

Fall 12-2011

A Critical Analysis of Job-Embedded Professional Learning Within a Distributed Leadership Framework

Ashley Jimerson Campoli
University of Southern Mississippi

Follow this and additional works at: <https://aquila.usm.edu/dissertations>



Part of the [Educational Administration and Supervision Commons](#), [Educational Leadership Commons](#), and the [Teacher Education and Professional Development Commons](#)

Recommended Citation

Campoli, Ashley Jimerson, "A Critical Analysis of Job-Embedded Professional Learning Within a Distributed Leadership Framework" (2011). *Dissertations*. 447.
<https://aquila.usm.edu/dissertations/447>

This Dissertation is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Dissertations by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu.

The University of Southern Mississippi

A CRITICAL ANALYSIS OF JOB-EMBEDDED
PROFESSIONAL LEARNING WITHIN A
DISTRIBUTED LEADERSHIP FRAMEWORK

by

Ashley Jimerson Campoli

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

December 2011

ABSTRACT

A CRITICAL ANALYSIS OF JOB-EMBEDDED
PROFESSIONAL LEARNING WITHIN A
DISTRIBUTED LEADERSHIP FRAMEWORK

by Ashley Jimerson Campoli

December 2011

Leadership style and professional learning have been linked to student achievement. Studies have linked leadership styles such as distributed leadership to job-embedded professional learning. However, research is mixed when these two constructs are related to student achievement.

This study evaluated the relationship between distributed leadership and job-embedded professional learning. This study also evaluated relationships among job-embedded professional learning, distributed leadership, and third-grade achievement scores.

The study involved third grade mathematics teachers and school administrators in 46 elementary schools in the state of Georgia. Pearson's bivariate correlation test was used to explore the relationship between job-embedded professional learning and distributed leadership. A hierarchical multiple regression was used to examine the relationships among job-embedded professional learning, distributed leadership and achievement while controlling for ability level and socioeconomic status.

To further examine the relationships between the constructs, qualitative analyses were conducted. Six teachers and administrators were interviewed. Although variations of the constructs were being implemented, participants had limited knowledge of the

meaning of the constructs; their analysis of effectiveness was based on perception rather than data.

The finding in extant research that job-embedded professional learning is more effective within a distributed leadership framework was supported by this study. Additionally, responses of interviewed school personnel revealed a relationship between these constructs. However, an inverse relationship was found between schools these constructs in schools with low socio-economic status and low levels of distributed leadership. On the other hand, the study did not reveal relationships among distributed leadership, job-embedded professional learning and student achievement.

COPYRIGHT BY
ASHLEY JIMERSON CAMPOLI

2011

The University of Southern Mississippi

A CRITICAL ANALYSIS OF JOB-EMBEDDED
PROFESSIONAL LEARNING WITHIN A
DISTRIBUTED LEADERSHIP FRAMEWORK

by

Ashley Jimerson Campoli

A Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved:

Dr. Michael Ward

Director

Dr. Tammy Greer

Dr. David Lee

Dr. Gaylynn Parker

Dr. Susan A. Siltanen

Dean of the Graduate School

December 2011

DEDICATION

This dissertation is dedicated to my grandmother, Beulah Jimerson. She practically raised me from a young age and always encouraged me to pursue my education. She was a woman of faith who worked hard and loved her family. She instilled in me the characteristics of a good wife and of a loving mother. I miss you terribly, Mamaw, and wish you were here to see me walk across the stage.

ACKNOWLEDGMENTS

The writer would like to thank the Dissertation Committee members, Dr. Michael Ward, Dr. Tammy Greer, Dr. David Lee, and Dr. Gaylynn Parker for their guidance and assistance throughout the dissertation process and for the excellent instruction received during course work that allowed me to successfully complete the doctoral degree. I would especially like to thank Dr. Michael Ward for the countless hours spent helping me along the dissertation path. He continually guided me with his vast expertise and his unwillingness to give up or let me give up. He was structured, insightful, and timely in his commentary.

I wish to also thank Dr. Edward Leonard for his fine teaching of statistics I. He started my experience at USM with humor, kindness, compassion, organization and dedication.

I would also like to thank Dr. Rose McNeese and Dr. Wanda Maulding for beginning the USM doctoral cohort in Georgia. It is through their guidance, forethought and assistance that our program emerged.

I would like to thank my father, Clarence Jimerson, for always supporting me. He has always been there for me when I needed him and I know that I can always count on him for anything. I could not have made it this far without his loving support, encouragement and the belief that I could accomplish anything.

Lastly, I wish to thank my sweet husband, Mark Campoli. He has encouraged me to pursue this degree and has supported me fully. Mark has continually guided me with loving support, knowledge and compassion. He has been my shoulder to cry on and my partner with whom I celebrate. He is my helper and my rock.

TABLE OF CONTENTS

ABSTRACT	ii
DEDICATION	iv
ACKNOWLEDGMENTS	v
LIST OF TABLES	viii
CHAPTER	
I. INTRODUCTION	1
Statement of the Problem	
Background of the Study	
Research Questions	
Delimitations	
Assumptions	
Definitions of Terms	
Justification	
Summary	
II. REVIEW OF RELATED LITERATURE	12
Introduction	
Theoretical Framework	
Historical Evolution of Distributed Leadership	
Professional Learning	
Pertinent Research and Professional Perspectives	
Distributed Leadership	
Job-embedded Professional Learning	
Summary	
III. METHODOLOGY	55
Introduction	
Research Questions and Hypotheses	
Participants in the Study	
Research Design and Procedures	
Variables in the Study	
Data Collection Process	
Analysis of the Results	
Summary	

IV.	RESULTS	64
	Introduction	
	Description of the Respondents	
	Results	
	Data Findings	
	Summary	
V.	DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS.....	94
	Introduction	
	Summary of Procedures	
	Major Findings	
	Discussion	
	Limitations	
	Recommendations for Policy and Practice	
	Recommendations for Future Research	
	Summary	
	APPENDIXES	113
	REFERENCES	178

LIST OF TABLES

Table

1. Demographic Data of District as Reported by Georgia Department of Education	65
2. Item Analysis, Descriptive Statistics and Correlations for Job-embedded Professional Learning and Distributed Leadership.....	67
3. Descriptive Statistics for the Predictor and Criterion Variables (N=46).....	71
4. Simple Correlations between Predictor and Criterion Variables (N=46).....	73
5. Factor Loadings and Communalities Based on a Principle Components Analysis with Variamax and Kaiser Normalization Rotation for 24 Items from the School Improvement Survey (N=46).....	75
6. Factor Loadings and Communalities Based on a Principle Components Analysis with Variamax and Kaiser Normalization Rotation for 7 Items from the School Improvement Survey (N=46).....	78
7. Hierarchical Multiple Regression of Variables onto Achievement on the ITBS (N=46).....	82
8. Frequencies and Themes of Responses to Professional Learning Questions (N=6) ...	90
9. Frequencies and Themes of Responses to Professional Learning Questions (N=6)	91

CHAPTER I

INTRODUCTION

Chapter I introduces the study and provides a statement of the problem.

Background information is provided to assist the reader in the review and to support the need for this research. Research questions, delimitations and assumptions are addressed in this chapter, along with definitions of terms. The chapter concludes with a justification for the study.

The purpose of this study was to determine the relationship between the adoption of a distributed leadership model and job-embedded professional learning to student achievement. This study identified K-5 public schools in one large suburban district in the state of Georgia that exhibited qualities of distributed leadership, job-embedded professional learning, and student achievement. It defined distributed leadership within a management framework to help schools build capacity for leaders, sustain job-embedded professional learning, and increase student achievement. In addition, it discussed the successes and limitations of such a framework, along with the associated risks.

Statement of the Problem

According to the National Staff Development Council (NSDC) (2009), professional learning is defined as, “a comprehensive, sustained and intensive approach to improving teachers’ and principals’ effectiveness in raising student achievement” (p. 2). The NSDC suggests that professional learning should occur several times per week among teams of teachers, support staff, and administrators to produce a continuous cycle of sustained improvement. For the most part, experts within the building, including master teachers, teacher leaders, coaches and mentors, should conduct professional

learning. According to Hirsh (2009), studies suggest that professional learning should be job-embedded to gain significant results and that a preponderance of evidence, both in the field of education and in businesses, reports that adults gain minimal knowledge from trainings which have limited follow up or a specific, focused content application. To reap significant benefits in regards to sustainability and increased academic achievement, schools can build capacity through job-embedded, classroom-coach and mentor-based training. Although NSDC promotes external training on occasion, they put primary responsibility for building capacity in the area of professional learning on the school to reap sustainable benefits.

The literature suggested that school-wide distributed leadership is necessary in order for professional learning to be job-embedded and sustainable (Hirsh, 2009; NSDC, 2009). Harris and Spillane (2008) assert the need for leadership activities to be spread widely within an organization among multiple leaders. Leadership is not limited to a role, but more often is seen through the formal and informal actions and interactions within an organization. Individuals are recognized for their contribution to the work, often regardless of title. Further, Harris and Spillane's research suggest that as schools and organizations become increasingly complex and the leadership requires diverse types of expertise to meet the demands of the organization, it is feasible that a distributed model of leadership be used to meet these demands. Distributed leadership is an analytic framework for understanding building teacher leadership capacity in the area of professional learning.

Background of the Study

To outline the need for the study, the researcher reviewed the current policy context, as well as current research surrounding distributed leadership and job-embedded professional learning.

Contemporary Policy Context

Because of No Child Left Behind (NCLB) and state systems of accountability, many school principals feel the increased push to raise student achievement at an exponential rate (Harris & Spillane, 2009; Hirsh, 2009; NSDC, 2009; Wilms, 2009). Over the years, schools have typically implemented a top-down leadership model in which the principal and administration make the majority of decisions. These decisions then filter down to the teachers via department or grade level chairs. As a consequence, many principals tend to push themselves into long hours and stressful working conditions in order to accomplish running the school effectively. Often they are afraid to delegate for fear of not meeting the performance mandates of NCLB and other responsibilities for which they are primarily held accountable.

Research suggested that top-down leadership within public education is not the most effective means for creating a positive school culture with high teacher and staff morale (Harris & Spillane, 2009; Hirsh, 2009; NSDC, 2009; Wilms, 2009). Particularly within the area of building teacher capacity as a dimension of professional learning, many studies revealed an overall increase in teacher morale, improvements in the school culture and, most importantly, an increase in student achievement (Hirsh, 2009; NSDC, 2009). Within top-down leadership, administrators fail to elicit teacher support and feedback, creating a culture in which teachers feel duty-bound rather than intrinsically motivated to

carry out professional learning. Once teachers embrace the elements of distributed leadership, they are more likely to follow through with the new learning and sustain it through formal and informal follow-up of professional learning opportunities. When distributed leadership models are conducted effectively, research suggested an overall increase in staff morale and, ultimately, in student achievement (Harris & Spillane, 2009; NSDC, 2009).

Shortage of Effective School Leaders

Many districts find it increasingly difficult to lure good principals. Research suggests that this is due to higher demands with inadequate pay. “The typical principal today is 50 years old, has 25 years of experience as an educator, and has held this position for 11 years—6 of them in the current school” (North Central Regional Educational Laboratory, 2010, p. 1). The majority of principals are not ethnically diverse and most are male. An emphasis on managing schools seems to take precedence over instructional leadership. The current principal has control over approximately 26 percent of the local school budget. The average elementary school principal’s salary in 1999-2000 was \$69,407 with middle and high school principals earning slightly more along with those employed in urban areas.

Research suggested that education reform places a strong emphasis on accountability (NCREL, 2010). Many schools are being punished or rewarded based on outcomes of standardized tests. School leaders often do not have the tools or support to create significant change and therefore turn to school-level leaders to initiate change and monitor data. In addition to placing a strong emphasis on accountability, many districts push for a comprehensive, model-based system for reform.

Many educators choose not to enter the principalship due to a lack of adequate compensation, stress, high accountability and time requirements (Bass, 2006). Despite the principalship having many negative external factors, research suggested that the intrinsic motivators outweigh the external factors (Malone, Sharp & Thompson, 2000). Increased stress, increased time commitment and pressures from standardized test scores were the top inhibitors to retention in the principalship. Gronn and Rawlings-Sinai (2003) suggested that conditions in the workplace, workload and intensification, and increased demand for accountability, combined with declining authority to act, and expanded and restructured work roles are some causes for principal attrition.

To meet the conflicting requirements of high-stakes accountability and lack of quality principal applicants, districts should consider the preparation of leaders in order to meet the schools' stringent accountability achievement demands. First, they should realize that school leadership is a multidimensional job (NCREL, 2010). One criticism is that training overly emphasizes management instead of instructional leadership. Integrating traditional principal training with hands-on experience may prove beneficial. Future principals would spend a large amount of time in real school settings with teams of teachers developing techniques of shared or distributed leadership. This process for building capacity for future leadership may increase the number of well-rounded, quality applicants for the principalship.

Research Questions

The purpose of this study was to determine the relationship between the adoption of a distributed leadership model and job-embedded professional learning to increased

student achievement. In order to examine these issues, the following research questions were addressed:

1. Is there a relationship between distributed leadership and job-embedded professional learning?
2. Are there relationships among distributed leadership, job-embedded professional learning, and student achievement?

Delimitations

This study focused on K-5 schools, therefore generalizations to middle and high schools should be approached with caution. This study was conducted in a large, middle-to-high income metro suburban district; therefore, generalizations to other districts should also be approached with caution. This study was conducted in a right-to-work state and findings will need to be interpreted with caution when applied in a collective bargaining state. This study was conducted in a district with high levels of professional learning; therefore, generalizations to districts providing inconsistent professional learning should be approached with caution. This study involved a significant number of teachers and administrators who held advanced degrees; therefore, findings should be approached with caution in districts where there is a limited proportion of professionals who have earned advanced degrees.

Assumptions

The researcher assumed that the respondents to the School Improvement Survey, Administrator Survey and Teacher Survey answered honestly. The researcher assumed that the respondents were aware of and understood definitions of terms used. The researcher also assumed that the respondents followed the directions of the survey and

completed the survey to the best of their ability. Since teachers were asked to reflect upon the behaviors of their supervising principals, the researcher also assumed that the respondents responded candidly and without fear of confidentiality being violated.

Definitions of Terms

The following definitions provide meaning, in some instances unique to the context researched, for terms that were used within this study:

Administrator- the principal or assistant principal who provides instructional and managerial leadership in order to increase student achievement;

Building capacity- the process or byproduct of efforts focused to increase leadership within the school building;

Consulting- the act of providing advice or feedback;

Distribute- the act of stretching or dividing tasks;

Distributed leadership- the process of decentralizing leadership to include all stakeholders in the leadership, management and decision making process;

Expertise- a mastery level of proficiency within a particular field;

Feedback- a reaction or response to a particular activity;

Formative assessment- an assessment for learning used to adjust instruction and inform the learner;

Framework- a model for a particular method or program;

Horizontal Collaboration- the collective, collegial interaction of the same grade level or course involved in curriculum, instruction and assessment needs of the school;

Job-embedded professional learning- a model of professional learning that is administered on-the-job through peer coaching, mentoring, teaching, modeling and consulting;

Mentoring- the act of teaching or guiding a less experienced colleague;

Modeling- the act of showing a standard for comparison or implementation;

Peer coaching- the process of providing feedback and instruction to colleagues;

Professional learning community (PLC)- a team of collegial teachers and/or administrators who meet to develop, revise, or implement a common goal, objective, or focus;

Schema- prior knowledge that helps to shape unknown concepts;

Stakeholders- a group of individuals who have a vested interest in the school such as student, parent, teacher, staff member, partner in education, booster club, etc;

Summative assessment- an assessment of learning used to evaluate the level of mastery acquired throughout a unit or concept;

Sustainability- the ability of a program or initiative to be sustained or implemented continuously for certain duration of time; and

Vertical Collaboration- the collective, collegial interaction of differing grade levels involved in curriculum, instruction and assessment needs of the school.

Justification

Although there are many ways to achieve whole school reform, many researchers suggested a distributed leadership framework (Harris & Spillane, 2009; Hirsh, 2009; Kayrooz & Fleming, 2008; NSDC, 2009; Wilms, 2009). According to Mayrowetz (2008), the term distributed leadership consists of multiple meanings and allows for

researchers and practitioners to talk past each other. She suggested that researchers look beyond administrators and more extensively examine leadership throughout the building among those who do not possess a formal leadership title. Story (2004) stated that leadership should not fall into the hands of one person, but be shared among a number of people. Research suggested a correlation between leadership and student achievement, but the lack of empirical evidence that suggests that distributed leadership increases student achievement is a weakness (NSDC, 2009; Spillane, 2004).

