourage his band members to participate in a 50-50 raffle to support her assistant principal who lost her home in a house fire. The rival principal agreed. Susan then asked the rival principal for any suggestions and ideas to help stop students from loitering around the concession stand and restrooms.

Both agreed to post law enforcement at each concession stand, portables, and restrooms, and required students to return to the stadium when not utilizing facilities. Although AHS lost the championship game, it concluded without any unsportsmanlike behavior.

Religion, spiritual, and faith approach. In this section, I will present evidence of Susan's strategies, personal attitudes, and the role of her religion, spirituality, and faith in her school leadership acts. There were no survey data to corroborate this theme. However, the RSF theme answered RQ 1: How did an NBCT demonstrate leadership behaviors in the principalship? These quoted encoded words and phrases were categorized in purple highlight and led to the emergence of the RSF theme: (a) Get to the hearts before you get the mind; (b) Do unto others as you would have them do unto you; (c) Level the playing field and treat everyone the same; (d) prayer; (e) Holy Spirit; (f)

Believers; (g) they have to know you care before they can learn from you; (h) this is my mission field; (i) I felt The Lord speaking to me, a tug in my heart. Susan's religion, spirituality, and faith approach may be organized under the tenants of the golden rule, She quoted, "Do unto others as you would have the do unto you" **(**Luke 6:31; KJV). Therefore, Susan's demonstrations of leadership behaviors were influenced by her faith.

Spirituality. Susan spoke at a community engagement with the Lions Club. Members opened their ceremony with responsive reading activities, their mantra spoken in unison, songs, and a prayer. After her introduction, Susan began her comments by stating,

> Thank you, gentlemen, for the opportunity to come and share with you tonight a bit about AHS . . . thank you so much for praying for our school and for me. And I just ask you that every time you ride by AHS, that you'd say a prayer for us. The main prayer I ask that you, that you ask the Holy Spirit would just hover over our school . . . so I ask that you use the building itself as your key to remember that if you're running by, or riding by, or walking by, that you lift us up in prayer.

Religion. At that meeting, Susan revealed the role of her religion and faith in her vision and mission at AHS. Susan further indicated that she used character education at AHS to share her religious values and faith:

> Those of us who are Believers have the opportunity to share with our kids, and we do that a lot through character education, but that we would be able to minister to them to help them understand what good morals are, and how to act decently to one another and that kind of thing . . . and we do that a lot through character education. . . . While you have the whole separation of church and state, I teach, at least through character education, the whole 'Do unto others as you would have the do unto you.' We just say treat others as you would have them treat you . . . And really, when you began to study religions, there're so many similarities in the morals of what those religions promote that you almost can't go wrong when you start teaching character education because it's going to be okay with almost everything.

Faith. Susan also shared the role of her faith in God; how her faith influenced her decision to pursue leadership and become a principal at the elementary school. In keeping with her personal mission to successfully revive schools she leads, Susan stated:

> . . . The sky was as blue as it could be. White billowing clouds, I mean it was just the perfect afternoon. I just felt, and I will tell you and I hope I don't offend you, I felt the Lord speaking to me. And it was so clear that, 'you need to come to this school and work here as the principal,' kind of thing. And I remember physically stepping back from the group. This school was the black sheep of the community. I mean nobody wanted to go to this school. It was a brand new facility but just the pits. It had the third lowest reading rates in the state for mastery and proficiency. Just not pleasant . . . and there was no opening. They had a principal. Couple of weeks later, the principal walks into the superintendent and says, 'We're moving home.' The next day I went into the superintendent and I said, 'I want to apply for that job.' And his response was "I expected you yesterday." That has been my mission field for nine years. I had done all I could do, and the tug actually had began two years before I came here that I should come to Atlas High School and get it straight. And again, there was no opening but things unfolded and here I am.

Regarding the role of her faith in her leadership and her comfort level commenting on the topic, Susan stated:

> I don't mind talking about it. One of my gifts is leadership . . . I mean I know that I can't sing, I can't dance, [laughing] I can give you a song and a dance sometimes; but that's not my talent. My talent, my gift is leadership. This is my mission field.

Charity. Charity is an important avenue in the expression of the Christian religion. Susan recounted a story of a member of her church who saved her coins in a jar for an entire year. The individual would give the money to Susan for a needy student or staff member during the holidays. Susan reported that she gave the money to a needy staff member because her students receive a tremendous amount of charity during the holiday season and because adults are often overlooked. Susan stated,

> Every year, I have a church member who puts change [coins] in a jar every day, every year, and then she turns that money in, she goes to the bank and gets however much it is in dollars or whatever and she generally hands that to me

> every year at Christmas. She says, "Go give that to somebody who needs it." And several years ago, I decided then I was going to watch for staff members to give it to instead of a kid. Our kids get a lot of stuff from the community. People are very giving during the Thanksgiving and Christmas holidays . . . sometimes grown folks . . . get overlooked. And so I kind of made it my own mission to honor that lady's desire to help somebody out and we usually give it to a staff member who is struggling financially.

Changing hearts. Based on a Christian concept of changing hearts and caring for individuals in need, Susan talked about her efforts to reach the hearts of students and believed everyone should be treated the same. She discussed her initiatives to level the playing field among differing SES groups. Susan's initiatives were about connecting with her students to reach their hearts. In the next few quotes, Susan shared how she went the extra mile for kids in poverty to create equal access:

> Number 1 is to recognize it. Number 2 is to create an atmosphere where they feel they are accepted no matter whether you are high, middle, or kids living in poverty. As a leader, you've got to realize that you have different SES groups in your building. And in saying that, it's not just the students, that's also the staff . . . you gotta recognize it about your staff. My kids in poverty, it's very different for them.

She continued,

> When you're talking about SES, treating everybody the same and putting processes in place that everybody is treated the same . . . and then, to me, I've got to go the extra mile for my kids in poverty because I've got to make sure that they have access to resources that everybody else has. Like, we've got the Mistletoe Ball tomorrow night. It costs $5.00 to come. I wouldn't want a kid not to come because he [sic] couldn't afford the $5.00.

She continued by discussing how her One-to-One initiative fits into going the extra mile for students in poverty at AHS and stated,

> This whole focus . . . to move One-to-One with computers . . . It's certainly an invaluable instructional tool in the classroom, but it also gets everybody on the same playing field. You know, everybody will have a laptop, not just the kids whose family can afford to send one . . . so everybody will have access.

Susan articulated her personal philosophy on how to educate children, particularly those with behavior problems, bad attitudes, or discipline problems. Regarding breaking through to students with hardened hearts, Susan stated,

> We are not doing everything we can yet, and I will tell you, this is what I see at AHS . . . it has not been a pleasant place for everybody . . . we got to make it a pleasant place . . . which we are working on. We've got to show them that we care and that we want them there. The hard part about it is, like the seniors and a couple of kids I have in the alternative center that I can't get to their heart. It has gotten so hard that we can't break through. So I know we are not going to be successful . . . I can tell you right now, I am not going to be successful with every one of those kids—but we are going to try.

Susan continued,

> You can get to the intellect but you can't get to the heart necessarily. . . . But, it's the heart, it's not the mind. You know I could stand up and say it all day long, but until they [staff] embrace it [it will not work].

Susan indicated her personal vision, mission, and methods to break through with her students through making connections and reaching the heart and stated,

> Go to the heart, okay . . . and we will go back to homeroom throughout the second nine weeks and into the second semester to help them connect with a person on campus. . . . The main thing is connect, connect, and connect with these kids. You have got to hit the heart before you can hit the mind.

Susan summarized her motivation and personal philosophy in reflection of her faith:

> So, why do I do what I do? . . . I think what I end with is. . . Everybody has worth and kids need to believe in themselves so they can be successful. For some of our kids we have to instill that belief in them because they don't come to us with it. I want our decisions to be based on what is best for kids, and if we can do that, then they're going to go out of here ready for their next step . . . And that step has gotta be a positive step . . . And again, I've alluded to it a couple times in this interview but it is about the heart, it's about passion; it's about wanting to come to work every day because you want to make a difference in their lives and you do it kid by kid . . . and staff by staff.

In the next section, I will present data regarding the role of the NBPTS process in the development and demonstration of Susan's leadership behaviors in her role as principal of AHS. The data presented in this section answers the research questions of the study.

Five core propositions approach of the NBPTS. In 1989, the NBPTS published a document called, *What Teachers Should Know and Be Able to Do* (NBPTS, 2002). It articulated the five core propositions of the NBPTS and codified its vision for accomplished teaching and its commitment to student achievement. Survey data corroborated this theme (Items 4, 7, 9, 10, 20, & 21). The theme: Five core propositions approach answered primarily RQ 2: What perceived role (if any) did the NBPTS process play in developing those leadership behaviors in the principalship?

The following quoted encoded words and phrases led to the emergence and identification of the theme: (a) "In 1998, I pursued my National Boards;" (b) "My passion is leadership . . . to walk in the steps of my teachers, I needed to complete the process;" (c) "The whole process is just so powerful and it's just been an asset to me throughout my career;" (d) "That's the best staff development I have ever been through by far;" (e) "It pushes you to reflect and be the best you can be and, and you assess yourself against a set of standards [five core propositions];" (e) "This [NBPTS process] . . . shaped my career;" (f) "A take away from the process was the importance of teacher leadership;" (g) "So that's a . . . take-away from the process that I use . . . certainly important for me as a leader is the assessment piece. I always think of . . . curriculum, instruction, and assessment;" (h) "It is who I am . . . you embrace those standards; you understand them . . . it's just immersed in who I am . . . I don't know how to separate it;" and (i) [the five] core props are so ingrained in what I do that I don't even think about it

anymore and it's just the way I do business and the way I want my school to do business." These blue highlighted encoded categories allowed the theme to emerge and become identified.

Data reflected Susan's desire to develop what she called a "five core prop building" as part of her NBPTS approach to school leadership. She explained,

> It was very much the five core props . . . very much the way we do business and will be here . . . in my opening meeting with them last January, we talked about the core props . . . we're embracing . . . like being a member of your learning community. . . . So of course there is a reflection piece, the formal reflection piece. The instructional practices . . . with pedagogy, that's what we're working on. Giving them the One-to-One tool would be a biggie to help change that.

Susan expressed early apprehension about pursuing NBC. When asked about the initial impressions of the NBPTS process to become a NBCT, she stated,

> I said, "I'm not going to do that!" . . . I was at Year 10 when I finally decided. I was like . . . that takes too much time. . . . Just like teachers do with me now, when I start planting that seed . . . and then a couple of ladies in our district went through the process and I went to an information meeting one day. And they said, "You know this is what it's about, this is what we did, and you ought to think about it." And so, in 1998, I pursued my National Boards.

Susan supported the assertion that completion of the NBPTS process identified master, exemplary teachers who may continue as classroom teachers or take on leadership roles within a school. Drawing on her instructional expertise, Susan achieved vertical career movement and eventually became a school principal. Susan decided not stay in the classroom. She said,

> It ended up being the last year I was in the classroom . . . during this same time, I was taking classes. I already had my master's before I ever started teaching, but I was adding on administration and supervision certificates. So I knew that I didn't want to stay in the classroom-that I would not stay in the classroom. . . . My passion is leadership and . . . I knew that that's where the Lord was sending me. I mean, I just knew, I also knew that if I really wanted to walk in the steps of my teachers, I needed to complete the [NBPTS] process.

Susan commented that the value of the NBPTS process was not about the financial incentives. She described how the process has been an asset to her career, stating,

> So in (Redacted) you get the 12% raise; well you also don't get that raise if you go out of the classroom. And so I never got that raise. So I can truly say it's not about the money because I never got the money. . . . But it's not all about the money. I mean . . . the whole process is just so powerful and it's just been an asset to me throughout my career . . . I do not regret not getting the 12% raise, by no means.

Susan expressed how the completion of the NBPTS process contributed to the development of behaviors crucial to her school leadership. She expanded her comments about the five core propositions and what made the process so powerful, indicating that the process had shaped her career. She said,

> That's the best staff development I have ever been through by far. Reason being, it pushes you to reflect and be the best you can be and, you push yourself against a set of standards [five core propositions]. Instead of just sitting back in a workshop listening to somebody tell you what they've done and you pick up a few things and get a little better, and try a few things and get a little better, this [process] . . . shaped my career.

Susan also shared how the process shaped her leadership. When asked what came first, her heart for leadership or the NBPTS process, she said,

> Combination, I think . . . what I took away from the process was the importance of teacher leadership; and so I know that a lot of what I do as a leader is promoting teacher leadership. It came because I understand it having gone through National Boards. So . . . my talent and gift is there, but definitely shaped . . . by the standards and the [NBPTS] process.

The five core propositions of the NBPTS process shaped Susan's leadership and her desire to support the creation and development of teacher leaders.

> For instance, when I came to this school there were teacher leaders here who . . . had been through four principals in seven years or there about . . . And teacher leadership is what kept this school going through every one of those changes . . . and even when I came, it helped keep it going; but it was the same teacher leaders

> that were leading this school for ten years. Well, part of what I put in place at my elementary school and I started it here . . . the school improvement team. Those people should change every year at the very least; so that you are constantly grooming new folks because those people who have been in leadership for ten and fifteen years, they are going to retire and they have not groomed anybody to take over for them . . . everybody doesn't need to change but we need to be looking at changing a third of that group every year.

I observed Susan's mentorship of three aspiring NBPTS candidates who were also pursuing the principalship. Susan collaborated with them to develop the presentation of AHS programs to the Lions Club. Susan spoke about leading by example and supporting the professional development of colleagues. She said,

> Part of leadership is leading by example and so again I went through the process knowing that sometime in the future that I would be leading teachers and I needed to "yay or nay" the process. And of course, I am a cheerleader for it . . . that developed because I went through it. I know I would not be as passionate of having my teachers go through National Board process if I had not done it myself.

Susan discussed how the NBPTS process encouraged her to become integrally involved in instructional leadership, thereby sharing in the analysis and selection of division-wide curricula, coordination of instruction, assessment, and reflection. Regarding the NBPTS process and the five core propositions, Susan reiterated the influence of the NBPTS process on her instructional leadership and her leadership practices in general. She said,

> I would say they did. I can tell you a take-away that might be the best example. When you're going through the National Board process, you are called to formally reflect on your practice. I had never been pushed to those limits before. I know I thought about my practice and I talked to people about my practice . . . but I've never been pushed to stop and write about it. And . . . so all of my teachers, after their formal observations, have to do a formal reflection and the questions come right from the National Board: What worked, what didn't, and what would you do differently if you taught this lesson again. And now, we talk about that during the post-conference; but then they have to write that up on a Word document and I actually . . . upload it to their evaluations as part of the artifacts.

