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The Relationship of Learner-Centered Beliefs of Principals and Student Achievement

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The Relationship of Learner-Centered Beliefs of Principals and Student Achievement

By
Camela Bonita Dingle Bell

A Dissertation Submitted to the
Gardner-Webb University School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

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Approval Page

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Abstract

The Relationship of Learner-Centered Beliefs of Principals and Student Achievement.
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Educators are focused with efforts to improve student achievement through reform and policies; a majority of the efforts are focused on accountability reform. The learner-centered model focuses on school reform that is organized around the personal domain for systemic reform. How principals work with students is greatly influenced by policy and what they believe about student learning and behavior. This dissertation attempted to establish principal beliefs and their effectiveness on student achievement on the End-of-Grade and End-of-Course test in the state North Carolina.

Survey data was collected and analyzed to determine if, and to what extent, significant differences between learner-centered and non-learner-centered principals were found. In addition, the relationship of learner-centered beliefs and non-learner-centered beliefs with student achievement as measured by the end-of-grade and end-of-course tests of the 2010-2011 was tested and failed to achieve significant differences. Therefore, this study provides added research about the difference, as well as causal relationship, of principal beliefs and student achievement.

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Chapter 1: Introduction

The 20th century marked the era of school reform and improvements in United States education. According to Lezotte (1997), the many reforms over the last decade in the educational arena have made it difficult to create enduring systematic changes needed to meet the expectations and high standards of achievement in every classroom in America. Most school reforms can be organized into *technical*, *organizational*, and *personal* domains of change.

The technical domain of the educational system includes curriculum, learning, and instructional strategies such as development and implementation of standards, standards-based performance assessment, and educational technology (Marzano & Kendall, 1999; McCombs & Whisler, 1997).

The organizational domain of the educational system includes policies, management structures, community support for the school system, procedures to implement innovations, political issues, and organizational reputation and history (Marzano & Kendall, 1999; McCombs & Whisler, 1997).

Finally, the personal or “people” domain of the educational system includes the attitudes of students, teachers, administrators, parents, and community members; beliefs and assumptions about learning; readiness for change; understanding of the change process; interactions among all the people involved in the system; and the comprehensive dynamics and psychology of change (Marzano & Kendall, 1999; McCombs & Whisler, 1997).

In addition, Mid-continent Research for Education and Learning (McREL) noted that reform initiatives have focused almost exclusively on either the technical or

organizational domains, neglecting the personal domain (Marzano & Kendall, 1996, 1999; McCombs & Whisler, 1997). The challenge is for educators to determine the extent to which current reform initiatives are based on or reflect learner-centered beliefs and practices, a challenge that moves educators into uncharted territory. McCombs and Whisler (1997) found that the challenge of meeting and exceeding standards for all students is contingent upon expanding change from the technical and organizational domains to the personal domain (McCombs & Whisler, 1997). Sheppard (1996) found positive relationships between the instructional leadership behaviors of principals, that is, behaviors that are directly related to teacher and learning, and professional involvement, which was defined as “the degree to which teachers are concerned about their work, are keen to learn from one another, and committed to professional development” (p. 56).

The purpose of Sheppard’s (1996) research was to determine whether instructional leadership is incongruent with the development of selected school-level characteristics identified by critics of the goal-attainment model of effectiveness as being essential to successful schools. Sheppard’s (1996) data was drawn from a questionnaire administered. The participants were teachers and principals at the elementary and secondary levels. The two data-gathering instruments were the School Organizational Climate Questionnaire (SOCQ) (Giddings & Dellar, 1990) to measure school-level characteristics and the Principal Instructional Management Rating Scale (PIMRS) (Hallinger, 1992) to measure the instructional leadership behaviors of principals. Both instruments are measures of teacher perceptions and both have been found to provide valid and reliable data at the elementary and secondary school levels (Courtney, 1987;

Giddings & Dellar, 1990; Jones, 1987; Krug, 1986; Meyer, 1990; O'Day, 1984; Paven & Reid, 1990; Trout, 1985).

Accordingly, Schumacher and McMillan (2005) contended that the learner-centered beliefs represent a vehicle to examine school reform that has been either overlooked or neglected. A thorough review of the structural design of the educational domain and effective strategies must occur in order to develop comprehensive systemic reform (Marzano & Kendall, 1996, 1999).

The American Psychological Association (APA) concluded that educational reform in the past only focused on the technical and organizational components of school systems. In 1990, the APA appointed a special Task Force on Psychology in Education to identify general principles that could provide framework for reform and redesign of schools (McCombs & Whisler, 1997). Coupled with the researchers at McREL, the APA Task Force identified twelve basic principles, called the Learner-Centered Psychological Principles (LCPPs) (see Appendix A), about learners and learning that provided a new perspective on factors that influence learning for all learners (APA, 1993). The APA revised this document in 1997, and it now includes 14 principles with the addition of diversity and standards (APA, 1997).

The 14 learner-centered principles are grouped into four categories. These categories group the principles into research-validated constructs important to learning (APA, 1993, 1997). There are four constructs: 1) metacognitive and cognitive, 2) affective and motivational, 3) developmental and social, and 4) individual differences (APA, 1993, 1997). Accordingly, an understanding of these categories, and the principles within them, establishes a framework for designing learner-centered practices at all levels

of schooling. These principles collectively define “learner-centered” from a research-validated perspective (Alexander & Murphy, 1998; Lambert & McCombs, 1998; McCombs, 1993, 1994a, 1995; McCombs & Whisler, 1997).

School Reform

Marzano, Walter, and McNulty (2005) provided insight about schools reform and systemic change. According to the researchers, there are two orders of change. A first-order change is gradual and focuses on the day-to-day school system and how it functions. A second-order change is an overhaul that takes time and consistent management from all levels in a school system. This requires investors to break from the past and incorporate new knowledge and skills.

For this purpose, Cuban (1988) distinguished between first-order and second-order change. Cuban (1988) suggested that first-order changes try to make the school more efficient and effective. Second-order changes seek to change the basic structural and organizational features of a school. A defining characteristic separating first- and second-order change is the presence and motivational power of a transformation in staff related to their philosophical orientation about the change or reform initiative (Cuban, 1988). Thus, these changes result in new goals, structural adjustment, and roles that intend to alter what one is used to doing into substantially different innovative behavior (Cuban, 1988).

According to Slavin (1989), education reform had been observed as a cycle that moved from one fad to another with little evidence of national progress. In addition, Rowan (1990) identified reforms as contradictory that combine top-down, centralized

efforts to improve schools and teaching with efforts toward decentralization and school-based management.

Research continues to support that schools should implement effective instructional practices, maintain high expectations, employ strong instructional leadership, execute individualized instruction, foster positive classroom environments, and increase student achievement. The United States Education System has attempted to address the issue of low-performance in student achievement through various reform initiatives and mandates such as Nation at Risk, Site-Based Management, Comprehensive School Reform, No Child Left Behind, and Race to the Top.

The reform Nation at Risk was introduced to the nation to improve education during the 1980s. The reform was a catalyzed movement aligned to radically restructure the nation's schools (Bennett et al., 1998).

A decade later, a more general review indicated that site-based management reforms failed to affect student outcomes positively in large part because the schools failed to develop coherent statements of beliefs or models for guiding the work and decision-making of the school (Murphy & Beck, 1995). It was during this time that the idea of schoolwide reform emerged as a prominent strategy for helping improve the outcome of at-risk students from high-poverty schools (Borman, Hewes, Overman, & Brown, 2002).

In 1998, Congress initiated the Comprehensive School Reform Program (CSRP), which encouraged schools to develop comprehensive plans for implementing “scientifically based” strategies for school reform. Comprehensive School Reform (CSR) encouraged schools to address all aspects of school function and environment

when making improvements, rather than implementing isolated programs that may or may not improve the academic performances of all students. Expansion of CSR has been fueled by a series of recent national developments: a) the movement toward systemic and standards-based reform; b) the establishment of the New American Schools Development Corporation; c) new federal legislation allowing the use of Title I funds, the primary source of federal assistance to at-risk students from high-poverty schools since 1965, to support schoolwide educational programs in high-poverty schools; and d) the federal CSRP legislation that provides hundreds of millions of dollars to support the costs of adopting externally-developed reform models (U.S. Department of Education, 2010).

Beyond these methodological considerations, studies and reviews of CSR and the process of school change have identified several common, substantive factors that have a bearing on the success or failure of externally-developed reforms.

First is the rather straightforward observation that the quality of the CSR model implementation matters. A number of researchers have demonstrated a strong relationship between reform implementation and positive effects—both qualitative and quantitative—across a variety of reforms (Berman & McLaughlin, 1978; Crandall et al., 1982; Datnow, Borman, & Stringfield, 2000; Stringfield et al., 1997).

Second, although some reform models have been criticized because their prescriptive designs may suppress teacher creativity and require an inordinate amount of preparation time (Datnow & Castellano, 2000), externally-developed reforms that are more clearly defined tend to be implemented with greater fidelity and, in turn, tend to have stronger effects on teaching and learning than reforms that are less clearly defined (Bodilly, 1996, 1998; Nunnery, 1998).

Third, well-implemented reforms tend to have strong professional development and training components and effective follow-up to address teachers' specific problems in implementing change within their classrooms (Muncey & McQuillan, 1996; Nunnery, 1998).

Finally, for external models of school change to make an important impact within schools, teachers and administrators must support, "buy into," or even help "co-construct" the reform design (Borman et al., 2002; Datnow & Stringfield, 2000).

Although there have been no systematic analyses across a wide range of CSR models, it would seem that those models with clear components addressing each of these issues would tend to result in more reliable implementations and stronger effects than CSR models without such components.

Inspired by the emerging vision of standards-based reform, the 1994 reauthorization of Title I called on states to raise academic standards, to build the capacity of teachers and schools, to develop challenging new assessments, to ensure school and district accountability, to ensure the inclusion of all children, and to develop coordinated systemic reforms. These sweeping changes began the transformation of Title I from a supplemental remedial program to the key driver of the standards-based, schoolwide reform movement (Borman, 2000b).

President George W. Bush signed the No Child Left Behind Act (NCLB) into law on January 8, 2002 for the reauthorization of the Elementary and Secondary Education Act. NCLB reform came at a time when the public was concerned about the state of education in regards to student achievement; the reform's purpose was to hold more states and schools accountable for student progress. NCLB was intended to improve

reading and math test scores at schools across the United States; the law reauthorized a number of federal programs targeted at education reform.

NCLB of 2002 was looked upon as a reform that was not meeting the needs of all students. Concerns grew regarding adequate yearly progress (AYP), 100 percent proficiency by 2013-14, high-performing schools failing to meet their set rates of improvement, and an increasingly high rate of failures to meet the rising benchmarks. By 2010, 38% of schools were failing to make AYP, up from 29% in 2006.

As a continuation of the NCLB of 2002, President Barack Obama implemented Race to the Top (RttT) as a program designed to improve public education by awarding monies to schools dedicated to school improvement.

Leadership

The topic of leadership has been in focus for a long time and has become a topic of great interest, as leaders have had to provide guidelines and motivate others toward accomplishing tasks (Khan, Ramzan, Ahmed, & Nawez, 2011). Research shifted to focusing on the effectiveness of leaders to foster a positive transformation and to foster the accomplishments of individuals as well as of organizational tasks (Burns, 2004).

According to Hargreaves (2004), principals are being judged almost exclusively on the outcomes and results of student achievement; therefore, any attempt to analyze and evaluate public education on the district or school levels must rest on the achievement of all students. In order for students to reach their academic potential consistently, school leadership must not only bring about short-sighted changes aimed for immediate accomplishment, but “secure sustainable improvement that benefits many schools over a long period of time” (Hargreaves, 2004, p. 2). For some time, educators have believed

that principals must be instructional leaders if they are to be effective in sustained innovation. Newmann, King, and Young (2000) found that school capacity is the crucial variable effecting instructional quality and corresponding student achievement. The shifting role and expectation for school leaders as instructional leaders has created challenges.

To assess the degree to which a principal exhibits learner-centered attributes, the Learner-Center Battery (LCB), a set of instruments, was derived from the theory and research base of the Learner-Centered Psychological Principles (LCCP) (APA, 1993, 1997). The LCB was specifically developed to assist teachers and administrators in becoming more aware of and reflective about (a) their basic beliefs and assumptions about learners, learning, and teaching; (b) the relationship of these beliefs to their school and classroom practices from their own and from their students' perspectives; and (c) the impact of these practices on student motivation, learning, and academic achievement (McCombs, 1993, 1994a, 1994b, 1995, 1999, 2003a, 2003b).

In the validation of the LCB and subsequent writings, several inferences and statements about the presence of learner-centered beliefs and practices have been made resulting in higher student achievement and motivation to learn (Alexander & Murphy, 1998; Lambert & McCombs, 1998; McCombs, 1993, 1994a, 1994b, 1995; McCombs & Whisler, 1997).

In a like manner, research to determine the correlation of learner-centered practices and student achievement and motivation has also been conducted (Fasko, Grubb, Jesse, & McCombs, 1997; McCombs & Lauer, 1997; Weinberger & McCombs, 2001). In both the theoretical and the practical application of the learner-centered beliefs

and practices, a compelling relationship between learner-centered beliefs about learning and the roles of the learner, principal, and school and improved student achievement and motivation has been documented (McCombs & Whisler, 1997). McCombs and Whisler (1997), however, call for an additional transformation depicted by moving from learning-centered to learner-centered.

Purpose of the Study

The purpose of this study was to examine principals' beliefs about the learner, learning, and teaching, as well as the impact of their beliefs on student achievement.

Statement of the Problem

Reform has failed to achieve its intended results. Moreover, reform has failed to address Learner-Centered Principles and Learner-Centered Beliefs, not only of teachers but also of principals.

Hypotheses

As a result of the literature review, the following hypotheses emerged:

Hypothesis 1. Districts that have a higher percentage of students meeting (Level III) or exceeding (Level IV) the state standard on the EOG/EOC tests have learner-centered principals.

Hypotheses 2. Districts that have a lower percentage of students meeting (Level III) or exceeding (Level IV) the state standard on the EOG/EOC tests have non-learner-centered principals.

Hypothesis 3. There is a higher correlation between student performance on the EOG/EOC tests with principals with learner-centered beliefs.

Hypothesis 4. There is a higher inverse correlation between student performance on the EOG/EOC tests with principals with non-learner-centered beliefs.

Research Questions

Underpinning and guiding the purpose of this study were six research questions in two distinct categories. The first category consists of questions (Questions 1-5) designed to determine if there are differences between principals on their learner-centered beliefs. The second category consists of a question (Question 6) to examine the relationship of learner-centered beliefs of principals and student achievement. They are as follows:

Research Question 1. What is the level of learner-centered beliefs of principals?

Research Question 2. Is there a difference in the level of learner-centered beliefs and non-learner-centered beliefs about the learner, teaching, and learning of principals and student achievement on the North Carolina End-of-Grade and End-of-Course tests?

Research Question 3. Is there a difference in the level of learner-centered beliefs about the learner between principals in districts with high, middle, and low percentages of students who met or exceeded state standards on the North Carolina End-of-Grade and End-of-Course tests?