Many theorists and researchers suggested a distributed leadership model to support job-embedded professional learning (DuFour & Eaker, 1998; Gusky, 2000; Hirsh, 2009; NSDC, 2009; Tienken & Stonaker, 2007). The National Staff Development Council (2009) stated that the term professional learning should be comprehensive, sustained and intensive. Professional learning should: align with state standards, be taught by experts within the building, occur several times per week, be data-based, evaluate teaching and learning, research evidence-based learning strategies, implement formative assessments, occur through job-embedded opportunities, and inform on-going academic improvements. Limited research has been done to link job-embedded professional learning to increased student achievement. Because of the limited number of studies conducted regarding job-embedded professional learning within a distributed leadership framework to student achievement, this study adds to the body of knowledge.

Summary

Many research studies have revealed a positive correlation between certain leadership styles and increased student achievement although it is unclear how distributed leadership was connected to school improvement and the development of leadership.

This may partially be due to the limited research on distributed leadership, specifically as it relates to student achievement; this may also be the result of the term having multiple meanings throughout academia. In addition, distributed leadership may lead to negative results noting teachers may become overstressed due to the shared decision making responsibilities. There was also a lack of evidence or direct correlation between leadership and large-scale academic improvement.

In addition, studies have also revealed an indirect correlation between job-embedded professional learning and student achievement. Overall, studies have shown that distributed leadership was often necessary for building capacity and sustaining job-embedded professional learning. Although empirical results show this form of distributed leadership has led to human capacity building, which is also leadership building, there are limited data on its effects relative to school improvement.

This study adds to the body of existing research on the relationships among distributed leadership, job-embedded professional learning and student achievement. Many studies exist in Great Britain, Finland and other countries showing the effectiveness of a distributed leadership model and the relationship among leadership and building capacity for leaders through job-embedded professional learning and increased student achievement (Silins & Mulford, 2002). Implications from this study can be used by policymakers and practitioners to move schools further along the distributed leadership continuum. According to the researcher's findings, this would be a positive move for schools. Although no relationship among job-embedded professional learning, distributed leadership and student achievement was found, it has been widely recognized by theorists and researchers that both of these constructs support teacher growth and, in

turn, student growth. The researcher's goal was to add to the body of research, provide resources for local schools for implementation, and influence state and local professional learning educational policy and budgeting. The results of this survey may be presented to local school districts for consideration.

In Chapter I, the researcher has provided an introduction to the study. The Literature Review is presented in Chapter II.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The purpose of this chapter is to offer a review of the literature in the field of leadership and professional learning, which includes an associated theoretical framework, as well as pertinent empirical studies and professional perspectives. It was developed through a systematic study of distributed leadership, job-embedded professional learning, and the effects of distributed leadership and job-embedded professional learning on student achievement. The review of the literature supports distributed leadership as a management framework to implement and sustain job-embedded professional learning and increase student achievement. Leadership styles among a significant number of leaders within education have evolved over the years from managerial to a more holistic distributed style in the hopes of increasing student achievement.

Theoretical Framework

The theoretical framework provides an examination of pertinent leadership theories, including those related to distributed leadership. In addition, the theoretical framework provides a review of professional learning theories, in particular those associated with job-embedded professional learning and its impact on student achievement. Job-embedded professional learning within a distributed leadership framework has been shown to impact student achievement. According to research, job-embedded professional learning should occur throughout the day and be embedded into the daily work of teachers (Croft et al., 2010; Garet et al., 2001; Gusky, 2003; Gusky, 1995; Morris, Chrispeels, & Burke, 2003; NSDC, 2009; Yoon et al., 2007). Research

suggests a relationship among job-embedded professional learning, distributed leadership, and student achievement (Harris & Spillane, 2009; Hirsh, 2009; Marzano, Waters, & McNulty, 2005; NSDC, 2009; Tienken & Stonaker, 2007; Wilms, 2009).

Historical Evolution of Distributed Leadership as a Management Construct

The term distributed leadership has been used synonymously with shared leadership, shared governance, team leadership, participative leadership and democratic leadership. Although there are multiple ways to describe distributed leadership, throughout time the meaning has remained the same. The term has stood the test of time in fields such as psychology, business, leadership and education.

One of the first theorists to provide a comprehensive theory on cooperative behavior in formal organizations was Chester Barnard (Mahoney, 2002). In the 1930s, Barnard asserted that one of the necessary functions of an organization was to promote communication among individuals. Barnard also stressed the importance of maintaining cohesion within the organization by regulating the willingness of stakeholders who were willing to serve (Mahoney, 2002). He suggested maintaining feelings of personal satisfactions, self-respect and independent choice. Barnard coined the terms zone of acceptance and zone of indifference. These terms assert that subordinates tend to accept some decisions of their superiors without examining their merits based on the subordinates' zone of acceptance (Simon, 1947). In such instances, the superior does not need to convince the subordinates, but relies on compliance. However, if the decision falls outside the zone of acceptance, disobedience is likely to follow. Such circumstance, he contended, may warrant the inclusion of subordinates in the decision making process. Although Barnard (1938) asserted that management required the ability to persuade

rather than command, the function of authority is a skill, not a hierarchical position. Gibb (1954) argued, “Leadership is probably best conceived as a group quality, as a set of functions which must be carried out by the group. This concept of ‘distributed leadership’ is an important one” (p. 113). Katz and Kahn (1978) suggest when team members voluntarily offer their influence to shared goals, shared leadership gives organizations a competitive advantage by the resources provided through shared information and increased commitment. “Those organizations in which influential acts are widely shared are most effective” (Katz & Kahn, 1978, p. 332).

Gibb (1954) suggested two forms of leadership: focused and distributed. Focused leadership resides with a single individual. Distributed leadership resides with two or more individuals who share in their roles, responsibilities and functions of leadership. Gibb’s definition focused on multiple sources of influence within teams rather than specific or formal positions of leadership. “We define shared leadership as an emergent team property that results from the distribution of leadership influence across multiple team members” (Gibb, 1954, p. 884). It represents a condition of mutual influence embedded in the interactions among team members that can significantly improve team and organizational performance (Day, Gronn, & Salas, 2004). Shared leadership creates a web of reciprocal influence that reinforces existing relationships among team members (Carson et al., 2007).

Others believe the theory of leadership originated with conceptions of a heroic leader (Kayrooz & Fleming, 2008). Over time, this theory evolved into accepting the situation in which the leader operated and he or she behaved within the situation. Leadership then began being seen as a group quality. Katz and Kahn (1978) stated that

leadership is the function of an organization that should be shared among stakeholders to allow for better decision making and create more of a commitment. Vroom and Jago (2007) defined leadership as a collaborative model where shared decision making prevails; however, leadership is a process, not the title of a person. Silins and Mulford (2002) stated, “Processes and structure that support open communication, sharing of information and participatory decision making are necessary for a school to work as a team of learners and build their capacity for organizational learning” (p. 441).

Distributed Leadership as a Theoretical Lens for Looking at the Activity of Leadership

The term distributed leadership is widely used in the field of education and among researchers and practitioners (Mayrowetz, 2008). It often consists of multiple meanings that confuse practitioners and allow them to talk past each other. It is also unclear how distributed leadership is connected to school improvement and the development of leadership. Spillane, Halverson, and Diamond (2001) transferred their knowledge of social science to argue that the idea of distributed leadership is an activity being distributed or stretched over multiple people. Mayrowetz (2008) suggested at least two important shifts in thinking: a) researchers must look beyond administrators, or the title of a leader, in order to investigate leadership within the school, b) the researcher’s focus should be on interactions or concertive action and not on a title of leadership such as the principalship. Distributed leadership can be seen as leadership functions being stretched among multiple people. Through their theories and research on distributed leadership, Spillane et al. (2004) identified a set of instructional leadership functions similar to those in the Interstate School Leaders Licensure Consortium (ISLLC) (Council of Chief State

School Officers, 2010). The two sets of leadership functions are outlined below. The ISLLC standards (Council of Chief State School Officers, 2010) are as follows:

Standard 1: A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation and stewardship of a vision of learning that is shared and supported by the school community.

Standard 2: A school administrator is an educational leader who promotes the success of all students by advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth. Personnel programs are developed to meet the needs of students and their families.

Standard 3: A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations and resources for a safe, efficient, and effective learning.

Standard 4: A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.

Standard 5: A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness and in an ethical manner.

Standard 6: A school administrator is an educational leader who promotes the success of all students by understanding, responding to and

influencing the larger political, social, economic, legal, and cultural context.

The functions developed by Spillane et al. (2004) consist of the following:

- constructing and selling an instructional vision;
- developing and managing a school culture conducive to conversations about the core technology of instruction by building norms of trust, collaboration, and academic press among staff;
- procuring and distributing resources, including materials, time, support and compensation;
- supporting teacher growth and development, both individually and collectively;
- providing both summative and formative monitoring of instruction and innovation; and
- establishing a school climate in which disciplinary issues do not dominate instructional issues. (p. 13)

As found in the ISLLC standards, a leader is someone who works to solicit the help, opinions and support from a multitude of stakeholders. Similar to the ISLLC standards, an examination of Spillane's et al. functions of a leader suggest similar elements of engaging multiple stakeholders in the education process. Through extrapolation, these leadership functions from both the ISLLC and Spillane's et al. research may be viewed as strong support by the profession for distributing leadership among a variety of stakeholders.

The idea of distributed leadership is not new, but is used selectively in businesses, international schools, and public education institutions in the United States. According to the most recent Programme for International Students' Assessment (PISA), a 2006 test with 57 countries participating, Finland ranked number one in the world in mathematics and science and number two in reading (The Finnish National Board of Education, 2007). Kayrooz and Kahn (2008) believe that Finland's entire educational system operates under the distributed leadership framework. Decision-making powers in education have historically been delegated to the local level leaders. Kayrooz and Kahn recognize that principals usually do not know students the way that teachers do and therefore should delegate the majority of curriculum and instructional decisions to those experts in the building who work most directly with students and teachers. It is the principal's job to create a safe environment in which leadership will naturally rise up from within. Leadership and decision-making should stretch an employee's ability and allow them to take on risks within the shared values and common goals adopted (Kayrooz & Kahn, 2008).

Spillane (2005) described another type of a "heroic leadership" in which school leadership is often seen as that provided by an individual leader, often the principal. Schools deal with the what of leadership instead of the how. Spillane defines the what of leadership as structures, functions, roles and routines. He defines the how of school leadership as the daily performance of those structures, functions, roles and routines. Spillane also demystifies distributed leadership since the term has garnered research in the United States. He goes on to say there is no one correct definition of distributed leadership, but the terms and definitions are key to understanding the practice.

Distributed leadership is that, a practice, not a particular role or a title. It can be viewed as the product of interactions among stakeholders within a school setting. It is not the product of one's knowledge, but the interactions among individuals within a particular setting. Spillane suggests the leader plus view to gain a better understanding. Leadership practice involves multiple people with diverse backgrounds and various levels of expertise. It is not the action of a super-human individual, but the product of interactions among groups of individuals. It is not something done to followers, but the interaction between leaders and followers' interactions.

According to Kayrooz and Fleming (2008), distributed leadership is allowing leadership to arise naturally and focus on collaborative interactions toward a shared goal. Companies have used the distributed leadership framework to provide conditions in which people will naturally rise to the occasion provided the right conditions. Instead of a title defining someone as a leader, distributed leadership focuses on leadership actions and interactions both formally and informally which occur in collaborative environments. Those with various levels of expertise within a particular area are encouraged to mentor new and/or less experienced staff. This leader is often described as a transformational leader.

Building Leadership Capacity

Principals often ask, "How do I lead my school to high academic standards given the current economic and No Child Left Behind crises?" (Flanary, 2009). Researchers suggest building leadership capacity within the school to better serve the school's and the students' needs. The National Association for Secondary School Principals' (NASSP) book, *Breaking Ranks*, lays out the strategies for building capacity. First, the leadership

team should create a safe environment where taking risks is accepted. Second, professional learning should be viewed as relevant and substantial. Third, staff members need to identify their strongest skills and build on those for success. It takes multiple experts within the building to build capacity to a level of providing job-embedded professional learning and overall distributed leadership. According to Fullan (2005), “Capacity building involves developing the collective ability—dispositions, skills, knowledge, motivation and resources—to act together to bring about positive change” (p. 4). He goes on to say that teachers are put on a high alert dependency mode when districts or schools jump from one superficial quick fix to another.

Distributed leadership in schools can be defined as “a form of collective leadership in which teachers develop expertise by working together,” and “equates with maximizing the human capacity within the organization” (Harris, 2004, p. 14). Schools at this advanced degree have powerful professional learning communities seeking school and instructional improvement. Although empirical results show this form of distributed leadership has led to human capacity building, which is also leadership building, there are limited data on its impact upon school improvement.

Professional Learning

The National Staff Development Council (2009) states that the term professional learning means, “a comprehensive, sustained and intensive approach to improving teachers’ and principals’ effectiveness in raising student achievement” (p. 1).

Professional learning should: align with state standards, be taught by experts within the building, occur several times per week, be data-based, evaluate teaching and learning, research evidence-based learning strategies, implement formative assessments, occur

through job-embedded opportunities and inform on-going academic improvements (NSDC, 2009). Gusky (2000) defines professional learning as “those processes and activities designed to enhance the professional knowledge, skills and attitudes of educators so that they might, in turn, improve the learning of students. In some cases, it also involves learning how to redesign education structures and cultures. It is an extremely important endeavor and central to education’s advancement as a profession. “High-quality professional development is at the center of every modern proposal to enhance education” (Gusky, 2000, p. 16).

Historical Evolution of Job-Embedded Professional Learning

Professional learning, in schools has changed in recent decades due to many factors; one such factor is the level of accountability and performance mandates set forth in NCLB. During the past 20 years professional learning has gone by names such as: in-service education, staff development, human resource development and professional development (Sparks, 1994). Many of these professional learning opportunities came from experts outside the school building coming in to train teachers on new practices. Often the results of professional learning were based less on empirical data and more on teacher satisfaction with the training. As schools were faced with higher performance mandates, many schools began evaluating their professional learning’s effectiveness through empirical data (Mayrowetz, 2008; NSDC, 2009; Sparks, 1994).

Results-Oriented Professional Learning

Results-driven professional learning is based not on the staff’s perception of learning, but on the degree to which it changes behaviors in teachers to positively impact student learning (Sparks, 1994). Results-driven education is based not on the bell curve,

but on assessing and re-assessing students until they have mastered performance standards. This method is implemented in the belief that all students can meet performance standards if given sufficient time and appropriate instruction. Results-driven education means designing the curriculum and providing instructions in a way that makes results more likely to occur.

According to Covey (1989) beginning with the end in mind assists in obtaining desired results. O'Neil and Drillings (1994) suggest that curriculum and instruction should be driven by the results the students are asked to display. The same holds true with adult learners in professional learning. Results-driven education marks a shift in thinking regarding public education and therefore requires a shift in thinking for professional learning opportunities to meet the ever-changing needs of students. To date, high school credits have been based largely upon seat time (Fitzpatrick, 2009). Current reality suggests, in addition, that students should be held accountable for what they actually learned as evidenced by their grade point averages (GPA) or their mastery on state standardized tests. Professional learning is undergoing a similar shift in which measuring only the number of professional learning units (PLUs) is inadequate. Professional learning opportunities should be awarded based upon improved performance (Fitzpatrick, 2009; O'Neil & Drillings, 1994).

Systems Thinking

Systems thinking refers to the functioning of various parts within an organization and their effects on the system as a whole (Sparks, 1994). Systems thinkers are able to view the impact of individual ideas on improvement efforts. Systems thinkers are also able to see how change in one part of the organization may positively or negatively affect

different parts of the organization. Systems thinkers think of the organization as a whole with interdependent parts, not piecemealed reform efforts. Systems theory can be traced by to the study of ecology (Mid-continent Research for Education and Learning, 2000). For example, the introduction of feral pigs in Hawaii to a non-native atmosphere severely altered the island's ecosystem. The pigs ate rare native plants that many birds depended on for nectar. They also dug deep holes that puddled with water and bred disease-carrying mosquitoes. Schools are like the interdependent workings of ecosystems. Like cogs in a machine, one part of the system depends on the other.

According to Senge (1990), systems thinking is the process of seeing interrelationships, not things. It is looking for patterns of change versus static situations. He suggests looking at change as a circular motion, not a straight line. Change happens throughout an organization and there is not necessarily one cause or one outcome that anyone can predict. Senge also suggests that changes in the system will affect another part of the system in a minor or major way. The system is always in a state of flux (O'Neil & Drillings, 1994).

Systems thinking is a powerful construct for professional learning (Sparks, 1994). First, systems thinking should be a pervasive way of thought throughout all levels of the organization. Second, administrators should understand the limitations of professional learning that is conducted outside a systems thinking environment.

Constructivism

Constructivism is the belief that learners build their own knowledge rather than receiving it from others (Sparks, 1994). According to Brooks and Brooks (1993) people generally construct their own meaning. Fosnot (2005) suggests the constructivist theory

consists of thinkers, creators and constructors. Just as young children create their own meaning by exploring their world, so must adults do the same to create schema (Clinchy, 1995). Modeling is a key construct to the constructivist theory (Sparks, 1994). Teachers should provide environments where students search for meaning and inquire about unknown concepts (Brooks & Brooks, 1993). The goal is to help students become better problem solvers.