I observed Susan conducting a post-conference with a teacher, demonstrating leadership behaviors that were consistent with a five core propositions approach to school leadership. Specifically, coaching, mentoring, encouraging, and modeling. Susan stated,

> Utilize a mnemonic device and fold in test taking tips. You folded in test taking in your lesson very naturally and your teaching is very good. Encourage students to come back to you for Ace Time for additional tutoring, remediation, and relationship building. Three things to work on before our next observation: (a) Hook; (b) Management; and (c) Monitoring. Some of your students stayed with you, some were lost, and some gave up. Hook: Hook them on why they need to know Algebra II content. Get with Shirley [guru] to get help. Go on the Internet to get ideas on how to get your students to care about Algebra. Monitoring: The only kids who were monitored were the kids in the first two rows on your left side and you did not monitor every student. (I observed Susan model) Get around to every student, walk around the room with purpose to get and keep them on task. Get to every desk and tell them 'I expect you to do this- take notes!' . . . You have to have them get their notebooks out and engage them to love math; you have to get them to engage.

Susan provided her with a list of people to collaborate with for professional development. Susan continued,

> Management: Every student must be held to the same standard of behavior . . . When to get up out of your seat, when to put up the calculators, and when to dismiss from class. Separate today, the two students seated in the rear of the class [carried on conversations during the entire lesson-not engaged]. Change the seating arrangements and place desks between each student today. Spread them out. You have the largest classroom in the school. Behavior strategies: Require students to raise their hands to speak. Say 'hands' to cut out talking out behaviors. When requiring general answers say, 'Class' for choral answers say 'hands.' Develop a procedure for putting up calculators requiring students to go one at a time. Do it row by row or section by section. This will bring management to the classroom and will clarify mixed messages. Say, 'This is what I mean and this is what you are going to do.'

Susan credited the NBPTS process and how it influenced her expectations of teachers and how she developed teacher leadership concerning assessments, saying,

> So that's a . . . take-away from the [NBPTS] process that I use . . . certainly important for me as a leader is the assessment piece. I always think of that in this whole . . . curriculum, instruction, and assessment. That certainly has evolved over time. Just this morning in the pre-conference . . . a young teacher said let me show you my data notebook and she opened her laptop and has already started

analyzing by objective how her kids did on a midterm and has seen the need to re-teach and give a mini midterm or follow-up.

Fifth bell initiative. Susan's fifth bell initiative (Ace Time) was designed to accomplish multiple goals in pursuit of her vision, mission at AHS. One of the main goals of (Ace Time) was to protect instructional time. However, Susan's primary goals were to use the fifth bell for: (a) tutoring students to allow them to complete missing assignments and tests; (b) hold department meetings; (c) develop learning teams; (d) host professional development activities; and (e) engage in collaboration. Susan believed that Ace Time benefited teachers, students, and families because they did not have to stay after school; teachers could connect with students and develop relationships; get to their hearts and change them; focus work on incoming freshmen; provide positive role modeling for students; teach pro-social skills development through character education; and review the student code of conduct on a regular basis. Susan stated:

> In the operation of the school, there has to be a sense that instruction is the most important thing. That learning is happening . . . For instance, they are used to having everything that we do at two thirty . . . Well, that's fourth period. So fourth period gets cut into . . . that's the middle part of the day . . . I told you about Ace Time, that fifth period. I am constantly moving things to that. So the ring guy calls my secretary a week or so ago, wants to come at two thirty. I said, 'No.' she said, 'Well that's what time he says he can come.' I said, 'Well then, we will find another company.' She said, 'What time can he come?' I said, 'He can come at twelve fifteen . . . And so he's coming at twelve fifteen. . . . You just have to be determined to protect that instructional time.

Curricula, instruction, assessment, and reflection. Reflection involves sharing with others, evolves with experience, can be formal and informal, informs instruction or leadership, and is most effective when it takes place in a nurturing environment (Morgan, 2007). Evidence supported in Susan's case that one consequence of completing the NBPTS process was that she brought a heightened focus upon curricula, instruction,

assessments, and reflection to her role as principal of AHS. When asked to comment on how well AHS reflected the five core propositions of the NBPTS and if the school was shaped by the five core propositions, she stated:

> Do we mirror the standards? Not yet, not yet. In my other school, absolutely . . . it was very much the five core props.. . . are very much the way we do business and will be here . . . So will it mirror it? Yes, it will. How long will it take? Couple of years; I've got five until I retire, so I want to get it straight before I retire.

Regarding what role the NBPTS process and what influence the five core propositions played on her leadership behaviors, Susan stated,

> It is who I am . . . you embrace those standards [core propositions]; you understand them . . . it's just immersed in who I am . . . I don't know how to separate it . . . the process was about showing that you are an accomplished teacher. And so . . . I don't know what my leadership would be like if I hadn't gone through it.

Susan commented on how the five core propositions influenced how she demonstrated leadership behavior. She said,

> It is who I am; I mean, I think I might have told you that last time. The core props are so ingrained in what I do that I don't even think about it anymore to tell you the truth, and it's just the way I do business, and the way I want my school to do business.

Susan discussed how teachers were required to apply for the pilot of the One-to-One initiative and described how she referenced the National Board's submission activities. Susan provided the following example:

> [A teacher said] "I felt like I was writing for the National Board again," I said "Good. You are supposed to because they were very deep questions." It pushed them . . . and they had to submit artifacts, they had to submit lesson plans of how they would use these Chromebooks in their room. And that came out because of the NBPTS, those core standards are with you.

There was also evidence of how the NBPTS process helped Susan refine her practice for engaging the community stakeholders. Susan discussed her NBCT portfolio

entries regarding community engagements (entry 6) wherein she was required to demonstrate and document using multiple sources of evidence of her positive impact on student achievement, Susan stated,

> Entry 6 was working with your community and parents and all that kind of stuff to enhance . . . your classroom. So, the entries, as well as the standard, push you to do things that you might not have thought about before. . . . I'll tell you, I was doing a lot of things with the community in those first 11 years of teaching before I went through the process . . . but it did help with refining my practice. And it is certainly something that kinda stays with you.

Susan shared how she took very seriously her efforts to document her entries in her NBCT portfolio. She related how some individuals may approach the portfolio process as busy work. Susan discussed her approach stating:

> The [NBPTS portfolio] process was about showing that you are an accomplished teacher … therefore you're trying to be the best you can be and you're trying to show that. And it is not just for that one video that you have to do, or this one unit that you are going to work on for four or five weeks. Now I am sure that some people addressed the process that way- where, "I'm going to do this just so I can check it off!" But that's not how I addressed it.

Susan's detailed responses revealed many layers of experiences, beliefs, perceptions, and reflections about the value of the NBPTS process and its influence on her leadership.

Summary of Chapter 4

I observed, analyzed, and categorized Susan's leadership behavior in her role as principal of AHS. Data were collected through observations, interviews, a survey, and a collection of pertinent documents. Observations and interview narratives were transcribed and encoded. This process enabled data analysis, and categorization, leading to the emergence and identification of the four major themes of this single-case study. The identified themes included (a) setting the vision and mission, (b) school and community

relationships, (c) religion, spirituality, and faith, and (d) the five core propositions approach to school leadership.

The results provided evidence in support of the effects of the NBPTS process to develop leadership behaviors suitable for the principalship. The NBPTS process, codified by five core propositions as what teachers should know and be able to do. In Susan's case, (a) the NBPTS process developed knowledge relative to curriculum, instruction, assessment and reflection which was crucial to her school leadership; (b) the NBPTS process contributed to the development of Susan's leadership behaviors integral to her role as principal; (c) the NBPTS process contributed to Susan's preparation for setting the vision and mission of AHS; (d) the NBPTS process contributed to Susan's preparation for building school and community relationships; and (e) as one consequence of completing the NBPTS process, Susan demonstrated leadership behaviors consistent with its five core propositions. Reflection is (a) part of a continuous learning process, (b) a way to address change, (c) instrumental in problem solving, and (d) a way to self-monitor (Bunch 2012; Morgan, 2007). The analyses of data in Chapter 4 led to the interpretations, implications, and recommendations for further research presented in Chapter 5.

Chapter 5: Interpretations, Implications, and Recommendations

Opening: The Purpose of the Study

In 16 states, the ascension of NBCTs to school leadership including the principalship emerged as a feature of school improvement initiatives (ISAELP, 2007). Faced with this knowledge, it is imperative that educational practitioners investigate the linkages between the NBPTS process and principal preparation. Consequently, research must verify how NBCTs demonstrate leadership behavior in the principalship, and what role (if any) the NBPTS process plays. Such linkages were not adequately investigated. These prompts inspired this case study.

The purpose of this single-case study was to describe, analyze, and explain the leadership behaviors of an NBCT who ascended to the principalship. Central to the purpose of this study and consistent with its epistemological roots was to learn from Susan's experiences. Thereby, examining how Susan demonstrated leadership behaviors in the principalship and determining what role (if any) the NBPTS process played in the development of her leadership behaviors. Hence, the presentation and analysis of the data in Susan's case potentially contributes to the research regarding the NBPTS process and its influence on principal preparation (i.e. the development of leadership behaviors integral to the principalship).

A purposeful sampling strategy was used to select a participant who met the specific criterion of this single-case study; an NBCT in the principalship. This research effort was exploratory and explanatory, investigating the experiences of only one participant. The goal was not to generalize the findings beyond the boundaries of Susan's case. A qualitative research method in a descriptive, single-case design was used to study

Susan's experiences, leadership practices, beliefs, and perspectives. Multiple observations and interviews were used to collect and enrich the data. A survey of individuals within the boundaries of the case provided an indication of the extent to which other respondents' corroborated or disputed Susan's reports. Documents were collected to augment the data and to corroborate or contradict the observation and interview data. Thus, a wide range of data collection methods provided a detailed picture of the operation of the school. A second analysis of the data from an inductive approach allowed themes to emerge and become identified.

I identified four themes: (a) setting the vision and mission, (b) school and community relationships, (c) religion, spirituality, and faith, and (d) the five core propositions approach to school leadership. These case study themes explained the linkages among the variables. Using the four themes, the following research questions were answered.

RQ 1: How did an NBCT demonstrate leadership behaviors in the principalship?

RQ 2: What perceived role (if any) did the NBPTS process play in developing those leadership behaviors in the principalship?

Chapter 5 is divided into three sections. Section 1 provides an interpretation of the findings. Section 2 articulates the implications of the findings for Susan. Section 3 includes recommendations and concluding thoughts for future research.

Interpretation of Findings

From the outset of this discussion, I will assert that generalizeability of the findings to the population beyond this single case is not claimed. As a single case study, the findings were limited due to the size and specificity of the sample. However, much

learned from Susan's particular case. Consistent with the epistemological root of the study, readers can learn vicariously from Susan's reports of her experiences, events, and relationships. Further, through inductive empiricism, what we may learn in this particular case can be transferred to similar situations. Therefore, it is the reader, not the researcher who determines how much to transfer to another context (Yin, 2003). According to Stake (2005) the reader will come to know the participant and will infer, formulate and modify their perspectives, thereby; reframing new information in ways that it becomes more individually useful (Stake, 2005). Therefore, the implications were confined to the boundaries of this case, namely, Susan and AHS.

Finally, although the limitations regarded the small sample and the qualitative nature of the study that restricts generalizing the findings; according to Anderson (2010):

> Data based on human experience obtained through qualitative research is potentially powerful and sometimes more compelling than quantitative data. Subtleties and complexities about the research subjects or the topic at hand are potentially missed by deductive enquiries. Though data are collected from a few cases or individuals, findings can be transferable to another setting and might signal a direction for future research inquiries (p 2.)

Thus, according to Anderson (2010) qualitative inquiries may potentially assist researchers in determining the causation of a particular phenomenon (i.e., the role of the NBPTS in the development of leadership behavior) as the phenomenon is uniquely situated in personal experiences and bound in local contexts (Anderson, 2010).

Findings. Research Question 1: How did an NBCT demonstrate leadership behaviors in the principalship? Consistent with the findings of Graczewski, Knudson, & Holtzman, 2009; Hallinger and Heck, 1998; Ylimaki, Jacobson, and Drysdale, 2007, Susan exhibited the following direct approach (D) leadership behaviors to set the vision

and mission of AHS: (a) initiated a commitment to an explicit educational vision; (b) established a clear, shared vision; (c) directly engaged teachers in content-focused professional development, with an emphasis on subject-area curriculum and assessment; (d) improved the organizational structure by creating a safe, orderly, and positive school environment; (e) developed and communicated a clear and focused mission; (f) established high performance expectations; (g) increased student time on tasks. Consistent with behaviors predicted in the literature, Susan also initiated and cultivated school and community relationships that defined and created the school's culture and climate (MacNeil, Prater, & Busch, 2009). Susan demonstrated leadership behaviors consistent with reciprocal approaches (R) primarily accomplished by initiating and maintaining positive home-school partnerships (Hallinger & Heck, 1998).

Further, an inductive analysis of the data generated two major findings: (a) the five core propositions theme and (b) the religion, spirituality, and faith theme. These findings were noteworthy and potentially missed in the absence of an inductive analysis. These themes were noted as the most vital influences on Susan's demonstration of leadership behaviors at AHS. Although Susan demonstrated DMRA leadership approaches in varying degrees of specificity, each approach was governed by the overarching goals and practices of the NBPTS process. Such practices are consistent with mediated approaches (M) and codified by the 5 core propositions of the NBPTS that prompts a sharp focus on curricula, instruction, assessment, and reflection (Deavers, 2009; Hallinger & Heck 1998; Marzano et al, 2005). This conclusion foreshadowed the findings of Research Question 2.

Research Question 2: What perceived role (if any) did the NBPTS process play in developing those leadership behaviors in the principalship? Based upon the analysis of the data and Susan's self reports, the NBPTS process played a decisive role in the development of Susan's school leadership practices codified by the five core propositions. Withstanding the effect of Susan's other principal preparation activities, one outcome of completing the NBPTS process was Susan brought a tremendous focus upon curricula, assessment, instruction, and reflection to her role of principal. This focus on pedagogy was crucial to the development and demonstration of Susan's school leadership practices at AHS.

Theme 1: setting the vision and mission. Multiple incidents of alignment between Susan's leadership behaviors and those predicted in the literature were found. Studying direct approaches, Barker (2007), Graczewski et al. (2009), and Ylimaki et al. (2007) found that principals managed the instructional program, developed people, redesigned the school organization, established high performance expectations for teachers and students, improved the functionality and appearance of the school, and enforced student discipline policies (School Improvement Plan, Documents N & P, Appendix J). Document N referred to developing academic, behavioral, and instructional interventions for failing students. Document P referred to the increased opportunities for tutoring and remediation (Appendix J).

This alignment was reported in the interview data, observations, by survey respondents, and corroborated by the pertinent documents I collected (Professional Portfolio Document J; Document Q; Document Z, Appendix J). Document J referred to the One-to-One Technology Initiative and Professional Development. Document Q

referred to AHS vision and mission statement (Appendix J). Consistent with direct approaches and predicted in the literature, Susan set the directions of the school through shared vision, close supervision of faculty and staff, the enforcement of student discipline policies, and school safety procedures. Survey data (Item 7) corroborated that Susan set high performance expectations for students and teachers (f_T = 35, 95%); P group (f_P = 28, 97%). Susan encouraged teacher leadership in congruence with the activities and goals of the NBPTS process by creating interconnectedness between the instructional departments and by creating a PLC.