Research Question 4. Is there a difference in the level of non-learner-centered beliefs about the learner between principals in districts with high, middle, and low percentages of students who met or exceeded state standards on the North Carolina End-of-Grade and End-of-Course tests?

Research Question 5. Is there a difference in the level of non-learner-centered beliefs about teaching and learning between principals in districts with high,

middle, or low percentages of students who met or exceeded state standards on the North Carolina End-of-Grade and End-of-Course tests?

Research Question 6. What is the relationship between learner-centered beliefs and the level of student performance on the North Carolina End-of-Grade and End-of-Course tests?

Significance of the Study

The significance of this research study was in its purpose and design. A correlation study was conducted to determine the relationship between the learner-centered beliefs of principals and student achievement as defined by the North Carolina End-of-Grade and End-of-Course Tests. This study established a foundation for future predictive studies. The relationship between learner-centered beliefs, principals, student achievement, and the North Carolina End-of-Grade and End-of-Course Tests had not been conducted at the time of this study.

Limitations of the Study

This study did not take into account the different principals and years of experience at the various levels. This study did not make provisions to control the number of years a principal had been assigned to a particular school or the number of years a principal had been assigned to a particular school district.

Conclusion and Overview of Chapters

Chapter 2 includes a proposed literature review that embodies an examination of previous research similar to the purpose of this study. The review of literature concludes with the justification and rationale for this study. Chapter 3 describes in detail the methodology and methods employed in this study. Chapter 4 includes the results of

descriptive and inferential statistics as well as their analyses. Lastly, Chapter 5 analyzes and discusses the results, summarizes, and concludes the study with recommendations for future consideration.

Chapter 2: Literature Review

Ellis and Fouts (1993, 1998) identified three levels of research that inform education innovation and practice. The design of this research utilized the framework identified by Ellis and Fouts (1993, 1998).

Ellis and Fouts (1993, 1998) defined Level I research based on theory or pure research. In addition, Level I research is limited to medical or psychological investigation at the clinical level. Level II research tests the theory within a classroom setting, often in the form of a comparative study. Level III research analyzes and evaluates programs on the school or district level, often in the form of a large-scale comparative study (Ellis & Fouts, 1993, 1998),

In order for a theory to be identified as research-based, all three levels of the research must be completed (Ellis & Fouts, 1993, 1998). The literature review will utilize the levels of research and its framework as a guide.

The use of Learner-Centered Psychological Principles, Learner-Centered Beliefs and Situational Leadership will be further discussed throughout Level I research. The initial and theoretical research by American Psychological Association (APA) and Mid-continent Regional Education Laboratory (McREL) Task Force (1993), Lezotte and Snyder (2011), McCombs (1994a, 1997, 2001, 2003a), McCombs and Lauer (1997), McCombs and Whisler (1997), and Hershey and Blanchard (1969, 1972, 1977) will be included in this section.

Expanding the theoretical underpinning, Level II research includes the validation and initial results of the instrument developed to identify and determine learner-centered practices (McCombs, 1994b, 1999, 2003a; McCombs & Lauer, 1997) and leadership

styles (Hershey & Blanchard, 1969). Accordingly, validating of the Assessment of Learner-Centered Practices tool is discussed. The work of McCombs (1994b, 1999, 2003 a), McCombs and Lauer (1997), and Hershey and Blanchard (1969) is presented in the Level II research section. Furthermore, studies that measure learner-centered practices and behaviors on the motivation and academic achievement of students and leadership styles are included in the Level II research section.

The Level III research section is a summary of program evaluation where learner-centeredness has been implemented at the school and district levels. In essence, Level III research provides insight into the correlation of student achievement with aspects of learner-centered beliefs and practices.

At last, this review of literature summarizes each of the three levels of research defined by Ellis and Fouts (1998) concluding with a recommendation to specifically study the correlation of learner-centered beliefs and practices with leadership styles and student achievement.

Learner-Centered Psychological Principles

In 1990, the APA appointed a Presidential Task Force on Psychology in Education to identify general principles that could provide framework for the reform and redesign of schools (McCombs & Whisler, 1997). The task force reviewed over a century of research on education with the focus on learning, motivation, development, and individual differences. As a result, the Learner-Centered Psychological Principles (LCPPs) emerged (APA, 1993, 1997).

The 12 psychological principles, created by APA, were revised to 14 statements and grouped into four domains. The four domains are: 1) metacognitive and cognitive, 2)

motivational and affective, 3) development and social, and 4) other individual difference factors shown by the research to have significant impacts on student learning, motivation, and achievement in schools (APA, 1993, 1997).

The original 12 psychological principles (APA, 1993), with the addition of two principles (APA, 1997), communicate the belief that current reform efforts lack the profound knowledge and implementation of teaching and learning based on research from human learning, human motivation, and human development necessary to be effective and enduring (McCombs, 2003b; APA, 1993, 1997; McCombs & Whisler, 1997).

The validation of LCPPs began with a review from experts in the field of psychology (APA, 1993). In addition, feedback received from a diverse pool of experts (science, mathematics, teacher educators, and school counselors) warranted revisions to the document. Therefore, research and five revisions yielded the articulated Learner-Centered Psychological Principles document (APA, 1997).

Four domains of learner-centered psychological principles were defined. The first domain, metacognitive and cognitive factors, makes-up the first six LCPPs: 1) the nature of the learning process, 2) goals of the learning process, 3) the construction of knowledge, 4) strategic thinking, 5) thinking about thinking, and 6) context of learning. Each principle was supported with an exhaustive research base (APA, 1993, 1997; McCombs & Whisler, 1997; McCombs, 2003a). Hence, the first domain research is rooted in constructivist learning, cognitive learning, and higher-order thinking strategies (APA, 1993, 1997; McCombs & Whisler, 1997).

The second domain, motivational and affective factors, consists of three LCPPs: 7) motivational influences on learning, 8) intrinsic motivation to learn, and 9) effects of motivation and effort. The second domain was supported by an exhaustive research base similar to the first domain (APA, 1993, 1997; McCombs & Whisler, 1997). Particularly, research was centered on the interrelationship and interaction between intrinsic motivation, learning goals, anxiety, intellectual curiosity, and clinical applications of cognitive approaches (APA, 1993, 1997; McCombs & Whisler, 1997).

The third domain, developmental and social factors, includes two LCPPs: 10) developmental influences on learning and 11) social influences on learning. Following the research of domains one and two, domain three is heavily grounded in both theoretical and clinical research (APA, 1993, 1997; McCombs & Whisler, 1997). Primarily, research efforts targeted developmental psychology and theories of intelligence via physical, social, emotional, and intellectual development (McCombs, 1994a).

Subsequently, the fourth domain, individual differences, consists of three LCPPs: 12) individual differences in learning, 13) learning and diversity, and 14) standards and assessment. Research in the areas of social constructivism, adaptive instruction, cultural diversity, self-esteem, socio-emotional support, and social psychology are imperative to this domain (APA, 1993, 1997; McCombs & Whisler, 1997).

As a result of the APA (1997) revisions, the two additional practices added to domain four were derived chiefly from the areas of individual differences as well as social and developmental psychology. Furthermore, theories about the role of environmental variables, such as previous experiences, belief systems, and capabilities,

extend to include linguistic, cultural, and social differences research. Lastly, domain four identifies the integral role of high expectations and the stages of the learning process as central to learner-centered (APA, 1997).

In the original research by the APA Task Force (1993), McCombs and Whisler (1997) published the following definition of learner-centered:

Learner-centered is the perspective that couples a focus on individual learners—their heredity, experiences, perspectives, backgrounds, traits, talents, interests, capacities, and needs—with a focus on learning—the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners. (p. 56)

By large, the resulting LCPP's definition of the term "learner-centered," and learner-centered premises provide a theoretical concept for a holistic view of how the individual principles collectively interact to influence learners and learning (McCombs, 2007). Consequently, this theoretical concept is limited in its utility for influencing educational reform due to its inability to provide practical insights that result from pure research (Ellis & Fouts, 1998).

The learner-centeredness is a complex interaction of teacher qualities in combination with characteristics of instructional practices as perceived by individual learners. The quality of learner-centeredness does not reside in programs or practices. Furthermore, learner-centered clarifies what teachers need to know, do, and be (i.e., beliefs, practices, and dispositions) to create a positive learning environment (McCombs, 2001; McCombs & Lauer, 1997; McCombs & Whisler, 1997).

The need to understand the ongoing challenges of failed education reforms began the exploration of learner-centered principals at the classroom and school levels (McCombs & Whisler, 1997). According to McCombs and Whisler (1997) the learner-centered principles were categorized into five premises that serve as the theoretical framework:

- 1) Learners are distinct and unique. Their distinctiveness must be attended to and taken into account if learners are to engage in and take responsibility for their own learning;
- 2) Learners' unique differences include their emotional states of mind, learning rates, learning styles, stages of development, abilities, talents, feelings of efficacy, and other academic and non-academic attributes and needs. These must be taken into account if all learners are to be provided with the necessary challenges and opportunities for learning and self-development;
- 3) Learning is a constructive process that occurs best when what is being learned is relevant and meaningful to the learner and when the learner is actively engaged in creating his or her own knowledge and understanding by connecting what is being learned with prior knowledge and experience;
- 4) Learning occurs best in a positive environment, one that contains positive interpersonal relationships and interactions, that contains comfort and order, and in which the learner feels appreciated, acknowledged, respected, and validated; and
- 5) Learning is a fundamental natural process; learners are naturally curious and basically interested in learning about and mastering their world. Although

negative thoughts and feelings sometimes interfere with the natural inclination and must be dealt with, the learner does not require “fixing.” (p. 10)

The effective school correlates discussed in the effective schools’ research exemplifies the five premises (Lezotte & Snyder, 2011). McCombs and Whisler’s (1997) premises are embedded in realistic research; therefore, the correlates of effective schools are focused on beliefs about learning, the learner, and the role of the teacher (Lezotte & Snyder, 2011).

The basis for the LCPPs has extended over a decade. Currently, the LCPPs are in their second iteration, and by definition, have the greatest positive effect on learners and learning (McCombs & Miller, 2007). Moreover, the LCPPs are consistent with recent discoveries from psychology that linked positive youth development and prevention interventions (Seligman & Csikszentmihalyi, 2000).

Learner-Centered Battery

The Learner-Centered Battery (LCB) was developed based on the work created by LCPPs (APA, 1993). McREL’s researchers created an instrument that would assist educators in addresses the areas that impact LCPPs (McCombs & Lauer, 1997).

Educators make use of the LCB to address the need to a) examine the consistency of their basic beliefs and assumptions about learners, learning, and teaching with the current knowledge base; b) attend to student perceptions of their classroom practices in domains critical to motivation, learning, and achievement; and c) use self-assessment and reflection skills to identify areas of needed professional development in order to meet the needs of all students (McCombs & Lauer, 1997).

The two-phase validation process was completed by looking at the reliability and content validity of teacher and student surveys and the construct and validity of teacher and student variables. By measuring student motivation and achievement during each phase the validation was established as being credible (McCombs & Lauer, 1997).

Phase one validation efforts reported moderate to high internal consistencies (alpha coefficients from .67 to .96) that were consistent with the LCPPs (APA, 1993). Above all, phase one empirical findings confirmed the theoretical relationships between teacher beliefs and practices; therefore, future use of self-assessment tools for enhancing teachers' reflections is promising (McCombs & Lauer, 1997).

Phase two validation established statistical validity of the LCB by examining its association with existing data on teachers' attitudes and students' motivation as well as its predictive validity. Therefore, teacher perceptions of their practice was positively associated with their self-efficacy, beliefs that they can influence students during adolescence, reflective self-awareness, attitudes about supporting their student's autonomy, and learner-centered beliefs. Likewise, their perceptions were negatively associated with their non-learner-centered beliefs about learners (McCombs & Lauer, 1997).

McCombs and Lauer (1997) stated that the LCB offers a valuable instrument to use for self-reflection that will include the following suggestions: a) teachers can take increasing personal responsibility for defining their own professional development plan; b) the lines between pre- and in-service teacher education can become increasingly blurred as individual teacher's needs are met in continuing education programs; and c) the "one size fits all" thinking about effective teachers needs to be modified and tailored

to the diversity of teacher characteristic mixes that can accommodate both student and content diversity in schools (McCombs & Lauer, 1997).

The LCB was validated for validity by surveying over 600 teachers and 4,000 students. The final LCB format consisted of 35 items and a short self-assessment for teachers and students. The beliefs, assumptions and assessment of classroom practices are measured in the survey by two variables. The Teacher Beliefs are measured by the following three factors: 1) learner-centered beliefs about learner, learning, and teaching; 2) non-learner centered beliefs about learners; and 3) non-learner-centered beliefs about learning and teaching (McCombs, 1994).

Building on the LCPPs (APA, 1993, 1997), the Assessment of Learner-Centered Practices (ALCP) surveys were created to involve teachers in the reflection process (McCombs, 2003). The ALCP surveys (McCombs, 1999) have been authenticated with more than 5,000 K-20 teachers and more than 25,000 students.

The point of the reflection process is to be able to assist teachers in regards to 1) their own beliefs and practices; 2) how these practices are perceived by their students; and 3) the impact both teacher and student learner-centered variables on student motivation and achievement (McCombs, 1994, 2003). When decisions are made by teachers with respect to their practices based on the understanding of the LCPs, they 1) include learners in decisions about how and what they learn and how that learning is assessed; 2) value each learner's unique perspectives; 3) respect and accommodate individual differences in learners' backgrounds, interests, abilities, and experiences; and 3) treat learners as partners in teaching and learning (McCombs & Lauer, 1997, 1998; McCombs & Whisler, 1997).

The ALCP surveys are looked upon as a tool for self-assessment to facilitate and reflection. ALCP surveys support the beliefs and discrepancies between teacher and students perceptions in regards to the best practices to enhance student motivation and achievement (McCombs & Lauer, 1997, 1998; McCombs & Whisler, 1997).

To summarize, ALCP surveys look at teacher beliefs and practices, to classify them as learner-centered or non-learner-centered (McCombs & Lauer, 1997, 1998; McCombs, 2002). To look further at this idea states that “learner-centered beliefs” could be challenging in regards to the beliefs that cannot be categorized into a specific program.

Instructional Leadership

During the effective school movement, the principal began to be looked upon as an instructional leader. As researchers responded to the call for an explicit model of principal instructional leadership, the factors of an effective instructional leader began to emerge (Valentine & Prater, 2011). In addition, research indicated that one pivotal factor in school improvement is the school principal’s demonstrated instructional leadership behaviors (Portin, 2004; McEwan, 2003).

DeBevoise (1984) suggested that instructional leadership focuses on establishing schoolwide goals, defining the purpose of schooling, providing resources for learning, supervising and evaluating teachers, coordinating staff development activities, and creating collegial relationships with and among teachers. Therefore, an effective, instructional leader is an individual who encourages and supports the teaching staff rather than directs them and one who strongly emphasizes effective performance (Valentine & Prater, 2011). High expectations for teachers and students, close supervision of classroom instruction, coordination of the school’s curriculum, and close monitoring of

student progress emerged as descriptors of effective principals (Hallinger & Murphy, 1985).