Brooks & Brooks (1993) suggest the same constructivist theory for adult learners. Adults should continue to see themselves as life-long learners. They should still inquire and grapple for meaning. They suggest the importance of teachers having time to reflect upon learning, and build their own schema from concepts learned. Constructivist teaching may be best learned through constructivist professional learning where behaviors are modeled rather than receiving training from “experts.” Constructivist professional learning may consist of: peer coaching, reflection and feedback from students and peers, journaling, action research, and conversation with peers regarding Best Practices. According to the NSDC (2009), professional learning models like job-embedded professional learning flourish in a distributed leadership framework.

Job-Embedded Professional Learning

Many theorists and researchers suggest using a job-embedded professional learning model in order to increase student achievement and improve teacher instructional practices (Gusky, 2000; Kelleher, 2003; NSDC, 2009; Putnam & Borko, 2000). With the increased accountability associated with state standardized testing, districts have a heightened interest in getting the optimal results from professional learning in order to impact student achievement (Kelleher, 2003). Traditional

professional learning opportunities have consisted of speakers or teacher workshops. These activities may have little or no relevance to the individual schools or teachers' content areas. According to NSDC (2009), traditional professional learning is often disjointed experiences with limited follow up and insufficient time to experiment and develop the new teaching strategies. Although external professional learning opportunities may have some benefit, the school should then help the teachers connect their learning to instructional practices relevant to all in order to maximize achievement. The standards movement, along with the increased push to improve student achievement data, has intensified the approach of administrators to ensure professional learning is effective and linked to positive achievement results. Many assert that such a goal is more effectively achieved through job-embedded professional learning.

“Job-embedded professional development refers to teacher learning that is grounded in day-to-day teaching practice and is designed to enhance teachers' content-specific instructional practices with the intent of improving student learning” (Croft A., Coggshall J., Dolan M., Killion J., & Powers E., 2010, p. 2). It is integrated into the workday. It is a continuous cycle of improvement in assessing and finding solutions to authentic problems. Job-embedded professional learning is on-going, shared, cooperative, inquiry-based, and aligned with state standards for student achievement. It takes place in schools and is about the current working of schools. “Although job-embedded professional development can be undertaken by a teacher alone, a view of professional knowledge as social, situated and distributed among colleagues undergirds job-embedded professional development” (Putnam & Borko, 2000, p. 4).

Job-embedded professional learning occurs both formally and informally through the interactions among teachers (Croft et al., 2010). It is situated in the context of the school and is distributed among the staff. Teachers typically build their knowledge through practices that exist within the school. Job-embedded professional learning consists of departmental, cross-departmental, grade-level (horizontal) and across grade-level (vertical) teams of teachers engaging in contextual learning. Activities include: coaching, mentoring, lesson study, action research, peer observation, examining student work, reflecting and receiving feedback. Structured time is made available for teachers to engage in job-embedded professional learning throughout the school day. Professional learning should be sustained over time, embedded into every day work, incorporate research and foster collaboration and reflective practices. Professional learning is more effective when schools approach it as part of a reform model rather than isolated trainings. Research on effective professional learning highlights the importance of a collaborative or collegial learning environment (Croft et al., 2010). This type of environment produces school-wide change rather than individual classroom change.

Job-Embedded Professional Learning, Expertise, and Distributed Leadership

According to Ericsson (2000), an expert refers to someone who possesses superior achievement. An expert is one who has acquired special skill in or knowledge of a particular subject through professional training and practical experience. Often these professionals make their job or talent look effortless. Ericsson found that the level of expertise was highly correlated with the number of hours spent on extensive, focused training in that particular area. Ericsson found that experts in a particular field such as chess often had limited success when applying that level of expertise in other areas that

were not domain specific. He also found that the level of proficiency always reflected the difference in the number of hours spent in specific, lengthy trainings. Often there was no superior ability or mental capacity for becoming an expert in a particular field, just the amount of time spent on specific, focused training. Mayrowetz (2008) argued that since expertise is needed in particular areas, it is only feasible that a distributed style of leadership would work since no one person can possess all the skills and expertise necessary for improving a school. Distributed leadership can then be seen as multiple sources of expertise from persons working in concert.

Leadership Practices that Sustain Professional Learning

“Sustainability is the capacity of a system to engage in the complexities of continuous improvement consistent with deep values of human purpose” (Fullan, 2005, p. ix). Overlapping Fullan’s definition is that of Hargreaves (2000): “Sustainability does not simply mean whether something will last. It addresses how particular initiatives can be developed without compromising the development of others in the surrounding environment now and in the future” (p. 30). Fullan (2005) recognized that districts with high levels of sustainability acknowledged poor performance publicly and sought solutions (building the will for reform), focused intently on improving instruction and achievement, built a system-wide framework and infrastructure to support instruction, redefined and redistributed leadership at all levels of the district, made professional development relevant and useful, and recognized there were no quick fixes.

In order to sustain change and keep an organization moving in the same direction, a clear focus should be defined (Zepeda, 1999). In schools where learning communities exist, the persons responsible for developing, implementing and evaluating professional

learning typically have been the closest to the school's success. Learning communities need to be interconnected so that no one person is responsible for determining professional learning that is best for staff and students.

Some theorists suggest the implementation of Professional Learning Communities (PLCs) to sustain professional learning and achieve whole school reform. DuFour and Eaker (1998) assert they not only help create change, but also sustain it through staff ownership and peer accountability. Many schools today create time to collaborate in professional learning communities. These collaborative sessions are a part of the school day and help teachers reflect upon their professional learning, which is then implemented across the PLC. Teachers are given time so that professional learning can be sustained and more effective.

Sergiovanni (2006) suggests examining the role of teachers and administrators to analyze how decisions are made throughout the school. Senge (1996) suggests teachers are seed carriers of leadership and connect to like-minded individuals. The teacher as learner promotes reflection and collaboration which builds capacity and moves organizations further along the sustainability continuum (Sergiovanni, 1996). Organizations take expertise from members of the organization to sustain a common vision and mission; they work toward common values and goals together (Senge, 1996; Sergiovanni, 1996). Brookfield (1986) suggests that when teachers teach other teachers they engage in challenging and creative activities that foster an open, safe dialogue between participants. Changes in practice come from these open dialogues and can be sustained through learning communities (Zepeda, 1999).

Traditional professional learning trainings consist of skill-based workshops (North Central Regional Educational Laboratory, 1994). These activities assume that the transfer of knowledge from experts is sufficient for learning and implementation without considering the need for horizontal or vertical collaboration. School-wide reform flourishes when all members within the school act as one body rather than independent parts. As students' learning needs change, so should adult learning protocols.

Summary Reflections on a Theoretical Framework

From Chester Barnard's theories regarding leadership in the 1930s to modern day literature based on distributed leadership, the theories of those who espouse shared governance remains largely consistent. Leadership that is distributed, they assert, produces better performance, cohesion, sharing of ideas, building capacity, increased commitment and sustainability of initiatives. Distributed leadership can be found in businesses as well as public education institutions. It is the process of building capacity, promoting expertise and sustaining initiatives through shared decision making, governance, and implementation processes.

Many theorists and researchers agree that job-embedded professional learning is implemented more effectively in a distributed leadership model. Job-embedded professional learning consists of on-the-job, real-world applicable training. It is embedded into the school day and focused on individual teachers' content application. It is data-driven professional learning that is based on the interactions and sustainability of initiatives. It also is founded in the theory of constructivism where the learner constructs his or her own meaning based on prior knowledge and experiences rather than receiving it from others.

Pertinent Research and Professional Perspectives

According to research literature, both leadership style and job-embedded professional learning have been correlated to increased student achievement. Researchers assert that to be sustainable, job-embedded professional learning should exist within a distributed leadership framework.

Distributed Leadership

Although greater emphasis has been placed on distributed leadership within an organization, as opposed to leadership being the purview of a single individual elevated by a hierarchical system, little research has been conducted to address the implications of distributed leadership (Carson, J., Marrone, J., & Tesluk, P., 2007). However, research does suggest relationships among distributed leadership, job-embedded professional learning and student achievement (Harris & Spillane, 2009; Hirsh, 2009; Marzano, McNulty, & Walters, 2005; NSDC, 2009; Tienken & Stonaker, 2007; Wilms, 2009).

Many in the field of education use the term distributed leadership, which also is used synonymously with shared, collaborative, democratic and participative leadership (Leithwood et al., 2004; Harris & Spillane, 2008). Researchers such as Leithwood et al. and Harris and Spillane agree that the term distributed leadership has promising uses, but until further research is conducted, could confuse those implementing it. Research has shown the importance of leadership functions occurring throughout the school at multiple levels whether through a formal or informal position of authority. Distributed leadership helps leaders perform at every level of the organization while encouraging them to think differently about their work. Leithwood et al. (2004) believe that studies showing the importance of leadership occurring simultaneously throughout the school building and

school day may prevent the term distributed leadership from becoming another passing reform.

Distributed leadership and job-embedded professional learning may require new ways of thinking and managing a school. Michael Fullan's (1993) theory on leadership and change states that educational reform is expansive and ever-changing. He suggests new ways of looking at reform such as seeing problems as opportunities, realizing that change cannot be mandated, ensuring that realism and individualism have equal power, and designing schools to be learning communities. In addition, Fullan suggests that leaders are at the forefront of the effective change process. In order to move a school from good to great, James Collins (2001) presents multiple levels of leaders with a Level 5 leader exhibiting qualities of humility and selflessness while building a great organization. He suggests relying on high standards and not personal charisma. He encourages leaders to surround themselves with other good leaders and followers. Collins enlists those who will create a culture of discipline while honestly looking at the facts of the company. And, he suggests that companies entertain difficult questions regarding the future of operations. His work has been widely accepted in the education world to help schools improve performance.

James Spillane consistently defines distributed leadership not as the distribution of tasks, but as the interactive web of leaders who change roles based on the situation (Spillane, et al., 2003; Spillane et al., 2001). He and his co-authors define three ways that leadership roles can be distributed or stretched out, collaborative distribution occurs when the actions of one leader become the basis for another leader's actions, collective

distribution occurs when leaders act individually for the purpose of a common goal, and coordinated distribution occurs when sequential tasks are led by different individuals.

Effects of Leadership on Student Achievement

A recent research study entitled, “How leadership influences student learning,” revealed that effective leadership improves learning (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Leithwood et al. argued that there is nothing new about this information. Studies have shown a lack of evidence or direct correlation to leadership as a pathway for large-scale academic improvement. More often, schools rely more on faith than fact. Leithwood et al., in collaboration with The Wallace Foundation, determined that leadership does matter, and it is second only in importance to the instruction of the classroom teacher. Leadership style seemed to matter most in schools where the student learning needs were critical for academic mastery and improvement. The authors do not promote one type of leadership over another, but stress that the local and district school leaders are crucial in maintaining school reform. Again, schools with the highest needs tend to show the greatest gains when coupled with effective leadership. Leithwood et al. asserts that virtually no troubled school has been turned around without the intervention of a powerful leader acting as the catalyst. Research suggests that there are two primary predictors to determine if leadership will have a positive or negative impact on student achievement (Mazano, Waters, & McNulty, 2003). The first is whether or not leaders are able to discern the change needed in classroom practices that will most likely have a positive impact on student achievement. The second is whether or not leaders recognize the magnitude of change needed and adjust their leadership style accordingly.

In the largest national study to date, “In Learning from Leadership” strongly links leadership to student achievement (Leithwood et al., 2004). The Wallace Foundation conducted a \$3.5 million study with more than 1,000 interviews, surveyed more than 8,000 teachers and administrators, and observed in more than 350 classrooms at all grade levels. The study suggested a strong, positive correlation among the leadership of individual principals, school board members, teachers and community member stakeholders and improved student achievement. Key findings in the study indicated the following:

- Student achievement is higher in schools where principals share leadership roles and responsibilities with teachers and other community members; principals play a key role in encouraging others to join;
- Higher-performing schools generally ask for more input and engagement from a variety of stakeholders;
- High-performing schools generally have district support regarding shared leadership;
- High-performing schools tend to reach beyond the minimum educational standards which are mandated;

Challenges to effective school leadership consisted of the following:

- Lack of district support in regard to principal professional development and limited contact with the district office;
- Negative impact of principal turnover on student achievement due to disruptions in shared and collegial leadership with teachers;
- Lack of sustained leadership to improve instruction in high schools; and

- Absence of a comprehensive reform model in most districts.

Similarly, research by Silns and Mulford (2002) has shown that student achievement is more likely to improve when leadership is distributed throughout the school community, and where teachers are empowered in areas of importance to them. The message emanating from these studies suggests the limitation of a singular leadership approach and an emphasis on the leadership role as being primarily concerned with empowering others to lead.

Carson et al., (2007) tested the hypothesis that the degree of shared leadership within a team positively related to the team's performance in a managerial organization. A hierarchical regression was used with controls for team size, project demands, gender and race diversity, as well as internal team environment. The results revealed a strongly positive relationship between the degree of shared leadership and the team's performance ($\beta = 0.65$, $p < .001$). The theoretical implications for the study suggest using various forms of leadership, but suggest that shared leadership, also known as distributed leadership, is more effective than relying on a sole individual for leadership.

According to Reeves (2007), teacher leadership is an integral part of educational reform. He suggests the common element in award-winning schools is their desire for excellence, focused continuous improvement and a push for teacher leadership. Reeves studied Jenks Public Schools in Oklahoma, the winner of the 2005 Baldrige Award for school quality, and found teacher leaders providing extra tutoring for students, analyzing data in the efforts to act proactively and a relentless determination to see all students succeed. According to Reeves, Jenks' academic challenges could not be met by

programs, inspirational speakers or dynamic administrators, but rather by systematic approaches to leadership at every level.

Marzano et al., (2005) conducted a meta-analysis in which they correlated leadership to student achievement. This research revealed a positive correlation of .25 among different facets of leadership and student achievement. The researchers began by searching ERIC, Psychology Literature and dissertation abstracts, and obtained over 5,000 studies correlating leadership to study achievement between the years of 1978 through 2001. Sixty-nine studies that directly link leadership and student achievement were identified. The study directly and indirectly linked leadership with student achievement; academic achievement was measured by a standardized achievement test or state test, and effect sizes in correlation form were reported or could be computed. The typical study involved a questionnaire given to teachers regarding their perception of the principal's leadership style. Teachers were surveyed since they are the closest to the principal's leadership style and since the principal might inflate their own leadership style ranking. Teacher's ratings were seen as the most valid. The average score for the teacher's rating of the principal's leadership was computed and correlated with the average student achievement score for the school which resulted in an overall $r = .25$ correlation value between leadership and student achievement.

When comparing results to similar studies, Marzano et al. (2005) found a somewhat higher correlation between leadership functions and student achievement than other studies. Many reasons may exist for this discrepancy. First, other studies researched schools within different countries that did not mirror the education system within the United States. Second, the overall effect sizes vary depending on the method

for determining the correlation value. Finally, the Marzano et al. study corrected for attenuation or shrinkage in the correlation coefficient due to the reliability and validity of the measurement instrument. Overall, the principal's leadership style was found to have a profound effect on the achievement of students in their schools. According to Marzano et al., the leadership within a school is extremely important to the well-being of the staff and students success both socially and academically. The research shows that while leaders can have a positive impact on student achievement, they also can have a negative impact on student achievement (Marzano et al., 2003).

Some findings on the effects of leadership on student achievement depend on whether the study was conducted through a quantitative or qualitative analysis (Robinson, Lloyd, & Rowe, 2008). Robinson et al. reported that the effects of leadership on student achievement are very weak. Quantitative researchers such as Hallinger and Heck (1996) suggest an indirect relationship between principal actions and student outcomes. Qualitative researchers assert more of a direct relationship between school leaders and their impact on student achievement (Hargreaves & Finks, 2006). They suggest the quality of school leaders directly impacts student achievement. Researchers Leithwood and Mascall (2008) tout distributed leadership over hierarchical types of leadership since it capitalizes on the collective strengths of multiple individuals to accomplish shared goals and responsibilities. In addition, their research suggest a stronger relationship in high schools than elementary school.

According to Reeves (2009), teacher leadership is not defined by a person's title, but the act of influencing colleagues in the art of instructional

practice. Reeves conducted a survey of open-ended questions targeting over 300 teachers and administrators regarding the sources of greatest impact on professional practice. This survey found that internal factors such as students, family, personal experience and colleagues had the greatest impact on professional practice. Additional impact came from external factors such as professional learning and formal school leadership experience. The most powerful predictor of teacher leadership was direct modeling by colleagues. Reeves suggests these leadership practices lead to the sharing of effective practices throughout the staff, higher standards of excellence for teachers and students, improved engagement by teachers and students, and most importantly, a positive change in professional practice.