Observational data supported that Susan created a safe and orderly school environment. When setting the vision and mission of a school, communication of the mission is vital. Members of the T group reported agreement (f_T = 37, 100%) and the P group reported (f_P = 27, 94%) agreement (Item 12). Finally, Susan completed renovations of the physical structure, grounds, and purchased new instructional equipment and furnishings. Thereby, she improved the functionality and the appearance of AHS (School Improvement Plan, Documents A, G, U; Professional Portfolio, Documents P, W, Y, Z).

Theme 2: school and community relationships. In this study, school and community relationships, which focused on initiating and cultivating relationships, potentially led to a positive school culture and climate (Hallinger & Heck, 1998; MacNeil, Prater, & Busch, 2009). Consistent with reciprocal approaches (R), Susan created a positive school climate (School News Letter, Documents B; F; G; & I, Appendix J). Members of the P group reported agreement that there is a positive school climate (f_P = 24, 83%) and that the principal is responsible to create a positive climate (f_P = 26, 91%). Document F referred to the school culture, climate, and school spirit

activities. Document I referred to parent conferences and parental engagement. I observed and experienced the culture of AHS. I sensed a family-like atmosphere and a welcoming environment. I felt comfortable in the school. In an observation, I noted how cordially I was greeted by faculty and staff, particularly the office staff and how well I was greeted and treated respectfully by students.

The engagement of stakeholders was found to be an essential research-based reciprocal leadership approach (R), to which Susan's leadership acts closely aligned. Corresponding with Krüger et al. (2007) and Anderson's (2004) findings, Susan influenced the culture and climate of AHS through initiating and cultivating school and community relationships. For example, Susan focused on communication within and between school and community stakeholders and teacher-student relationships through her Ace Time initiative (School Improvement Plan, Documents A, G, U; Professional Portfolio, Documents P, W, Y, Z). Susan fostered relationships and communication with parents via conferences and open house engagements.

To Item 13 survey respondents reported agreement that Susan responded to questions from parents; T group responded (f_T = 32, 87%); and the P group responded (f_P = 24, 83%). This finding consistently emerged from the interview, observation, survey, and document data. Also, efforts to improve communication between teachers were pursued through the school improvement team and the instructional leadership team (School Improvement Plan, Document E, Appendix J). To connect with the community, Susan attended speaking engagements with community-based organizations. Interview and observation data confirmed that Susan solicited teachers to participate in presenting AHS programming and initiatives. This encouraged and supported teachers to take risks

and try new things. Accordingly, Susan distributed departmental budget allocations and budgeting decisions to teachers. It was also noted that Susan demonstrated leadership behaviors to communicate, influence the relationships, culture, and climate of the school through brief and focused interactions with teachers she called hallway conversations.

Identified as the school and community relationships theme, Susan's behaviors coincided with existing antecedent approach (A) research as she worked to interact with or manipulate the antecedent effect of SES through targeted school resource allocations, social equity and equality, and academic interventions (DeMaeyer et al., 2007; Guldemond & Bosker, 2009). In keeping with the school and community relationships theme, Susan acted to improve communication and thus relationships, form connections, manage conflicts, and intercede in the lives of students and staff members. Susan's specific antecedent approach (A) interventions were contingency based, solution focused, and designed to, "Go the extra mile for my kids in poverty, level the playing field among students, provide equal access despite race, gender, handicap, or SES, and ensure everybody has the same expectations no matter whether you are rich, poor, Black, White, male, female [*sic*], or whatever." Susan concluded that the NBPTS process "highly" influenced her efforts to engage community stakeholders; therefore it influenced a heightened focus on cultivating relationships through communication and by managing or eliminating conflicts when possible. Regarding teachers and parents, Susan stated,

> You talk to them one on one. You give them a voice. You help them shape your own vision without taking you off course, but . . . to some extent, they know what's going to work and what doesn't. I also capitalize on their expertise . . . So you pick up on the expertise of the people, listen to parents; try to fold their voice into the school.

Though the analysis of case study data confirmed a close alignment between Susan's leadership behaviors and those predicted in the literature, her leadership acts were filtered through and subordinate to the framework, activities, and competencies of the NBPTS.

Theme 3: The five core propositions approach. The five core propositions approach theme emerged from the inductive analysis of the data and thus was not anticipated when the study was designed. The overarching goals of the NBPTS (2008) were to improve instructional practices within and beyond the classroom, influence policy makers to improve public education, to keep the United States workforce globally competitive, and encourage teachers to serve as key decision makers within the school context (NBPTS, 2008). To further its goals, the NBPTS required that teachers become members of learning communities, provide active teacher leadership in the redesign of schools, and in helping their colleagues to uphold high standards of teaching and learning (NBPTS, 2008). The NBPTS also sought to influence state and federal policies to provide schools with the technology, training, and services that are essential to teacher productivity (NBPTS, 2008). Finally, the NBPTS sought to professionalize teaching by acquiring school leadership roles, eventually giving teachers the needed control, influence, and ownership of the profession (Berg, 2005).

Similarly, Susan's leadership behaviors at AHS intersected with the goals of the NBPTS as she: (a) focused on an instructional vision and mission, (b) set instructional directives at AHS inspired by the five core propositions of the NBPTS, (c) encouraged and developed teacher leadership, (d) redesigned the organization in light of the NBPTS goals, (e) closely supervised and managed the instructional program, (f) distributed leadership among teaching staff, (g) established high performance expectations for

teachers and students, (h) challenged and changed organizational procedures and processes with technology initiatives, and (i) coached and mentored teachers through NBPTS inspired reflection activities (School Newsletter, Document J, Appendix J). A collection of multiple documents corroborated her goal to develop a "five core prop" building (NBPTS, Documents A, B, C; Professional Portfolio, Documents N, O, P, Q, R, Appendix J). In those documents, Susan articulated that teachers should be committed to students and their learning, know the subjects they teach and how to teach them, manage and monitor student learning, reflect on their practice and learn from their experiences, and be a member of a professional learning community (PLC). These leadership acts confirmed the third emergent theme.

According to the NBPTS, (2008) the five core propositions of the NBPTS represent the foundation and framework for the knowledge acquisition, skills development, dispositions, and beliefs that are embodied in NBCTs (NBPTS, 2008). Susan used the framework and activities of the NBPTS process to pursue her primary outcome goals that were to create a "Five core prop building" and to influence the overall school organization. The goals and activities of the NBPTS process governed Susan's curricular, instructional, assessment, reflection practices and processes, and shaped her vision, mission, and communication activities with community stakeholders. Through the five core propositions, Susan influenced multiple levels of the school organization. Susan stated,

> In my opening meeting with them [faculty and staff] last January, we talked about the [5] core props. We're embracing . . . being a member of your learning community. I'm gradually helping them reshape what there're doing in department meetings from a business meeting to a curriculum instruction meeting.

NBPTS Proposition 1: Teachers are committed to students and learning. In this study, I found evidence of Susan's dedication to pedagogy (teaching and learning practices and processes); thereby, Susan made knowledge accessible to her students and teachers. As such, multiple examples of her belief that all students can learn were noted: (a) Instructional Leadership Team PowerPoint 7/10/12; (b) Learning teams, to develop teacher leaders, PowerPoint, 7/10/12 for ongoing professional development and collaboration across departments; (c) Faculty meeting, opening ceremonies PowerPoint 8/15/12, NBPTS core propositions presented as school-wide instructional goals; and (d) Student learning goals, PowerPoint, 8/15/12, raise SAT, ACT, EOC scores; improve 9th grade performance & reduce dropouts (Professional Portfolio, Documents N, O, P, R, & S, Appendix J).

Through her character education initiative at AHS, Susan encouraged the development of civic responsibility in students. I will present three examples of evidence from the data:

1. . . . Help them understand what good morals are and how to act decently to one another . . . and we do that a lot through character education. . .

2. . . . We just say treat others as you would have them treat you . . . you almost can't go wrong when you start teaching character education. . .

3. It's just each one—you gotta work with each one. And it's the flip side, you know, some of my minority teachers need to be more accepting of my Caucasian population. It's understanding each other, and learning each other in spite of color, sex, religion, whatever. . . . I Model, model, model . . . and I might have shared this with you before . . . helping people understand people who are not like them, that's the key. . . .

Also found was evidence of Susan's strategies and philosophy to treat students equitably and to disallow individual differences to get in the way of pedagogy (School

Improvement Plan, Document M, Appendix J). This document referred to the Gear- Up grant project to develop college and career readiness.

Susan's mediated (M) acts were consistent with the findings of Pitner (1988), Cavalluzzo (2004), Wallace (2002), and Marzano et al. (2005), who found pedagogy (teaching and learning practices and processes) as the primary instrument for school change (Hallinger & Heck, 1998). In managing the instructional program, principals directly supervised curriculum and instructional improvements through buffering staff from distractions to protect instructional time (Ylimaki et al., 2007). Susan strategically changed the daily schedule to increase or protect instructional time and provided direct supervision and observation of teaching. Susan's fifth bell initiative (Ace Time) was designed to accomplish multiple goals in pursuit of her vision, mission at AHS. One of the main goals of (Ace Time) was to protect instructional time.

Susan's primary goals were to use the fifth bell (Ace Time) for: (a) tutoring students to allow them to complete missing assignments and tests; (b) hold department meetings; (c) develop learning teams; (d) host professional development activities; and (e) engage in collaboration. Susan believed that Ace Time benefited teachers, students, and families because they did not have to stay after school; teachers could connect with students and develop relationships; get to their hearts and change them; focus work on incoming freshmen; provide positive role modeling for students; teach pro-social skills development through character education; and review the student code of conduct on a regular basis. Susan stated:

> In the operation of the school, there has to be a sense that instruction is the most important thing. That learning is happening . . . For instance, they are used to having everything that we do at two thirty . . . Well, that's fourth period. So fourth

> period gets cut into . . . that's the middle part of the day . . . I told you about Ace Time, that fifth period. I am constantly moving things to that. So the ring guy calls my secretary a week or so ago, wants to come at two thirty. I said, 'No.' she said, 'Well that's what time he says he can come.' I said, 'Well then, we will find another company.' She said, 'What time can he come?' I said, 'He can come at twelve fifteen . . . And so he's coming at twelve fifteen. . . . You just have to be determined to protect that instructional time.

NBPTS Proposition 2: Teachers know the subjects they teach and how to teach those subjects to students. Susan supported and encouraged teachers to have mastery over the subject(s) they taught. To Item 8 of the survey regarding teachers collaborating with each other, T group respondents reported agreement with the statement (f_T = 35, 95%). To Item 10, regarding the principal providing instructional development for teachers, the T group responded (f_T = 37, 100%) agreement. After multiple observations of instruction and walkthrough visits, Susan required that teachers demonstrate an aptitude for instructional delivery and behavior management, classroom structure, and real-world applications of the subject(s). Susan informally coached a new teacher, thereby training the requisite skills for instruction and classroom management. When necessary, Susan referred the new teacher to experienced "gurus" in her building to assist with skills gaps. Susan demonstrated ability to model a diverse skill set of instructional strategies to teach for understanding. I will present two examples:

1. [Informal] Coaching, and I don't have all the answers but I can point them to the people who might, especially moving into this high school curriculum . . . I don't make any claims whatsoever to know all the content. But I can tell on my campus who my gurus are and I can point them in that direction.

2. Three things to work on before our next observation: (a) Hook; (b) Management; and (c) Monitoring. Some of your students stayed with you, some were lost, and some gave up. Hook: Hook them on why they need to know Algebra II content. Get with Shirley [guru] to get help.

Regarding knowing her curricula, I found interview and observational evidence of Susan's efforts to retain her familiarity with learning theories and instructional strategies. She stayed abreast of current issues in American education, particularly the new standards adopted by her state and the Common Core curricula debate (Professional Portfolio, Document New and revised pacing guides, Document A; Objectives & units of study; Bulletin Board Document B, Appendix J). As a result of her state adopting common core for English and math, Susan developed a strategy to implement the standards; five examples are presented as evidence:

1. So we are on a mission at AHS to make sure that we are following the common core and for (Redacted her state) all other subjects it's called the Essential Standards . . . ensuring that our kids have the same content they would anywhere else across this state and in English and math across the nation. So that those kids, who are in the military, or for whatever reason, move around, would have the same basic content no matter where they were going to school.

2. . . . It is also changing that pedagogy in the classroom so that they are embracing collaboration and project-based learning and . . . *Revised Bloom's Taxonomy* and all of those things that are happening over here in the curriculum to make sure that our pedagogy is matching, and that our technology matches, and that everything is . . . connecting.

3. Content . . . that's a biggie for us because we . . . have changed the entire curriculum . . . we have common core and essential standards . . . We are on the cusp of the change right now with common core and of course the jury is still out on whether we have made the right decision . . . (School Improvement Plan, Document I, Appendix J).

4. The standards, of course I worked in the area of English Language Arts it will be interesting to see that now that so many states have adopted the common core English standards . . . at the National Board level . . . I would say that those standards were ahead of the common core and they will match nicely. . .

5. Now the common core standards only apply to English and math right now so that all the states across the nation who adopt them, the kids will be having the same course of study. We hope that it will spread to other subjects as well.

NBPTS Proposition 3: Teachers are responsible for managing and monitoring student learning. Observational evidence revealed incidents of Susan modeling, informally coaching, and supporting effective instructional strategies with a math teacher (NBPTS, Document A; Professional Portfolio, Document P). Susan modeled and suggested a range of instructional and behavior management techniques, and discussed methods of keeping students motivated, engaged, and focused. She modeled and informally coached how to engage students to ensure a disciplined learning environment, and how to organize instruction to meet instructional goals. Survey respondents in the T group corroborated this statement (Item 4). They agreed that Susan closely supervises school employees (f_T = 36, 97%). They also agreed (f_T = 36, 97%) that Susan sets high expectations for teaching (Item 11). She reinforced the teacher's efforts to assess the progress of her students by using multiple methods for measuring student growth and checking for understanding. Susan engaged in relationships with faculty and staff members to improve pedagogy by connecting people in the PLC (Professional Portfolio, documents N, O, R) Four examples are offered as evidence:

1. So that's a . . . take-away from the [NBPTS] process that I use . . . certainly important for me as a leader is the assessment piece. I always think of that in this whole . . . curriculum, instruction, and assessment. That certainly has evolved over time. Just this morning in the pre-conference . . . a young teacher said let me show you my data notebook and she opened her laptop and has already started analyzing by objective how her kids did on a midterm and has seen the need to re-teach and give a mini midterm or follow-up.

2. Utilize a mnemonic device and fold in test taking tips. You folded in test taking in your lesson very naturally and your teaching is very good. Encourage student to come back to you for Ace Time for additional tutoring, remediation, and relationship building.

3. Monitoring: The only kids who were monitored were the kids in the first two rows on your left side and you did not monitor every student. (I observed

Susan model) Get around to every student, walk around the room with purpose to get and keep them on task. Get to every desk and tell them 'I expect you to do this- take notes!'

4. Susan's professional learning community and school improvement team at AHS met regularly to share expertise and worked collaboratively to improve teaching skills and the academic performance of students.