Lashway (1995) produced evidence that high-achieving schools have principals who boldly lead the academic program, set goals, examine curriculum, evaluate teachers, and assess results. Blasé and Blasé (1999) defined instructional leadership as a blend of several tasks, such as supervision of classroom instructional, staff development, and curriculum development. Leithwood (1992) asserted that the term *instructional leadership* focuses administrators' attention on first-order changes, improving the technical, instructional activities of the school through close monitoring of teachers' and students' classroom work. Also, instructional leaders often make such important second-order changes as building a shared vision, improving communication, and developing collaborative decision-making processes.

During the past decade, schools have undertaken fundamental changes in areas such as curriculum development, students' and teachers' roles, and learning strategies. These curriculum changes have brought about a shift in the philosophy that dominated the realm of educational leadership. As Leithwood indicated (1992, 1994), the 80s and 90s met the expectations of decision-makers and the public from the principal; therefore, the form of instructional leadership corresponded well to that era. With numerous changes taking place during the 90s, it was difficult for the principal to take on the responsibility of being an instructional leader. Therefore, the concept of *transformational leader* gradually moved to the center of the discourse and identified the role of the leader who expected to bring the instructional leadership to the organization (Leithwood, 1992, 1994).

Referring to transformational leadership, Burns (1978) described followers and their leaders as inspiring each other to achieve “higher levels of morality and motivation” such as justice and equality (p. 24). The transactional image of leadership, on the other hand, refers to the exchange of relationships between leaders and their followers; each enters the transaction because of the expectation to fulfill self-interests, and it is the role of the leader to maintain the status quo by satisfying the needs of the followers.

Leithwood (1994) argued that transformational approaches to school leadership are especially appropriate to the challenges facing schools entering the 21st century. Leithwood (1994) based his argument for the relevancy of transformational leadership for educational leaders on two assumptions. First, leadership primarily manifests itself during times of change, and the nature of change is the critical determinant of the most helpful forms of leadership. Second, the era of school change, reform, and restructuring will likely extend into the foreseeable future. In addition to focusing leadership efforts on school and classroom practices associated with improved student achievement, leaders also must tailor their own leadership practices based on the magnitude or order of change they are leading (Marzano, Walter, & McNulty, 2005).

Leithwood (1994) noted that the focus for reform has shifted from elementary to secondary schools because of the size and complexity of secondary schools and because of the nature of secondary school principals’ practices. The size of many secondary schools inhibits principals’ direct influence on classroom practice envisioned in instructional leadership models. The number of teachers and classrooms is simply too large for the time available to principals. The secondary school curriculum and the amount of content knowledge required for graduation hinder direct principal involvement

in instructional practices. Transformational forms of leadership encourage secondary school principals to focus their energies on the capacities and motives of classroom teachers, those in a position to offer direct leadership in the classroom.

In order for students to reach their academic potential consistently, school leadership must not only bring about short-sighted changes aimed for immediate accomplishment but also “secure sustainable improvement that benefits many schools over a long period of time” (Hargreaves, 2004, p. 14). The rapidly changing environment in education creates a situation where principals must be equipped and able to implement reform that leads to sustained improvement in student achievement. Effective school leaders are key to large-scale, sustainable education reform. For some time, educators have believed that principals must be instructional leaders if they are to be the effective leaders needed for sustained innovation.

Sheppard (1996) found positive benefits to the instructional leadership behaviors of principals, that is, behaviors that are directly related to the teacher, learning, and professional involvement, which were defined as “the degree to which teachers are concerned about their work, are keen to learn from one another, and committed to professional development” (p. 4). In addition, Brewer (1993) found that principals indirectly affect all students by simply ensuring that schools run smoothly on a day-to-day basis.

Leithwood and Jantzi (1999) identified six main characteristics of educational leaders who are transformational, which include a) building school vision and goals, b) providing intellectual stimulation, c) offering individualized support, d) symbolizing professional practices and values, e) demonstrating high-performance expectations, and f)

developing structures to foster participation in school decisions. Transactional leadership was identified by two factors: contingent reward and management by exception.

Contingent reward pertains to a situation where the leader rewards the follower upon completing an agreed-upon task. Management by exception relates to a situation where the leader responds only in instances when things go wrong. In later consideration, this factor was conceived in two forms: passive and active (Ball & Avolio, 1990). In relation to educational settings, transactional leadership entails four dimensions: staffing, instructional support, monitoring school activities, and community focus (Leithwood & Jantzi, 1999).

Although distinct principal leadership styles have emerged in the literature, several researchers suggested that no single set of leadership behaviors can be discerned to be more effective than others; principals must find the style and structure most suited to their own local situation (Bamburg & Andrews, 1991; Cuban, 1988; Deal & Peterson, 1994; Hallinger & Heck, 1996).

With limited research evidence linking principal leadership and student achievement (Hallinger & Heck, 1996, Heck & Hallinger, 1999; Heck, 1993), insight gained about the collective influence of the broad perspectives of managerial, instructional, and transformational leadership has the potential to enlighten the community of principal leadership research and practice.

Consequently, principals do not affect individual students directly in the manner that teachers do through classroom instruction, but the activities of the principal have a trickle-down effect on teachers and students (Leithwood, Louis, Anderson & Wahlstrom, 2004; Marzano, 2000; Marzano et al., 2002).

Moral purpose is social responsibility to others and the environment. School leaders with moral purpose seek to make a difference in the lives of students. They are concerned about closing the gap between high-performing and low-performing schools and raising the achievement of high-performing and low-performing students. They act with the intention of making a positive difference in their own schools as well as improving the environment in other district schools.

Researcher Kenneth Leithwood (1994) is confident that education leaders affect student learning. While confirming that leadership affects student performance, what is lacking in the current research base is a firm understanding of the processes that skilled leaders use to foster the conditions that allow for improved performance. Leadership is seen as central and essential in delivering the change, improvement, and performance society increasingly expects of all organizations, including schools (Dinham, 2007c). Because of this perceived importance, leadership has been the subject of both widespread and in-depth study and popular writing (Northhouse, 2007).

Opinion on the effect that schools, teachers, and educational leaders can have on student outcomes has also fluctuated. Until the early 1960s, it was widely believed that schools made little difference on student achievement, which was believed to be largely predetermined by heredity, family background, and socioeconomic status (Reynolds, Teddlie, Creemers, Scheerens, & Townsend, 2000). The various phases of school effectiveness research from the mid-1960s to the present revealed the inputs, variables, and processes resulting in some schools being seemingly more effective and successful than others. One of the phenomena so identified was leadership, initially of the principal

but more recently perceived as the influence exercised by other formal and informal leaders within and outside of the school (Dinham, 2007).

School leadership traditionally focused on the principal, but today it is recognized that there can be many leaders in a school, including deputy principals, heads of departments, and program and committee chairs and teachers; those invested agree that leadership should be distributed. According to Dinham (2007), principals of schools with exceptional educational achievement are open to change and opportunity and are outward rather than inward looking, they derive benefits for their schools from being in the forefront on mandated change, and they develop productive external linkages inside and outside the educational system. Also, they are entrepreneurial and efficiently mobilize community, financial, and other support (Dinham, 2007).

In conclusion, change can be mandated or demanded, but it will not be successful in the long-term, and much individual and organizational potential will fail to be realized with such an approach. The organization may rise to a higher level of performance, but runs the risk of plateauing or falling back. To improve and renew an organization, it is necessary to change what people know, what they can do, and how they think. The leaders in the various studies, both at department and school levels, had worked to create the desired phenomenon of the learning community (Dinham, 2007).

Learner-Centered Principles and Instructional Leadership

Ruddell (1999) described that students who excelled in their academics is due to them being exposed to more prominent teachers than struggling learners. Teachers who address individual needs, motivations, and aptitudes have an influential impact on student learning (Ruddell, 1999). Weinberger and McCombs (2001) identified that academic

performance improved in classrooms where teachers displayed a high degree of learner-centered practices compared to non-learner-centered practices.

For teachers to be classified as an effective teacher, they must demonstrate high and clear expectations and believe all students can learn (Foster & Peele, 1999; Nieto, 2000). Therefore, teacher attitudes have an impact on student achievement. The effective schools research found that effective student, motivation and student achievement was evident when individual needs of students were met through instruction, curriculum and assessment (Edmonds, 1979).

The priority of the principalship must be leadership for learning. Therefore, they identified three key roles that the principals of the 21st century should fulfill: (1) Instructional leadership that focuses on strengthening teaching and learning, professional development, data-driven decision-making and accountability; (2) Community leadership manifested in a big-picture awareness of the school's role in society; shared leadership among educators, community partners and residents; close relations with parents and others; and advocacy for school capacity building and resources; and (3) Visionary leadership that demonstrates energy, commitment, entrepreneurial spirit, values, and conviction that all children will learn at high levels, as well as inspiring others with this vision both inside and outside the school building.

As a result of the increased need to focus on learner-centeredness, Interstate School Leaders Licensure Consortium (ISLLC) (1996) created standards for school leaders.

The ISLLC (1996) standards are directly related to beliefs, expectations, motivation, and learning. The standards are:

Standard 1: Leadership and Vision. Facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.

Standard 2: Learning and Teaching. Advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and professional growth.

Standard 3: Productivity and Professional Practice. Ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.

Standard 4: Support, Management, and Operations. Collaborating with families and community members, and mobilizing community resources.

Standard 5: Assessment and Evaluation. Acting with integrity, fairness, and in an ethical manner.

Standard 6: Social, Legal, and Ethical Issues. Understanding, reporting to, and influencing the larger political, social, economic, legal, and cultural context.

The North Carolina new Principal Evaluation Instrument mirrors the ISLLC standards. McREL designed the new North Carolina Principal Evaluation instrument. The new instrument addresses principals being reflective practitioners (Public Schools of North Carolina State Board of Education/Department of Public Instruction, 2011).

For the most part, learner-centered beliefs and practices do not represent a formal program or even a unified reform effort. No studies have been conducted over a period of time on the school or district level in regards to instructional leadership. Therefore,

research consisting of studies that examine the overall effects on learner-centered and instructional leadership is problematic.

Summary of Literature Review

Level I and II research was included through the LCPP, consideration of Instructional Leadership, theoretical foundation, teacher effectiveness, assessment of learner-centered practices and the effects of instructional leadership on student achievement. (APA, 1993, 1997; CCSSO, 2011; Edmunds, 1979; Hersey and Blanchard, 1969, 1972, 1977; McCombs, 1997, 1999, 2001, 2003; McCombs & Lauer, 1997; Weinberger & McCombs, 2001; Wenglinsky, 2000).

Due to the nature of LCPPs and the effects of instructional leadership on student achievement, the Level III research does not exist. Level I and Level II research provides an overview of the learner-centered principles based on research by Ellis and Fouts (1998) and on instructional leadership based on Hersey and Blanchard's (1977).

With this in mind, questions about learner-centered beliefs and practices have yet to be correlated with instructional leadership and student achievement as measured by the North Carolina End-of-Grade and End-of-Course tests.

Chapter 3: Methodology

General Design

This study was designed to explore six questions via a non-experimental research design utilizing descriptive as well as causal comparative design components. The purpose of this study was to examine leadership beliefs about the learner, learning, and teaching as well as the impact of beliefs on student achievement. In addition, the study was implemented to determine the relationship between the learner-centered beliefs of principals and the level of student achievement as measured by the North Carolina End-of-Grade and End-of-Course tests.

Participants

The participants in this study consisted of 64 principals from elementary, middle, and high schools located in one of the 13 Local Educational Agencies (LEA) in the Sandhills Region of North Carolina. The participants were selected and placed in one of three categories corresponding with their districts' EOG and EOC test results. The first category consisted of principals from districts with 0-33% of students proficient at Level III or Level IV. The second category consisted of principals from districts with 34-66% of students proficient at Level III or Level IV. The third category consisted of principals from districts with 67% or more of students proficient at Level III or Level IV. North Carolina Department of Public Instruction (2011) defines proficient as achieving a Level III (meet standard) or IV (exceed standard) on the EOG and EOC tests.

Instrument

The instrument used in this study contained two sections: Part I - Background and Demographic Information and Part II - Teacher Beliefs Survey.

Part I: Background and Demographic Information. In this section, participants were asked to identify their school district, total number of years in education, total number of years as a principal, and highest degree earned.

Part II: Teacher Beliefs Survey. The Teacher Beliefs Survey (McREL, 1994) (see Appendix B) contains 35 items. The initial validation efforts focused on establishing internal consistency reliability and factor structures (theoretically sound sub-scales related to learner-centered beliefs and practices) for the principal scales. Accordingly, the results revealed 35 items divided into three subscales: 1) Learner-Centered Beliefs about Learners, Learning, and Teaching (14 items, $\alpha = .87$); 2) Non-Learner-Centered Beliefs about Learners (9 items, $\alpha = .83$); and (3) Non-Learner-Centered Beliefs about Teaching and Learning (12 items, $\alpha = .82$) (McCombs, 1994).

The second phase of validation focused on establishing the predictive validity and further constructs validity of the Teacher Survey (McCombs, 1994). Therefore, the Teacher Beliefs Survey has demonstrated both internal consistency and construct validity.

North Carolina End-of-Grade (EOG) and End-of-Course (EOC) tests. The measures of student achievement were the North Carolina End-of-Grade (EOG) and North Carolina End-of-Course (EOC) tests. The tests were designed to measure student performance on goals, objectives, and grade-level competencies specified in the North Carolina Standard Course of Study. The tests were administered within the last 3 weeks of the school year (North Carolina State Board of Education/Department of Public Instruction, 2011).

Student results were reported in scale scores, percentile scores, and achievement levels. Scale scores provide a consistent method for interpretations of results from test to test. Percentile scores show student performance relative to students who took the test during the first year the tests were administered. Achievement levels (I, II, III, or IV) are used to provide an interpretation of student performance relative to pre-determined standards based on range of scale scores. Specifically, this study focused on the percentage of students who were proficient as determined by an achievement Level of III or IV.

Procedures

A sample of 292 principals employed during the 2010-2011 school year was identified from the 13 districts in the Sandhills Regional Education Consortium. An electronic cover letter was emailed to each selected principal requesting their participation and explaining the purpose of the study. The researcher created a web-based survey site where participants were able to take the survey at their convenience.

Independent and Dependent Variables

The study was designed to explore the answers to six research questions. The main question required a correlational research design. This study sought to collect data on multiple variables to ascertain the relationship between those variables (Fraenkel & Wallen, 2006). The independent variable in this study was the principals' learner-centered beliefs as measured by the Teacher Beliefs Survey. The dependent variable in this study was academic achievement as measured by the North Carolina End-of-Grade and End-of-Course Tests.

Data Analysis

Using the Statistical Package for Social Sciences (SPSS) (Brain, 2008), data from descriptive statistics were analyzed utilizing independent measures *t*-tests, Analysis of Variance, and the Pearson Product-Correlation Coefficient. The results are reported in Chapter 4.

Descriptive Statistics

The measure of central tendency and variability is determined by the descriptive statistics. Teacher Beliefs Survey results are categorized based on the total score for each of the following factors: 1) learner-centered beliefs about learners, learner-centered beliefs about learning, and learner-centered beliefs about teaching (14 items).