Effects of Leadership on Student Achievement

According to Harris (2005), research suggests distributed forms of leadership do build capacity within schools, but further research is needed to determine the relationship to student achievement. The relationship between school leadership and school improvement is complex. Research has determined a relationship between the two, but empirical data are limited and unclear. Many studies have attempted to define the relationship between leadership and student achievement, but most focus on the traits of the principal and not on the relationship between leadership and organizational change and development (Bell, Bolan, & Cubillo, 2003). Hallinger and Heck (1996) suggest that shortcomings in the research and areas that may have been overlooked during

research because of biases that produce inconclusive research results when linking leadership to school improvement.

Recent research points to capacity building as a means of generating and sustaining school reform (Fullan, 2001; Harris, 2005; Harris & Lambert, 2003). Distributed leadership is seen by many as the core of capacity building within an organization (Fullan, 2003; Fullan, 2005; Harris, 2005; Mayrowetz, 2008). Leadership in this context is a group of experts who are interconnected, working together for the good of the organization. Although further and more direct correlations are needed, these implications from current school leadership suggest distributed leadership can and does impact building capacity and student achievement (Harris, 2005).

Louis, Leithwood, Wahlstrom and Anderson (2010) along with The Wallace Foundation (2010) conducted a study aimed at determining the effects of collective leadership on teachers and students. Through their empirical data, they determined that almost all high-performing schools had a large number of teacher leaders involved in the decision making process, whereas low-performing schools had limited input. Although principals and central office personnel had the most impact on decision-making at the local level, their influence was not diminished by the addition of teacher leaders. In conclusion, the study found that school leaders had an impact on student achievement through the motivation of teachers and working conditions.

In summary, there is limited empirical data directly linking distributed leadership to student achievement. The majority of the research suggests a

relationship between general types of leadership and improved school culture, increased teacher efficacy, or increased student achievement. Most research does not delve into particular leadership types, but gives a general overview asserting that leadership does impact student achievement both directly and indirectly.

Effects of Leadership on School Improvement

Most empirical data related to distributed leadership are found in school improvement and teacher leadership literature (Harris, 2005). First, researchers suggest a relationship between distributed leadership and school culture (Harris, 2005, Spillane et al., 2001). Researchers suggest strong collegial relationships form through distributed leadership practices, and lead to school improvement and effective change. Collegial relationships allow for leadership to arise naturally (Little, 1990). Rosenholz (1989) suggests a strong link between teacher collegiality and school change. Her research suggests that administrators and teachers are more likely to adopt and follow norms, values and beliefs when participating within a collegial, collaborative environment. This environment allows for and supports the change process.

Glickman, Gordan and Ross-Gordan (2001) researched successful schools, and compiled a list of characteristics exhibited by those with improved student achievement. Varied sources of leadership within the schools were consistently found, including distributed leadership. The one form of leadership that was often associated with school change and improvement was distributed leadership (Fullan, 2001; Glickman et al., 2001).

Another area where researchers have noted improvements in achievement is in the area of organizational development (Harris, 2005). According to the research by Silins

and Mulford (2002), student achievement was increased in schools where the leadership was distributed throughout the school and where teachers felt they were contributing to an area of interest to them. In schools where teachers have shared leadership roles, improved student achievement gains were also seen (Louis, 1996). Schools with this type of collegiality and collaboration are often viewed as learning communities.

Within the area of teacher leadership, the literature and research both show a strong relationship between distributed leadership, self-efficacy and morale (MacBeath, 1998). Research suggests when teachers learn together and share effective practices for the purposes of improved instruction, the possibility of hiring quality personnel is often easier (Little, 1990; Lieberman, Saxl, & Miles, 2000). Leithwood and Jantz (2000) found that distributing leadership to teachers often had an impact on student achievement. They found teachers who were considered to have a leadership role were more effective in engaging their students and providing a positive influence. Other studies suggest that where teachers have a role in leadership, there is often decreased staff absenteeism (Rosenholz, 1989). Overall, distributed leadership is shown throughout research literature to have a positive impact on school culture, effective pedagogy, and educator quality. Less consistently demonstrated are the influences on student achievement.

Effects of Distributed Leadership and Productivity from the General Research on Organizational Effectiveness.

Organizational effectiveness can be defined as the physical amount of output for each unit of productive input (Herman Miller, Inc., 2004). Within the studies of organizational effectiveness outside the realm of education, there is a wealth of research that may be beneficial, assuming that one can extrapolate such data to complement the

limited data on the impact of distributed leadership on productivity in the education world. Early theories regarding human behavior and productivity are still valid today.

Within an organization, input is directly related to output. According to the U.S. Bureau of Labor and Statistics (2010), output is determined by the combined efforts of input. The products of white collar or knowledge work such as transportation, communications, utilities, finance and insurance are hard to measure whereas blue collar products and services are quantifiable. Although hard to measure, Herman Miller, Inc. (2004) suggests that the unit of analysis should be the individual. The research suggests looking into external factors that affect productivity such as the design of the organization (centralized or decentralized), its people (work styles, human resource issue, performance), and the physical work environment (facilities). Herman Miller, Inc. (2004) suggests that in order to foster organizational effectiveness, organizations should establish trust and give people autonomy, create a positive work environment, and provide healthful support. According to Baker and Branch (2002), generic management functions within an organization should include the following:

- Defining mission and establishing purpose and goals;
- Leading and motivations;
- Strategizing and planning;
- Controlling and establishing roles and authorities;
- Setting performance standards and value expectations;
- Staffing, developing, and managing human resources;
- Budgeting and allocating resources;
- Evaluating, learning, and improving; and

- Managing external relations.

One of the most widely used tools for assessing organizational effectiveness, the Malcolm Baldrige Quality Award, reflects these generic management functions. Along with prior organizational effectiveness literature, the Malcolm Baldrige Quality Award reflects seven performance criteria: leadership, strategic planning, customer and market focus, information and analysis, human resource focus, process focus and business results.

According to Baker and Branch (2002), the leadership style within organizations has changed over the years. Over time, leadership has evolved from bureaucratic control to engagement and now to networking and collaboration. Networking and collaboration consists of a flexible and fluid network design, added value in partnerships and alliances, organization designed around the external environment, and a facilitation focus rather than a management focus.

Research suggests that shared leadership and entrepreneurial teams are a valuable predictor in the success of an organization (Ensley & Pearce, 2000). Organizational research goes further to suggest shared leadership leads to cohesion within a company (Mintzberg & Waters, 1985). Eisenhardt and Bourgeois (1988) found that firms whose top executives instill shared leadership outperform those who have dominating, power-controlling leaders. Katzenbach (1997) suggests that a team's real performance depends on the ability of top leaders to share leadership and shift the role of the leader back and forth to different experts, as various tasks require specific expertise. Research suggests that teams are more effective when shared leadership is employed (Barry, 1991;

Katzenbach, 1997). Shared leadership assists with increased collaboration, coordination, cooperation and innovation (Manz & Sims, 1993, Yeatts & Hyten, 1998). Additional research suggests that shared leadership has been found to be a predictor of new venture performance (Ensley & Pearce, 2000). Shaw and Shaw (1962) found that highly cohesive groups spent more time planning and problem solving, whereas less cohesive groups spent time in strife. Highly cohesive groups share knowledge, and have a high degree of commitment to the group task and group goals. Cohesion appears to be necessary for productivity within most organizations.

In addition, research suggests shared leadership leads to a collective vision, which in turn leads to new venture performance. Teams that are self-managing leadership teams are more effective (Pearce, 2000; Katzenbach, 1997). Distributed leadership teams are typically high-performing teams. Finally, both cohesion and a collective vision that is found within shared leadership leads to new venture performance and productivity.

While tentative conclusions about distributed leadership and student achievement might be generalized from the findings from the general literature, the dearth of such literature is a weakness in the body of extant knowledge regarding effective leadership practice in schools. Thus, the present study will seek to add additional, research-based information regarding the impact of shared governance in schools upon student achievement.

Job-embedded Professional Learning

Research that directly correlates job-embedded professional learning to student achievement is also very limited. However, conclusions may be drawn about these links through extrapolation of the general research literature on professional learning and student achievement; this is approached through an examination of the literature on elements of professional learning that are enhanced through training that occurs within the context of actual practice. One of the goals of this study is to make a contribution to existing literature by providing seminal findings regarding relationships between job-embedded professional learning and student achievement.

The National Staff Development Council (2009) defines the term professional learning as, “a comprehensive, sustained, and intensive approach to improving teachers’ and principals’ effectiveness in raising student achievement” (p. 1). Professional learning should occur throughout the day through job-embedded processes that support teachers and encourage professional growth through peer-coaching, peer-observation, conferences, feedback, modeling and mentoring (NSDC, 2009; Tienken & Stonaker, 2007). Thus, according to Tienken and Stonaker (2007), every day is a potential professional learning day. The authors studied schools located in Monroe Township Public School District in New Jersey. Teachers in this small district realized the importance of job-embedded professional learning and asked the district to provide time for peer observation and coaching. These teachers recognized the ineffectiveness of their current professional learning that had no relevance to their content, no follow up and limited purpose. When asked about traditional professional learning, teachers remarked, “It doesn’t really change what we do in our classrooms” (Tienken & Stonaker, 2007, p.

25). Professional learning from the outside was often viewed as disconnected and isolated from their classroom.

In order to make the shift, the district had to first listen to these teachers as they voiced their concern, and they did. Monroe Township Public Schools radically changed the structure of professional learning in the district. The accountability and expectations for professional learning were high. In a year's time, the district saw a twenty-nine percent increase in the teachers who said they applied the things learned from job-embedded professional learning into their classroom. A 25% increase was seen in instructional strategies being used in the classroom. An increase of over 30% was recorded in teachers saying that the content of the professional learning was directly related to the content they were teaching in the classroom.

Some evidence suggests that advisability of blending both external and internal staff development (Morris, Chrispeels, & Burke, 2003). Researchers assert that external staff development enhances pedagogical knowledge and content skills (Morris, Chrispeels, & Burke, 2003; NSDC, 2009; Yoon, Duncan, Lee, Scarloss & Sharpley, 2007). Internal staff development should focus on school reform networks, forums for teacher dialogue, grade-level, departmental and interdisciplinary teams. The crux of the work for school reform comes from the shared expertise developed both internally and externally with colleagues in the school.

DuFour (2004) suggests that practitioners have drawn an artificial distinction between teaching and learning. According to DuFour's research, teachers teach 180 days a year and learn for four or five days a year. He suggests that practitioners transition from this way of thinking and embed professional learning throughout the 180 days of

teaching. When teachers work together, create common assessments, monitor assessments, analyze data and help each other develop and improve instructional strategies; this kind of professional learning builds teacher capacity and sustains school improvement.

Empirical data collected in Victoria, Australia by Knowledge & Skills: Building a Future (2005) demonstrated a relationship between effective professional learning and student achievement. The research confirms that engaging teachers in high-quality professional learning is one way to increase teacher skills and competency. This research confirms that teacher competency is an indicator of student achievement. Due to evolving trends in education, teachers are constantly changing their practices to meet the demands. In order to keep abreast of current pedagogical trends in teaching and learning, educators need sufficient knowledge of the content area and skills and strategies to help students be successful. This study in provided seven principles for highly effective professional learning to impact student achievement:

1. Professional learning is focused on student outcomes.
2. Professional learning is focused on and embedded in teacher practice.
3. Professional learning is informed by the best available research on effective learning and teaching.
4. Professional learning is collaborative, involving reflection and feedback.
5. Professional learning is evidence-based and data-driven to guide improvement and to measure impact.

6. Professional learning is ongoing, supported and fully integrated into the culture and operations of the system an school.
7. Professional learning is an individual and collective responsibility at all levels of the system and it is not optional.

According to Newmann and Whalage (1995), schools with collaborative work cultures, professional learning communities, a clear focus on student achievement data, a link to instructional standards, and staff development support are more likely to have growth in student achievement. Fullan (2000) states that school improvement will not occur until the majority of teachers become contributors and benefactors to the professional learning community. School principals who are results-driven and data-oriented are more likely to engage their staff in effective professional learning opportunities that result in continuous improvement (DuFour, 1999). Research indicates that schools that have a stable professional learning community with expert teachers who share norms, values and goals typically focus in on student achievement results (Lewis & Paik, 2001). In order to create whole school reform, schools should build capacity in the area of teachers who become experts, build capacity and create quality professional learning opportunities for others (Darling-Hammond, 1993).

Effects of Job-Embedded Professional Learning on Student Achievement

As noted previously, empirical evidence linking job-embedded professional development to student achievement is very limited. Gusky (1995) asserted throughout the processes of school reform, restructuring and transforming, professional development is the vehicle for change. Questions have been raised about the effectiveness of various forms of professional learning along with increased demands for demonstratable results.

Gusky's research suggests that professional learning should include both organizational and individual development. It should be job-embedded, and can be provided by experts outside the school building.

For the most part, research on professional learning is extensive, but most point to the inadequacies without offering solutions. Studies directly linking professional learning to student achievement are rare. Gusky (1995, p. 4) suggests the following guidelines for professional learning success:

1. Recognize change as both an individual and organizational process.
2. Think big, but start small.
3. Work in teams to maintain support.
4. Include procedures for feedback on results.
5. Provide follow-up, support, and pressure.
6. Integrate programs.

Gusky suggests there is no single optimal approach to professional development. Rather there is a multitude of ways to achieve student success through professional learning depending on each school's individual context.

While few studies provide direct empirical evidence to support positive impacts of job-embedded professional learning on student achievement; research suggests that job-embedded professional learning leads to improved practice, which leads to improved student achievement (Croft et al., 2010). According to Darling-Hammond and Richardson (2009), the most useful professional learning emphasizes active teaching, assessment, observation and reflection, rather than abstract discussion. A recent national survey reported that teacher's knowledge and skills grew and their practice changed when

they received professional learning that was coherent, focused, and promoted active learning (Garet, Porter, Desimone, Birman, & Yoon, 2001).

Gusky (2003) concludes that characteristics of effective professional learning vary widely and were often contradictory. His research suggests that researchers and practitioners may not know what it takes for effective professional learning. Even though the studies that he examined were research-based, many lacked rigorous investigations into the relationships, which changed instructional practices and improved student achievement. Many studies, he concluded, are based on teacher perceptions based on surveys, and not based on empirical data.

In conjunction with NSDC, Roy (2009) found that student achievement was impacted when professional learning was embedded. It helped when teachers applied their knowledge throughout their content area and had sufficient time to practice. Research suggests that collective teams of teachers work together to provide follow up activities and support, conduct peer observations and feedback, plan together, examine student work, and take part in professional discussions (Croft et al., 2010; Garet et al., 2001; Gusky, 2003; Gusky, 1995; Morris, Chrispeels, & Burke, 2003; NSDC, 2009; Yoon et al., 2007). In an examination of more than 1,300 professional development studies, Yoon et al., 2007 found that when teachers participated in 49 hours of specific professional learning; student achievement score were raised by 21 percentile points. Educators are more likely to sustain learning when it is hands-on, relative to their content area, and applied consistently. Many elements within the general research on professional learning are adopted throughout job-embedded professional learning. Through an extrapolation of the general research, which has provided evidence in some

cases of the impact of professional learning on student achievement, a tentative conclusion can be made regarding the effects of job-embedded professional learning with the same characteristics found in previous research studies.

Sustained, Intensive Professional Learning

According to research conducted by Yoon et al., (2007), sustained and intensive professional learning was linked to student achievement. They found that professional learning lasting fewer than 14 hours showed no effect on student learning, while professional learning that provided more than 14 hours of sustained learning showed significantly positive results. The largest effect was found in professional learning consisting of 30 to 100 hours spread over 6-12 months.

Together, the research points to the effectiveness of sustained, job-embedded, collaborative professional learning (Croft et al., 2010). Time intensive professional learning is important, and research also suggests that unless it is specifically connected to teacher subject-matter, then it will do little to change teacher practices or improve student achievement (American Educational Research Association, 2005). Current research also suggests providing intensive, sustained, content-rich collegial learning opportunities to improve both teacher and student learning (Croft et al., 2010; Morris, Chrispeels, & Burke, 2003; NSDC, 2009; Yoon et al., 2007). When schools are able to provide this type of hands-on rigorous learning for the teachers, they are then able to recreate similar rigorous and engaging opportunities for students.

Building Teacher Competency and Content Expertise

According to research, good teachers are the foundation for improving student achievement (American Educational Research Association, 2005). A recent study

suggests that the quality of the teacher is the most important factor in determining student achievement (Darling-Hammond, 1998). Haycock (1998) found that low-achieving students made a 53% gain in achievement when taught by a highly competent teacher.