Through her PLC, Susan encouraged a commitment to teamwork (School Improvement Plan, Document J, Appendix J).

The NBPTS advocates a role for teachers in which they became integrally involved in instructional leadership, thereby sharing in the analysis of curricula, coordination of instruction, assessment, and reflection. Susan accomplished this through her personal mentoring of three NBCT principal candidates, the SIT, departmental meetings, and her mentoring partnerships program (School Improvement Plan, Document I, Appendix J). I observed Susan providing one-on-one modeling and mentoring of a teacher as she conducted direct supervision through regular and ongoing teacher performance evaluations. Data supported that Susan strategically paired students and teachers through her Ace Time initiative and developed human capital in the teaching profession through mentorships and informal coaching.

NBPTS Proposition 4: Teachers think systematically about their practice and learn from experience (Reflection). The fourth core proposition of the NBPTS focuses on reflective practice. Dewey (1933) introduced the concept of reflection in education, defining it as the act of "persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends." (p. 9) Susan commented on the influence of the NBPTS process on her instructional leadership regarding reflection, she said,

> When you're going through the National Board process, you are called to formally reflect on your practice . . . so all of my teachers, after their formal observations, have to do a formal reflection and the questions come right from the National Board: What worked, what didn't, and what would you do differently if you taught this lesson again . . . then they have to write that up on a Word document and I actually . . . upload it to their evaluations as part of the artifacts.

Schön (1987) asserted that reflection is directly tied to action in that newly acquired skill is the result of reflection. A leader may reflect on her actions and consider what worked, what could be improved, and then change her behaviors based on her self-assessment.

In that regard, Polk (2006) found that NBCTs engaged in reflective practice and came to understand their own beliefs about teaching and learning and modified their behavior accordingly. Smikle (2004) found that the main difference between NBCTs and non NBCTs was the acquisition and implementation of reflection in their practice (Bunch, 2012). Susan reported that reflection exercises were a methodology used by the NBPTS to improve a candidate's instructional leadership, instructional content knowledge, and content delivery. I observed Susan using NBPTS inspired reflection exercises during a post-conference with one of her new teachers. Regarding the influence of the NBPTS process, Susan stated,

> I'm trying to think what else we've done with [5] core props. So of course there is a reflection piece, the formal reflection piece . . . The instructional practices, all of that piece . . . with pedagogy . . . we're working on it.

Further examples of Susan thinking systematically about her practice, she assisted in the development of the core propositions of the NBCEL initiative sponsored by the NBPTS. She agreed to participate in this study as a research assistant thereby, as Mills (2000) articulated, enabled her to have an opportunity to reflect upon her practice, to objectively and critically examine her practice, to deepen her knowledge, to expand her repertoire of skills, and to incorporate new findings into her practice (Mills, 2000).

NBPTS Proposition 5: Teachers are members of learning communities.

Interviews and observations readily yielded evidence of Susan encouraging and, in some instances, requiring teacher collaboration through the school improvement team, departmental planning meetings, and her mentoring partnership program. These groups met regularly to collaborate on lesson planning and shared common instructional goals. They functioned as the PLC at AHS. Through the PLC, Susan supported and developed teacher leadership and distributed leadership through the school improvement team (SIT). Many of the members of the SIT were department heads and instructional gurus. They were responsible for administering various instructional decisions such as the One-to-One pilot. The SIT was also responsible for various instructional budgetary decisions. Susan discussed how she built trust through distributing leadership to the SIT.

> I am currently dealing with a faculty who were not used to making decisions, and so they are still a little leery, they are still a little shaky as far as….is Susan really going to let me make this decision? . . . So, Monday at the school improvement team meeting I opened up the budget book and I went department by department of how much you have left . . . I said do not be afraid . . . you will still get an allocation next year and we will go through this same process. So, the whole level of trust right now is still out there, they're not quite sure. Really making those decisions about . . . in this case budget . . . Why should I be the one making all the decisions from the office level? They know what they need.

I observed multiple incidents of Susan using visibility and accessibility to communicate and actively cultivate community partnerships with community groups, businesses, and parents. I observed Susan working collaboratively with parents and other community stakeholders to engage them to participate in mentoring AHS seniors, assisting with senior projects, and judging senior presentations. Susan answered questions posed by Lions Club members about the programs and initiatives at AHS.

Susan invited them to participate in the Gear-Up Federal Grant project. According

to Susan, the grant was designed to improve academic performance, assist first generation college students, engage community members in mentoring projects, assists students in completing financial aid forms, and applying to colleges. Susan also presented the Graduation Project initiative designed to engage community representatives to serve as mentors and judges for senior projects. The initiative also assisted seniors who were not college bound but prepared them for career readiness through local apprenticeships. For example, four excerpts from Susan are offered:

1. We have several opportunities . . . The first opportunity is with the Gear-Up program that is just starting . . . to put a community member one-on-one with a student who particularly is a first generation college [student]. They would be the first person in their family to go to college. It doesn't have to be, but that is the person Gear-Up is targeting. Help that kid catch the vision that he can go to college . . . from filling out their financial aid forms with them to filling out their college application forms. That's one piece and that doesn't take a long time.

Susan continued by discussing her other initiatives:

2. The other piece is with our senior projects. We are constantly in need of people who can work with our kids, especially our struggling kids. And they are the hardest to work with. I will tell you, a couple of the guys who came last year said, 'you know, I can't just get them over the hump, and I said, 'we have been trying to get them over the hump for twelve years.' . . . But taking an interest in them and holding their hand through their senior project and then certainly serving on the judging panel which I know some of you have done that over the years.

A Lions Club member asked Susan, "What is the senior project?" Susan stated,

3. The biggest thing that's happening this year is that [a student] who wants to be an emergency medical technician- paramedic type person is going to have the East Care helicopter land on our football field on November the fifth . . . That's his product . . . having them come in and . . . listen to the paramedics talk about their career . . .

Susan spoke about leading by example and supporting the professional development of colleagues. She said,

4. Part of leadership is leading by example and so again I went through the process knowing that sometime in the future that I would be leading teachers and I needed to "yay or nay" the process. And of course, I am a cheerleader for it . . . that developed because I went through it. I know I would not be as passionate of having my teachers go through National Board process if I had not done it myself.

Susan concluded that her leadership was definitely shaped by the five core propositions of the NBPTS process. This included her desire to support the development of teacher leaders. Susan indicated that she would not be as passionate about having her teachers go through the National Board process if she had not completed it. Thus, the following assertions were concluded in Susan's case that secondarily investigated the effects of completing the NBPTS certification process: (a) the unintended development of Susan's leadership behaviors that were crucial to her principalship; and (b) one result of completing the NBPTS process, Susan focused on curricula, instruction, assessment, and reflection to the principalship at AHS (Marzano et al., 2005). I acknowledge that school leadership also requires the development of knowledge relative to school management (i.e., educational administration, school law, school finance, supervision, and special education). Such knowledge is traditionally gained through practicum experiences, mentorships, and college courses, and will likely continue in the foreseeable future (De Maeyer et. al., 2007).

Theme 4: religion, spirituality, and faith. In response to Research Question 1, I discovered evidence of Susan's leadership strategies that were inspired by her religion, spirituality, and faith. These encoded words and phrases led to the emergence of the RSF theme: (a) "Do unto others as you would have them do unto you"; (b) prayer; (c) Holy Spirit; (d) Believers; (e) "This is my mission field"; and (f) "I felt The Lord speaking to

me, a tug in my heart." Susan's religion, spiritual, and faith approach may be organized under the tenants of the Golden Rule, She quoted, "Do unto others as you would have the do unto you" **(**Luke 6:31; KJV). I will offer several examples from interviews, observations, and documents as evidence.

Regarding the role of her faith in her leadership and her comfort level commenting on the topic, Susan stated:

> I don't mind talking about it. One of my gifts is leadership . . . I mean I know that I can't sing, I can't dance, [laughing] I can give you a song and a dance sometimes; but that's not my talent. My talent, my gift is leadership. This is my mission field.

Spirituality. I observed Susan at a community engagement with the Lions Club. Members opened their ceremony with responsive reading activities, their mantra spoken in unison, songs, and a prayer. After her introduction, Susan began her comments by stating,

> Thank you, gentlemen, for the opportunity to come and share with you tonight a bit about AHS . . . thank you so much for praying for our school and for me. And I just ask you that every time you ride by AHS, that you'd say a prayer for us. The main prayer I ask that you, that you ask that the Holy Spirit would just hover over our school. . . so I ask that you use the building itself as, as your key to remember that if you're running by, or riding by, or walking by, that you lift us up in prayer.

In a school newsletter document, Susan announced the faculty prayer group meetings to be held in the AHS media center (Document B, Appendix J).

Religion. At the Lions Club meeting, Susan revealed the role of her religion and faith in her vision and mission at AHS. Susan further indicated that she used character education at AHS to share her religious values and faith:

> Those of us who are Believers have the opportunity to share with our kids and we do that a lot through character education, but that we would be able to minister to them to help them understand what good morals are . . . and we do that a lot through character education. . . While you have the whole separation of church

> and state, I teach at least through character education, the whole 'Do unto others as you would have the do unto you . . . And really, when you began to study religions, there're so many similarities in the morals of what those religions promote. . .

Faith. Susan also shared the role of her faith in God and the role of her faith in her decision to pursue leadership and become a principal at the elementary school. In keeping with her personal mission to successfully revive schools she leads, Susan stated:

> . . . The sky was as blue as it could be. White billowing clouds, I mean it was just the perfect afternoon. I just felt, and I will tell you and I hope I don't offend you, I felt the Lord speaking to me. And it was so clear that, 'you need to come to this school and work here as the principal,' kind of thing. And I remember physically stepping back from the group. This school was the black sheep of the community. I mean nobody wanted to go to this school. It was a brand new facility but just the pits. It had the third lowest reading rates in the state for mastery and proficiency. Just not pleasant . . . and there was no opening. They had a principal. Couple of weeks later, the principal walks into the superintendent and says, 'We're moving home.' The next day I went into the superintendent and I said, 'I want to apply for that job.' And his response was "I expected you yesterday." … that has been my mission field for nine years. I had done all I could do, and the tug actually had began two years before I came here that I should come to Atlas High School and get it straight. And again, there was no opening but things unfolded, and here I am.

Changing hearts. Based on a Christian concept of changing hearts and caring for individuals in need, Susan talked about her efforts to reach the hearts of students and believed everyone should be treated the same. She discussed her initiatives to level the playing field among differing SES groups. Susan's initiatives were about connecting with her students to reach their hearts. In the next few quotes, Susan shared how she went the extra mile for kids in poverty to create equal access:

> Number 1 is to recognize it. Number 2 is to create an atmosphere where they feel they are accepted no matter whether you are high, middle, or kids living in poverty. As a leader, you've got to realize that you have different SES groups in your building. And in saying that, it's not just the students, that's also the staff . . . you gotta recognize it about your staff. My kids in poverty, it's very different for them.

Susan summarized her motivation and personal philosophy in reflection of her faith:

> So, why do I do what I do? . . . I think what I end with is. . . Everybody has worth and kids need to believe in themselves so they can be successful. For some of our kids we have to instill that belief in them because they don't come to us with it. I want our decisions to be based on what is best for kids and if we can do that then they're going to go out of here ready for their next step . . . And that step has gotta be a positive step . . . And again, I've alluded to it a couple times in this interview but it is about the heart, it's about passion; it's about wanting to come to work every day because you want to make a difference in their lives and you do it kid by kid . . . and staff by staff.

Susan's demonstration of leadership behaviors at AHS was influenced by her religion, spirituality, and faith. The RSF theme emerged from my inductive analysis of the data and therefore was not anticipated when the study was designed. There were no survey data corroborating this theme.

Implications of the Findings

Theoretical implications. It is acknowledged that I did not collect pre-intervention data regarding Susan's leadership approaches prior to her NBPTS candidacy. Such an assessment was beyond the scope and design of the study; it was not possible to separate the effect of principal preparation courses and other leadership training. Thus, I acknowledged that Susan's vast experience as a principal, her principal preparation activities, and the mentoring she received, likely influenced her development as a principal. It is further acknowledged that any implications expressed in this section are limited by the single participant design. Generalizeability of the findings is not claimed; though findings may be transferred at the discretion of the reader. However, the findings may also generalize to theoretical propositions, because they were consistent with current theories in the field, the epistemology, and conceptual frameworks guiding this study.

Though I was unable to assert with confidence that it was only the NBPTS process that prepared Susan for her principalship, it was critical. Based upon Susan's reports, completing the NBPTS process was the decisive element in her leadership development and her demonstration of leadership behaviors in the principalship. The findings of this study supported existing research (Deavers, 2009; Marzano et. al., 2005) regarding the value of the NBPTS in Susan's principal preparation. Further, the findings potentially inform and guide future studies and augment educational leadership research regarding school leadership skill development. The findings also may inform policy decisions attending to the centrality of NBCTs in comprehensive school reform initiatives that feature NBCTs in leadership roles (Berg, 2005). Replication of this study in a variety of contexts and designs could advance theory and research, providing an alternative conceptual understanding of school leadership behaviors and approaches.

Methodological implications. Selection of the case study methodology was made because it is a form of qualitative descriptive research. Consistent with the epistemology of the study, this methodology was an appropriate fit to investigate Susan's leadership behaviors in her role as principal. Case studies have a distinct place in research; the most important application in this single-case study was to explain the observed behaviors, particularly how Susan demonstrated leadership behaviors and what role the NBPTS process played. The case study design was the appropriate methodology for answering the "how" and "what" research questions posed in this study.

Case studies are defined by certain logical tests including trustworthiness, credibility, conformability, and data dependability (Yin, 2009). To address construct validity, I used multiple sources of evidence that could be triangulated and used correct

operational measures (interview, observation, a survey, pertinent documents) and for studying the concept of leadership behavior: the acts of directing and supporting teaching and learning through structuring the social settings, developing collaborative relationships, and arbitrating internal and external demands (Pitner, 1988).

To address internal validity, a causal relationship between variables was described. This relationship was distinguished from spurious relationships (e.g., completing the NBPTS process was linked to a heightened focus upon curricula, instruction, assessment, and reflection). The effect of Susan's leadership behaviors on school outcomes (e.g., student achievement and teacher satisfaction) were beyond the scope of the study and therefore not measured. Hence, external validity, the domain to which the findings of the study of causality were defined was limited to the theoretical propositions (research questions) and boundaries of the case.

Concerning reliability, the data collection procedures followed protocols (Appendix E, F) that were repeated and yield similar results. I established a chain of evidence by audio taping and transcribing the interviews, and I invited Susan to review a draft of the interview narratives prior to coding and thematic identification. In her role as RA, Susan collected documents, assisted in the launch of the survey, assisted in the development of the research plan, and identified multiple data collection targets. Accordingly, to strengthen external validity, I defined the domain to which the findings of this study generalize and the degree to which inferences were made. In this case, the findings were based on Susan's reports and corroborated by multiple sources of evidence. The findings generalized to the boundaries, which the case was defined and not to populations (Yin, 2009).