Accordingly, the total score possible for Factor 1 ranged from a low of 14 (14 x 1) to a high 56 (14 x 4). The total possible score for Factor 2, non-learner-centered beliefs about learners (9 items), ranged from a low of 9 (9 x 1) to a high of 36 (9 x 4). The total possible score for Factor 3, non-learner-centered beliefs about learning and teaching (12 items), ranged from a low 12 (12 x 1) to a high 48 (12 x 4). Once totaled, each factor was divided by the number of items in each factor, resulting in a mean score. Likewise, the validation sample means were: Factor 1, 3.22; Factor 2, 2.28; and Factor 3, 2.31 (McCombs & Whisler, 1997).

Consequently, research conducted by McCombs and Whisler (1997) identified those principals with $M > 3.4$ for learner-centered beliefs, $M < 2.0$ for non-learner centered beliefs about learners, and $M < 2.0$ for non-learner centered beliefs about teaching and learning as teachers with learner-centered beliefs.

Conversely, those principals identified with $M > 2.8$ for learner-centered beliefs, $M > 2.4$ for non-learner centered beliefs about learners, and $M > 2.4$ for non-learner centered beliefs about teaching and learning are principals with non-learner-centered beliefs.

In addition to principal beliefs, the survey included demographic questions such as years of principal experience, area of academic preparation, and level of education attained.

Analysis of Variance. In addition to studying relationships, several research questions were designed to explore differences. To that end, an analysis of variance (ANOVA) statistical procedure was utilized to determine where and on which specific variables differences existed between means on each factor of the Teacher Beliefs Survey.

The results from the 2011 North Carolina End-of-Grade and End-of-Course tests served as a dependent variable and an ANOVA investigated difference of means between and within each school in the following ways: a) principal's degree of learner-centeredness and the individual test score for each school, b) principal's degree of non-learner-centeredness about learners and the individual test score for each school, and c) principal's degree of non-learner-centeredness about learning and teaching the individual test score for each school.

Pearson Product-Moment Correlation Coefficient. In brief, the Pearson Product-Moment correlation was performed to determine the relationship, if any, between principal beliefs and student achievement.

The principals' degrees of learner-centeredness, non-learner centeredness about learners, and non-learner-centeredness about learning and teaching were examined to determine the direction and magnitude of a relationship, if any, between student achievement and principal beliefs.

Summary of Methodology

In conclusion, the methodology and methods utilized in this study were used to determine differences and common relationships between the learner-centered beliefs of principals in the state of North Carolina with the performance of students on the End-of-Grade and End-of-Course tests.

Chapter 4: Results

The outcomes of this study are presented through a structure that is organized into four sections: 1) demographic characteristics of the principals in the Sandhill Region of North Carolina who participated in this study; 2) results of the four hypotheses; 3) six research questions, statistical analysis, and the actual results; and 4) summary of results.

Demographic Information

Sixty-four principals ($n = 64$) from eight ($n = 8$) districts within the Sandhill Region in North Carolina participated in this study. Demographic data was compiled in three areas: 1) years in education, 2) years as a principal and 3) highest degree earned.

Total years in education. Two principals ($n = 2$), or 3%, were in their fifth through ninth year in education. Seventeen principals ($n = 17$), or 27%, ranged from 10 to 15 years in education. Twenty-four principals ($n = 24$), or 38%, had 16 to 23 years in education. Finally, twenty-one principals ($n = 21$), or 33%, had 24 years or more in education. These results are presented in Table 1.

Table 1

Total Years in Education

District	1 – 4 Years	5 – 9 Years	10 – 15 Years	16 – 23 Years	24 + Years
Anson			2	1	5
Bladen			3	2	4
Columbus		1	1	5	1
Harnett			2	3	3
Hoke			3	4	
Montgomery			1	2	2
Robeson			4	6	6
Scotland		1	1	1	
Total	0 (0%)	2 (3%)	17 (27%)	24 (38%)	21 (33%)

Total years as a principal. Thirty-four principals (n = 34) or 53% were in their first through fourth years as a principal (see Table 2). Fifteen principals (n = 15), or 23%, ranged from 5 to 9 years as a principal. Ten principals (n = 10), or 16%, had 10 to 15 years as a principal. Finally, five principals (n = 5), or 8%, had 16 to 23 years as a principal.

Table 2

Total Years as a Principal

School	1 – 4 Years	5 – 9 Years	10 – 15 Years	16 – 23 Years	24 + Years
Anson	3	3	1	1	
Bladen	7	1	1		
Columbus	3	4		1	
Harnett	2	2	3	1	
Hoke	6	1			
Montgomery	4			1	
Robeson	6	4	5	1	
Scotland	3				
Total	34 (53%)	15(23%)	10 (16%)	5 (8%)	0 (0%)

Highest Degree Earned. Fifty-two principals (n = 52), or 81%, indicated their highest degree was either a Masters of Art or a Masters of Science (see Table 3). Twelve principals (n = 12), or 19%, indicated their highest degree earned was a Doctorate.

Table 3

Highest Degree Earned

School	BA/BS	MA/MS	PhD/EdD
Anson		5	3
Bladen		7	2
Columbus		8	
Harnett		6	2
Hoke		6	1
Montgomery		4	1
Robeson		14	2
Scotland		2	1
Total	0 (0%)	52 (81%)	12 (19%)

Hypotheses

From the review of literature, four hypotheses were identified and investigated through six research questions. The four hypotheses were:

Hypothesis 1. Districts that have a higher percentage of students meeting (Level III) or exceeding (Level IV) the state standard on the EOG/EOC tests have learner-centered principals.

Hypothesis 2. Districts that have a lower percentage of students meeting (Level III) or exceeding (Level IV) the state standard on the EOG/EOC tests have non-learner-centered principals.

Hypothesis 3. There is a higher correlation between student performance on the EOG/EOC tests with principals with learner-centered beliefs.

Hypothesis 4. There is a higher inverse correlation between student performance on the EOG/EOC tests with principals with non-learner-centered beliefs.

To test the null hypothesis, six research questions were identified. The results from each research question are described in the following sections.

Research Question 1

What is the level of learner-centered beliefs of principals?

McCombs and Whisler (1997) identified that those principals with $M > 3.4$ for learner-centered beliefs, $M < 2.0$ for non-learner-centered beliefs about learners, and $M < 2.0$ for non-learner-centered beliefs about teaching and learning were principals with learner-centered beliefs. Conversely, those with $M < 2.8$ for learner-centered beliefs, $M > 2.4$ for non-learner-centered beliefs about learners, and $M > 2.4$ for non-learner-centered beliefs about teaching and learning were principals with non-learner-centered beliefs. Using these means, the results of Research Question 1 are shown in Table 4.

Table 4

Learner-Centered Beliefs Means

	LCB	NLCB (Learners)	NLCB (Learning and Teaching)
Principals	M	M	M
Anson 1	3.4	1.2	1.8
Anson 2	3.1	1.6	2.9
Anson 3	3.0	1.8	2.3
Anson 4	3.5	1.8	2.6
Anson 5	3.3	2.4	2.2
Anson 6	2.4	1.8	2.3
Anson 7	3.3	1.8	2.6
Anson 8	3.0	1.9	3.3
Bladen 1	3.1	2.1	2.6
Bladen 2	3.3	2.8	2.4
Bladen 3	3.2	2.2	2.5
Bladen 4	2.9	1.8	2.4
Bladen 5	3.4	1.3	2.7
Bladen 6	3.6	2.0	2.8
Bladen 7	3.1	2.6	3.4
Bladen 8	3.6	2.2	2.9
Bladen 9	2.9	1.3	2.7
Columbus 1	3.0	2.0	3.0
Columbus 2	3.1	1.6	2.0
Columbus 3	2.6	2.2	2.3
Columbus 4	2.7	2.0	3.0
Columbus 5	3.3	2.1	2.9
Columbus 6	3.7	1.9	2.3
Columbus 7	3.3	2.6	2.5
Columbus 8	3.7	2.0	2.8
Harnett 1	3.1	2.7	3.1
Harnett 2	3.0	1.4	2.2
Harnett 3	3.7	1.4	2.3
Harnett 4	3.6	2.3	1.7
Harnett 5	3.1	1.3	3.2
Harnett 6	3.3	2.6	2.4
Harnett 7	3.5	1.7	2.3
Harnett 8	2.9	2.0	2.3
Hoke 1	3.4	1.8	2.6
Hoke 2	2.8	1.3	2.6
Hoke 3	3.6	1.7	2.3

(continued)

	LCB	NLCB (Learners)	NLCB (Learning and Teaching)
Principals	<i>M</i>	<i>M</i>	<i>M</i>
Hoke 4	3.4	1.1	2.0
Hoke 5	3.7	1.8	2.7
Hoke 6	3.0	1.7	2.3
Hoke 7	3.4	1.9	2.8
Montgomery 1	3.3	2.3	1.5
Montgomery 2	3.2	1.2	3.1
Montgomery 3	3.9	1.4	2.8
Montgomery 4	2.9	1.9	2.0
Montgomery 5	3.3	2.6	2.4
Robeson 1	3.1	2.6	2.9
Robeson 2	3.6	2.0	3.2
Robeson 3	3.6	2.7	3.0
Robeson 4	3.0	2.3	2.4
Robeson 5	2.9	1.7	2.1
Robeson 6	3.2	2.1	2.6
Robeson 7	2.7	2.4	2.6
Robeson 8	3.3	1.8	2.7
Robeson 9	3.3	1.7	2.8
Robeson 10	3.1	3.2	3.1
Robeson 11	3.5	2.2	3.3
Robeson 12	3.6	2.2	2.8
Robeson 13	3.1	1.4	2.1
Robeson 14	3.6	2.2	3.0
Robeson 15	3.4	2.0	2.4
Robeson 16	3.5	1.4	2.8
Scotland 1	3.1	1.2	2.8
Scotland 2	3.5	2.1	2.5
Scotland 3	3.3	1.3	2.3

McCombs and Whisler (1997) reported that standard deviations for each factor were .40, .56, and .49. The results of this study showed that the standard deviations for each factor were .31, .46, and .40 respectively, as displayed in Table 5.

Table 5

Differences Among Principals on Learner-Centered and Non-Learner-Centered Beliefs

	N	M	SD
LCB	64	3.25	.31
NLCBL	64	1.93	.46
NLCBTL	64	2.58	.40

Sixty-two principals (n = 62) did not meet the aforementioned McCombs and Whisler (1997) statistical definition of a learner-centered principal or non-learner-centered principal. One principal (n = 1), from a higher-performing school on the EOC but a middle-performing school on the EOG, met the criteria for learner-centered beliefs (see Table 6).

Table 6

Learner-Centered Principals

	$M > 3.4$	$M < 2.0$	$M < 2.0$
Principal	M	M	M
Hoke 4	3.4	1.1	2.0

As noted, only two principals (n = 2) met the McCombs and Whisler (1997) statistical definition of a learner-centered principal or non-learner-centered principal. However, upon a more careful examination, twenty-three principals (n = 23) met or exceeded the validation mean of $M > 3.4$ for the learner-centered beliefs about the learner, teaching, and learning (see Table 7).

Table 7

Principals Above the Validation Mean for Learner-Centered Beliefs

LCB	
Principal	M > 3.4
Anson 4	3.4
Bladen 5	3.4
Bladen 6	3.6
Bladen 8	3.6
Columbus 6	3.7
Columbus 8	3.7
Harnett 3	3.7
Harnett 4	3.6
Harnett 7	3.5
Hoke 1	3.4
Hoke 3	3.6
Hoke 4	3.4
Hoke 5	3.7
Hoke 7	3.4
Montgomery 3	3.9
Robeson 2	3.6
Robeson 3	3.6
Robeson 11	3.5
Robeson 12	3.6
Robeson 14	3.6
Robeson 15	3.4
Robeson 16	3.5
Scotland 2	3.5

Conversely, one principal (n = 1), from a higher-performing school on the EOC but a middle-performing school on the EOG, met the criteria for non-learner-centered beliefs (see Table 8).

Table 8

Non-Learner-Centered Principal

	M < 2.8	M > 2.4	M > 2.4
Principal	M	M	M
Robeson 7	2.7	2.4	2.6

One principal ($n = 1$) met the McCombs and Whisler (1997) statistical definition of a non-learner-centered principal. Five principals ($n = 5$) were below the validation mean of $M < 2.8$ for the learner-centered beliefs about the learner, teaching, and learning. Forty-five principals ($n = 45$) were above the validation mean associated with non-learner-centered beliefs.

Eleven principals ($n = 11$) were above the validation mean of $M > 2.4$ for the non-learner-centered beliefs about the learner and forty-five principals ($n = 45$) were above the validation mean of $M > 2.4$ for non-learner-centered beliefs about teaching and learning (see Table 9 & Table 10).

Table 9

Principals Above the Validation Mean for Non-Learner-Centered Beliefs: Learner

NLCB (Learners)	
Principal	$M > 2.4$
Anson 5	2.4
Bladen 2	2.8
Bladen 7	2.6
Columbus 7	2.6
Harnett 1	2.7
Harnett 6	2.6
Montgomery 5	2.6
Robeson 1	2.6
Robeson 3	2.7
Robeson 7	2.7
Robeson 10	3.2

Table 10

Principals Above the Validation Mean for Non-Learner-Centered Beliefs: Teaching and Learning

Principal	NLCB (Learners)
	M > 2.4
Anson 2	2.9
Anson 4	2.6
Anson 7	2.6
Anson 8	3.3
Bladen 1	2.6
Bladen 2	2.4
Bladen 3	2.5
Bladen 4	2.4
Bladen 5	2.7
Bladen 6	2.8
Bladen 7	3.4
Bladen 8	2.9
Bladen 9	2.7
Columbus 1	3.0
Columbus 4	3.0
Columbus 5	2.9
Columbus 7	2.5
Columbus 8	2.8
Harnett 1	3.1
Harnett 5	3.2
Harnett 6	2.4
Hoke 1	2.6
Hoke 2	2.6
Hoke 3	2.5
Hoke 5	2.7
Hoke 7	2.8
Montgomery 2	3.1
Montgomery 3	2.8
Montgomery 5	2.4
Robeson 1	2.9
Robeson 2	3.3
Robeson 3	3.0
Robeson 4	2.4
Robeson 6	2.6
Robeson 7	2.6

(continued)

Principal	NLCB (Learners) M > 2.4
Robeson 8	2.7
Robeson 11	3.3
Robeson 12	2.8
Robeson 14	3.0
Robeson 15	2.4
Robeson 16	2.8
Scotland 1	2.8
Scotland 2	2.5

Research Question 2

Is there a difference in the level of learner-centered beliefs and non-learner-centered beliefs about the learner, teaching, and learning of principals and student achievement on the North Carolina End-of-Grade and End-of-Course tests?

An analysis of variance (ANOVA) was conducted to assess whether the EOG and EOC scale score means were statistically significantly different among the learner-centered belief means, non-learner-centered beliefs about learners means, and non-learner-centered beliefs about teaching and learning means (see Table 11). The test results failed to identify a statistically significant difference. Because the *F* test was not significant, no follow-up tests were conducted.