Four out of five teachers are not prepared to teach today's students, and over one third are teaching out of their primary field of expertise (McQueen, 1999). In the 1960s, the push for improved teacher competency was through generic teaching skills such as grouping, time management, maintaining attention, and classroom demonstrations. These generic skills provided small to moderate gains in student achievement. In the 1990s, the research delved deeper into student reasoning and problem solving. Researchers determined that professional learning consisting of how students learn a particular subject, instructional practices and strategies that are specific to the subject, and strengthening teacher subject matter knowledge had a much larger impact on student achievement. The National Board for Professional Teaching Standards (NBPTS) (1999) identified five characteristics of highly qualified teachers:

1. Teachers are committed to students and their learning.
2. Teachers know the subjects they teach and how to teach those subjects to students.
3. Teachers are responsible for managing and monitoring student learning.
4. Teachers think systematically about their practice and learn from experience.
5. Teachers are members of learning communities. (p.1)

Improving teacher quality is worth the money spent and nets greater gains in student learning (Darling-Hammond, 1998).

Research shows that professional learning is most effective when directly applied to specific and individual teachers and their content area (American Educational Research Association, 2005). In addition, professional learning, when connected to the specific standards and materials teachers use, leads to better instruction and improved student achievement. To considerably improved student achievement, the content dealing with curriculum and instruction should be evaluated (Joyce & Showers, 2002). In order for the content to have an impact, teachers should implement changes from professional learning into their everyday practice. There needs to be a cycle of learning, implementation, reflection and evaluation.

Researchers in Tennessee studied students who had highly qualified teacher for three consecutive years and those who did not (Education Week, 2004). On the state standardized tests, students in the classes with high quality teachers scored 50 percentile points higher than those students who were taught by low quality teachers. Many ask what sets the high quality teacher apart from his or her counterpart. Although teacher quality is hard to measure, researchers suggest that teachers who score high on basic skills test and college entrance exams are typically high scoring academically and in return produce that same achievement through their instruction. Deep content knowledge, especially in science and mathematics, has positive impacts on student achievement (Monk, 1994).

Equally important to teacher content knowledge in determining student achievement is the years of experience a teacher holds (Education Week, 2004). A significant amount of research suggests that teachers who have taught more than five years are also better able to improve achievement. NCLB required in 2005-2006 that all

teachers be highly qualified. This means that teachers are certified and have demonstrated proficiency in the subject matter through college course work or advanced certification.

Summary

Many research studies have revealed a positive correlation between leadership style and increased student achievement, although it is unclear how distributed leadership is connected to school improvement and the development of leadership. This may partially be due to the limited research on distributed leadership specifically as it relates to student achievement and also the term having multiple meanings throughout academia. In addition, some researchers have found that distributed leadership may lead to negative results, noting teachers can become overstressed due to the shared decision making responsibilities. Variance in ability and experience among teachers may also impact their preparedness to contribute meaningfully in decisions. Other studies have shown a lack of evidence or direct correlation to leadership as a pathway for large-scale academic improvement.

Studies have also revealed mostly indirect positive correlations between job-embedded professional learning and student achievement. Research on generic forms of professional learning has been shown to impact overall teacher quality, morale and student achievement. Research on job-embedded professional learning is typically limited to qualitative data based on teacher questionnaires. Quantitative data that directly links job-embedded professional learning to student achievement are limited.

Overall, studies show that distributed leadership is often necessary for building capacity and sustaining job-embedded professional learning. Although empirical results

show this form of distributed leadership has led to human capacity building, which is also leadership building, there are limited data on its effects relative to school improvement and student achievement gains.

Only tentative conclusions can be drawn concerning the relationships among distributed leadership, job-embedded professional learning and student achievement. However, the suggestions of such relationships, both from the specific literature on these topics and from that which is extrapolated from research on leadership, professional learning and general organizational productivity literature indicates the possibility of such relationships. With this in mind, the researcher hopes to add to the body of extant knowledge on these topics through the present research protocol.

In Chapter II, the researcher reviewed the literature. The methodology is presented in Chapter III.

CHAPTER III

METHODOLOGY

Introduction

Chapter III poses research questions based on the theoretical framework and pertinent research and professional perspectives; it further describes the research methodology used. In addition, it describes the participants in the study and gives an in-depth look of the research design and procedures. It identifies the independent and dependent variable as well, along with the variables for which the researcher provided controls. The data collection process is described and an analysis of the results is provided.

Research Questions and Hypotheses

The purpose of this study was to determine the relationship between the adoption of a distributed leadership model and job-embedded professional learning to increased student achievement. This study identified K- 5 public schools in the state of Georgia that exhibited qualities of distributed leadership, job-embedded professional learning and student achievement. It defined distributed leadership within a management framework to help schools build capacity for leaders, sustain job-embedded professional learning, and increase student achievement. In addition, the successes and limitations of such a framework, along with the associated risks were discussed. The study examined the following research questions:

1. Is there a relationship between distributed leadership and job-embedded professional learning?

2. Are there relationships among distributed leadership, job-embedded professional learning, and student achievement?

The hypotheses for the research questions were as follows:

H₁: There is a significant positive relationship between distributed leadership and job embedded professional learning.

H₂: There are significant positive relationships among distributed leadership, job embedded professional learning, and student achievement.

Participants in the Study

Participants in this study were teachers and administrators in a large metropolitan school district. These practitioners previously participated in a county-sponsored survey regarding various dimensions of school performance and climate. This instrument is the *School Improvement Survey* (see Appendix A). Archival data from this survey was retrieved for purposes of analysis in conjunction with the present study.

All 65 of the district's elementary schools with grade 3 students were considered for participation in the study. The district consisted of 106,642 students in 65 elementary schools, 25 middle schools and 16 high schools as of the 2009-2010 school year.

According to the Georgia Department of Education, as of March, 2010, the school district was comprised of 41.6% white students, 30.3% black students, 19.2% Hispanic students, 5% Asian students, 3.9% multi-racial students and 0.2% American Indian students. The ethnic breakdown of the staff consisted of 80.4% white teachers, 16.5% black teachers, 2.1% Hispanic teachers, 0.9% Asian teachers, 0.04% multi-racial teachers and 0.08% American Indian teachers. In addition to the analysis of archived survey data, a select sampling of teachers and administrators were interviewed based on a pre-determined

instrument to gauge the depth of knowledge and implementation of distributed leadership and job-embedded professional learning within the schools.

The study included two independent variables, distributed leadership overall domain score and job-embedded professional learning overall domain score, and will be analyzed using a correlation test. Each overall domain score was obtained from the archival county-sponsored School Improvement Survey (see Appendix A). The survey consisted of multiple professional learning and leadership questions. A panel of experts was used to select questions that pertained to job-embedded professional learning and distributed leadership. The mathematics total percentile rank scores of third grade students who were administered the mathematics sections of the ITBS served as the dependent variable. Distributed leadership and job-embedded professional learning scores served as the independent variables and were analyzed using a multiple regression analysis. The researcher controlled for the ability level of the students by using the quantitative percentile age rank CogAT scores, and for socio-economic status through free or reduced lunch participation. Following the quantitative analysis, a sample of third grade mathematics teachers and school administrators were interviewed with a constructed response protocol (see Appendix B).

Research Design and Procedures

The study employed quantitative and qualitative protocols. Because previous studies linked job-embedded professional learning to distributed leadership, the survey instrument included expert panel suggested domains of distributed leadership and job-embedded professional learning from the school's School Improvement Survey as a basis for the correlation test (Harris & Spillane, 2009; Hirsh, 2009; Marzano, Waters, &

McNulty, 2005; NSDC, 2009; Tienken & Stonaker, 2007; Wilms, 2009). Since few studies link job-embedded professional learning as implemented within a distributed leadership model to gains in student achievement (DuFour & Eaker, 1998; Hirsh, 2009; NSDC, 2009), a multiple regression analysis was performed to determine the relationship among distributed leadership, job-embedded professional learning and student achievement in third grade mathematics as measured by the ITBS. Each school's CogAT test scores and percentage of free or reduced lunch were used to control for other variables influencing achievement.

In addition to performing quantitative tests, the researcher also employed a qualitative analysis. A constructed-response interview was conducted to further investigate the relationship among job-embedded professional learning, distributed leadership and student achievement. The researcher asked select teachers and administrators to be interviewed via telephone or in-person conference. Each interviewee was asked the same questions from the constructed response survey instruments (see Appendix B). Teachers and administrators had a different, but similar set of questions. Coding was analyzed to determine specific themes and patterns within the qualitative data.

Variables in the Study

The dependent variable for this study consisted of mathematics ITBS total percentile rank scores for third graders in 65 elementary schools. Two independent variables were evaluated in this study based on teachers' self-responses on the School Improvement Survey instrument. The independent variables were as follows:

1. Overall domain score of the perceived distributed leadership within the school; and
2. Overall domain score of the perceived job-embedded professional learning within the school.

In order to control for extraneous variables, the researcher used two covariates which were as follows:

1. Ability level of the students (CogAT quantitative age score percentile); and
2. Socio-economic status (Percent of free or reduced lunch).

Data Collection Process

Approval for the study was provided by the Institutional Review Board (IRB) at The University of Southern Mississippi (see Appendix C), and IRB approval was also obtained from the school district being researched. Permission to use archival ITBS data, CogAT data, and School Improvement Survey data was obtained through the school district's IRB approval process. In addition, permission to interview third grade mathematics teachers and administrators was obtained through the school district's IRB approval process. Interview responses were obtained through local school administrator approval. Mathematics ITBS scores, CogAT scores and percentage of free or reduced lunch rates from all 65 third grade schools were provided by the district's Office of Accountability.

To provide additional insights into the quantitative data, the researcher conducted qualitative research through interviews via telephone conference or in person.

Interviewees were categorized as teacher or administrator. The interview instrument was adapted from an interview sponsored by the Georgia Department of Education entitled

Georgia Assessment of Performance on School Standards (GAPSS) survey. This original survey was designed to evaluate schools based on eight key standards:

1. Curriculum;
2. Instruction;
3. Assessment;
4. Planning and Organization;
5. Student, Family, and Community Support;
6. Professional Learning;
7. Leadership; and
8. School Culture.

Each of the eight elements had sub-elements that are rated by staff, parents and students; however, some questions, such as questions about professional learning, were only applicable to staff and did not include parent and student responses. This instrument was administered by the state in spring, 2010 to all schools in year six under the designation of needs improvement, and to all other schools that requested it. All schools in the district being interviewed have received a GAPSS analysis. “With the accountability requirements of No Child Left Behind, schools must evaluate their programs through data-driven, research-based practices. The GAPSS Analysis was intended to provide a process of data collection and verification of a school’s status and offer specific direction for school improvement” (Georgia Department of Education, p. 4). The survey employed a Likert-type scale with domains on a four point scale: not addressed, emergent, proficient and fully operational. The interview process was used to determine the proficiency level of each element and sub-elements.

To determine the level of distributed leadership and job-embedded professional learning, the researcher selected an expert panel to analyze the School Improvement Survey (Appendix A). Each rater was asked to read through the elements located in the leadership section and the professional learning section to determine if the item was considered a characteristic of each construct. The expert panel included the following items under job-embedded professional learning: PL 1.1, PL 1.3, PL 2.3 and PL 2.7. In the survey, respondents answered questions according to a Likert-type scale, with ratings ordered in a range as follows: *consistently* = 4, *often* = 3, *infrequently* = 2, and *never* = 1. Each item was then summed after being given the ranking to form an overall domain score.

Appendix A contains a copy of the School Improvement Survey. Appendix B contains a copy of the interview instrument for teachers and administrators. Appendix C contains a copy of the University of Southern Mississippi IRB approval letter. Appendix D contains a copy of the superintendent's permission to survey and Appendix E contains a copy of the principal's survey instructions.

Analysis of the Results

Primary data from the distributed leadership, job-embedded professional learning domains of the school improvement survey, CogAT, and percentage of free or reduced lunch rates were entered into the Statistical Package for the Social Sciences (SPSS) and relevant tests were conducted. The primary test was a Pearson's bivariate correlation analysis to determine the relationship between distributed leadership and job-embedded professional learning within the population. CogAT scores and the percentage of free or reduced lunch rates were included in the independent variable correlation test as well to

provide a basis for the multiple regression analysis. Archived percentile rank scores from the third grade mathematics ITBS total were entered into SPSS and the relevant tests were conducted. A multiple regression test was conducted using the CogAT and free or reduced lunch percentages to control for other variables that influence student achievement. The CogAT score was used to control for the student's ability level, and the percentage of students receiving free or reduced lunch was to control for socio-economics. A significance level of $p < .05$ was used for the hypotheses.

Qualitative studies attempt to gain additional meaning through the verbal responses of participants. A grounded theory study was generated to discover a theory that may help explain the practice or provide a framework for further research (Creswell, 2007). Interview responses from teacher and administrator interviews were analyzed through a coding process. Pertinent phrases served to provide code names. Through interview analysis, phrases or terms were coded and like terms were placed into categories. Categories that shared similar meaning were collapsed into similar categories where themes or terms were identified. A frequency table categorized similar themes within the interview responses. The grounded theory research is qualitative and generates a general theory of a process, action, or interaction shaped through the responses of participants who have experienced the process (Strauss & Corbin, 1998). Finally, an explanation of the findings was reported. The qualitative data discussed theory and contrasted it with extant literature (Creswell, 2007). A comparison of quantitative and qualitative data results were combined to form an overall analysis of the relationship, both direct and indirect, among the amount of distributed leadership, job-embedded professional learning, and student achievement.

Summary

Using the School Improvement Survey and administering a correlation test, the researcher determined the relationship between distributed leadership and job-embedded professional learning within the population. Third grade mathematics ITBS total percentile scores were obtained for all 65 elementary schools through the district's Office of Accountability. Using student achievement ITBS scores as the dependent variable, a multiple regression was conducted using two independent variables and two control variables. The researcher controlled for the ability level of the students by using the CogAT test scores. The researcher also controlled for socio-economic status through the free or reduced lunch percentages per school. Since other factors were known to influence student achievement such as the ability level of the students and socio-economics, a multiple regression test was conducted to determine the relationship among distributed leadership, job-embedded professional learning and student achievement. Of the population, sample schools were identified and teachers and administrators were interviewed to determine the depth of knowledge and degree of implementation regarding distributed leadership and job-embedded professional learning.

In Chapter III, the researcher has reviewed the methodology. The results will be presented in Chapter IV.

CHAPTER IV

RESULTS

Introduction

The level of expected academic achievement through NCLB continues to rise while schools search for ways to meet these accountability demands. As of 2014, public schools will be expected to reach 100% proficiency levels in English/language arts, mathematics, science and social studies. Concern about these requirements has spurred educators to seek out effective instructional practices. Many educators have found that through analyzing specific data, schools can increase the level of academic proficiency. This research gathered the overall scores of distributed leadership and job-embedded professional learning as reported in the county-issued School Improvement Survey and correlated these scores with the levels of mathematics achievement on the ITBS, while controlling for the ability level of students from the CogAT and the percentage of free or reduced lunch rate. An overall correlation was conducted first to determine relationships among all variables. This chapter describes the results, statistical analyses, findings from the archival data and thematic interpretation of sample interviews.

Description of the Respondents

Primary data consisted of 65 School Improvement Surveys from a large metropolitan district in Georgia. Twenty-three schools did not participate in the study; of these schools, 19 elected not to participate and four were classified as K-2 primary schools, which do not include third graders. The attrition of these schools resulted in 46 schools participating. The demographic makeup of the K-12 teachers within the school district as reported by the Georgia Department of Education in 2009-2010 can be found

in Table 1. As noted in Table 1, many students in the district were either white (41.6%) or black (30.3%). A sizeable portion of students were on free or reduced lunch (44.8%). Most teachers within the district held advanced degrees beyond the four-year Bachelor's (59%). An attempt was made to gain the demographics of the School Improvement Survey respondents, but these data were not reported. Once the data were collected, teachers and administrators from three schools were interviewed with the interview procedure following a constructed response protocol.

Table 1

Demographic Data of District as Reported by Georgia Department of Education (2009)

Variable	N	Percentage
Teacher Gender		
Male	1,461	17.7
Female	6,811	82.3
Teacher Certification Level		
4-year Bachelors	3,375	41
5-year Master's	3,744	45.5
6-year Specialist	1,008	12.2
7-year Doctorate	118	1.43
Teacher Ethnicity		
Asian	74	0.9
Black	1,363	16.5
Hispanic	173	2.1
Native American/Alaskan Native	7	.08
White	6,652	80.4
Multi-Racial	3	.04
Teacher Years of Experience		
< 1	208	2.5
1-10	4,338	52.4
11-20	2,281	27.6

Table 1 (continued).