Limitations of the case study. Limitations were influences, shortcomings, and conditions that were not controlled and placed restrictions on the methodology and conclusions (Creswell, 2003). The focal point for the case study was one NBCT who had ascended to the principalship. This study was limited by its design, participant selection, and its boundaries. When describing and explaining what role the NBPTS process played in the development of Susan's leadership behaviors, it was not possible to separate the effect of principal preparation courses and other leadership training.

Regarding the conceptual frameworks used to inform and bound the study, I acknowledged that Pitner's (1988) models and Hallinger and Heck's (1996a, 1996b, 1998) theoretical extension of her models were not the only means of depicting, defining, and analyzing leadership behaviors. Many researchers in educational leadership offered definitions and models of leadership behavior and theory. However, Pitner's conceptual models were most appropriate for the design of this study because they depicted specific paths or approaches from leadership behavior to desired outcomes, and accounted for a full range of leadership behaviors by incorporating transactional and transformational behaviors. Further, Pitner's models specifically addressed leadership behaviors, processes, and practices in school organizations and had no historical basis in corporate or political arenas, like most of the available leadership paradigms.

Pitner's models offered comprehensive depictions of leadership behaviors in school organizations and thus an appropriate lens through which to analyze Susan's behaviors. However, in the data analysis phase, I was predisposed to only find DMRA behaviors. Such a lens required me to force fit the data into DMRA bins or ignore critically emergent data altogether; hence the need to change my data analysis method

and revise my research questions. A thematic process of data analysis from a traditional case study perspective was warranted. These limitations necessitated a second analysis of the data, which resulted in a thematic approach and my growth as a qualitative researcher.

Regarding the survey, I achieved a low response rate from the school staff member group (SSM). Only 4 of 26 responded. This group included office staff, cafeteria staff, custodial staff, nursing staff, and specialists. I am not certain why the response of the SSM group was low because the survey was emailed to every AHS faculty and staff member, each staff member at AHS had an individual laptop computer, the survey was accessible in the computer lab at AHS; each computer in the school had access via email link to the survey. Staff members could potentially access their email from their home computer. I offer this explanation as conjecture, given the multiple opportunities to complete the survey perhaps members of the SSM group were uncomfortable with the survey or simply not interested in completing the survey. It is acknowledged that the absence of data from this important reporting group limits the findings.

My growth as a qualitative researcher. I originally designed this study with the intent of overcoming two of the primary criticisms of the qualitative research method regarding bias and the lack of rigor. I adopted the approach espoused by Yin (2003), wherein the standards of quantitative research are applied to the qualitative methodology. For example, Yin (2009) advocated the use of the tightly controlled data collection and analysis protocols, specific sampling methods, and use of multiple sources of data that can be triangulated and thereby overcome many of the threats of bias.

Yin (2003) also advocated a multiple case design to increase rigor through replication and cross-validation, however in single case designs, replication logic was not

recommended. Cross validation, and thus rigor, was accomplished through triangulation of multiple data sources, reiteration of data collection activities, alignment with theoretical and conceptual models, and alignment with behaviors predicted in the research literature. Further, according to Yin (2003) the flexible nature of qualitative research should be embraced, however strategies to ensure case study rigor must be in place. In that regard, I attempted to conform to the four tests recommended by Yin (2003) to strengthen the rigor of this case study. The four tests included construct validity, internal validity, external validity, and reliability. Yin (2003) argued that these tests define qualitative research, and are applied throughout the case study process during design, data collection, data analysis, and reporting.

Yin (2003) recommended techniques to increase the quality of case study research, and overcome traditional criticisms of the weakness of qualitative studies in general. Yin noted:

> The most important advantage presented by using multiple sources of evidence is the development of converging lines of inquiry, a process of triangulation, thus any finding or conclusion in a case study is likely to be much more convincing and accurate if it is based on several different sources of information, following a corroboratory mode. (p. 98)

According to Yin (2003), the logic of theoretical propositions appraised relationships among variables particularly, how well predicted patterns (theory) converged or diverged from observed patterns (research). In a deductive process, subsequent iterations corroborated possible links between theory and observation by comparing or contrasting rival patterns, consequently strengthening or weakening the theory. Such pattern matching compared observed patterns with predicted patterns (Yin, 2003).

Induction vs. deduction. Based on Yin's (2003) explanation, a theoretical proposition was understood as a qualitative hypothesis about the relationship between variables. Describing this hypothetical relationship requires observable evidence that can be triangulated. Therefore, in support of Yin's perspective, I initially selected the epistemologies of empiricism and realism. Both are deductive epistemologies. Knowledge is gained through multiple observations, cross verification, pattern matching, and multiple iterations via experiences. Observations and experiences were categorized and cross-verified based on their characteristics of similarities and differences, and in the strictest sense, gained only through the five senses.

For example, empiricism was the foundation of the scientific method in that all hypotheses were tested against observation and experiences gained through the senses, rather than relying solely on reasoning, intuition, or revelation. From the empiricism perspective, inferred or deduced knowledge was gained ultimately from one's sense-based experience. Thus experience and observation was the foundation of all human knowledge (Baird & Kaufman, 2008). In this study, I classified and group data objects (observations, interviews, survey, and documents) to make connections and inferences that would ultimately lead to answering the central research questions. In accordance with positivism, I analyzed the data by creating data tables with DMRA and EC headings, so that I could conduct frequency counts as described in Chapter 3. I abandoned this positivistic approach to data analysis and adopted a post-positivistic perspective.

From positivism to post-positivism. Limitations of my deductive approach to data analysis emerged and exposed the analysis and findings to the criticism that I knew what I find based on the literature, and I went out and found only what I was looking for.

In effect, I fell short of my goal to conduct a rigorous qualitative study. The deductive lens constrained me to focus too heavily on DMRA approaches. Therefore, I elected to analyze the data inductively, and I reported what emerged. To analyze the data from an inductive qualitative research perspective, I sought guidance from qualitative researchers Chenail (1994) and Saldaña (2009).

I acknowledged that counting frequencies is a quantitative analysis procedure and not qualitative. I will note that my initial analysis was based on the premise of Yin's (2003) description of multiple iterations, advocating replication, not sampling logic. He recommended iterative tabulations (counting) of evidence for each code to sharpen a construct's definition, validity, and measurability. These tabulations confirm the analysis. Therefore, I selected frequency counting as an appropriate deductive analysis approach of analyzing the data and confirming my analysis. From the deductive perspective, I found that Susan demonstrated high alignment with each DMRA approach (particularly the mediated approach). However, the deductive lens did not allow generative or emergent data to have equal consideration. In this case, the emergent data could not be ignored. For example, there was a high frequency count for the EC category. Those data were related to the NBPTS process and upon further analysis, Susan's faith.

Subsequently, I concluded that Susan's focus on the five core propositions of the NBPTS intersected with each DMRA approach to leadership and therefore prompted me to create the NBPTS process approach conceptual model. I eventually selected it as the model that best fit the data. In summary, my deductive approach limited the essential inductive processes that are foundational to case study research. I needed a way to bridge the gap between deductive processes to inductive processes; to change lenses, so to

speak. Unfortunately, using a deductive approach, I failed to capture two significant findings of the study. By adopting an inductive lens to analyze the data as opposed to a deductive approach, I embraced a generative process that allowed case study themes to emerge. What emerged was the importance of the five core propositions of the NBPTS and the role of Susan's faith in her demonstration of leadership behavior at AHS.

Assessment of effectiveness. Originally, the conceptual framework of this single case study's design did not include an assessment of Susan's effectiveness in the principalship. I acknowledged the futility of studying the leadership behavior of an ineffective leader. Therefore, I introduced the ISLLC standards as a measure of effectiveness to provide a qualitative framework with which to heuristically assess Susan's effectiveness in the principalship. I gleaned an understanding of Susan's effectiveness from transcripts of Susan's interviews, my observation notes, and survey respondents.

Based on my conceptual framework and research design, the most useful evaluation of Susan's effectiveness is her alignment with DMRA leadership interventions that were highly predicted in the literature. Those interventions were structural (direct), strategic, (mediated) systemic, (reciprocal) and situational (antecedent). Hallinger and Heck (1998), asserted that such interventions lead to improved student achievement in long-chain linkages. One might argue that the most obvious measure for principal effectiveness is student outcome measures; specifically, student performance on achievement tests. I acknowledge that test scores could be used as one component of performance data in evaluating principal effectiveness, however Reeves (2004) argued against the use of student test scores as a primary measure of principal effectiveness.

Applied implications of the findings. Multiple applications were inferred from the findings regarding the utility of the NBPTS process in developing Susan's leadership behaviors. Historically, education policy was prescribed by people who were not educators and thus they were inexperienced and uninformed regarding the effect of those policies (Berg, 2005). In reaction to those policies, teachers clamored to have a voice, to become significantly involved in policy debates and thereby influence education policy mandates. Unfortunately, teacher leadership continues to be an amorphous idea in terms of its practical applications, particularly at the federal and state levels where policy is made (NBPTS, 2010). Through the NBPTS, and the achievement of school leadership roles, teacher leaders like Susan influenced educational practice.

The findings of this single-case study augmented current educational leadership literature with two caveats: (a) the potential influence of the NBPTS process on education policy decisions regarding principal preparation activities (ISAELP, 2007) and (b) Susan's use of the five core propositions approach as a school leadership model. In congruence with existing research, it is concluded that the NBPTS process developed Susan's knowledge relative to curricula, instruction, assessment, and reflection. The implied next step stemming from this research finding is for NBCTs to become a potential target for principal recruitment (Deavers, 2009).

Recommendations for Practice

In 2010, the NBCEL for principals initiative was to be the first national certification for accomplished principals. In 2014, when The Wallace Foundation Funding ended and due to the high cost and the high attrition rate of field test and pilot test participants, the NBPTS abandoned its efforts to create a national certification for

principals (Maxwell, 2014, p. 1). From my perspective, the NBPTS already created a process that developed leadership behaviors central to school leadership. Individuals like Susan who completed the NBPTS process developed leadership behaviors integral to the principalship. The apparent implication for practice is to create principal preparation program that includes the 5 core propositions of the NBPTS process, college courses, and practicum or mentorship activities. This route must develop knowledge relative to school management articulated as educational administration, school law, school finance, supervision, and special education (De Maeyer et. al., 2007).

Such a route potentially lends credence to preparation programs designed and implemented by school divisions that may use NBPTS activities and the 5 core propositions themes. Susan, an individual who completed the NBPTS process, focused on instruction, curricula, assessments, and reflection to her role as principal. Further, Susan applied the five core propositions of the NBPTS as a school leadership approach in the pursuit of what she called a "five core prop building," and determined that pedagogy was the primary instrument for school change. Therefore, an unintended effect of completing the NBPTS process (developing instructional leaders as NBCTs at the classroom level) was, in Susan's case, the inadvertent preparation of instructional leaders for the principalship. If substantiated by future research, NBCTs who complete the NBPTS process could become an invaluable resource for principal preparation and recruitment in the future (Deavers, 2009). The findings of this single-case study potentially lead school effectiveness researchers in that direction.

Recommendations for further research. The ascension of NBCTs to school leadership roles emerged as a common feature of comprehensive school reform models

and initiatives to improve public schooling outcomes. More studies of this topic, replicated in multiple settings, would advance our understanding of this unique phenomenon. Quasi-experimental and inferential statistical analysis of the variables investigated in this single-case study is recommended.

The findings from this single-case study revealed areas that warrant further exploration. The following are recommendations for future research:

- The leadership behaviors of NBCT principals should be analyzed through additional empirical studies using multiple-case designs and inferential statistical analysis. Further replication of this study is helpful in understanding clearly how the NBPTS process links to the overall school academic performance, as measured by improved student achievement.
- The performance of principals who attended various types of principal preparation programs should be measured against NBCTs who ascended to the principalship. Such a comparative analysis could confirm the NBPTS teacher certification process as a viable alternate path to the principalship, causing NBCTs to become a vital resource for principal preparation, induction, training, and recruitment (Deavers, 2009).
- A comparison study should be conducted to assess the levels of focus upon instruction, assessment, curricula, and reflection of principals who attended traditional principal preparation programs against NBCTs who have ascended to the principalship through the NBPTS process in Illinois.

By pursuing the recommended research investigations, we can begin to confirm the utility of the NBPTS process and NBCTs in the principalship.

Concluding remarks. The implementation of this case study was an attempt to explore, describe, analyze, and explain how an NBCT demonstrated leadership behaviors in the principalship. This analysis of the connections through which Susan's leadership behaviors were demonstrated benefits educational leadership research. This study was guided by explanatory conceptual models and used the case study technique designed to investigate this contemporary phenomenon within its real-life context. The purpose of this research study was to examine the knowledge gap that existed relative to NBCTs in the principalship. Researchers asserted that the NBPTS process develops knowledge relative to school leadership and that individuals who completed the process may bring a greater focus upon curricula, instruction, assessment, and reflection that were a crucial linkage to successful school leadership (making new things happen).

The primary components of my conceptual framework and research design included the research questions, the purpose of the study, data collection methods, data analysis, epistemology, Pitner's (1988) conceptual framework, and validity and reliability. The research questions were answered by the emergent themes: setting the vision and mission, school and community relationships, religion spirituality and faith, and the 5 core propositions approach to school leadership.

Answering the research questions satisfied the purpose of the study to investigate the potential effect of the NBPTS process on principal preparation. I also described the role it played in the development of Susan's leadership behaviors. Data were collected through three interviews, multiple observations, and a survey that included three reporting groups comprised of a census of teachers and a convenience sample of parents, and school staff members. I also collected pertinent documents.

Data were analyzed twice from a deductive and inductive process. Findings and conclusions were reported from the inductive (thematic) perspective. The epistemology of empiricism informed and guided my data collection activities and my initial analysis of the data which categorized the data based on Pitner's (1988) direct, mediated, reciprocal, and antecedent (DMRA) conceptual models. Finally, validity and reliability were pursued by following acceptable case study methodology, defining the domain to which the findings may generalize, conducted pattern matching activities, rival explanations, and I used interview and observation protocols to permit replication.

I found evidence that the NBPTS certification process assisted in preparing Susan for her role as principal. Specifically, it was found that Susan demonstrated Pitner's (1988) DMRA leadership behavioral approaches in alignment with SVM, SCR, RSF, and the five core propositions. This demonstration was consistently found across each data collection activity conducted in this case study. Therefore, it was concluded that the consequences of completing the NBPTS process were (a) Susan demonstrated a focus on curricula, instruction, assessment, and reflection in the role as principal, (b) the primary instrument for school change was pedagogy, and therefore (c) Susan's reform efforts focused on creating a "five core prop building."

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Appendix A: Recruitment E-Mail

This e-mail serves as an invitation for your participation in a current study I am conducting as a doctoral student at The George Washington University. Your contact information was obtained through public records of school district websites and/or association membership directories, or by referral sources.