Table 11

Analysis of Variance for Total Score

Source	df	F	Sig.
LCB	7	.377	.912
NLCBL	7	1.594	.156
NLCBTL	7	.908	.507

Research Question 3

Is there a difference in the level of learner-centered beliefs about the learner between principals in districts with high, middle, and low percentages of students who met or exceeded state standards on the North Carolina End-of-Grade and End-of-Course tests?

The Principal Beliefs Survey (see Appendix B) was calculated with a total mean and each district's EOG/EOC mean scale score. The independent sample *t*-test was used to evaluate the statistical difference between high performing district principals' and middle performing district principals' scores of learner-centered beliefs (see Tables 12 & 13). The test results, $t(6) = .639$, $p = .547$, failed to reject the null hypothesis at the $p > .05$ level of significance. Principals in higher-performing districts ($M = 3.28$, $SD = .08$) were slightly more learner-centered than principals in middle-performing schools ($M = 3.24$, $SD = .07$). The eta square index specified that less than .05% of the variance of learner-centered beliefs was accounted for by whether a principal was in a high-performing or a middle-performing district.

Table 12

Difference Between High- and Middle-Performing Districts: Learner-Centered Beliefs

		<u>N</u>	<u>M</u>	<u>SD</u>	Std. Error Mean
LCB	High	20	3.28	0.08	.048
	Middle	44	3.24	0.07	.031

Table 13

Independent Samples Test Between High- and Middle-Performing Districts

	Levene's Test for Equality of Variances	t-test			
	<u>F</u>	<i>Sig.</i>	<u>t</u>	<u>df</u>	<i>Sig.</i> (2-tailed)
Equal variances assumed	.209	.663	.639	6	.547
Equal variances not assumed			.604	3.66	.582

Research Question 4

Is there a difference in the level of non-learner-centered beliefs about the learner between principals in districts with high, middle, and low percentages of students who met or exceeded state standards on the North Carolina End-of-Grade and End-of-Course tests?

The independent samples *t*-test was used to evaluate the difference between high-performing district principals' and middle-performing district principals' scores on the level of non-learner-centered beliefs about the learner (see Tables 14 & 15). The test result, $t(6) = -.27$, $p = .80$, sustained the hypothesis that principals in higher-performing districts ($M = 1.84$, $SD = .22$) were less non-learner-centered about the learners than principals in lower-performing districts ($M = 1.89$, $SD = .23$).

Table 14

Difference Between High- and Middle-Performing Districts: Non-Learner-Centered Beliefs About the Learner

		N	M	SD	Std. Error Mean
NLCBL	High	3	1.84	.22	.13
	Middle	5	1.89	.23	.10

Table 15

Independent Samples Test Between High- and Middle-Performing Districts: Non-Learner-Centered Beliefs About The Learner

	Levene's Test for Equality of Variances	t-test			
	<u>F</u>	Sig.	<u>t</u>	<u>Df</u>	Sig. (2-tailed)
Equal variances assumed	.023	.884	-.272	6	.795
Equal variances not assumed			-.273	4.36	.797

Research Question 5

Is there a difference in the level of non-learner-centered beliefs about teaching and learning between principals in districts with high, middle, or low percentages of students who met or exceeded state standards on the North Carolina End-of-Grade and End-of-Course tests?

The independent samples t-test was used to evaluate the difference between high-performing district principals and middle-performing district principals' scores on the level of non-learner-centered beliefs about teaching and learning (see Tables 16 & 17). The test result, $t(6) = -1.13$, $p = .30$, was aligned to the hypothesis that principals in

higher-performing districts ($M = 2.48$, $SD = .11$) were less non-learner-centered about the learners than principals in lower-performing districts ($M = 2.58$, $SD = .13$).

Table 16

Difference Between High- And Middle-Performing Districts: Non-Learner-Centered Beliefs About Teaching and Learning

		N	M	SD	Std. Error Mean
NLCBTL	High	3	2.48	.31	.061
	Middle	5	2.58	.49	.058

Table 17

Independent Samples Test: Difference Between High- And Middle-Performing Districts: Non-Learner-Centered Beliefs About Teaching and Learning

	Levene's Test for Equality of Variances	<i>t</i> -test			
	F	Sig.	t	Df	Sig. (2-tailed)
Equal variances assumed	1.103	.334	-1.13	6	.301
Equal variances not assumed			-1.20	5.197	.281

Research Question 6

What is the relationship of learner-centered beliefs and the level of performance on the North Carolina End-of-Grade and End-of-Course tests?

The three levels of learner-centered beliefs were calculated based on the correlation coefficients. The correlational analysis that was presented in Table 18 demonstrates the correlation among learner-centered beliefs and non-learner-centered beliefs were significant, $r(7) = -.28$, $p < .05$. The correlation between non-learner-centered beliefs about the learner and non-learner-centered beliefs about teaching and

learning was significant, $r(7) = .53$, $p < .01$. The correlation of learner-centered beliefs with non-learner-centered beliefs about teaching and learning was not significant.

Table 18

Correlations Among the Levels of Learner-Centeredness

	NLCB (Learners)	NLCB (Teaching and Learning)
LCB	-.28*	-.30
NLCBTL	.53**	

Note. * $p < .05$ ** $p < .01$

Summary of Results

Descriptive statistics were accessible to describe statistically the participants and data collected from the Principal Beliefs Survey. Research questions were explored by using various methods: Independent-Samples t Tests, Analysis of Variance, and Pearson Product-Moment Correlation Coefficient. Overall, the data analysis demonstrated a failure to reject the four null hypotheses and no significant difference between learner-centered principals, non-learner-centered principals, and student performance on the 2010-2011 EOG and EOC. The Pearson Product-Moment Correlation Coefficient demonstrated significance. Chapter 5 is presented with a detail discussion of the results that were discussed in Chapter 4.

Chapter 5: Discussion

Chapter 5 is organized in the following manner: 1) a review of the purpose of this study, 2) a discussion of the results including the demographic information reported in Chapter 4, and 3) a conclusion accompanied by recommendations for future study.

Purpose of Study

The purpose of this study was to examine instructional leadership's beliefs about the learner, learning, and teaching as well as the impact of their beliefs on student achievement. This study was designed to explore six research questions via a non-experimental research design utilizing descriptive as well as causal comparative design components. In addition, the research questions were divided into two distinct categories. The first category consisted of questions designed to determine if there were differences between principals on their learner-centered beliefs. The second category consisted of questions to examine the relationship of learner-centered beliefs of principals and student achievement.

Demographic Information

Sixty-four principals ($n = 64$) from eight ($n = 8$) districts within the Sandhill Region in North Carolina participated in this study. As identified as a potential limitation, the sample size ($n = 64$) was selected based primarily on the overall composite scores during the 2010-2011 school year. Gall, Borg, and Gall (1996) believes that it is traditional to use a minimum of 30 subjects to conduct a correlational research. Even though the study met the minimum requirement, the sample size limits the external validity or generalizability of results. Nonetheless, the extent to which the conclusions from this study can be presumed to truly reflect the results of principals in the Sandhill

Region in North Carolina is a concern. However, the design of the study was to look at principals from districts from opposite levels of student performance to ascertain if in fact the level of learner-centered beliefs statistically differed. Once the regions were identified, the superintendents were asked if their principals could participate in the Learner Belief Survey.

Only one principal (n=1) from a high-performing school district was identified as a learner-centered belief principal according to McCombs and Whisler (1997). In addition, only one principal (n = 1) was from a middle-performing district was identified as a non-learner-centered principal according to McCombs and Whisler (1997). There are factors to consider, such as whether the principal was at the same school the prior year, the students' academic growth from the prior year, and teacher turnover; thus, the results may have a higher degree of variability. This demographic information appeared not to be a factor or influence in the level of learner-centered beliefs. It may, however, have been a factor or influence of student performance that was beyond the scope of this study.

Learner-Centered Beliefs

McCombs and Whisler (1997) reported from the validation research on the Beliefs Survey that “principals with learner-centered beliefs with means above 3.4 on Factor 1 and below 2.0 on factors 2 and 3” were learner-centered: additionally, “principals with non-learner-centered beliefs were those with means below 2.8 on Factor 1 and above 2.4 on factors 2 and 3” (p. 231).

Four hypotheses were identified through the review of literature. As reported in Chapter 4, the null hypotheses for each of the four hypotheses were tested through six

research questions. Research Questions 1, 2, 3, 4 and 5 were investigated to test the null hypotheses for the first two hypotheses. Research Question 6 was investigated to test the null hypothesis for Hypotheses 3 and 4. Accordingly, each hypothesis, accompanied by the appropriate research question(s), is discussed in the following section.

Hypothesis 1. Districts that have a higher percentage of students meeting (Level III) or exceeding (Level IV) the state standard on the EOG/EOC test have learner-centered principals.

Hypothesis 2. Districts that have a lower percentage of students meeting (Level III) or exceeding (Level IV) the state standard on the EOG/EOC test have non-learner-centered principals.

Research Question 1. To determine the level of learner-centered beliefs for principals, the means from each factor were statistically compared to the validation means. The results as reported in Chapter 4 identified one principal ($n = 1$) as meeting the statistical criteria for learner-centered. It was also reported that one principal ($n = 1$) met the statistical criteria for non-learner-centered.

Though only two principals met the McCombs and Whisler (1997) statistical definition of a learner-centered principal or non-learner-centered principal, twenty-three principals ($n = 23$) met or exceeded the validation mean of $M > 3.4$ for the learner-centered beliefs about the learner, teaching, and learning. Further, only five principals ($n = 5$) were below the validation mean $M < 2.8$ for non-learner-centered beliefs about the learner, teaching, and learning. Thus, it is concluded that forty-five principals ($n = 45$) were neither learner-centered nor non-learner-centered about the learner, teaching, and learning.

This discovery, though not statistically substantial, points to a better understanding about the participants in this study. That is, 13% of the principals in the higher-performing districts were learner-centered compared to 23% of the principals from middle-performing districts as it pertains to the learner-centered beliefs about the learner, teaching, and learning. In conclusion, the principals from high-performing districts beliefs' were learner-centered, which possibly had a positive impact on the student achievement that has taken place within the district. As for the middle-performing districts, the principals' beliefs were learner-centered, but it didn't demonstrate a positive impact on student achievement.

Consistent with the results of learner-centered beliefs, one principal met the McCombs and Whisler (1997) statistical definition of a non-learner-centered principal. As previously stated, only five ($n = 5$) principals were below the validation mean of $M < 2.8$ for the learner-centered beliefs about the learner, teaching, and learning. Though not statistically significant, this discovery does suggest that the participants in this study were clearly more learner-centered than non-learner-centered in their beliefs about the learner, teaching, and learning. This means that the principals demonstrated strong learner-centered beliefs, but there were a few areas they believed to be a non-learner-centered belief. Therefore, it is possible that it hasn't demonstrated a positive impact on student achievement. It was reported that eleven ($n = 11$) teachers were above the validation mean of $M > 2.4$ for the non-learner-centered beliefs about the learner. Fourteen percent (14%) of the lower-performing districts' principals were non-learner-centered about the learner. Three percent (3%) of the higher-performing districts' principals were non-learner-centered about the learner. This discovery addressed the results that the

percentage of middle-performing districts' principals were about equal in regards to be learner-centered as well as non-learner-centered. Thus, it is established that the middle-performing districts' principals were almost evenly split on their learner-centered beliefs.

Forty-five principals ($n = 45$) were above the validation mean of $M > 2.4$ for non-learner-centered beliefs about teaching and learning. Twenty percent (20%) of the principals in the higher-performing districts were non-learner-centered compared to fifty percent (50%) of the principals from lower-performing districts as it pertains to the non-learner-centered beliefs about teaching and learning.

The first and second findings described an interesting distinction of middle-performing districts. Although not statistically significant, the principals in the middle-performing districts had a higher percentage of principals who held learner-centered beliefs and a higher percentage of principals with non-learner-centered beliefs about learner, teaching, and learning. In comparison, the higher-performing districts had a higher percentage of principals who held non-learner-centered beliefs about teaching and learning. This means that the principals' beliefs in middle-performing districts were more learner-centered than the high-performing districts. In addition, other factors to consider would include if the principal were at the same school the prior year, the students' academic growth from the prior year, teacher turnover, etc.

Additionally, a modified McCombs and Whisler (1997) statistical definition for learner-centered uses a higher mean on the learner-centered beliefs for the learner, teaching, and learning and lower mean on the non-learner-centered beliefs about the learner and non-learner-centered beliefs about teaching and learning. As a result, one principal ($n = 1$) was identified as being learner-centered, one principal ($n = 1$) was

identified as being non-learner-centered, and sixty-two principals (n=62) were identified as being both a learner-centered and non-learner centered.

There are at least four possible explanations that account for these findings. First, in the initial validation and subsequent follow-up studies using the Beliefs Survey, researchers did not identify specific principals as the single focus of their study. Thus, there may exist a unique set of variables including principals' preparation for being an instructional leader; their views on pedagogy, curriculum, and the ways students learn may prevent the differentiation of learner-centered from non-learner-centered beliefs of the principals.

Second, as indicated previously in this chapter, the sample size is a limitation and is considered a plausible explanation. Third, the validation means derived at by McCombs and Whisler (1997) used in this study to ascertain the level of learner-centeredness may have been set too high. However, irrespective of the level of learner-centeredness, statistical analysis did not yield a statistical significant difference between the principals from higher-performing and lower-performing schools.

Finally, the differentiation of learner-centered from non-learner centered beliefs of principals as measured by the Beliefs Survey may not be possible given variables or factors unique to being a principal.

Research Question 2. Is there a difference in the level of learner-centered beliefs and non-learner-centered beliefs about the learner, teaching, and learning of principals?

As reported in Chapter 4, an analysis of variance (ANOVA) was conducted to assess whether the EOG and EOC scale score means were statistically and significantly different among the learner-centered belief means, non-learner-centered beliefs about

learners means, and non-learner-centered beliefs about teaching and learning means. The overall data analysis resulted in a failure to reject the four null hypotheses: 1) Districts that have a higher percentage of students meeting (Level III) or exceeding (Level IV) the state standard on the EOG/EOC test have learner-centered principals; 2) Districts that have a lower percentage of students meeting (Level III) or exceeding (Level IV) the state standard on the EOG/EOC test have non-learner-centered principals; 3) There is a higher correlation between student performance on the EOG/EOC test with principals with learner-centered beliefs; and 4) There is a higher inverse correlation between student performance on the EOG/EOC test with principals with non-learner-centered beliefs. Therefore, the data analysis did not show statistically significant differences or statistically significant correlations between learner-centered principals, non-learner-centered principals and student performance of students on the 2010-2011 EOG and EOC.

Research Question 3. Is there a difference in the level of learner-centered beliefs about the learner between principals in districts with high, middle, and low percentages of students who met or exceeded state standards on the North Carolina End-of-Grade and End-of-Course tests?

Without a clear differentiation of learner-centered from non-learner-centered beliefs of principals, the ability to statistically investigate and examine if and to what extent differences as well as possible causal relationships between the level of principals' beliefs and the performance of students on the North Carolina End-of-Grade and North Carolina End-of-Course tests was challenging at best. This was due to the number of

principals who were equally divided in their beliefs between learner-centered and non-learner-centered.