> 30	324	3.9
Student Gender		
Male	4,250	51.5
Female	4,008	48.5
Student Sub-groups		
Special Education	1,041	12.6
Economically Disadvantaged	3,706	44.8
Student Ethnicity		
Asian	411	5
Black	2,498	30.3
Hispanic	1,585	19.2
Native American/Alaskan Native	14	0.2
White	3,431	41.6
Multi-Racial	319	3.9

Results

Quantitative Study

The School Improvement Survey was given in the spring of 2010 to all certified staff members, students and parents. The survey data were then archived on the school district's website for public viewing. After the instrument and related archival data were selected for use in the present study, a panel of experts reviewed the instrument to determine the questions that related to job-embedded professional learning and those that related to distributed leadership. The survey was designed to assess multiple categories including leadership and professional learning, with each category consisting of twelve related questions each. Three raters on the expert panel were asked to include each item under the description of job-embedded professional learning, distributed leadership or neither. Table 2 shows the resulting categorizations.

Table 2

Item Analysis, Descriptive Statistics and Correlations for Job-embedded Professional Learning and Distributed Leadership

Professional Learning Variable	M	SD	r w/ JEPL ² items ¹	r w/ PL ³ total	r w/ L ⁵ total	r w/ DL ⁴ total
*PL 1.1 Teachers and administrators participate in job-embedded professional learning and collaboration addressing curriculum, assessment, instruction, and technology.	361.48	18.36	.899**	.919**	.828**	.798**
PL 1.2 The principal and other school leaders set clear expectations and monitor the effectiveness of professional learning on teacher practices and student learning.	360.86	21.07	.817**	.869**	.929**	.854**
*PL 1.3 The principal and other school leaders set clear expectations and monitor the effectiveness of professional learning on teacher practices and student learning.	338.74	20.61	.941**	.832**	.820**	.874**
PL 1.4 The principal and other leaders utilize data to plan for professional learning.	367.27	15.16	.839**	.891**	.907**	.857**
PL 1.6 The professional learning activities at my school are connected to our school improvement goals.	364.72	15.93	.836**	.907**	.807**	.756**
*PL 2.3 Teams meet to review and study current research to make informed instructional decisions.	343.43	20.32	.818**	.739**	.625**	.650**

Table 2 (continued).

PL 2.4 The staff participates in long-term in-depth professional learning which is aligned with our	349.28	22.44	.856**	.907**	.804**	.713**
*PL 2.7 Teachers and administrators have the knowledge and skills necessary to collaborate.	366.93	14.70	.877**	.881**	.849**	.856**
PL 3.1 Our professional learning prepares us in practices that convey respect for diverse cultural backgrounds and high expectations for all students.	353.91	18.77	.801**	.891**	.868**	.763**
PL 3.2 Our professional learning prepares teachers to adjust instruction and assessment to meet the needs of diverse learners.	351.99	17.76	.904**	.939**	.786**	.748**
PL 3.3 Our professional learning designs are purposeful and are aligned with specific individual group needs.	348.86	20.20	.893**	.936**	.879**	.811**
PL 3.4 Professional learning in our school provides opportunities for teachers and administrators to learn how to involve families in their children's education.	314.27	26.16	.732**	.783**	.739**	.708**
Leadership Variable	M	SD	r w/ DL ⁴ items ¹	r w/ L ⁵ total	r w/ PL ³ total	r w/ JEPL ² total
L 1.1 Our principal and other school administrators exhibit a deep understanding of curriculum, assessment, and instruction.	367.06	17.88	.834**	.888**	.837**	.708**
L 1.2 Our principal and other school						

Table 2 (continued).

administrators are actively involved in the learning community, including serving as active members on study teams and promoting meaningful professional learning.	364.63	18.09	.898**	.939**	.878**	.761**
L 1.4 Our principal and other school administrators utilize multiple types of data to drive and monitor school-wide instructional decisions.	367.27	15.16	.857**	.891**	.910**	.839**
L 2.1 Our principal and other school administrators implement policies, practices, and procedures that ensure a safe and orderly learning environment.	367.89	17.38	.761**	.834**	.905**	.868**
L 2.2 Our principal and other school administrators maximize the availability and distribution of instructional resources focused on school learning goals.	361.29	17.66	.833**	.897**	.891**	.864**
L 2.3 Our principal and other school administrators are visible to staff, students, and parents and participate in subject and/or grade level meetings.	359.28	26.48	.832**	.846**	.758**	.617**
*L 3.1 Our principal and other school administrators collaborate with staff members and other stakeholders to elicit input and provide opportunities for shared decision-making and problem- solving.	343.93	26.41	.909**	.927**	.848**	.815**
*L 3.2 Staff members have opportunities to serve in a variety of leadership roles.	338.86	24.22	.858**	.858**	.823**	.877**
L 3.3 Our school receives help from outside agencies like Metro RESA, colleges, businesses	310.19	23.45	.627**	.637**	.692**	.650**

Table 2 (continued).

and the Ga. Dept. of Education.

*L 4.1 Our school has a fully operational Leadership Team that is representative of our entire staff. The team conducts regular, results-driven meetings and exists to address student achievement and overall academic success.	367.40	20.06	.823**	.812**	.658**	.703**
L 4.2 Our Leadership Team has a system for handling business, making decisions, and solving problems.	360.07	27.61	.771**	.738**	.652**	.748**
L 4.3 Our Leadership Team uses current data to identify student achievement needs.	374.51	12.98	.875**	.876**	.874**	.873**

¹ Items that belong to the construct of interest are not included.

² JEPL – Items that were included as job-embedded professional learning.

³ PL – Items that were included as professional learning.

⁴ DL – Items that were included as distributed leadership.

⁵ L – Items that were included as leadership.

* Indicates items chosen by expert panel.

As can be seen in Table 2, items chosen by expert raters to indicate job-embedded professional learning (JEPL) and distributed leadership (DL) correlated similarly with the total for included items and with non-included items. To assess JEPL total, items PL 1.1, PL 1.3, PL 2.3 and PL 2.7 were used. To assess DL total, items L 3.1, L 3.2 and L 4.1 were used. These data suggest that the respondents to the School Improvement Survey did not make the distinction between JEPL, PL, DL and L as the expert raters. This is problematic. It may be the case that respondents are responding based on principal likeability, or that the School Improvement Survey should explain the questions and definitions more thoroughly, or that the respondents should be trained on the constructs before evaluating them.

Data Findings

Descriptive statistics and correlations of each item considered for inclusion in the total score for included items and the total score for excluded items are seen in Table 2. *Means (M)* and *Standard Deviations (SD)* were performed for the sample based on response *N* for each school improvement survey. Descriptive statistics for the predictor and criterion variables can be seen in Table 3.

Table 3

Descriptive Statistics for the Predictor and Criterion Variables (N=46)

Variable	Min	Max	Mean	SD	Skew/SE
JEPLtot ¹	1252.60	1516.30	1410.60	68.31	- 1.45
DLtot ²	938.60	1159.90	1050.19	66.46	- 0.66
CogAT ³	21	72	43.85	12.61	0.49
Percent FRL ⁴	3.38	98.49	46.25	32.43	0.60
ITBS ⁵	28	89	62.09	17.55	- 0.40

¹ Job-embedded Professional Learning Total Items Included

² Distributed Leadership Score Total Items Included

³ Cognitive Test of Abilities Quantitative Percentile Age Rank Score

⁴ Percent of Free or Reduced Lunch

⁵ Iowa Test of Basic Skills Total Mathematics Percentile Rank Score

* significant skew at alpha= .05; ** significant skew at alpha= .01

Statistical Analyses for Research Question 1 and Hypothesis 1

To address Research Question 1 concerning the relationship between job-embedded professional learning and distributed leadership, a Pearson's bivariate correlational analysis was conducted.

Simple correlations. Simple correlations among predictor variables (job-embedded professional learning, distributed leadership, CogAT, Percent Free or Reduced Lunch and ITBS), and between predictor and criterion variables appear in Table 4. The means and standard deviations for individual items can be found in Table 2. The means and standard deviations for total items included can be found in Table 3. All items included in the correlation were correlated with each other except job-embedded professional learning and percent of free or reduced lunch. The correlation between CogAT and ITBS scores was highest, followed closely by their correlations to free or

reduced lunch. There was an inverse relationship between job-embedded professional learning and percent of free or reduced lunch. There was also an inverse relationship between distributed leadership and percent of free or reduced lunch. In response to Research Question 1 and Hypothesis 1, a relationship was found between distributed leadership and job-embedded professional learning.

Hypothesis 1 read as follows: There is a significant positive relationship between distributed leadership and job embedded professional learning. A positive relationship was found between distributed leadership and job-embedded professional learning; thus, the relationship between the constructs that was asserted by the hypothesis was supported.

Table 4

Simple Correlations between Predictor and Criterion Variables (N=46)

Variable	JEPL ¹	DL ²	CogAT ³	Percent FRL ⁴	ITBS ⁵
JEPLtot ¹		.856**	.503*	-.510**	.500*
DLtot ²			.604**	-.588**	.573**
CogAT ³				-.938**	.967**
Percent FRL ⁴					-.964**

¹ Job-embedded Professional Learning Total Items Included

² Distributed Leadership Score Total Items Included

³ Cognitive Test of Abilities Quantitative Percentile Age Rank Score

⁴ Percent of Free or Reduced Lunch

⁵ Iowa Test of Basic Skills Total Mathematics Percentile Rank Score

* $p < 0.05$ two-tailed; ** $p < 0.01$ two-tailed.

Factor analysis. To further explore the psychometric properties of the distributed leadership and job-embedded professional learning constructs, a principal components analysis was conducted. With all items (N=24) entered into the analysis (expert rater

chosen and non-chosen), results indicated two factors with eigen values greater than 1.0. One major factor explained 76% of the variance with varimax rotation resulting in 100 percent of job-embedded professional learning items, 50% of professional learning items, 0% of distributed leadership items and 0% of leadership items loading at greater than 0.7 onto this first factor. A second factor explained only 5.8% of the variance with varimax rotation resulting in 0 percent of job-embedded professional learning items, 12.5% of professional learning items, 66.6% of distributed leadership items and 55.5% of leadership items loading at greater than 0.7 onto the second factor. Chronbach's Alpha (α) on all items indicated a very high level of internal consistency ($\alpha = .983$). A second factor analysis was run with only expert rater chosen items. Again, one major factor emerged, explaining 80.6% of the variance with varimax rotation resulting in 100% of job-embedded professional learning items, and 10 % of distributed leadership items loading at greater than 0.7 onto the first factor. Chronbach's Alpha (α) was computed on all expert rater chosen items and resulted, again, in a very high internal consistency ($\alpha = .954$) index. Table 5 shows the findings from the factor analysis.

Table 5

Factor Loadings and Communalities Based on a Principle Components Analysis with Varimax and Kaiser Normalization Rotation for 24 Items from the School Improvement Survey (N = 46)

Professional Learning Variable	Loadings		
	Factor 1 Professional Learning	Factor 2	Leadership
*JEPL ¹ 1.1 Teachers and administrators participate in job-embedded professional learning and collaboration addressing curriculum, assessment, instruction, and technology.	.849		.436
PL ² 1.2 The principal and other school leaders set clear expectations and monitor the effectiveness of professional learning on teacher practices and student learning.	.562		.762
*JEPL 1.3 The principal and other school leaders set clear expectations and monitor the effectiveness of professional learning on teacher practices and student learning.	.777		.456
PL 1.4 The principal and other leaders utilize data to plan for professional learning.	.629		.695
PL 1.6 The professional learning activities at my school are connected to our school improvement goals.	.736		.521
*JEPL 2.3 Teams meet to review and study current research to make informed instructional decisions.	.894		.135
PL 2.4 The staff participates in long-term in-depth professional learning which is aligned with our school improvement goals.	.783		.457
*JEPL 2.7 Teachers and administrators have the knowledge and skills necessary to collaborate.	.774		.511

Table 5 (continued).

PL 3.1 Our professional learning prepares us in practices that convey respect for diverse cultural backgrounds and high expectation for all students.	.679	.595
PL 3.2 Our professional learning prepares teachers to adjust instruction and assessment to meet the needs of diverse learners.	.859	.392
PL 3.3 Our professional learning designs are purposeful and are aligned with specific individual group needs.	.793	.519
PL 3.4 Professional learning in our school provides opportunities for teachers and administrators to learn how to involve families in their children's education.	.667	.450
<hr/>		
Leadership Variable	Loadings	
	Factor 1 Professional Learning	Factor 2 Leadership
L ⁵ 1.1 Our principal and other school administrators exhibit a deep understanding of curriculum, assessment, and instruction.	.408	.854
L 1.2 Our principal and other school administrators are actively involved in the learning community, including serving as active members on study teams and promoting meaningful professional learning.	.465	.854
L 1.4 Our principal and other school administrators utilize multiple types of data to drive and monitor school-wide instructional decisions.	.556	.718
L 2.1 Our principal and other school administrators implement policies, practices, and procedures that ensure a safe and orderly learning environment.	.305	.868
L 2.2 Our principal and other school administrators maximize the availability and distribution of instructional resources focused on school learning goals.	.674	.638
L 2.3 Our principal and other school administrators are visible to staff, students, and parents and participate in subject and/or grade level meetings.	.281	.895
*DL ⁴ 3.1 Our principal and other school administrators collaborate with staff		

Table 5 (continued).

members and other stakeholders to elicit input and provide opportunities for shared decision-making and problem- solving.	.539	.769
*DL 3.2 Staff members have opportunities to serve in a variety of leadership roles.	.681	.575
L 3.3 Our school receives help from outside agencies like Metro RESA, colleges, businesses and the Ga. Dept. of Education.	.597	.389
*DL 4.1 Our school has a fully operational Leadership Team that is representative of our entire staff. The team conducts regular, results-driven meetings and exists to address student achievement and overall academic success.	.380	.759
L 4.2 Our Leadership Team has a system for handling business, making decisions, and solving problems.	.578	.482
L 4.3 Our Leadership Team uses current data to identify student achievement needs.	.685	.615

¹ JEPL – Expert rater chosen items that were included as job-embedded professional learning.

² PL – Items that were included as professional learning.

⁴ DL – Expert rater chosen items that were included as distributed leadership.

⁵ L – Items that were included as leadership.

* Indicates items chosen by expert panel.

Table 6

Factor Loadings and Communalities Based on a Principle Components Analysis with Varimax and Kaiser Normalization Rotation for 7 Items from the School Improvement Survey (N = 46)

Professional Learning Variable	Loadings Factor
*JEPL ¹ 1.1 Teachers and administrators participate in job-embedded professional learning and collaboration addressing curriculum, assessment, instruction, and technology.	.915
*JEPL 1.3 The principal and other school leaders set clear expectations and monitor the effectiveness of professional learning on teacher practices and student learning.	.931
*JEPL 2.3 Teams meet to review and study current research to make informed instructional decisions.	.816
*JEPL 2.7 Teachers and administrators have the knowledge and skills necessary to collaborate.	.932
Leadership Variable	Loadings Factor
*DL ² 3.1 Our principal and other school administrators collaborate with staff members and other stakeholders to elicit input and provide opportunities for shared decision-making and problem- solving.	.916
*DL 3.2 Staff members have opportunities to serve in a variety of leadership roles.	.937

Table 6 (continued).

*DL 4.1 Our school has a fully operational Leadership Team that is representative of our entire staff. The team conducts regular, results-driven meetings and exists to address student achievement and overall academic success.	.827
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------

¹ JEPL – Expert rater chosen items that were included as job-embedded professional learning.

² DL – Expert rater chosen items that were included as distributed leadership.

* Indicates items chosen by expert panel.

As can be seen in Table 5, all of the expert rated job-embedded professional learning items and all except four items in the professional learning item pool loaded at ≥ 0.7 onto factor 1, indicating that factor 1 is, likely, a professional learning factor. Three of the four items with loadings < 0.7 seemed to relate to both factor 1 and factor 2. Only item 1.2 of the professional learning items loaded at 0.7 onto factor 2. Item 1.2 asks about the leaderships' roles in professional learning in the question that follows: The principal and other school leaders set clear expectations and monitor the effectiveness of professional learning on teacher practices and student learning.

As can be seen in Table 6, all expert rated distributed leadership items and all except five of the items in the leadership pool loaded at > 0.7 onto factor 2 indicating that factor 2 is, likely, a leadership factor. All of the items with loadings < 0.7 related to both factor 1 and factor 2. Neither the job-embedded professional learning nor distributed leadership items separated themselves from their respective groups of items. In addition, distributed leadership items did not distinguish themselves from job-embedded professional learning. Further, because a substantial portion of the total variance was explained with one factor for this entire group of items, it seems likely that very little unique information was generated by a second factor.

Statistical Analyses for Research Question 2 and Hypothesis 2

To address Research Question 2 concerning the relationships among job-embedded professional learning, distributed leadership and student achievement, a hierarchical multiple regression was conducted. The researcher controlled for the ability level of the students using the CogAT and socio-economic status using the percent of free or reduced lunch.