This study will incorporate the voice a of current K-12 school principal who holds or held a National Board for Professional Teaching Standards (NBPTS) certification (NBCT). As research assistant, you will be invited to describe your experiences of school leadership and the skills, attitudes, and knowledge necessary to be successful in your role. I will analyze your leadership approaches in the principalship. The study is being conducted under the direction of Dr. Jennifer K. Clayton, PhD, Assistant Professor, The George Washington University. She can be reached at XXX-XXX-XXXX or by email at XXXXXXXX@gwu.edu.

I request three 1-hour interviews with you to discuss your insights on this topic. I also request site observations of you conducting your leadership and position responsibilities. Each observation should not exceed 120 minutes. I will also conduct a survey of faculty, staff, parents and key members of the community. Finally, I request that I have access to your NBCT portfolio and professional portfolio of performance artifacts. The study will be conducted over the course of six-nine weeks, barring unforeseen circumstances. Your responses to my interview questions will be confidential and anonymous. I would refer to you only by the position you currently hold and by pseudonym.

The interviews will be recorded for purposes of transcription, and the transcripts will have a unique code for identification. The recordings will be destroyed upon completion of the transcription. Your recording will not be used in any presentation or publication. All interview data will be kept in secure locations and will ultimately be destroyed to preserve your confidentiality. You will also be asked to sign an informed consent form and complete a demographic questionnaire if you choose to participate. I will accommodate your schedule and meet you at a convenient time and location to sign the informed consent forms.

Please contact me at this e-mail address or telephone number if you are willing to participate: XXXXXXXX@gwu.edu XXX-XXX-XXXX

Sincerely,

Ralph L. Gee

Doctoral Student, The George Washington University

Cc: Jennifer K. Clayton, PhD

Assistant Professor, GWU

XXXXXXXX@gwu.edu

Appendix B: Exemplar of Participant Letter of Invitation

Date: _____

Dear NBCT Principal:

I am completing a dissertation and research study at The George Washington University (GWU). This [email/postcard/phone call] invites you to be a participant in this research study which will focus on the leadership behavior of an NBCT in the principalship. The study is being conducted under the direction of Dr. Jennifer K. Clayton, PhD, Assistant Professor, The George Washington University. She can be reached at XXX-XXX-XXXX or by email at XXXXXXXX@gwu.edu.

The study will be completed during the fall of 2012. The study encompasses three 60 minute individual interviews, site observations, a survey, and an analysis of appropriate documents including your NBCT and professional portfolios. XXXXX Public Schools has granted permission for this study to be conducted. Your participation as research assistant in this study will contribute to educational leadership research.

In carrying out this study, I will respect the rights, needs, values, and desires of the NBCT participant. To protect the rights and privacy of the NBCT participant, I will follow these seven safeguards: (a) I will state the research objectives verbally and in writing; (b) I will obtain written permission to proceed with the study from the NBCT participant; (c) I will file a research exemption form with the GWU Institutional Review Board; (d) I will inform the NBCT participant of all data collection tools; (e) I will provide the NBCT participant with verbatim transcription and written interpretations; (f) I will, at all times, respect the NBCT's rights, interests, and requests when making data

reporting decisions; (g) I will insure participant anonymity in the publication of the dissertation.

Please complete and return the bottom invitation response indicating if you are interested in being a participant in the study. Please respond to my e-mail: XXXXXXXX@gwu.edu or contact me by phone if you have questions; my cell phone number is XXX-XXX-XXXX.

Sincerely,

Ralph L. Gee, Doctoral Candidate, The George Washington University

Cc: Jennifer K. Clayton, PhD, Assistant Professor, GWU

claytonj@gwu.edu

Invitation Response for Participation in NBCT in the Principalship Study

☐ Yes, I am willing to participate in the NBCT in the Principalship Study

☐ No, I am not willing to participate in the NBCT in the Principalship Study

☐ I would like to learn more information about the study before I make a decision.

Thank you for replying to this invitation.

Appendix C: Informed Consent Form

How Did an NBCT Demonstrate Leadership Behavior in the Principalship?

GWU IRB number:_____

Principal Investigator: Jennifer K. Clayton, PhD, Assistant Professor, GWU

XXXXXXXXXX@gwu.edu Telephone number: XXX-XXX-XXXX

Ralph L. Gee, Doctoral Student. XXXXXXXXXX@gwu.edu. Telephone number: XXX-XXX-XXXX

1. Introduction

You are invited to participate in a research study under the direction of Dr. Jennifer K. Clayton of the Graduate School of Education and Human Development, The George Washington University (GWU). Taking part in this research is entirely voluntary.

2. Why is this study being done?

You are being asked to participate in this single case study because you are or were a National Board Certified Teacher (NBCT) and you are a principal within a K-12 school. Please read this form and ask me any questions that will help you decide if you want to be in the study.

Taking part is completely voluntary and even if you decide to participate, you can quit at any time. You must be over 18 years old to take part in this study.

The purpose of this case study is to analyze how an NBCT in the principalship demonstrates leadership behaviors through direct, mediated, reciprocal, and antecedent (DMRA) approaches. Only one participant will be asked to take part in this study.

3. What is involved in this study?

If you choose to take part in this study, you will be invited to act as research assistant; participate in three 1-hour interviews, assist in disseminating the survey instrument, read and approve interview transcripts, and site observations of you in your professional environment conducting leadership and other professional duties.

The following activities are specifically research related: signing the informed consent form, completing the demographic information sheet, participating in the interviews, disseminating the survey instrument, reading and approving your transcripts, and observations. The total amount of time you will spend in connection with this study is approximately 40 hours. The majority of your time will be spent participating in observations. During the observations, you will not be actively involved, nor will you deviate from your normal daily activities.

The interviews will be audio recorded. I will ask you (a) to describe your experiences as an NBCT in the principalship; and (b) to describe what role if any, the NBPTS process had on the development of your leadership behaviors and approaches.

4. What are the risks of participating in this study?

During the interview, you will feel no more emotional or physical fatigue than a typical work day. There is, however, the minor risk of loss of confidentiality. However, every professional effort will be made to keep your information confidential; although, this cannot be guaranteed. You may refuse to answer any of the questions, and you may take a break at any time during the interviews, ongoing conversations, or observations. You may stop your participation in this study at any time.

5. Are there benefits to taking part in this study?

You will not benefit directly from your participation in the study. The benefit is to the field of educational leadership. As a research assistant, you may benefit from reflecting upon and improving your leadership processes and practices. Moreover, an analysis of your leadership approaches in the principalship might result in a more accurate understanding of the most effective ways to act and could corroborate the saliency of NBCTs in the principalship.

6. What are my options?

You do not have to participate in this study if you do not want to. Should you decide to participate and later change your mind, you can do so at any time.

7. Will I receive payment for being in this study?

You will not receive any type of payment for participating in this study.

8. Can I be taken off the study?

The investigator can decide to withdraw you from the study at any time. You could be taken off the study for reasons related solely to you (for example, not following study related directions from the investigator) or because the entire study is stopped.

9. How will my privacy be protected?

If results of this research study are reported in journals or at scientific meetings, the people who participated in this study will not be named or identified. The George Washington University (GWU) will not release any information about your research involvement without your written permission, unless required by law.

To minimize the risk that your confidentiality will be compromised, I will destroy all audiotape contents of the interview after it has been transcribed. Prior to transcription,

I will keep the audiotapes in a secure location. The written transcripts will not include your name or the name of the school you have been affiliated with.

Direct quotes may be used in the written reporting and publication of this information. You will be identified only by your generic position title (principal or by pseudonym). You will not be identified or connected to your quotes in any other fashion. These quotes will be cited only as interview transcript number.

10. Problems or questions

The Office of Human Research of George Washington University, at (202) 994-2715, can provide further information about your rights as a research participant. If you think you have been harmed in this study, you can report this to the Principal Investigator of this study.

By signing below, you are telling the researcher YES, that you agree to participate in this study.

Participant's Printed Name _____

Particpant's Signature: _____

Date: _____

INVESTIGATOR'S STATEMENT

I certify that I have explained to this subject the nature and purpose of this research, including benefits, risks, costs, and any experimental procedures. I have described the rights and protections afforded to human subjects and have done nothing to pressure, coerce, or falsely entice this subject into participating.

I am aware of my obligations under state and federal laws, and promise compliance. I have answered the subject's questions and have encouraged her to ask

additional questions at any time during the course of this study. I have witnessed the above signature(s) on this consent form.

Investigators' Printed Name & Signature: _____

Date: _____

Appendix D: Demographic Information Collection Sheet

Please provide the following demographic information. This information will not be connected to your name or school/school district. You may choose not to answer any/all questions on this form.

Participant Code: (to be completed by principal investigator) _____

Race (Circle One)

Unspecified

American Indian/Alaska Native

Asian

Black/African American/Not of Hispanic Origin

Hispanic

White/Not of Hispanic Origin

Native Hawaiian/Other Pacific Islander

Age (Circle One)

20–30

31–40

41–50

51–60

61–70

Gender (Circle One)

Female

Male

Unspecified

Current position: _____

Years in current position: _____

Area of NBCT certification: _____

Year attained National Board for Professional Teaching Standards Certification: _____

Preferred pseudonym: _____

Preferred school pseudonym: _____

Appendix E: Interview Protocol NBCT

Name _____ Date_____ Time_____

You were selected to participate in this study because you are an NBCT in a K-12 principalship. Your identity will be protected in keeping with university policy articulated by the Institutional Review Board (IRB) of The George Washington University. The information you provide in this study will be confidential. Each of the three interviews should last about an hour. Everything you say will be kept confidential; your name and school will not be associated with any specific comments or conclusions expressed in the study. You may be identified by position (example, principal, assistant principal), but your school will not be attached to that description.

My interest is in learning from your experience and will tend to focus on your acts when directing, identifying, and supporting learning through structuring the social settings and arbitrating the internal and external demands of the school. I will be recording our interview today for purposes of transcription. Your recording will not be used in any publication or presentation. The files containing the recording will be de-identified as soon as possible, but the only identifier on them will be a participant code that cannot be connected to your name by anyone but me. Finally, I will contact you and provide you an opportunity to review your interview transcripts.

Do you have any questions before we start?

Interview Session 1

1. Without being humble, what do you value about yourself as a leader?
2. What do you value about the nature of your work, and your school?
3. Describe your philosophy of leadership in your principalship role.

4. Describe your idea of how a school should look, feel, and operate.
5. What were your initial impressions about the NBPTS process?
6. What did you hope to gain from achieving the NBCT?
7. What part (if any) of the NBPTS process influenced your philosophy of instructional leadership in your principalship role?
8. What role (if any) did the NBPTS process play in the attainment of key skills, attitudes, and knowledge to be successful in your principalship role?
9. Based upon your philosophy of leadership and experiences in the principalship role what is the purpose of a school?
10. What are some strategies or procedures that bring about the school's purpose?
11. If the school's purpose is not being fulfilled, what are some interventions to change from one purpose to another?
12. What role (if any) did the NBPTS process play in your understanding of the purpose of a school and strategies and interventions to achieve that purpose?

Interview Session 2

1. Looking at your entire experience in education what is your philosophy of teaching and learning?
2. What is your philosophy for improving teaching and learning?
3. Describe how technology can assist in teaching and learning.
4. How important are instructional assessments and why are they important?
5. Philosophically, how important are instructional reforms in teaching methods? What (if any) instructional reforms have you instituted?

6. How (if at all) has the NBPTS process influenced your focus on curriculums, instruction, and assessment in your principalship role?
7. What are methods of engaging faculty and staff members?
8. What are methods to engage parents, school board members, and local business owners?
9. What is your idea of an interactive faculty?
10. What strategies help engage the faculty and staff in decision making?
11. What are some barriers to implementing and enforcing decisions, policies, or procedures?
12. How (if at all) did the NBPTS process prepare you for engaging these "stakeholders"?

Interview Session 3

1. Looking at your entire experience and philosophy of leadership what are methods of meeting the needs of differing socioeconomic groups?
2. What are methods of meeting the needs of differing racial groups?
3. What are methods of meeting the needs of differing gender groups?
4. What are methods of meeting the needs of differing academic ability groups?
5. In general, who is responsible to create or change school practices and processes to meet those needs?
6. What experiences, or training (if any), did the NBPTS process provide you in preparation for key aspects of your leadership in this regard?

7. If you could develop or transform your school in any way you wished, what three things would you do to heighten its effectiveness and the overall student achievement?
8. Feel free to make any statements or comments that you believe important to add at this time.

Appendix F: Observation Protocol Checklist

Observation # _____ Observation Date: _____

When observed, circle all that apply and write field notes describing the incident:

Levels of focus	D: School organization	M: School classroom	R: School culture	A: School context	EC
Central concepts	Policies, procedures, rules, rituals, routines, supervision, mentoring, modeling the way, and challenging the process, performance artifacts, portfolio assessments, high standards	Comprehen-sive reforms, developing effective teaching through selection, induction, and training, enabling teachers to act on their ideas, professional learning organizations	Teacher satisfaction, teacher efficacy, inspiring a shared vision, distributed leadership, slogans, mascots, student discipline, providing resources and support	Matching the internal conditions with the external contingency factors (i.e. demographic shifts, changes in local employment patterns, high stakes testing, division support and funding), data driven	
Leader-ship Chal-lenge	Compliance: Improving organizational structure through standardization compliance and documentation, various observations and supervision	Pedagogy: Improving teaching and learning strategies through team planning and aligned instruction, student engagement Parental involvement	Interaction: Improving relationships and commu-nication throughout the entire system, develop student councils to gain their input and engagement	Alignment: improving educational outcomes through managing the racial, gender, and socio-economic compositional factors of the local community	
Leader-ship principle	School building	Teachers and students	Leader's vision and relationships	Setting or conditions	

Levels of focus	D: School organization	M: School classroom	R: School culture	A: School context	EC
Leader-ship Interven-tions	Structural: Setting directions, improve facilities, enforce safety protocols, documentation of performance evaluations, standardization, a hierarchical structure	Strategic: Improved instructional strategies, improved alignment of curricula, usage of technology tools, reading and math initiatives, teaching test-taking skills	Systemic: Connecting people, counseling, direct communica-tion, shared leadership, parental engagement, community partners, managing and eliminating conflicts	Situational: Contingent and solution focused based on school location, the school's racial gender, and socio-economic composition, and the community's racial and socioeconomic factors	
Narrative & Field Notes					

Note. D = direct approach. M = mediated approach. R = reciprocal approach. A = antecedent approach. EC = emergent coding.

Appendix G: Survey Cover Letter

Dear Survey Respondent:

As a doctoral candidate at The George Washington University, I am in the process of conducting a study entitled "How Did an NBCT Demonstrate Leadership Behavior in the Principalship?" The purpose of this study is to contribute to educational leadership research. The study is being conducted under the direction of Dr. Jennifer K. Clayton, PhD, Assistant Professor, The George Washington University. She can be reached at XXX-XXX-XXXX or by email at XXXXXXXX@gwu.edu

I am reaching out to the faculty, staff, parents, and community members of the school to assist me in acquiring a greater understanding of the principal's leadership approaches. Your participation in this qualitative study will assist me in filling a void in the research regarding NBCTs in the principalship. To that end, I am inviting you to participate in an online survey. The survey can be completed in approximately 15 minutes.