Even so, the results of Research Question 3 produced a $t(6) = .639$, $p = .547$ that subsequently failed to reject the null hypothesis at the $p < .05$ level of significance.

Though principals in higher-performing districts ($M = 3.28$, $SD = .08$) were slightly more learner-centered than principals in middle-performing districts ($M = 3.24$, $SD = .07$) the difference failed to have statistical significance.

As previously stated, the limited variation of learner-centeredness among the participants in this study was attributed to at least three possible explanations:

- 1) There may, in fact, be no difference between the learner-centered beliefs of principals.
- 2) The level of learner-centered beliefs was determined by the principal and does not take into account the actual practices or behaviors associated with learner-centeredness. Thus, it is possible that sixty-two participants ($n = 62$) were indecisive or conflicted about what they believed with relationship to what they practiced.
- 3) It is possible that principals believe themselves to be learner-centered about the learner as did one principal ($n = 1$) in this study but not learner-centered in the areas of teaching and learning. Thus, the principals in this study did believe themselves to be learner-centered to the degree of the validation samples reported by McCombs and Whisler (1997).

Research Question 4. Is there a difference in the level of non-learner-centered beliefs about the learner between principals in districts with high, middle, and low

percentages of students who met or exceeded state standards on the North Carolina End-of-Grade and End-of-Course tests?

As reported, the results of Research Question 4 produced a $t(6) = -.272$, $p = .795$ that subsequently failed to reject the null hypothesis at the $p < .05$ level of significance. Principals in higher-performing districts ($M = 1.84$, $SD = .22$) were less non-learner-centered about the learners than principals in middle-performing districts ($M = 1.89$, $SD = .23$). Though a difference was identified between these two groups of principals, the difference failed to reach statistical significance.

The limited variation of non-learner-centeredness among the participants in this study is attributed to at least two possible explanations: 1) There may, in fact, be no difference between the non-learner-centered beliefs of principals as segregated by EOG and EOC scores; and 2) There is also the possibility that principals were indecisive or conflicted about what they believe with relationship to what they practice. With respect to the methodology employed in the validation research, McCombs and Whisler (1997) acknowledged the importance of cross-validating the perceptions of learner-centered beliefs with student perceptions of teacher practices. However, this study was designed to ascertain if differences existed between what principals themselves believed. Thus, one conclusion is that the principals in this study did not believe themselves to be non-learner-centered to the degree as the validation samples reported by McCombs and Whisler (1997). Therefore, an additional explanation may be that principals do not definitively believe themselves to be either learner-centered or non-learner-centered about the learner, teaching, and learning.

Research Question 5. Is there a difference in the level of non-learner-centered beliefs about teaching and learning between principals in districts with high, middle, or low percentages of students who met or exceeded state standards on the North Carolina End-of-Grade and End-of-Course tests?

The final question was posed to study differences within beliefs; Research Question 5 examined if a statistical difference existed between higher-performing districts' and middle-performing districts' principal scores on the level of non-learner-centered beliefs about teaching and learning. It had been hypothesized that principals in middle-performing districts would have a higher percentage of principals that were non-learner-centered in their beliefs about teaching and learning. Specifically, as reported in Chapter 4, an independent t test resulted in a $t(6) = -1.131$, $p = .301$ that failed to reject the null hypothesis at the $p < .05$ level of significance.

Consistent with the previous discussion surrounding the results of Research Questions 1, 2, 3, and 4, the inability to differentiate between learner-centered and non-learner-centered beliefs of principals severely limited and ultimately influenced the results of the aforementioned research questions.

In summary, the failure to reject both the first and second null hypotheses is explained, in part, by the sample size as well as the intentional selection of the participants from a single regional area. The previous research, as reported by McCombs and Whisler (1997), did not discriminate by subject areas. Lastly, it is possible that districts do not attract principals that inevitably hold learner-centered or non-learner-centered beliefs about the learner, teaching, and learning. Hypotheses 3 and 4 held that the results of data analysis would result in identifying a relationship between the levels of

learner-centered beliefs with student performance on the EOG and EOC test. To test these hypotheses, Research Question 6 was investigated. The following section discusses these findings.

Hypothesis 3. There is a higher correlation between student performance on the EOG/EOC tests with principals with non-learner-centered beliefs.

Hypothesis 4. There is a higher inverse correlation between student performance on the EOG/EOC tests with principals with non-learner-centered beliefs.

Research Question 6. What is the relationship of learner-centered beliefs and the level of performance on the North Carolina End-of-Grade and End-of-Course tests?

To answer these questions, it was necessary to conduct a Pearson Product-Moment Correlations. The correlation coefficient looked at the relationship of learner-centered beliefs with both the non-learner-centered beliefs about the learner and non-learner-centered beliefs about teaching and learning. As reported, two correlations were statistically significant. Specifically, the correlation between learner-centered beliefs and non-learner-centered beliefs, $r(7) = -.28, p < .05$, and the correlation between non-learner-centered beliefs about the learner and non-learner-centered beliefs about teaching and learning, $r(7) = .53, p < .01$, were consistent with previous research (McCombs & Whisler, 1997).

The findings supported that if a principal has learner-centered beliefs, then an inverse correlation with non-learner-centered beliefs about the learner as well as with non-learner-centered beliefs about teaching and learning would exist. However, the results of this study did not support this assumption statistically. Though a negative correlation did result in a $r(7) = -.30$, it failed to reach the $p < .05$ level of significance.

As stated throughout the discussion of the previous research questions, there are several possible explanations for this finding. These explanations include the limited sample size as well as the inability to differentiate participants in this study with learner-centered beliefs about the learner, teaching, and learning from those with non-learner-centered beliefs about the learner, teaching, and learning. The number of years the principal has been at the current school and the positive/negative impact of student achievement from the previous year with the current principal, if applicable, may have influenced findings.

As has been discussed, the failure to clearly define a statistical difference between the learner-centered beliefs about the learner, teaching, and learning and non-learner-centered beliefs about teaching and learning of principals limited further data analysis. It has also been discussed that previous research using the Beliefs Survey did not differentiate principals to the extent of this study. Arguably, ascertaining the level of learner-centeredness without considering the variability of principals, pedagogy and curriculum was not considered as potentially limiting.

Therefore, it was concluded that this study found that student achievement as defined by the 2010-2011 End-of-Grade and End-of-Course tests was not determined or influenced positively or negatively by the level of learner-centered beliefs of their principals.

Subsequently, the theory of learner-centered beliefs about the learner, teaching, and learning correlating with different levels of student achievement on end-of-grade and end-of-course assessments was not supported in the findings of this study. However, the fact that the theory is not supported does not necessarily diminish its importance.

McCombs and Whisler (1997) postulated that learner-centered beliefs correlated with student learning and achievement. The validation, as well as subsequent research (Alexander & Murphy, 1998; Lambert & McCombs, 1998; McCombs, 1993, 1994, 1995; McCombs & Whisler, 1997), found that growth or improvement in learning, as measured by classroom assessments over time, was correlated with the level of learner-centered beliefs of the principals. However, student learning was measured over time and not as a single event. This study looked at student achievement as measured by a performance-based assessment that was, in fact, a single event. Thus, one conclusion is that learner-centered beliefs do not influence single event assessments external to classroom assessments.

Further, it is possible that growth in learning, not achievement, is influenced or determined by learner-centered beliefs. Orton's (1996) research examined the differing roles of beliefs on student learning and concluded that the relationship and beliefs with student learning was significant.

Accordingly, the influence of learner-centered beliefs on student achievement as found in this study remains theoretical, not empirical. Sample (2002) stated, "until [a] theory is in fact disproved or falsified, until it is found to be at odds with experimental evidence, it is accepted as being true" (p. 45). In concert, Sample (2002) points out that in the social sciences, "the dictum that any theory is true unless and until is it falsified by experiment" (p. 48) has dominated contemporary practice in several fields, chief among them education, where it has been both costly in financial terms and equally expensive in morale and trust with educators, parents, and the public.

For that reason, the findings of this study contribute to the body of knowledge that seeks to identify the variables that can be eliminated from the theoretical because they do not directly influence and cause improved student achievement.

Recommendation for Future Research and Practice

Throughout this study, it has become clear that there is a need for continued research on the variables that influence student achievement. Although much theory, research, conjecture, and speculation about what influences student learning and achievement has been written and debated, there remains a need to look at what specifically influences student performance on performance-based assessments. There continues to be little, if any, research on those variables that influence student performance and achievement on performance-based assessment. Consequently, research needs to target and investigate the factors and variables that promote positive influence on student learning and achievement. With this consideration, there are four recommendations for future research listed below. Each would assist in increasing the knowledge base of how to improve student learning and achievement.

A replication of this study should take place with a probability sample of principals. Specifically, every principal within a school district should be included. This would increase the likelihood of differentiating learner-centered from non-learner-centered principals. In concert, an increased and carefully selected sample-size would increase the generalizability of the findings. Finally, an increased number of participants would allow the researcher to ascertain if, in fact, the level of learner-centered beliefs about the learner, teaching, and learning of principals can statistically be defined,

compared, and correlated with student achievement as measured by a performance-based assessment.

A second recommendation for future research is to incorporate the general design of the completed study while adding a component that would allow principals to report their professional development. In keeping with the first recommendation, it would be advised to increase the sample size as well as the number of districts. Most principals are leaders of a school an average of 1 to 3 years. This recommendation, therefore, would take into account that multiple principals are factors in the performance and learning achievement levels of students.

The third recommended study is to incorporate the general design of the completed study and include a comprehensive breakdown of the principal's schedule and day-to-day tasks in regards to instruction. Therefore, it would take into account how the principal spends their day instructionally in regards to planning, observations, coaching, etc.

Finally, a fourth recommended study is to investigate learner-centered beliefs of teachers along with students, and parent assessment of principal practices to ascertain if, and to what extent, a difference exists between each group. In addition, this study could include, not unlike the validation and follow-up research reported by McCombs and Whisler (1997), an investigation of relationships between student achievement with principals and student levels of identified learner-centered beliefs.

Discussion of Conclusion

This study did not find statistical significance with respect to a difference between learner-centered and non-learner-centered principals. Equally, this study did not find a

relationship of statistical significance between learner-centered beliefs and non-learner-centered beliefs with student achievement as measured by the End-of-Grade and End-of-Course tests of the 2010-2011. However, these findings should not be interpreted to mean that there is no relationship between learner-centered beliefs as well as non-learner-centered beliefs of principals with student learning and student achievement.

The introduction of this study began with the identification of three interdependent components of a school system. Two of these components, technical and organizational, have dominated the literature, research, and activity associated with school reform and change (Marzano & Kendal, 1999). The third area, personal, has had very limited empirical research conducted to study its impact on student learning and achievement. Thus, this study adds to the research base about the difference as well as causal relationship of principal beliefs and student achievement.

Though the findings of this study were less than dramatic, they are informative for educators interested in identifying variables influencing both student learning and achievement. For example, it was learned from this study that principals are neither learner-centered nor non-learner-centered. Therefore, this information may assist districts in identifying and designing training focused on effective leadership and instructional strategies for principals that appeal to beliefs across the spectrum.

The outcomes of this study also present some support for the idea that principals in middle-performing districts differ in their beliefs about the learner, teaching, and learning from principals in higher-performing districts. Conversely, the perception that principals in higher-performing districts expose more learner-centered beliefs than those in middle-performing districts was also challenged by the results.

Even though the findings of this study did not support the results found by McCombs and Whisler (1997), they do support the assertion by Lezotte (1997) and Bowsher (2001) that educational reform has shifted from teacher-centered to learning-centered but has not yet transformed to learner-centered. As claimed by Lezotte (1997), the transformation to learner-centered requires a deep internal belief that all students can and must learn what we want them to, whatever it takes. Arguably, there is a strongly-held belief that some, if not many students, will never learn. Thus, there remains a formidable task in changing principals' beliefs about the learner, teaching, and learning to become more learner-centered.

Finally, as stated in the beginning of this study, the achievement results to date suggest that the promises of school reform are far from being realized (Fouts, 1999; Fouts, Stuen, Anderson, & Parnell, 2000). These inconsistent results, coupled with the inability to clearly identify the factors or variables correlated with improved student achievement as measured by the EOG and EOC, remain inconclusive at best. Unfortunately, this study will be placed with the countless research that has been conducted and failed to clearly identify the factors or variables that are needed to positively influence student learning and achievement.

References

- APA Task Force on Psychology in Education. (1993). *Learner-centered psychological principles: Guidelines for school redesign and reform*. Washington, DC: American Psychological Association and Mid-Continent Regional Educational Laboratory.
- APA Work Group of the Board of Educational Affairs. (1997). *Learner-centered psychological principles: A framework for school reform and redesign*. Washington, DC: APA.
- Alexander, P. A., & Murphy, P. K. (1998). The research base for APA's Learner-Centered Psychological Principles In B. L. McCombs & N. Lambert (Eds.), *Issues in school reform: A sampler of psychological perspectives on learner-centered schools*. Washington, DC: APA Books.
- Bamburg, J., & Andrews, R. (1990). *School goals, principals and achievement*. Effectiveness and School Improvements, 2(3), 175-191.
- Bennett, W., Fair, W., Finn, C., Flake, F., Hirsch, E.D., Marshall, W., & Ravitch, D. (1998). A nation still at risk. *Policy Review*, 90, 23-29.
- Berman, P., & McLaughlin, M. W. (1978). *Federal programs supporting educational change, Vol. VIII*. Santa Monica, CA: RAND.
- Blasé, J., & Blasé, J. (1998). *Handbook of instructional leadership: How really good principals promote teaching and learning*. Thousand Oaks, CA: Corwin Press.
- Bodilly, S. J. (1996). *Lessons from New American Schools Development Corporation's demonstration phase*. Santa Monica, CA: RAND.
- Bodilly, S. J. (1998). *Lessons from New American Schools' scale-up phase: Prospects for bringing designs to multiple schools*. Santa Monica, CA: RAND.
- Borman, G. D. (2000b). Title I: The evolving research base. *Journal of Education for Students Placed at Risk*, 5, 27-45.
- Borman, G., Hewes, G., Overman, L., & Brown, S. (2002). Comprehensive school reform an achievement: A meta-analysis. *Review of Educational Research*, 73(2), 125-230.
- Bowsher, J. E. (2001). *Fix schools first: A blueprint for achieving learning standards*. Gaithersburg, MD: Aspen Publications.