Regression analysis. A hierarchical multiple regression was used to assess the ability of two predictors (job-embedded professional learning and distributed leadership) to predict the ITBS score after controlling for the influence of ability level using the CogAT and influence of socio-economic status using the percent of free or reduced lunch. Third grade mathematics total percentile rank scores were regressed onto the overall domain score for distributed leadership scores, overall domain score for job-embedded professional learning scores, after controlling for CogAT quantitative age rank score, and percent of free or reduced lunch. CogAT score and percentage of free or reduced lunch were entered at Step 1, explaining 96.2% of the variance, which was a significant portion of variance. Both variables entered at Step 1 had a unique and combined significant relationship. After entering the total score for included items from job-embedded professional learning and distributed leadership at Step 2, the total variance explained was 96.3%, with a non-significant change in R^2 of .001, $F(2,43) = 543.02, p = .001$. Both CogAT and percent of free or reduced lunch had a unique significant relationship. In the final model, only the two control measures were significant. In response to Research Question 2 and Hypothesis 2, there was no relationship among the variables of distributed leadership, job-embedded professional learning, and student achievement. Hypothesis 2 read as follows: There are significant relationships among distributed leadership, job-embedded professional learning and student achievement. No significant relationship was found between distributed leadership, job-embedded professional learning and student achievement. Hierarchical Regression results can be found in Table 7.

Table 7

Hierarchical Regression of Variables onto Achievement on the ITBS (N=46)

Step 1		ITBS ¹ R ² = .962 F(2,43) = 543.02, p = .001				
	<i>b</i>	<i>t</i>	<i>p</i>	pr ²	sr ²	
Y-Intercept	42.14	5.75	< .001**			
CogAT ²	.726	6.06	< .001**	.461	.032	
Percent FRL ³	-.257	-5.51	< .001**	.413	.027	
Step 2		ITBS ¹ ΔR ² = .001 ΔF(2,41) = .830, p = .442				
	<i>b</i>	<i>t</i>	<i>p</i>	pr ²	sr ²	
Y-Intercept	43.62	3.01	.004			
CogAT ²	.759	6.16	< .001**	.480	.034	
Percent FRL ³	-.256	-5.42	< .001**	.417	.026	
JEPL ⁴	.014	.914	.366	.020	.001	
DL ⁵	-.021	-1.28	.209	.038	.001	
		R ² = .963 F(4,41) = 269.80, p = .001				

¹ Iowa Test of Basic Skills Total Mathematics Percentile Rank Score² Cognitive Test of Abilities Quantitative Percentile Age Rank Score³ Percent of Free or Reduced Lunch⁴ Overall Job-embedded Professional Learning Score⁵ Overall Distributed Leadership Score* *p* < 0.05 two-tailed; ** *p* < 0.01 two-tailed.

Qualitative Study

The qualitative study addressed elements of Research Question 1 on whether a relationship exists between job-embedded professional learning and distributed leadership. This part of the study also addressed Research Question 2 on whether a relationship exists between job-embedded professional learning, distributed leadership and student achievement. This research added a qualitative analysis to further explain the practice of distributed leadership and job-embedded professional learning and provided a framework for further research. The goal of this research was to provide a general theory of a process, action or interaction shaped through the responses of participants who have experienced the processes of distributed leadership and job-embedded professional learning.

In the previously described quantitative study, the researcher analyzed an archival School Improvement Survey, which is issued annually to all school stakeholders. The researcher and a panel of experts then analyzed the section listed as professional learning and the section listed as distributed leadership for like or related terms that dealt specifically with job-embedded professional learning and distributed leadership. For a more in-depth analysis, the researcher sought six schools as follows:

- three schools with a low percentage of free or reduced lunch that also demonstrated a strong relationship among job-embedded professional learning, distributed leadership and student achievement; and
- three schools with a high percentage of free or reduced lunch that also demonstrated a strong relationship to student achievement.

The researcher did not find any schools out of the 65 studied that exhibited high levels of student achievement with high levels of free or reduced lunch rates, so the selection was adjusted by eliminating those three schools from the qualitative study.

Interviews were then conducted with three teachers and with three building principals from each school using the protocol outlined in Appendix B. Responses from administrator and teacher interviews were coded using the direct wording taken from preliminary responses; like responses were then compiled into categories based on congruent beliefs. The categorical themes were:

- teacher leadership;
 - opportunities for teacher leadership;
 - input for decisions and team approach;
 - distributed leadership's impact on student achievement;
- teacher professional learning;
 - identification of professional learning needs;
 - structure and support for job-embedded professional learning;
 - job-embedded professional learning's impact on student achievement;
- administrator leadership;
 - opportunities for teacher leadership;
 - input for decisions and team approach;
 - distributed leadership's impact on student achievement;
- administrator professional learning;
 - structure and support for job-embedded professional learning;
 - evaluation/monitoring of job-embedded professional learning; and

- job-embedded professional learning's impact on student achievement.

After the coding was complete, similar themes began to emerge from the categories.

Leadership. The first coded category from teacher interviews regarding leadership had responses such as we participate in the building leadership team, we help create the School Strategic Plan (SSP), teacher liaison, we serve as instructional coaches and peer mentors, we provide curriculum development, we have learning communities, we engage teachers in collaborative action planning, reflection, and research and we conduct teacher-led trainings. This grouping of codes was organized under the category of Building Leadership Team Member with the theme of Opportunities for Teacher Leadership.

The second coded category from teacher interviews regarding leadership dealt with teacher input for decision-making and a team approach. Responses included we give feedback to our BLT, team meeting minutes and weaknesses are identified through the annual School Improvement Survey. This category was named Communication from BLT and Feedback to BLT and fell under the theme of Input for Decisions and Team Approach.

The third coded category from teacher interviews regarding leadership had responses such as data drives our SSP, we monitor fluctuations in data frequently, distributed leadership does impact student achievement, based on data, distributed leadership impacts student achievement by improving classroom instruction, distributed leadership has a significant effect on working relationships, effective leadership strengthens professional community, a global perception leads to problem solving, innovative teaching, and shared strategies and more feel responsible and have a vested

interest. This grouping was categorized as Positive Impact and fell under the theme of Distributed Leadership's Impact on Student Achievement.

The first coded category from administrator interviews regarding leadership had responses such as teachers participate in the Building Leadership Team (BLT), teachers are a part of our BLT, they serve as team leaders and serve on Georgia Keys Teams, we have leadership programs that I [the principal] mentor and many teacher leaders help with duties such as testing. This grouping of codes was organized under the category of BLT/Georgia Key Team Member with the theme of Opportunities for Teacher Leadership.

The second coded category from administrator interviews regarding leadership dealt with teacher input for decision-making and a team approach. Responses included we meet once a month, team leaders ask for input and bring this back to the BLT, minutes are sent to administration and someone sends the BLT meeting minutes to the staff. This category was named Meeting Minutes and fell under the theme of Input for Decisions and Team Approach.

The third coded category from administrator interviews regarding leadership had responses such as yes- it does impact student achievement, teachers take ownership for academic progress and work harder to improve and yes- teachers have buy-in to what students need, distributed leadership does impact student achievement, based on data, distributed leadership impacts student achievement by improving classroom instruction, distributed leadership has a significant effect on working relationships, effective leadership strengthens professional community, a global perception leads to problem solving, innovative teaching, and shared strategies and more feel responsible and have a

vested interest. This grouping was categorized as Positive Impact and fell under the theme of Distributed Leadership's Impact on Student Achievement.

Professional learning. The first coded category from teacher interviews regarding professional learning had responses such as the BLT does a needs assessment based on data, by an end of the year survey, our needs are identified by data, research and goals for a shared vision and teacher requests. This grouping of codes was organized under the category of Needs Assessment/Survey with the theme Identification of Professional Learning Needs.

The second coded category from teacher interviews regarding professional learning dealt with structure and support for job-embedded professional learning. Responses included we get release time during the day, we have required staff development, we have meetings throughout the year and the staff would push back if job-embedded professional learning was mandated – teachers feel maxed out with responsibilities and would view it in a negative way. This category was named Planned Release Time and fell under the theme of Structure and Support for Job-Embedded Professional Learning (JEPL). Respondents in this category began to veer from the question being asked. They responded with when they were given time for professional learning, but none explained in detail the structure and support for job-embedded professional learning.

The third coded category from teacher interviews regarding professional learning had responses such as I'm not sure what the impact is on student achievement, professional learning sometimes occurs after the training is needed, but we can glean some things to implement immediately, my hope is that they do impact student

achievement and yes – data supports job-embedded professional learning. This grouping was categorized as Not Sure and fell under the theme of Job-embedded Professional Learning's Impact on Student Achievement. As can be seen in this theme, respondents were unsure as to how student achievement was impacted.

The first coded category from administrator interviews regarding professional learning had responses such as teachers give us input and we figure out how to get it [training], administration goes in the classrooms to see the level of implementation, the School Strategic Plan (SSP) lists what the teachers need to know in order to be successful and we have one meeting a month. This grouping of codes was organized under the category of Administrator Implementation with the theme Structure and Support for Job-Embedded Professional Learning. Again, respondents did not quite answer the question of structure and support for job-embedded professional learning. Most described the administrator's actions to get professional learning to the teachers.

The second coded category from administrator interviews regarding professional learning involved evaluation and monitoring of professional learning. Responses included we pre-assess in the fall and post assess our professional learning at the end of the year, we see if it has an impact on instruction, we survey the teachers to see if trainings are useful and we look at their lesson plans and do classroom walk throughs. This category was named Surveys and fell under the theme of Evaluation/Monitoring of Professional Learning. It is not clear here if the administrators were monitoring and evaluating professional learning or job-embedded professional learning.

The third coded category from administrator interviews regarding professional learning had responses such as yes – staff development is based on what teachers need

and what data says the school needs to work on, data sheets track our improvements, yes – because job-embedded professional learning was based on identification of needs based on data and they decide what they need and we find presenters to meet their needs. This grouping was categorized as Positive and fell under the theme of Job-embedded Professional Learning’s Impact on Student Achievement. Here again, it is not clear if job-embedded professional learning is taking place or if the school is conducting regular professional learning.

After the categories and themes were identified, the researcher conducted an analysis of results. Table 8 gives the number of responses regarding teacher and administrator leadership under each category and theme and provides rank order from the highest number of responses to the lowest. In addition, Table 9 gives the number of responses regarding teacher and administrator professional learning under each category and theme and provides rank order from the highest number of responses to the lowest.

Table 8

Frequencies and Themes of Responses to Leadership Interview Question (N=6)

Teacher Leadership			
Rank Order	Category	Theme	Number of Responses
1	Building Leadership Team (BLT) Member	Opportunities for Teacher Leadership	3
2	Communication from BLT and Feedback to BLT	Input for Decisions and Team Approach	3
3	Positive Impact	Distributed Leadership's Impact on Student Achievement	3
Administrator Leadership			
Rank Order	Category	Theme	Number of Responses
1	BLT/Georgia Key Team Member	Opportunities for Teacher Leadership	3
2	Meeting Minutes	Input for Decisions and Team Approach	3
3	Positive Impact	Distributed Leadership's Impact on Student Achievement	3
TOTAL RESPONSES			18

Table 9

Frequencies and Themes of Responses to Professional Learning Questions (N=6)

Teacher Professional Learning			
Rank Order	Category	Theme	Number of Responses
1	Needs Assessment/Survey	Identification of Professional Learning Needs	2
2	Planned Release Time	Structure and Support for Job-Embedded Professional Learning	2
3	Not Sure	Job-embedded Professional Learning's Impact on Student Achievement	2
Administrator Professional Learning			
Rank Order	Category	Theme	Number of Responses
2	Administrator Implementation	Structure and Support for Job-embedded Professional Learning	3
2	Surveys	Evaluation/Monitoring of Professional Learning	3
3	Positive Impact	Job-embedded Professional Learning's Impact on Student Achievement	2
TOTAL RESPONSES			14

The qualitative portion of the study yielded additional insight into the thoughts, perceptions, definitions, beliefs and misperceptions regarding distributed leadership and

job-embedded professional learning. A discussion from the results of this portion of the study will be provided in Chapter V.

Summary

Upon receipt of the archived data, all 65 schools' responses were entered into a spreadsheet with their corresponding overall domain score for distributed leadership and job-embedded professional learning scores from the School Improvement Survey, third grade mathematics total percentile rank scores, CogAT quantitative age rank percentile score and free or reduced lunch percentage. Raw data from the quantitative portion were put into SPSS and the relevant statistics were analyzed and reported. Analyses were then performed for the qualitative part of the study.

Demographic data from this sample indicated that the majority of respondents were female, had 1-10 years teaching experience and held a Master's degree. Most of the respondents were white.

Descriptive statistics showed a large gap in the CogAT scores. Likewise, a large range was noted in the scores of the ITBS. In the same fashion, the percent of free or reduced lunch varied by large differences throughout the county.

Simple correlations among predictor and criterion variable showed a correlation among job-embedded professional learning, distributed leadership, cognitive ability, achievement on the ITBS and percent of free or reduced lunch. Therefore, Hypothesis 1 did reveal a significant relationship between distributed leadership and job-embedded professional learning.

Factor analysis among like and unlike items of job-embedded professional learning and distributed leadership were analyzed to further study the relationships. One major factor in each test accounted for the majority of variance.

Hierarchical multiple regression results showed there was not a significant relationship among job-embedded professional learning, distributed leadership and student achievement. Therefore, Hypothesis 2 was rejected.

After the quantitative analysis of the archived data, the researcher selected schools based on their overall distributed leadership, job-embedded professional learning, and student achievement correlation. Each school was then rank ordered by percent of free or reduced lunch rate and correlation to student achievement. The results from the qualitative portion of the data indicated that teachers and administrators ranked all questions within leadership equally. Administrators, however, ranked professional learning more favorably than teachers did. In both professional learning and leadership, some teachers and some administrators answered the constructs in a manner different than the researcher and expert rater had defined them. Both teachers and administrators had difficulty relating either of the constructs directly to student achievement based on empirical data. In Chapter V, discussion and implications of the findings from the quantitative and qualitative research will be provided, along with recommendations for further research.

CHAPTER V

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The primary purpose of this study was to determine the relationship between the adoption of a distributed leadership model and job-embedded professional learning to increased student achievement as measured by third grade mathematics total percentile rank on the ITBS, while controlling for the influences of ability level and socio-economic status. This chapter includes a summary of procedures, discussion of the findings, conclusions, and future recommendations.

Summary of Procedures

Primary data for this study consisted of 65 teacher-reported School Improvement Surveys from a large metropolitan district in Georgia. Twenty-three schools either opted not to participate in the study or were classified as K-2 primary schools; K-2 schools were ineligible because they lacked third grade ITBS scores. Thus, the data from a net total of 46 schools were included. The study analyzed overall domain scores of job-embedded professional learning and distributed leadership within each school, and their relationship to student achievement as measured by the total percentile rank on the ITBS while controlling for ability level through the quantitative age rank score on the CogAT and socio-economics through the percentage of free or reduced lunch rate. After permission was obtained from the University of Southern Mississippi (Appendix C) and from the county superintendent (Appendix D), directions were sent to individual principals (Appendix E). Upon receipt of the archival data from the county's Research

and Accountability Office, the researcher analyzed demographic and descriptive statistics.

A bivariate Pearson's correlation test was used to determine whether a relationship exists between two independent variables, job-embedded professional learning and distributed leadership. A factor analysis was then conducted to further investigate the relationship of the independent variables. A hierarchical multiple regression analysis was used to determine whether relationships exist among the dependent variable third grade ITBS total percentile rank, job-embedded professional learning and distributed leadership. The researcher controlled for extraneous variables that influence achievement by using the CogAT and percentage of free or reduced lunch rate.

Demographic data were analyzed for the population within the district. Items such as gender, race, age and educational experience were analyzed. The researcher also analyzed the demographics of the student population of the district.

Descriptive statistical summaries were then generated for all independent and dependent variables. These data showed the means, standard deviations, minimum, maximum and skew of each variable.

Bivariate Pearson's correlation tests were then generated between the independent variables, dependent variable, and the control variables. These tests showed the relationship among all predictor and criterion variables.

Factor analysis was then conducted to further investigate the relationship among the independent variables of job-embedded professional learning and distributed

leadership. These tests showed one major factor in each test accounted for the majority of variance.

A hierarchical multiple regression was then generated to show the relationship among job-embedded professional learning, distributed leadership and student achievement while controlling for CogAT and percent of free or reduced lunch rate. These tests did not show a significant relationship.

For the qualitative portion of the study, the researcher analyzed teacher and administrator responses to interview questions (Appendix B). Responses were coded and collapsed into six categories. Those categories for leadership were Building Leadership Team (BLT) Member, Communication from BLT and Feedback to BLT, Positive Impact, BLT/Georgia Key Team Member, Meeting Minutes and Positive Impact. The themes for leadership were: Opportunities for Teacher Leadership, Input for Decisions and Team Approach and Distributed Leadership's Impact on Student Achievement. The categories for professional learning were Needs Assessment/Survey, Planned Release Time, Not Sure, Administrator Implementation, Surveys and Positive Impact. The themes for professional learning were Identification of Professional Learning Needs, Structure and Support for Job-embedded Professional Learning and Evaluation/Monitoring of Professional Learning. Chapter IV contains a frequency table with rank order of the categories according to number of responses.