Your participation is strictly voluntary. Your survey results will be confidential. You will not be identified in any reports or publications related to this study. There will be no way to trace the survey responses to you. The results will be analyzed and summarized in the final chapters of my dissertation. Your responses are important to my research. I look forward to your participation in this study.

Please do not hesitate to contact me if you have any questions. I can be reached at XXX-XXX-XXXX or through e-mail at XXXXXX@gwu.edu. Your time and effort in helping me with this study are greatly appreciated.

Continuing with this survey indicates your consent and waiver of documentation.

Please follow the link below to connect to the online survey.

Sincerely,

Ralph L. Gee, Doctoral Candidate

The George Washington University

Cc: Jennifer K. Clayton, PhD

Assistant Professor, The George Washington University

Appendix H: Survey Questions

What is your role at the school?

- o School Teacher
- o School Staff Member
- o Current Parent of a Student

Survey Directions: Please select the answer that represents how you feel about the principal of this school.

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
I Don't Know

1. The principal is the instructional leader.
2. The principal has designed a well organized school.
3. The principal closely supervises school employees.
4. The principal enforces student discipline.
5. The principal enforces safety procedures.
6. The principal sets high academic performance expectations for students.
7. The principal provides opportunities for teachers to collaborate with each other.
8. The principal provides the resources needed to teach at this school.
9. The principal provides instructional development for teachers.
10. The principal sets high expectations for teaching.
11. The principal communicates the school's mission to the school employees.
12. The principal quickly responds to questions from parents.
13. The principal is responsible for creating a positive school climate.
14. The principal works with community members.

15. The principal ensures that the school recognizes the importance of diversity.

16. The principal effectively uses programs for low performing students.

17. The principal effectively uses programs for poor or disadvantaged students.

18. The principal pairs the best teachers with low performing students.

19. The principal makes school test scores a priority for teachers.

20. The principal spends money to improve student performance.

21. The principal provides training for school employees.

22. The principal communicates her vision to school employees.

23. There is a positive school climate.

24. The principal provides opportunities to recognize ethnic diversity.

25. The principal effectively uses school test scores in resource allocations.

26. Rate this school overall.

27. Rate the appearance of the school.

28. Rate the test score performance of this school.

29. Rate the principal of this school.

30. Is there anything else I should know about this school or this principal?

Appendix I: Survey Data

Direct Section

Item		% Strongly agree	% Agree	% Neutral & IDK	% Disagree & strongly disagree
2. The principal is the instructional leader.					
	Teacher	52	32	11	5
	Parent	48	39	10	3
3. The principal has designed a well organized school.					
	Teacher	57	22	13	8
	Parent	46	48	3	3
4. The principal closely supervises school employees.					
	Teacher	78	19	3	0
	Parent	45	34	7	14
5. The principal enforces student discipline.					
	Teacher	68	19	5	8
	Parent	69	31	0	0
6. The principal enforces safety procedures.					
	Teacher	68	24	5	3
	Parent	48	38	7	7
7. The principal sets high academic performance expectations for students.					
	Teacher	57	38	5	0
	Parent	72	24	7	0

Mediated Section

Item		% Strongly agree	% Agree	% Neutral & IDK	% Disagree & strongly disagree
8. The principal provides opportunities for teachers to collaborate with each other.					
	Teacher	76	19	5	0

Item		% Strongly agree	% Agree	% Neutral & IDK	% Disagree & strongly disagree
	Parent	34	34	8	24
9. The principal provides the resources needed to teach at this school.					
	Teacher	62	30	5	3
	Parent	31	52	7	10
10. The principal provides instructional development for teachers.					
	Teacher	73	27	0	0
	Parent	45	34	7	14
11. The principal sets high expectations for teaching.		73	24	3	0
	Teacher	66	28	3	3
	Parent				
12. The principal communicates the school's mission to the school employees and parents.					
	Teacher	59	41	0	0
	Parent	46	48	3	3
13. The principal quickly responds to questions from parents.					
	Teacher	68	19	11	2
	Parent	45	38	14	3

Reciprocal Section

Item		% Strongly agree	% Agree	% Neutral & IDK	% Disagree & strongly disagree
14. The principal is responsible for creating a positive school climate.					
	Teacher	37	46	5	11
	Parent	90	3	7	0
15. The principal works with community members.					
	Teacher	59	30	11	3
	Parent	52	24	21	3
16. The principal ensures that the school recognizes the importance of diversity.					
	Teacher	57	32	11	0
	Parent	42	34	21	3

Item		% Strongly agree	% Agree	% Neutral & IDK	% Disagree & strongly disagree
17. The principal effectively utilizes programs for low performing students.					
	Teacher	32	49	14	5
	Parent	34	38	21	7
18. The principal effectively utilizes programs for poor or disadvantaged students.					
	Teacher	27	41	27	5
	Parent	24	42	31	3
19. The principal pairs the best teachers with low performing students.					
	Teacher	27	16	46	11
	Parent	17	24	52	7
20. The principal makes school test scores a priority for teachers.					
	Teacher	51	38	8	3
	Parent	24	52	21	3

Antecedent Section

Item		% Strongly agree	% Agree	% Neutral & IDK	% Disagree & strongly disagree
21. The principal spends money to improve student performance.					
	Teacher	78	22	0	0
	Parent	34	21	38	7
22. The principal provides training for school employees.					
	Teacher	41	54	5	3
	Parent	24	28	48	0
23. The principal communicates her vision to school employees.					
	Teacher	70	30	0	0
	Parent	38	31	31	0
24. There is a positive school climate.					
	Teacher	27	35	19	19
	Parent	21	62	14	3
25. The principal provides opportunities to					

Item		% Strongly agree	% Agree	% Neutral & IDK	% Disagree & strongly disagree
recognize ethnic diversity.					
	Teacher	24	46	27	3
	Parent	21	45	31	3
26. The principal effectively utilizes school test scores in resource allocations.					
	Teacher	40	30	30	0
	Parent	21	28	48	3

Appendix J

Documents Table of Findings

Source #		Type	Format	Date	Subject/ Content/ Purpose	DMRA	EC
1.		**Professional Portfolio**					
	a.	School Instructional Budget Summary	Spreadsheet	2012-2013	Allocation of funds reflects leadership focus	D	
	b.	School Improvement Plan	PowerPoint	10/15/12	Overall school improvement goals and objectives: "College and career ready"	D	
	c.	RTI- Responsiveness to Instruction: HS Model	PowerPoint	10/15/12	Student Intervention team, tiered response to academics and behavior	D	
	d.	Ace Time- Students may earn a 5th credit	PowerPoint	10/15/12	Tutoring, clubs, department meetings, service learning projects, intramurals	R, D	
	e.	Alternative Center- APEX instructional software: Located in the city's Armory	PowerPoint	10/15/12	"For students exhibiting academic, behavioral, and/ or attendance issues"	M, D	
	f.	Homeroom Advisors (HRA)- for each student	PowerPoint	10/15/12	HRA's provide character Ed., relationship building, & Ace Time	R	
	g.	GEAR UP- Federal grant Academic performance	PowerPoint	10/15/12	Increase grad rates & post secondary educational options and participation	M	
	h.	Graduation Project- Senior project	PowerPoint	10/15/12	Improve efficiency of English 4 instructional delivery	D, M	
	i.	Summer Program	PowerPoint	10/15/12	Summer school transitional program & orientation for rising 9th graders	M, R, D	
	j.	One to One Technology- & Tech. Professional Dev	PowerPoint	10/15/12	Technology initiative Chrome Books computers to each student	M	
	k.	Increased Communication via HHH	PowerPoint	10/15/12	Utilize social media platforms to communicate with stakeholders	R	
	l.	School-wide Clean-Up Days	PowerPoint	10/15/12	Invite church and civic groups to volunteer painting, cleaning, gardening	R	
	m.	Physical Plant Facilities	PowerPoint	10/15/12	Capital improvements to facility- new office areas, furniture & media center	D	
	n.	Instructional Leadership Team	PowerPoint	7/10/12	Provide instructional support to in the classroom	M	
	o.	Learning Teams- To develop teacher leaders	PowerPoint	7/10/12	Ongoing professional development and collaboration across departments	D, M, R	
	p.	Faculty Meeting- Opening Ceremonies	PowerPoint	8/15/12	NBPTS Core Propositions presented as school-wide instructional goals	M	
	q.	School Vision & Mission	PowerPoint	8/15/12	A school dedicated to preparing graduates for the global community	D	
	r.	School Improvement Initiative	PowerPoint	8/15/12	"School improvement depends on improving the quality of instruction in classrooms"	M	
	s.	Student Learning Goals	PowerPoint	8/15/12	Raise SAT, ACT, EOC scores; improve 9th grade performance & reduce dropouts	M	
	t.	Organizational Effectiveness Goals	PowerPoint	8/15/12	Improve communication between faculty & admin; Improve parent & community involvement; Improve safety; reduce # of students who skip & office referrals	R	
	u.	CPR certification for each student	PowerPoint	8/15/12	CPR certification required to graduate to begin 2014-15	M	EC
	v.	Open House- for parents	PowerPoint	8/15/12	Make school a welcome place/communicate & develop relationships with parents	R	
	w.	New Teacher Orientation & Expectations	PowerPoint	8/9/12	Our Motto: Be respectful, responsible, safe & successful: PBIS Matrix	D. R	
	x.	New Teacher Expectations	PowerPoint	8/9/12	Greet students at door; begin class immediately; check email 2x daily; date, sign, copy everything; expect observations	D, R	
	y.	Teacher Evaluation	PowerPoint	8/9/12	Rubric; formal observations; walk-throughs; continuous professional development; teacher talks	D	
	z.	Teacher Handbook	PowerPoint	8/9/12	Required to read and sign handbook for policies and procedures	D	
2.		**Five core propositions approach**	PowerPoint	8/8/12	Five Core Propositions	EC	

	a.	**New Employee Orientation**	PowerPoint	8/8/12	Five Core Propositions: Teachers are committed to students and their learning; know their subjects and how to teach those subjects; responsible for managing and monitoring student learning; think systematically about their practice; are members of a learning community.	M, EC	
	b.	**Contents of Participant's NBCT Portfolio**	PowerPoint	8/8/12	Written portfolio of performance artifacts; videotaped lessons, interactions with parents and students, and school counseling; multiple assessments; supervision and documentation of competencies	M	
	c.	Inclusion- Professional Development	PowerPoint	11/29/12	An inclusion classroom has an expert content person; and an exceptional children expert who work collaboratively to promote student growth through differentiation, instructional modification & accommodation	M, D	
3.	**Bulletin Boards**						
	a.	PBIS Matrix- Updated	Bulletin Board	10/19/12	Positive Behavior Intervention Supports- to include technology & celebrations	R, D	
	b.	Common Core & Essential Standards	Bulletin Board	10/19/12	New/ revised pacing guides, objectives & units of study	M, D	
4.	**School Newsletter**						
	a.	Summer Institute- Continuing Staff Development	Word Doc	7/3/12	Reading and Math Foundations; Core Curriculums Alignment; Co- Teaching; and Autism in the General Education Classroom	M, D	
	b.	School Faculty Prayer Group	Word Doc	7/27/12	To be held in the media center at 1:30 on 8/21/12	R	EC
	c.	Staff Development	Word Doc	8/10/12	Core Literacies: Designing instruction for the 21st Century Classroom	M	
	d.	Summer Reading Project	Word Doc	8/17/24	Staff to read the book: *Becoming a Great High School*- communicating vision	M	
	e.	Document Camera and LCD Projector	Word Doc	8/24/12	New instructional equipment purchase and training	M, D	
	f.	School culture, climate & school spirit activities	Word Doc	8/31/12	Pep Rally; BBQ dinner and music monetary benefit for a needy faculty; PBIS tailgate party; Lunch & Learn; Ace Time	R	
	g.	Faculty & staff birthday recognitions and parties	Word Doc	9/7/12	Seven faculty and staff members were recognized for September birthdays	R	
	h.	Collaboration Days and collaboration schedule Learning community	Word Doc	9/28/12	Professional development sessions: intra-department and cross department lesson planning and preparation- subs provided	M, D, R	
	i.	Parent Conferences- Parental engagement	Word Doc	10/5/12	367 parent conferences-"Way to go"	R	
	j.	Chromebooks Pilot for One-to-One vision	Word Doc	10/12/19	Financed three classroom sets of laptop computers for each student	D, M	
	k.	Benchmark Testing & Released Test Items	Word Doc	11/2/12	Bring to collaboration meeting for lesson planning; remediation; & instructional improvement	M	
	l.	Mistletoe Ball	Word Doc	12/7/12	Christmas dance & celebration for students	R	
5.	**Letters & Memorandum**						
	a.	Budget Allocation: Social Studies	Word Doc	8/20/12	Spend allotment frugally & revert funds to other needy departments if possible	D, M	
	b.	Budget Allocation: Science	Word Doc	8/20/12	Allocation for two digital microscopes and equipment repair	D, M	
	c.	Budget Allocation: Media Specialist	Word Doc	8/20/12	Allocation for staff development, subs for collaboration, software & library books	D, M	
	d.	Budget Allocation: Math	Word Doc	8/20/12	"Stay within budget no room for costly mistakes or purchases outside budget"	D, M	
	e.	Budget Allocation: Health Phys. Ed.	Word Doc	8/20/12	Spend allotment frugally & revert funds to other needy departments if possible	D, M	
	f.	Budget Allocation: Guidance	Word Doc	8/20/12	SAT/ ACT Prep	D, M	
	g.	Budget Allocation: English Department	Word Doc	8/20/12	Spend significant allotment on Novels- $2976	D, M	