- Brain, C. C. (2008). *How to use SPSS: A step-by-step guide to analysis and interpretation* (5th ed.). Glendale, CA: Pyrzack Publishing.
- Brewer, J. D. (1993). Sensitivity as a problem in field research: A study of routine policing in Northern Ireland. In Renzetti, C. M. & Lee, R. M. (Eds.), *Researching sensitive topics* (pp. 125-145). London, Sage.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Burns, J. M. (2004). *Transforming Leadership*. New York: Grove Press.
- Council of Chief State School Officers. (2011). *InTASC model core teaching standards: A resource for state dialogue (April 2011)*. Washington, DC: Author.
- Crandall, D. P., Loucks-Horsley, S., Baucher, J. E., Schmidt, W. B., Eiseman, J. W., Cox, P. L., Miles, M. B., Huberman, A. M., Taylor, B. L., Goldberg, J. A., Shive, G., Thompson, C. L., & Taylor, J. A. (1982). *Peoples, policies, and practices: Examining the chain of school improvement (vols 1-10)*. Andover, MA: The NETWORK.
- Cuban, L. (1988). A fundamental puzzle of school reform. *Phi Delta Kappan*, 69(5): 340-344.
- Datnow, A., Borman, G., & Stringfield, S. (2000). School reform through a highly specified curriculum: A study of the implementation and effects of the Core Knowledge Sequence. *The Elementary School Journal*, 101, 167-192.
- Datnow, A., & Castellano, M. (2000). Teachers' responses to Success for All: How beliefs, experiences and adaptations shape implementation. *American Educational Research Journal*, 37, 775-799.
- Datnow, A., & Stringfield, S. (2000). Working together for reliable school reform. *Journal of Education for Students Placed At Risk*, 5, 183-204.
- DeBevoise, W. (1984). Synthesis of research on the principal as instructional leader. *Educational Leadership*, 41(5), 14-20.
- Dinham, S. (2007a). Authoritative leadership, action learning and student accomplishment. Conference Proceedings, Australian Council for Educational Research.
- Dinham, S. (2007b). The dynamics of creating and sustaining learning communities. *Unicorn Online Referenced Article, ORA43*, 1-16.

- Dinham, S. (2007c). The secondary head of department and the achievement of exceptional student outcomes. *Journal of Educational Accountability*, 45(1), 62-79.
- Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership*, (1), 15-24. Association for Supervision and Curriculum Development.
- Ellis, A., & Fouts, J. (1993). *Research on educational innovations*. Princeton, NJ: Eye on Education.
- Ellis, A., & Fouts, J. (1998). *Research on educational innovations*. Princeton, NJ: Eye on Education. Same title but different date as ref above – make correction
- Fasko, D., Jr., Grubb, D. J., Jesse, D., & McCombs, B. L. (1997). Use of the learner-centered principles test battery: Implications for inservice and preservice professional development. *The Professional Educator*, 20(1), 23-24.
- Foster, M., & Peele, T. B. (1999). Teaching Black males: Lessons from the experts. In V. C. Polite & J. E. Davis (Eds.), *African American males in school and Society: Practices and policies for effective education*. (pp. 8-19). New York: Teachers College Press.
- Fouts, J. (1999). *School restructuring and student achievement in Washington state: Research findings on the effect of House Bill 1209 and school restructuring on western Washington schools*. Seattle Pacific University, Seattle: Washington School Research Center.
- Fouts, J., Stuen, C., Anderson, M., & Parnell, T. (2000). *The reality of reform: Factors limiting the reform of Washington's elementary schools*. Seattle Pacific University, Seattle, WA: Washington School Research Center.
- Fraenkel, J. R., & Wallen, N. E. (2006). *How to design and evaluate research in education* (6th). New York, NY: McGraw-Hill Companies, Inc.
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational Research: An Introduction* (6th). White Plains, NY: Longman.
- Hallinger, P., & Heck, R. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-1995. *Educational Administration Quarterly*, 32(1), 5-44.
- Hallinger, P., & Murphy, J. (1985). Assessing the instructional leadership behavior of principals. *Elementary School Journal*, 86(2), 217-248.

- Hargreaves, A. (2004). Inclusive and exclusive educational change: emotional responses of teachers and implications for leadership. *School Leadership and Management* 24(2): 8-13.
- Heck, R. (1993). School context, principal leadership, and achievement: The case of secondary schools in Singapore. *The Urban Review*, 25(2), 151-166.
- Heck, R., & Hallinger, P. (1999). *Conceptual models, methodology, and methods for studying school leadership*. In:., Murphy & K., Seashore-Louis (Eds.), The 2nd handbook of research in educational administration. San Francisco: McCutchan.
- Hersey, P., & Blanchard, K. (1969). Life cycle theory of leadership. *Training and Development Journal*, 2, 6-34.
- Hersey, P., & Blanchard, K. H. (1972). *Management of organizational behavior: Utilizing human resources* (2nd ed). New Jersey: Prentice Hall.
- Hersey, P., & Blanchard, K.H. (1977). *Management of organizational behavior: Utilizing human resources* (3rd Ed). New Jersey: Prentice Hall.
- Institute for Educational Leadership Task Force. (1996). *Leadership for student learning*. Retrieved from <http://www.icl.org/program/21st/reports/princial.pdf>.
- Interstate School Leaders License Consortium. (1996). *Standards for school leadership practice: What a leader needs to know and be able to do*. Retrieved from <http://www.e-lead.org/principles/standards1.asp>
- Kaufhold, J. A. (2007). *Basic statistics for educational research*. Lincoln, NE: iUniverse.
- Khan, M., Ramzan, M., Ahmed, I., & Nawaz, M. (2011). Transformational, transactional, and laissez-faire styles of teaching faculty as predictors of satisfaction, and extra effort among the students: Evidence from higher education institutions. *Interdisciplinary Journal of Research in Business*, 1(4): 130-135.
- Lambert, N., & McCombs, B. L. (Eds.) (1998). *Issues in school reform: A sampler of psychological perspectives learner-centered schools*. Washington, DC: APA Books.
- Lashway, L. (1995). Can instructional leaders be facilitative leaders? *Eric Digest*, 98, 15. Clearing House on Educational Management, College of Education, University of Oregon.
- Leithwood, K. (1992). The move toward transformational leadership. *Educational Leadership*, 49(5), pp. 8-13.

- Leithwood, K. (1994). Leadership for school restructuring. *Educational Administration Quarterly*, 35, 679-706.
- Leithwood, K., & Jantzi, D. (1999). The relative effects of principal and teacher sources of leadership on student engagement with school. *Educational Administration Quarterly*, 35, 679-706.
- Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. NY: The Wallace Foundation.
- Lezotte, L. (1997). *Learning for all*. Okemos, MI: Effective Schools Products.
- Lezotte, L. W., & Snyder, K. M. (2011). *What effective schools do*. Bloomington, IN: Solution Tree Press.
- Marzano, R., & Kendall J. (1996). *A comprehensive guide to designing standards-based districts, schools, and classrooms*. Alexandria, VA: Association of Staff and Curriculum Development.
- Marzano, R., & Kendall, J. (1999). *Essential knowledge: The debate over what American students should know*. Aurora, CO: Mid-continent Regional Educational Laboratory.
- Marzano, R. J., Walter, T., & McNulty, B. A. (2005). *School leadership that works: Research to results*. CA: Association for Supervisors and Curriculum Developers.
- McCombs, B. L. (1993). Learner-centered psychological principles for enhancing education: Applications in school settings. In L. A. Penner, G. M. Batsche, H. M. Knoff, & D. L. Nelson (Eds.), *The challenge in mathematics and science education: Psychology's response* (pp. 287-313). Washington, DC: APA.
- McCombs, B. L. (1994a). *Description of the Learner-Centered Battery*. Aurora, CO: Mid-continent Regional Educational Laboratory.
- McCombs, B. L. (1994b). *Development and validation of the learner-centered psychological principles*. Aurora, CO: Mid-continent Regional Educational Laboratory.
- McCombs, B. L. (1995). Putting the learner and learning in learner-centered classrooms: The learner-centered model as a framework. *MASCD Focus*, 17(1), 7-12.
- McCombs, B. L. (1999). *The Assessment of Learner-Centered Practices (ALCP): Tools for teacher reflection, learning, and change*. Denver, CO: University of Denver Research Institute.

- McCombs, B. L. (2003a). *Defining tools for teacher reflection: The assessment learner-centered practices (ALCP)*. Chicago, IL: American Educational Research Association.
- McCombs, B. L. (2003b). Providing a framework for the redesign of K-12 education in the context of current educational reform issues. *Theory Into Practice*, 42(2), 93-101.
- McCombs, B. L., & Lauer, P. A. (1997). Development and validation of the Learner-Centered Battery: Self-assessment tools for teacher reflection and professional development. *The Professional Educator*, 20(1), 1-21.
- McCombs, B. L., & Whisler, (1997). *The learner-centered classroom and school: Strategies for increasing student motivation and achievement*. San Francisco: Jossey-Bass.
- McEwan, E. K. (2003). *10 traits of highly effective principals: From good to great performance*. Thousand Oaks, CA: Sage.
- Mid-continent Regional Educational Laboratory (McREL). (1995). *What's noteworthy on learners, learning, and schooling?* Washington, DC: Office of Educational Research and Improvement.
- Mid-continent Research for Education and Learning (McREL). (2011). *McREL: Midcontinent-Research for Education and Learning content knowledge standards and benchmark database*. Denver, CO: McREL.
- Murphy, J., & Beck, L. (1995). *School-based management as school reform: Taking stock*. Newbury Park, CA: Corwin.
- Muncey, D. E., & McQuillan, P.J. (1996). *Reform and resistance in schools and classrooms: An ethnographic view of the Coalition of Essential Schools*. New Haven: Yale University Press.
- Newmann, F., King, B., & Young, P. (2000). *Professional development that addresses school capacity*. New Orleans, LA: American Educational Research Association.
- Nieto, S. (2000). *Affirming diversity: The sociopolitical context of multicultural education* (3rd edition). NY: Longinan.
- Northhouse, P. (2007). *Leadership theory and practice* (4th Ed.). Thousand Oaks: Sage.
- Nunnery, J. (1998). Reform ideology and the locus of development problem in educational restructuring: Enduring lessons from studies of educational innovation. *Education and Urban Society*, 30, 277-295.

- Orton, R. E. (1996). How can teacher beliefs about student learning be justified? *Blackwell Publishing*, 26(2), 133-146.
- Portin, B. (2004). The roles that principals play. *Educational Leadership*, 61(7), 14-18.
- Public Schools of North Carolina State Board of Education/Department of Public Instruction. (2011). *Accountability services division: Adequate yearly progress 2010-2011*. Retrieved from <http://www.ncpublicschools.org/accountability/reporting/aypresults>.
- Reynolds, D., Teddlie, C., Creemers, B., Scheerens, J., & Townsend, T. (2000). An introduction to school effectiveness research. In C. Teddlie & D. Reynolds (Eds.), *The international handbook of school effectiveness research* (pp. 3-25). London: Falmer.
- Rowan, B. (1990). Commitment and control: Alternative strategies for the organizational design of schools. In C. Cazden (Ed.), *Review of Research in Education, Volume 16*. Washington, D.C.: American Educational Research Association.
- Ruddell, R. B. (1999). *Teaching children to read and write: Becoming an influential teacher* (2nd ed.). Boston: Allyn and Bacon.
- Sample, S. W. (2002). *The contrarian's guide to leadership*. San Francisco: Jossey-Bass.
- Schumacher, S. & McMillan, J. (2005). *Research in education: Evidence-based inquiry*. Old Tappan: Allyn & Bacon.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.
- Sheppard, B. (1996). Exploring the transformational nature of instructional leadership. *Albert Journal of Educational Research*, 42(4), 325-344.
- Slavin, R. E. (1989). Research on cooperative learning: An international perspective. *Scandinavian Journal of Educational Research*, 33(4), 231-243.
- Stringfield, S., Millsap, M., Yoder, N., Schaffer, E., Nesselrodt, P., Gamse, B., Brigham, N., Moss, M., Herman, R., & Bedinger, S. (1997). *Special strategies studies final report*. Washington, DC: U.S. Department of Education.
- United States Department of Education. (2000). *Before it's too late: A report to the nation from the national commission on mathematics and science teaching for the 21st century*. Washington, DC: Education Publication Center.
- United States Department of Education. (2009). *Race to the Top program executive summary*. Washington, DC: Department of Education.

- United States Department of Education. (2010). *The Elementary and Secondary Education Act; Public Law print of PL107-110, The No child Left Behind Act 2001*. Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/107-110.pdf>.
- Valentine, J. and Prater, M. (2011). *Instructional, Transformational, and Managerial Leadership and Student Achievement: High School Principals Make a Difference*. NASSP Bulletin, 95(1), 5-30.
- Weinberger, E., & McCombs, B. L. (2001). The impact of learner-centered practices on the academic and non-academic outcomes of upper elementary and middle school students. Paper presented in the Symposium, *Integrating what we know about learners and learning: A foundation for transforming PreK-20 practices*, at the annual meeting of the American Educational Research Association, Seattle, WA.
- Wenglinsky, H. (2000). *How teaching matters: Bringing the classroom back into discussions of teacher quality*. Princeton, NJ: Educational Testing Service.

Appendix A

Learner-Centered Psychological Principal

LEARNER-CENTERED PSYCHOLOGICAL PRINCIPLES

The following 14 psychological factors pertain to the learner and the learning process. They focus on psychological factors that are primarily internal to and under the control of the learner rather than conditioned habits or physiological factors. However, the principles also attempt to acknowledge external environment or contextual factors that interact with these internal factors. The principles are intended to deal holistically with learners in the context of real-world learning situations. Thus, they are best understood as an organized set of principles; no principle should be viewed in isolation. The 14 principles are divided into those referring to cognitive and metacognitive, motivational and affective, developmental and social, and individual difference factors influencing learners and learning. Finally, the principles are intended to apply to all learners—from children, to teachers, to administrators, to parents, and to community members involved in our educational system.

Cognitive and Metacognitive Factors

1. Nature of the learning process. The learning of complex subject matter is most effective when it is an intentional process of constructing meaning from information and experience.

There are different types of learning processes; for example, habit formation in motor learning, and learning that involves the generation of knowledge or cognitive skills, and learning strategies. Learning in schools emphasizes the use of intentional processes that students can use to construct meaning from information, experiences, and their own thoughts and beliefs. Successful learners are active, goal-directed, self-regulating, and assume personal responsibility for contributing to their own learning.

2. Goals of the learning process. The successful learner, over time and with support and instructional guidance, can create meaningful, coherent representations of knowledge.

The strategic nature of learning requires students to be goal directed. To construct useful representations of knowledge and to acquire the thinking and learning strategies necessary for continued learning success across the life span, students must generate and pursue personally relevant goals. Initially, students' short-term goals and learning may be sketchy in an area, but over time their understanding can be refined by filling gaps, resolving inconsistencies, and deepening their understanding of the subject matter so that they can reach longer-term goals. Educators can assist learners in creating meaningful learning goals that are consistent with both personal and educational aspirations and interests.

3. Construction of knowledge. The successful learner can link new information with existing knowledge in meaningful ways.

Knowledge widens and deepens as students continue to build links between new information and experiences and their existing knowledge base. The nature of these links can take a variety of forms, such as adding to, modifying, or reorganizing existing knowledge or skills. How these links are made or develop may vary in different subject areas and among students with varying talents, interests, and abilities. However, unless new knowledge becomes integrated with the learner's prior knowledge and understanding, this new knowledge remains isolated, cannot be used most effectively in new tasks, and does not transfer readily to new situations. Educators can assist learners in acquiring and integrating knowledge by a number of strategies that have been shown to be effective with learners of varying abilities, such as correct mapping and thematic organization or categorizing.