	h.	Budget Allocation: Exceptional Children	Word Doc	8/20/12	Spend allotment frugally & revert funds to other needy departments if possible	D, M	
	i.	Budget Allocation: Career Technical Ed.	Word Doc	8/20/12	Each teacher allotted $1000 for CTE	D, M	EC
	j.	Budget Allocation: Alternative Center	Word Doc	8/20/12	Smaller budget allotted to the alternative center $992	D, M; A	EC
	k.	Budget Allocation: World Cultures	Word Doc	8/20/12	2 Spanish Classes, Music, School Play; Band; Art; Band travel $7000+	D, M	
	l.	Restructure of office personnel assignments	Word Doc	8/16/12	Duties assigned to main office staff to improve its efficiency and productivity	D	
	m.	Vidant Chowan Hospital-Community Partner	Letter	8/17/12	Thank you letter to volunteers for painting the cafeteria and kitchen	R	
	n.	Custodial Check Sheet-documentation and supervision tool	Word Doc	No Date	Expectations checklist: corners clean; baseboards dusted; free of cobwebs; windowsills and blinds dusted; toilets scrubbed; floors buffed etc.	D	
	o.	Friends of Music- E. C. Band Parents Association	Letter	9/20/12	Battle of the Bands competition invitation and fund raiser with proceeds supporting the school band program	R	
6.	**School Website**						
	a.	Follow High School on Twitter and Facebook	Online	12/7/12	Interne based communication platforms to allow parents to connect with the school	R	
	b.	Academic Credential Evaluation Services (ACES)	Online	12/7/12	"A program designed to add value to the high school diploma by certifying student attainment of the skills most valued by post-secondary stakeholders."		EC
	c.	(ACES) continued **C**areer **R**eadiness **C**ertificate (CRC)	Online	12/7/12	The CRC is a portable skills credential, assuring employers that a job applicant actually has the basic skills they seek.		EC
	d.	(ACES) continued **C**ollege **T**ech **P**rep **R**eadiness **C**ertificate (CTPRC)	Online	12/7/12	The CTPRC is a credential based upon the reading, writing, and intro to Algebra composite scores- assuring community colleges that a students are prepared		EC
	a.	(ACES) continued **C**ollege/**U**niversity **P**rep **R**eadiness **C**ertificate (CUPRC)	Online	12/7/12	The CUPRC is a Bronze, Silver, or Gold credential assuring community colleges that SAT scores exceeds the average freshman score at (Bronze) **33%** of the state's colleges/ universities (Silver) **54%** (Gold) **93%** of the state's colleges & universities		EC
	b.	ACE Time	Online	12/7/12	84 minutes built into the daily schedule allowing students to meet with teachers, attend tutoring, complete missed assignments, remediation, work on research projects, and meet with school counselors	M, R, D	
	c.	Athletic Eligibility Requirements	Online	12/7/12	Students cannot miss more than 13 days, excused or unexcused; Must have passed at least three (3) courses during the previous semester	M	
	d.	Career and College Promise Initiative	Online	12/7/12	Students can begin their two or four-year college work, tuition free, while they are still in high school.		EC
	e.	Student Groups, Clubs, & Organizations	Online	12/7/12	The Student Government represents the interests of students to increase student decision-making to improve campus life	R	
	j.	Common Core and Essential Standards Link	Online	12/7/12	The standards articulate student learning expectations and are designed to be relevant reflecting the knowledge and skills needed for success in college and careers.	M	
	k.	School Mission Statement	Online	12/7/12	Providing a learning environment dedicated to preparing graduates for the global community. Through the support of all stakeholders, students are empowered to become responsible, active citizens.	R	
	l.	The United States Army Junior Reserve Officers' Training Corps (JROTC) Partnership with the city's Armory	Online	12/7/12	The study of ethics, citizenship, communications, leadership, life skills designed to prepare young men and women to take their place in adult society. "To instill in students in USA secondary educational	M	

					institutions the value of citizenship, service to the United States, personal responsibility, and a sense of accomplishment."	
	m.	Student Handbook	Online	12/7/12	Policies and procedures governing student activities while on the school's campus.	D
7.	**School Improvement Plan (SIP): 2012-2013**					
	a.	Professional Development	Word Doc	2012-13 school yr	Improve classroom practice and school leadership through tailored, intensive professional development to include follow-up, support, practice, feedback, and evaluation in a collaborative effort to provide competent, caring, and highly qualified teachers for each student.	M
	b.	Planning Time & Duty Free Lunch	Word Doc	2012-13 school yr	Teachers shall be provided a minimum of five hours per week planning time	D
	c.	Safe Schools Plan (SSP)	Word Doc	2012-13 school yr	SSP promotes a climate of respect and appropriate personal for students and school personnel, providing for safety security and order	D & R
	d.	Student Learning Goals (SLG)	Word Doc	2012-13 school yr	Lower the percentage of 9th graders failing courses; reduce drop-out rate; improve ACT & SAT scores; improve EOC testing scores	M
	e.	Organizational Effectiveness	Word Doc	2012-13 school yr	Improve communication between faculty and admin; increase parental 7 community involvement; improve the health & safety of students, faculty & staff (eliminate: drug use, selling of drugs & gang activity); reduce the number of students who ***skip*** class & the number of related office referrals.	R & D
	f.	Student Learning Projects & Initiatives	Word Doc	2012-13 school yr	Graduation Project; One-to-One Technology Program; Ace Time; GEAR-Up; Responsiveness to Instruction (RTI); Summer School; Summer Transition; Alternative Program; Homeroom; School-wide Clean-up Days; Plant Facilities; Triple H; Google Tools; Educator's Handbook; PBIS; Service Projects; & Communication	M
	g.	Programs & Strategies that impact student learning goals	Word Doc	2012-13 school yr	Professional Development; Credit Recovery; Tutoring; Inclusion; Units of Study (pacing guides); Graduation Project; SAT & ACT Preparation; AIG (dual enrollment) Extra-Curricular Activities; Guidance; Academic Intervention; Learning Teams (professional development & collaboration); Writing Across the Curriculums;	M
	h.	Programs & Strategies that impact Organizational Effectiveness	Word Doc	2012-13 school yr	Distributed Leadership Teams; Athletics (policies & procedures for participation); Graduation Ceremonies; Student Planners; Communications; (media & devices); Annual Surveys; Student Progress Reports; Meetings Schedule; Publish Monthly Newsletters (guidance department); Judicial Attendance Council (court referrals for chronic absentees) Orientation (parents & freshmen) & Open House (quarterly);	D
	i.	Common Core & Essential Standards	Word Doc	2012-13 school yr	Provide ongoing professional development; pacing guides; common assessments; data testing data analysis; read *Becoming a Great High School*	D
	j.	Graduation Project	Word Doc	2012-13 school yr	Make project more meaningful to students, mentors, and parents; Increase mentor's role in the project through Mentor Logs	M
	k.	One-to-One Technology Program for Students	Word Doc	2012-13 school yr	Leased laptops for every student; provide instruction in the use of the device; provide professional development on 21st Century skill and pedagogy regarding the device	M

	l.	Revised Ace Time	Word Doc	2012-13 school yr	To improve student attendance, academic achievement, communication & relationships between teachers and students	M & R
	m.	GEAR- Up	Word Doc	2012-13 school yr	A grant project for high school seniors to develop college and career readiness	M
	n.	Responsiveness to Instruction (RTI)	Word Doc	2012-13 school yr	Developing academic, behavioral, & instructional interventions for failing students at the classroom levels	M
	o.	Summer School	Word Doc	2012-13 school yr	Purchase APEX software- computer based instructional software; investigate online instructional providers;	M
	p.	Homeroom initiative	Word Doc	2012-13 school yr	To increase opportunities for teacher/ student communication & relationship development, tutoring, and remediation	R & M
	q.	School-wide Clean-Up Days	Word Doc	2012-13 school yr	Provide opportunities for the community to volunteer, communicate, & develop relationships with the school; to improve the appearance and functionality of the physical structure of the school	D & R
	r.	Plant Facilities	Word Doc	2012-13 school yr	To improve the appearance and functionality of the school: new furniture for main office & classrooms, paint, plants and shrubs, renovate the main office area; and provide custom shelving for each classroom	D
	s.	Triple H Newsletter	Word Doc	2012-13 school yr	Guidance Department will publish a monthly newsletter to improve communication of school activities with stakeholders	R
	t.	Google Tools Technology	Word Doc	2012-13 school yr	Continuous technology based professional development: Group Wise to Gmail; put teacher handbook on Google Docs; Docs Calendar Drive; Incorporate use of tools in daily communication, instruction & planning	D
	u.	Educator's Handbook	Word Doc	2012-13 school yr	Policies and procedures for recording grades, attendance, behavior referrals, and running attendance and behavior reports	D
Themes		SVM 36/92		SCR 14/92	RA 7/92	NBPTS 35/ 92
Approaches		D	M	R	A	EC
Totals:		26/92	46/92	27/92	1/92	9/92

Table 4. Document Analysis Table

EC= Emergent Coding

Appendix K

Summary of Direct Effects Research

Focus	Study 1: Barker, 2007	Study 2: Graczewski et al., 2009	Study 3: Ylimaki et al., 2007
Variables studied	Direct effect of transformational leadership on student achievement	Direct effect of instructional leadership on student achievement	Direct effect of leadership in high-poverty schools
Behavioral approach and findings	Manage the instructional program; communicated a clear shared vision; created greater interconnect-edness; redesigning the organization; distributed leadership, coaching, and mentoring to increase leadership capacity of staff; setting direction; developing people; establishing high performance expectations for teachers and students	Create a PLC, developing people, professional development on subject area curricula, established a coherent school-wide vision, setting directions, managing the instructional program, redesign organizational structure	Instructional leadership focus, redesign the organizational structure, authoritarian leadership style, develop people. communicate a clear vision and mission, establish high performance expectations, maintain positive home-school partnerships, distributed leadership
Areas of congruence	Vision; setting directions; developing people; redesigning the organization; managing the instructional program; distributed leadership; establish high performance expectations for teachers & students	Vision; setting directions; developing people; redesigning the organization; managing the instructional program; distributed leadership	Vision; setting directions; developing people; redesigning the organization; managing the instructional program; distributed leadership; establish high performance expectations
Areas of divergence	Coaching and mentoring of teachers, increase leadership capacity of teachers, create greater inter-connectedness	Create a PLC, professional development on subject area curricula	maintain positive home-school partnerships, create safe, orderly school environment

Summary of Mediated Effects Research

Focus	Study 1: Wallace (2002)	Study 2: Cavalluzzo (2004)
Variables studied	Distributed leadership and instructional management effectiveness focused at the classroom level	Pairing of NBCTs with students of varying ability levels
Behavioral approach and findings	Pedagogy, matching internal and external contextual factors: SES, manipulate classroom-level processes, commitment to teamwork, managing the instructional program, develop people, focus on teaching and learning processes	Pedagogy, matching internal & external contextual factors: SES, manipulate classroom-level processes, strategic pairing of students and teachers, develop human capital in the teaching profession, focus on teaching and learning processes,
Areas of congruence	Pedagogy, matching internal and external factors like (SES), manipulate classroom-level processes, develop people, focus on teaching and learning processes	Pedagogy; match internal and external factors: SES, manipulate classroom-level processes, develop people, focus on teaching and learning processes
Areas of divergence	Commitment to teamwork Managing the instructional program	Strategic pairing of students

Summary of Reciprocal Effects Research

Focus	Study 1:	Study 2: Anderson (2004)
Variables studied	Influence of instructional leadership on teacher effectiveness and school climate, test of Pitner's Model C for fit indices	Reciprocal influence between principals and teacher leaders on systemic relationships
Behavioral approach and findings	Principal's vision, instructional leadership focus, gender of principal (female) and percentage of female teaching staff, age of the female principal and teachers, gender (percentage of female students), antecedent variable related to the school context effected school culture: SES, organizational quality, transformational leadership style as distributed leadership, context of the school (e.g., high-SES neighborhood)	Relationships contribute to school climate, communication supports relationships, principal is both dominant and dependent (reciprocity); Enable teachers to act: allowing, encouraging, and supporting teachers to take risks and try new things (teacher efficacy); distributed leadership style, leadership prototypes, the gender and age of the principal and the percentage of female students; transformational leadership style
Areas of congruence	Transformational leadership style, gender of the principal, age of the female principal and teachers, percentage of female students, distributed leadership	Transformational leadership style; gender of the principal, age of the female principal and teachers, percentage of female students, distributed leadership
Areas of divergence	Principal's vision, instructional leadership focus, antecedent variables related to school culture (e.g., SES), context of the school (e.g., high-SES neighborhood), organizational quality	Teacher efficacy creating a positive culture and climate, principal is both dominant and dependent (reciprocity), focus on communication and relationships

Summary of Antecedent Effects Research

Focus	Study 1: Harris et al. (2006)	Study 2: De Maeyer et al. (2007)	Study 3: Guldemond & Bosker (2009)
Variables studied	Improving schools situated in challenging contexts	Integrated leadership and pupil achievement	Funding and staffing of schools with low-SES students
Behavioral approach and findings	Influence the school's context or neighborhood in which it is situated; match internal (school) and external (neighborhood) factors; influence school support and funding; SES influences achievement; manipulate the compositional mix of students: gender, race, SES, ethnicity, and language spoken in the home; improve literacy and numeracy; focus on teaching and learning; use data for tracking & goal setting	Shared vision and goal setting; distribute leadership to empower teachers; improve the organizational structure; develop social networks; develop human capital; Manipulate antecedent variables (e.g., pupil background, gender, IQ, SES); manipulate school context variables (e.g., percentage of girls, parents' nationality. and language spoken in the home, improve literacy and numeracy	Influence school funding sources and allocation; improve literacy and numeracy; match internal (school) and external (neighborhood) factors; SES influences achievement; manipulate the compositional mix of students: gender, race, SES, ethnicity, and language spoken in the home; pedagogy; Match internal (school) and external (neighborhood factors; influence the school context or neighborhood in which it is situated
Areas of congruence	Pedagogy: improve literacy and numeracy, influence school funding and resource allocation, manipulate the compositional mix of students	Pedagogy: improve literacy and numeracy, influence school funding and resource allocation, manipulate the compositional mix of students	Pedagogy: improve literacy and numeracy, influence school funding and resource allocation, manipulate the compositional mix of students
Areas of divergence	Use data for tracking and goal setting, professional development of teachers	Shared vision: distribute leadership, improve school social networks and organizational structure	Increase staffing levels, track student growth trajectories

Appendix L NBPTS Process

Mission: NBPTS is dedicated to advancing quality teaching and learning (NBPTS 2015).

What is National Board Certification: It is an advanced teaching credential. The assessment program consists of 10 assessments: four portfolio entries that feature teaching practice and six response exercises that assess content knowledge.

Five Core Prepositions: Knowledge, skills, dispositions, and beliefs that characterize National Board Certified teachers (NBPTS 2015).

Proposition 1: Teachers are committed to students and their learning.
Proposition 2: Teachers know the subjects they teach and how to teach those subjects to students.
Proposition 3: Teachers are responsible for managing and monitoring student learning.
Proposition 4: Teachers think systematically about their practice and learn from experience.
Proposition 5: Teachers are members of learning communities (NBPTS 2015).

NBPTS Certification Components 2014-2015
Component 1 — Assessment Center
Component 2 — Differentiated Instruction

2015-2016
Component 3 — Teaching Practice and Learning Environment (video)
Plus Components one (1) and two (2)

2016-2017
Component 4 — Effective & Reflective Practices
Plus Components 1, 2, 3 (NBPTS 2015)

Certification Areas: The NBPTS currently offers 24 certificates covering 14 subject areas: Generalist, Art, Career and Technical Education, English as a New Language, English Language Arts, Exceptional Needs Specialist, and Library Media. In the area of literacy: Reading Language Arts, Mathematics, Music, Physical Education, School Counseling, Science, Social Studies-History, and World Languages other than English. Certification remains current for 10 years (NBPTS 2015).

Age Categories: Early Childhood (ages 3-8); Middle Childhood (ages 7-12); Early & Middle Childhood (age 3-12); Early Childhood through Young Adult-hood (ages 3-18+); Adolescence and Young Adulthood (ages 14-18+); Early Adolescence through Young Adulthood (ages 11-18+) (NBPTS 2015)

Eligibility: Prior to applying the applicant must hold a bachelor's degree; must have completed three (3) full years of teaching or counseling experience; and possess a valid state teaching or counseling license (NBPTS 2015).