4. Strategic thinking. The successful learner can create and use a repertoire of thinking and reasoning strategies to achieve complex learning goals.

Successful learners use strategic thinking in their approach to learning, reasoning, problem solving, and concept learning. They understand and can use a variety of strategies to help them reach learning and performance goals, and to apply their knowledge in novel situations. They also continue to expand their repertoire of strategies by reflecting on the methods they use to see which work well for them, by receiving guided instruction and feedback, and by observing or interacting with appropriate models. Learning outcomes can be enhanced if educators assist learners in developing, applying, and assessing their strategic learning skills.

5. Thinking about thinking. Higher order strategies for selecting and monitoring mental operations facilitate creative and critical thinking.

Successful learners can reflect on how they think and learn, set reasonable learning or performance goals, select potentially appropriate learning strategies or methods, and monitor their progress toward these goals. In addition, successful learners know what to do if a problem occurs or if they are not making sufficient or timely progress toward a goal. They can generate alternative methods to reach their goal (or reassess the appropriateness and utility of the goal). Instructional methods that focus on helping learners develop these higher order (metacognitive) strategies can enhance student learning and personal responsibility for learning.

6. Context of learning. Learning is influenced by environmental factors, including culture, technology, and instructional practices.

Learning does not occur in a vacuum. Teachers play a major interactive role with both the learner and the learning environment. Cultural or group influences on students can impact many educationally relevant variables, such as motivation, orientation toward learning, and ways of thinking. Technologies and instructional practices must be appropriate for learners' level of prior knowledge, cognitive abilities, and their learning and thinking strategies. The classroom environment,

particularly the degree to which it is nurturing or not, can also have significant impacts on student learning.

Motivational and Affective Factors

7. Motivational and emotional influences on learning. What and how much is learned is influenced by the learner's motivation. Motivation to learn, in turn, is influenced by the individual's emotional states, beliefs, interests and goals, and habits of thinking.

The rich internal world of thoughts, beliefs, goals, and expectations for success or failure can enhance or interfere with the learner's quality of thinking and information processing. Students' beliefs about themselves as learners and the nature of learning have a marked influence on motivation. Motivational and emotional factors also influence both the quality of thinking and information processing as well as an individual's motivation to learn. Positive emotions, such as curiosity, generally enhance motivation and facilitate learning and performance. Mild anxiety can also enhance learning and performance by focusing the learner's attention on a particular task. However, intense negative emotions (e.g., anxiety, panic, rage, insecurity) and relative thoughts (e.g., worrying about competence, ruminating about failure, fearing punishment, ridicule or stigmatizing labels) generally detract from motivation, interfere with learning, and contribute to low performance.

8. Intrinsic motivation to learn. The learner's creativity, higher order thinking, and natural curiosity all contribute to motivation to learn. Intrinsic motivation is stimulated by tasks of optimal novelty and difficulty relevant to personal interests, and providing for personal choice of control.

Curiosity, flexible and insightful thinking, and creativity are major indicators of the learners' intrinsic motivation to learn, which is in large part a function of meeting basic needs to be competent and to exercise personal control. Intrinsic motivation is facilitated on tasks that learners perceive as interesting and personally relevant and meaningful, appropriate in complexity and difficulty to the learners' abilities, and on which they believe they can succeed. Intrinsic motivation is also facilitated on tasks that are comparable to real-world situations and meet needs for choice and control. Educators can encourage and support learners' natural curiosity and motivation to learn by attending to individual differences in learners' perception of optimal novelty and difficulty, relevance, and personal choice and control.

9. Effects of motivation and effort. Acquisition of complex knowledge and skills requires extended learner effort and guided practice.

Without learners' motivation to learn, the willingness to exert this effort is unlikely without coercion. Effort is another main indicator of motivation to learn. The acquisition of complex knowledge and skills demands the investment of

considerable learner energy and strategic effort, along with persistence over time. Educators need to be concerned with facilitating motivation by strategies that enhance learner effort and commitment to learning and to achieving high standards of comprehension and understanding. Effective strategies include purposeful learning activities, guided by practices that enhance positive emotions and intrinsic motivation to learn, and methods that increase learners' perceptions that a task is interesting and personally relevant.

Developmental and Social Factors

10. Developmental influences on learning. As individuals develop, there are different opportunities and constraints for learning. Learning is most effective when differential development within and across physical, intellectual, emotional, and social domains is taken into account.

Individuals learn best when material is appropriate to their developmental level and is presented in an enjoyable and interesting way. Because individual development varies across intellectual, social, emotional, and physical domains, achievement in different instructional domains may also vary. Overemphasis on one's type of developmental readiness--such as reading readiness, for example--may preclude learners from demonstrating that they are more capable in other areas of performance. The cognitive, emotional and social development of individual learners and how they interpret life experiences are affected by prior schooling, home, culture, and community factors. Early and continuing parental involvement in schooling, and the quality of language interactions and two-way communications between adults and children can influence these developmental areas. Awareness and understanding of developmental differences among children with and without emotional, physical, or intellectual disabilities, can facilitate the creation of optimal learning contexts.

11. Social influences on learning. Learning is influenced by social interactions, interpersonal relations, and communication with others.

Learning can be enhanced when the learner has an opportunity to interact and to collaborate with others on instructional tasks. Learning settings that allow for social interactions, and that respect diversity, encourage flexible thinking and social competence. In interactive and collaborative instructional contexts, individuals have an opportunity for perspective taking and reflective thinking that may lead to higher levels of cognitive, social, and moral development, as well as self-esteem. Quality personal relationships that provide stability, trust, and caring can increase learners' sense of belonging, self-respect and self-acceptance, and provide a positive climate for learning. Family influences, positive interpersonal support and instruction in self-motivation strategies can offset factors that interfere with optimal learning such as negative beliefs about competence in a particular subject, high levels of test anxiety, negative sex role expectations, and unique pressure to perform well. Positive learning climates can also help to establish the context for healthier levels of thinking, feeling, and behaving. Such

contexts help learners feel safe to share ideas, actively participate in the learning process, and create a learning community.

Individual Differences Factors

12. Individual differences in learning. Learners have different strategies, approaches, and capabilities for learning that are a function of prior experience and heredity.

Individuals are born with and develop their own capabilities and talents. In addition, through learning and social acculturation, they have acquired their own preferences for how they like to learn and the pace at which they learn. However, these preferences are not always useful in helping learners reach their learning goals. Educators need to help students examine their learning preferences and expand or modify them, if necessary. The interaction between learner differences and curricular and environmental conditions is another key factor affecting learning outcomes. Educators need to be sensitive to individual differences, in general. They also need to attend to learner perceptions of the degree to which these differences are accredited and adapted to by varying instructional methods and materials.

13. Learning and diversity. Learning is most effective when differences in learners' linguistic, cultural, and social backgrounds are taken into account.

The same basic principles of learning, motivation, and effective instruction apply to all learners. However, language, ethnicity, race, beliefs, and socioeconomic status all can influence learning. Careful attention to these factors in the instructional setting enhances the possibilities for designing and implementing appropriate learning environments. When learners perceive that their individual differences in abilities, backgrounds, cultures, and experiences are valued, respected, and accommodated in learning tasks and contexts, levels of motivation and achievement are enhanced.

14. Standards and assessment. Setting appropriately high and challenging standards and assessing the learner as well as learning progress including diagnostic, process, and outcome assessment are integral parts of the learning process.

Assessment provides important information to both the learner and teacher at all stages of the learning process. Effective learning takes place when learners feel challenged to work towards appropriately high goals. Therefore, appraisal of the learner's cognitive strengths and weaknesses, as well as current knowledge and skills, is important for the selection of instructional materials of an optimal degree of difficulty. Ongoing assessment of the learner's understanding of the curricular material can provide valuable feedback to both learners and teachers about progress toward the learning goals. Standardized assessment of learner progress and outcomes assessment provides one type of information about achievement levels both within and across individuals that can inform various types of programmatic decisions. Performance assessments can provide other sources of

information about the attainment of learning outcomes. Self-assessments of learning progress can also improve students' self-appraisal skills and enhance motivation and self-directed learning.

Appendix B

Belief Survey

Belief Survey

Part I Background/Demographic Information

Directions: using either a number two pencil or black/blue pen, please mark clearly your response by filling in the appropriate response corresponding to each stem statement on the answer sheet provided.

Please **do not** enter your **NAME** on the answer sheet. Rather, please **enter** your school's name in the area titled NAME. It is not necessary to enter Middle School.

Please **leave blank** the Birth Date section on the answer sheet.

Please **leave blank** the Special Codes section on the answer sheet.

Please **leave blank** the School Number section on the answer sheet.

Please **leave blank** the Student Number section on the answer sheet.

Mark your response to following questions on the answer sheet.

1. The total number of total years in education
A 1-4
B 5-9
C 10-15
D 16-23
E 24+
2. The total number of total years as a principal
A 1-4
B 5-9
C 10-15
D 16-23
E 24+
3. What is the Highest degree earned?
A BA/BS
B MA/MS
C Ed.D/Ph.D

Part II Teacher Beliefs Survey

THE ASSESSMENT OF LEARNER-CENTERED PRACTICES (ALCP):

Belief Survey©

DIRECTIONS for Part II: A number of statements that teachers in Grades 4 through 8 have used to describe themselves are shown below. Please read each statement carefully. Decide to **what extent** you agree or disagree with each statement. Do you *strongly disagree*, *somewhat disagree*, *somewhat agree*, or *strongly agree*? Circle the appropriate letter located in the box corresponding with each statement to indicate your choice. Answer carefully, but don't think too much about any one question.

PLEASE ANSWER EVERY QUESTION. Your responses will be kept private and confidential.

Responses:

A=Strongly Disagree, B=Somewhat Disagree, C=Somewhat Agree, D=Strongly Agree

Statement	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
4. Students have more respect for teachers they see and can relate to as real people, not just as teachers.	A	B	C	D
5. There are some students whose personal lives are so dysfunctional that they simply do not have the capability to learn.	A	B	C	D
6. I can't allow myself to make mistakes with my students.	A	B	C	D
7. Students achieve more in classes in which teachers encourage them to express their personal beliefs and feelings.	A	B	C	D

8. Too many students expect to be coddled in school.	A	B	C	D
9. If students are not doing well, they need to go back to the basics and do more drill and skill development.	A	B	C	D
10. In order to maximize learning, I need to help students feel comfortable in discussing their feelings and beliefs.	A	B	C	D
11. It's impossible to work with students who refuse to learn.	A	B	C	D
12. No matter how bad a teacher feels, he or she has a responsibility not to let students know about those feelings.	A	B	C	D
13. Addressing students' social, emotional, and physical needs is just as important to learning as meeting their intellectual needs.	A	B	C	D
14. Even with feedback, some students just can't figure out their mistakes.	A	B	C	D
15. My most important job as a teacher is to help students meet well established standards of what it takes to succeed.	A	B	C	D
16. Taking the time to create caring relationships with my students is the most important element for student achievement.	A	B	C	D
17. I can't help feeling upset and inadequate when dealing with difficult students.	A	B	C	D
18. If I don't prompt and provide direction for student questions, students won't get the right answer.	A	B	C	D
19. Helping students understand how their beliefs about themselves influence learning is as important as working on their academic skills.	A	B	C	D
20. It's just too late to help some students.	A	B	C	D
21. Knowing my subject matter really well is the most important contribution I can make to student learning.	A	B	C	D
22. I can help students who are uninterested in learning	A	B	C	D

get in touch with their natural motivation to learn.				
23. No matter what I do or how hard I try, there are some students who are unreachable.	A	B	C	D
24. Knowledge of the subject area is the most important part of being an effective teacher.	A	B	C	D
25. Students will be more motivated to learn if teachers get to know them at a personal level.	A	B	C	D
26. Innate ability is fairly fixed and some children just can't learn as well as others.	A	B	C	D
27. One of the most important things I can teach students is how to follow rules and to do what is expected of them in the classroom.	A	B	C	D
28. When teachers are relaxed and comfortable with themselves, they have access to a natural wisdom for dealing with even the most difficult classroom situations.	A	B	C	D
29. Teachers shouldn't be expected to work with students who consistently cause problems in class.	A	B	C	D
30. Good teachers always know more than their students.	A	B	C	D
31. Being willing to share who I am as a person with my students facilitates learning more than being an authority figure.	A	B	C	D

Statement	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
32. I know best what students need to know and what's important; students should take my word that something will be relevant to them.	A	B	C	D
33. My acceptance of myself as a person is more central to my classroom effectiveness than the comprehensiveness of my teaching skills.	A	B	C	D
34. For effective learning to occur, I need to be in control of the direction of learning.	A	B	C	D

35. Accepting students where they are – no matter what their behavior and academic performance —makes them more receptive to learning.	A	B	C	D
36. I am responsible for what students learn and how they learn.	A	B	C	D
37. Seeing things from the students' point of view is the key to their good performance in school.	A	B	C	D
38. I believe that just listening to students is a caring way helps them solve their own problems.	A	B	C	D

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 Development and Validation of the Learner-Centered Battery: Self-Assessment Tools for Teacher
 Reflection and Professional Development. Aurora, CO: Mid-continent Regional Education Laboratory

Appendix C

Invitation Letter

Dear Principal,

I am asking for your help in assisting me with my doctoral dissertation that seeks to conduct an initial study to identify, determine a difference, if any, and investigate any possible relationship between the roles of principal beliefs about learner-centered education with student achievement.

Specifically, I am asking that you complete the Leadership Belief Survey electronically via Survey Monkey. The Leadership Belief Survey is completely confidential and does not ask you to identify yourself. The survey will not take any longer than 5 minutes to complete.

Your school was one of 292 schools selected based on the results of the 2010-2011 End-of-Grade and/or End-of-Course test. Please know that I am fully aware that the EOG and EOC results are merely a starting point and in no way take into account the many challenges, obstacles, or barriers that you and your staff content with day in and day out.

Unlike previous research on school reform that has tended for the most part to address technical and organizational changes in our present system, this study seeks to ascertain if there is a difference as well as if a relationship exists between learner-centered beliefs and student achievement. Why learner-centered? Researchers at the Mid-continent Regional Educational Laboratory (McREL) identified an additional domain of reform that in their estimation has seldom, if ever, been studied. That domain includes defining and examining leadership beliefs and practices considered learner-centered and the degree to which student achievement, motivation, and learning is influenced. Intuitively we know that belief's influence behavior. Yet, what are the right or best beliefs that leaders need to have and demonstrate in their practice to meet current local, state, and national expectations?

The results of the study will provide the level of (1) Learner-Centered Beliefs about Learners, Teaching and Learning; (2) Nonlearner-Centered Beliefs About Learners; and (3) Nonlearner-Centered Beliefs about Teaching and Learning. Additionally, the results of this study will provide you the answers to several research questions investigating differences and/or relationships between and among the learner-centered beliefs and student achievement of different high, middle and elementary schools in the State of North Carolina.

Knowing full well the demands on your time, please accept my sincerest appreciation for assisting me with this project. If you have any questions, please do not hesitate to contact me either by phone ([REDACTED]) or by email (cbb0918@gardner-webb.edu).

Thank you,

Camela Bell
Learning Development Coordinator
[REDACTED] School System
[REDACTED]