Major Findings

The demographic composition of the population sample consisted of mostly white females. More than half of the population sample held Master's degrees or higher while having 1-10 years teaching experience. The district being researched contained nearly

half male and female students. Nearly half of the district's students received free or reduced lunch. Forty-one percent of the students were white, followed by blacks at 30% and Hispanics at 19%.

For the quantitative study, an item analysis was conducted for all 24 elements in the professional learning and leadership survey items that respondents answered on the School Improvement Survey. The means, standard deviations and correlations were computed for individual items and like and unlike items. As can be seen in Chapter IV, the means of all items were relatively similar. When r was calculated within like items (with the item of interest being left out) and correlated to unlike items and the other construct, r varied in a by-chance manner. The researcher then ranked each answer as follows: consistently = 4, often = 3, infrequently = 2, never = 1. Items were re-correlated and r still varied in a by chance manner as can be seen in Table 2.

Descriptive statistics were conducted for the predictor and criterion variables. The minimum, maximum, means, standard deviations and skew were conducted for all variables. As can be seen in Table 3, CogAT, percentage of free or reduced lunch rate, and ITBS varied with the district at range extremes.

Research Question 1 explored the relationship between distributed leadership and job-embedded professional learning. The related hypothesis was stated as follows: There is a positive relationship between distributed leadership and job embedded professional learning. Simple correlations were conducted between predictor and criterion variables to determine the relationship among variables. The correlation was significant; thus, the relationship between the constructs that was asserted by the hypothesis was supported. This finding is consistent with the literature in this area. As

was noted in Chapter II, distributed leadership and job-embedded professional learning are highly correlated. “Although job-embedded professional development can be undertaken by a teacher alone, a view of professional knowledge as social, situated and distributed among colleagues undergirds job-embedded professional development” (Putnam & Borko, 2000, p. 4). According to Ericsson (2000), an expert refers to someone who possesses superior achievement. An expert is one who has acquired special skill in or knowledge of a particular subject through professional training and practical experience. Mayrowetz (2008) argued that since expertise is needed in particular areas, it is only feasible that a distributed style of leadership would work since no one person can possess all the skills and expertise necessary for improving a school. Distributed leadership can then be seen as multiple sources of expertise from persons working in concert. Research suggests relationships among distributed leadership and job-embedded professional learning (Harris & Spillane, 2009; Hirsh, 2009; Marzano, Waters, & McNulty, 2005; NSDC, 2009; Tienken & Stonaker, 2007; Wilms, 2009).

Since the correlations were moderate to high, and all variables were correlated, the researcher conducted one final quantitative analysis. A principal component factor analysis with a varimax and Kaiser Normalization rotation was generated. Chronbach’s Alpha (α) test of reliability showed a relatively high internal consistency. When all the factors were loaded, one major factor (Job-embedded Professional Learning 1.1) explained 76% of the variance while a second factor (Professional Learning 1.2) explained 5.8% of the variance. A second factor analysis was run with only expert rater chosen items. One major factor (Job-embedded Professional Learning 1.1) explained 80.6% of the variance. Since one major question took up the majority of the variance in

each test, the researcher was able to identify both the professional learning and distributed leadership items. Since the items of distributed leadership and job-embedded professional learning did not separate themselves from items that were not selected as job-embedded professional learning and distributed leadership by the expert raters, it seems that there was no difference between the ratings of job-embedded professional learning and professional learning. It also means that there was no difference between the questions regarding distributed leadership and leadership. This means that the questions that were not chosen by the raters were not rated differently than those not chosen by the raters.

To address Research Question 2 and Hypothesis 2, a hierarchical multiple regression was conducted. This test showed that 96.2% of the variance was accounted for by CogAT and free or reduced lunch rate. Only 0.1% of student achievement variance on the ITBS was accounted for by distributed leadership and job-embedded professional learning. Studies have shown a lack of evidence of leadership as a direct correlate with academic improvement (Leithwood et al., 2004). More often, schools rely more on faith than fact. Some findings on the effects of leadership on student achievement depend on whether the study was conducted through a quantitative or qualitative analysis (Robinson, Lloyd, & Rowe, 2008). Robinson et al. reported that the effects of leadership on student achievement are very weak. Studies directly linking professional learning to student achievement are rare (Gusky, 1995).

As noted previously, empirical evidence linking job-embedded professional development to student achievement is very limited. While few studies provide direct empirical evidence to support positive impacts of job-embedded professional learning on

student achievement; research suggests that job-embedded professional learning leads to improved practice, which leads to improved student achievement (Croft et al., 2010). Even though the studies that Croft et al. examined were research-based, many lacked rigorous investigations into the relationships, which changed instructional practices and improved student achievement. Many studies, he concluded, are based on teacher perceptions based on surveys, and not based on empirical data. In conjunction with NSDC, Roy (2009) found that student achievement was impacted when professional learning was embedded.

The results from the qualitative portion of this study provided the sample participant's responses to open-ended interview questions on structure, support, evaluation and monitoring and effectiveness of job-embedded professional learning and distributed leadership. The results did not correspond precisely with the quantitative data. When the qualitative results were analyzed, several generalizations were made. One of the generalizations is that this survey may have been based upon teacher perceptions of job-embedded professional learning and distributed leadership and not based on school data. Many studies according to Gusky (2003) are based on teacher perceptions based on surveys, and are not based on empirical data. Studies directly linking professional learning to student achievement are rare (Gusky, 1995). As noted previously, empirical evidence linking job-embedded professional development to student achievement is very limited. While few studies provide direct empirical evidence to support positive impacts of job-embedded professional learning on student achievement; research suggests that job-embedded professional learning leads to improved practice, which leads to improved student achievement (Croft et al., 2010).

Teachers and administrators answered questions regarding teacher leadership in a similar fashion. Both groups seemed to understand the construct at a rudimentary level and answered accordingly. All respondents seemed to understand the construct of distributed leadership and its assumed impact on student achievement, even if the assumption was based on perception rather than empirical data. According to Mayrowetz (2008), the term distributed leadership consists of multiple meanings; this can result in researchers and practitioners perceiving the construct differently. She suggested that researchers look beyond administrators and more extensively examine leadership throughout the building among those who do not possess a formal leadership title. Research suggested a correlation between leadership and student achievement, but the lack of empirical evidence that suggests that distributed leadership increases student achievement is a weakness (NSDC, 2009; Spillane, 2004).

When respondents were asked questions regarding job-embedded professional learning, the answers varied. Many of the respondents did not answer the questions as they were presented or as the expert raters understood the construct. For instance, when teachers were asked how job-embedded professional learning was structured and supported, most answered that they were given release time for professional learning. None of the respondents answered the questions with direct details suggesting that they understood the construct. The administrators did not seem to understand the construct either. Most answered that the way they structured and supported job-embedded professional learning was by listening to the needs of the teachers and then setting up the training. Neither response lends itself specifically to job-embedded professional learning. Limited research has been done to link job-embedded professional learning to increased

student achievement. Results-driven professional learning is based not on the staff's perception of learning but on the degree to which it changes behaviors in teachers to positively impact student learning (Sparks, 1994). According to NSDC (2009), traditional professional learning is often disjointed experiences with limited follow up and insufficient time to experiment and develop the new teaching strategies. Many theorists and researchers suggested a distributed leadership model to support job-embedded professional learning (DuFour & Eaker, 1998; Gusky, 2000; Hirsh, 2009; NSDC, 2009; Tienken & Stonaker, 2007).

In summary, a significant relationship was found between job-embedded professional learning and distributed leadership, but the correlation cannot be extended to their impact on student achievement in a quantitative analysis. For the major qualitative findings, the highest frequencies of teacher and administrator responses were under the leadership categories. The respondents' answers suggested a lack of understanding of meaning surrounding the construct of job-embedded professional learning. Teachers and administrators alike answered that both independent variables impacted student achievement, but these responses appear to be mostly based on their perceptions since they could not list specific data linked directly to the constructs alone.

Discussion

Major finding from the quantitative and qualitative analyses revealed several pertinent themes. Effective educative practices that emerged from these analyses are supported by previous research and may provide a framework for future study or implementation for school reform. A closer look into the relationships among job-

embedded professional learning, distributed leadership and student achievement are included in this discussion.

This study was conducted in a large, metropolitan district in which the majority of teachers held a Master's degree or beyond. The district had a mixture of high and low-income schools. The majority of the teachers were white females with 1-10 years teaching experience. The district contained over 100,000 students with most being white, then black, and finally Hispanic students.

In response to Hypothesis 1, a significant relationship was found between distributed leadership and job-embedded professional learning; thus, the relationship between these constructs was supported. This relationship is consistent with the body of knowledge that addresses these constructs. The review of literature suggested a relationship among job-embedded professional learning, distributed leadership, and student achievement (Harris & Spillane, 2009; Hirsh, 2009; Marzano, Waters, & McNulty, 2005; NSDC, 2009; Tienken & Stonaker, 2007; Wilms, 2009). According to Gibbs (1954), "Leadership is probably best conceived as a group quality, as a set of functions which must be carried out by the group. This concept of 'distributed leadership' is an important one" (p. 113). Katz and Kahn (1978) suggest that when team members voluntarily offer their influence to shared goals, shared leadership gives organizations a competitive advantage by the resources provided through shared information and increased commitment. "Those organizations in which influential acts are widely shared are most effective" (Katz & Kahn, 1978, p. 332).

In addition, the researcher found an inverse relationship between job-embedded professional learning and percent of free or reduced lunch. An inverse relationship was

also found between distributed leadership and percentage of free and reduced lunch. This correlation shows that the higher the percentage of free and reduced lunch in a school, the lower the amount of distributed leadership and job-embedded professional learning.

Many questions can be raised as to why this is the case. This may be due to the school principal feeling the need to have more control over the functioning of the school since the school, according to this research, is likely to have lower student achievement.

Waters, Marzano and McNulty (2004) conducted a meta-analysis study on leadership practices and determined that they are highly correlated with student achievement. This may also be due to a principal who is not competent in leading a high-needs school. He or she may not be familiar with practices that influence student achievement for schools with a high percent of free or reduced lunch. It may also be due to high teacher attrition. This would prevent using distributed leadership and job-embedded professional learning in an effective way.

In response to the qualitative analysis regarding the constructs of job-embedded professional learning and distributed leadership, it was found that teachers and principals had difficulty directly explaining how their school distributed leadership outside of a building leadership team or how professional learning was carried out in a job-embedded way. This, too, is consistent with the body of knowledge. The term distributed leadership is widely used in the field of education and among researchers and practitioners (Mayrowetz, 2008). It often consists of multiple meanings that confuse practitioners and allow them to misunderstand one another. Researchers such as Leithwood et al., Harris and Spillane agree that the term distributed leadership has promising uses, but until further research is conducted, the term's meaning and

relationship to student achievement could confuse those implementing it. Spillane, Halverson and Diamond (2001) argue that distributed leadership is the act of distributing tasks and/or responsibilities among multiple people. Mayrowetz (2008) suggested at least two important shifts in thinking: a) researchers should look beyond administrators, or the title of a leader, in order to investigate leadership within the school, b) the researcher's focus should be on interactions or concertive action and not on a title of leadership such as the principalship. Distributed leadership can be seen as leadership functions being stretched among multiple people.

In response to job-embedded professional learning, teachers and administrators answered the interview questions in a manner that suggested that their knowledge of the construct was different from that of the expert raters. Many theorists and researchers suggest using a job-embedded professional learning model in order to increase student achievement and improve teacher instructional practices (Gusky, 2000; Kelleher, 2003; NSDC, 2009; Putnam & Borko, 2000). "Job-embedded professional development refers to teacher learning that is grounded in day-to-day teaching practice and is designed to enhance teachers' content-specific instructional practices with the intent of improving student learning" (Croft et al., 2010, p. 2). It is integrated into the workday. It is a continuous cycle of improvement in assessing and finding solutions to authentic problems. Job-embedded professional learning is on-going, shared, cooperative, inquiry-based and aligned with state standards for student achievement. It takes place in schools and is about the current working of schools. "Although job-embedded professional development can be undertaken by a teacher alone, a view of professional knowledge as

social, situated, and distributed among colleagues undergirds job-embedded professional development” (Putnam & Borko, 2000, p. 4).

Research Question 2 explored relationships among job-embedded professional learning, distributed leadership, and student achievement; the related hypothesis did not reveal a significant relationship among the constructs; therefore, Hypothesis 2 was rejected. The study found that the two control variables of ability level and percentage of free or reduced lunch accounted for 96.2% of the variance and the two constructs of distributed leadership and job-embedded professional learning only accounted for 0.1 percent of the variance. The literature is consistent with the finding that the constructs are not directly related to student achievement. Many also find that qualitative studies show a relationship, while quantitative studies do not. Most studies have found that the degrees to which the constructs affect student achievement are based on perceptions rather than empirical data. However, the research is mixed and this research seeks to add to the body of knowledge.

Many teachers and administrators during the interview process had difficulty answering if or how the constructs affected student achievement. If they did have a reaction, it was positive, but most answers seemed to be based on perception rather than direct empirical data. This, too, is consistent with research. A research study entitled, “How leadership influences student learning,” asserted that effective leadership improves learning (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Leithwood et al. argued that there is nothing new about this information. However, studies have shown a lack of evidence or direct correlation to leadership as a pathway for large-scale academic improvement. More often, schools rely on faith rather than fact. Similarly, research by

Silns and Mulford (2002) has shown that student achievement is more likely to improve when leadership is distributed throughout the school community, and where teachers are empowered in areas of importance to them. In the qualitative analysis, principals alluded to this point. Many felt that teachers were happier and more content when they were included in decision-making. The message emanating from these studies suggests the limitation of a singular leadership approach and an emphasis on the leadership role as being primarily concerned with empowering others to lead. Some findings on the effects of leadership on student achievement depend on whether the study was conducted through a quantitative or qualitative analysis (Robinson, Lloyd, & Rowe, 2008). Robinson et al. reported that the effects of leadership on student achievement are very weak. Quantitative researchers such as Hallinger and Heck (1996) suggest an indirect relationship between principal actions and student outcomes. Qualitative researchers assert more of a direct relationship between school leaders and their impact on student achievement (Hargreaves & Finks, 2006).

As noted in Chapter II, empirical evidence linking job-embedded professional development to student achievement is very limited. Research on professional learning is extensive, but most studies point to the inadequacies of professional learning within schools without offering solutions. Studies directly linking professional learning to student achievement are rare. While few studies provide direct empirical evidence to support the positive impact of job-embedded professional learning on student achievement, research suggests that job-embedded professional learning leads to improved practice, which in turn leads to improved student achievement (Croft et al., 2010). Gusky (2003) concluded that characteristics of effective professional learning

vary widely and were often contradictory. His research suggests that researchers and practitioners may not know what is required for effective professional learning. Even though the studies that he examined were research-based, many lacked rigorous investigations into the relationships that changed instructional practices and improved student achievement. Many studies, he concluded, are based on teacher perceptions based on surveys, and not based on empirical data. The research found in the qualitative study provides a springboard for future research.

The body of research reveals that job-embedded professional learning typically is more effective within a distributed leadership framework. Hypothesis 1 revealed a relationship between the two constructs. In addition, the responses of the school personnel who were interviewed revealed a strong relationship between the two constructs. On the other hand, Hypothesis 2, which examined the relationships among job-embedded professional learning, distributed leadership and student achievement, did not reveal a significant relationship. Extant literature and the current qualitative study are consistent with this finding. There is limited empirical data linking the two constructs to student achievement.

Limitations

This study's findings were limited by several factors. The construct of distributed leadership and job-embedded professional learning may not have been understood by the respondents in the manner in which the expert raters intended them to be understood. The intent of the researcher, and of the expert raters, was that the respondents clearly understand the construct's intricate meaning. In addition, both constructs are related to similar wording of different constructs – professional learning and leadership.

This study may also have been limited by a principal likeability factor. Respondents to the School Improvement Survey may have answered the survey and interview questions based on how well they liked the principal.

The type of survey given to the teachers limited this study. Many schools scored relatively high in the categories of job-embedded professional learning and distributed leadership as can be seen in the mean scores. This is a problem because there is a significant skew and in some cases a ceiling on the scores. It is also a problem because there is very little variance among the scores. One suggestion to prevent this is basing the survey items to which participants respond on a low to high Likert scale rather than one with the high score being listed first. This would prevent the respondent from marking all answers in the first column and require them to read all answer choices thoroughly.

Recommendations for Policy and Practice

Several key implications for policy and practice emerged from this study. It is recommended that administrators and teachers be trained on the constructs of job-embedded professional learning and distributed leadership. Each school should be aware of the distributed leadership framework and its potential benefits/risks. The major finding from this research suggests that distributed leadership and job-embedded professional learning are strongly related. A recommendation for policy and practice is to inform schools of the constructs and teach them the benefits of using such a framework. Even though the concepts were not found to be significant in their relationship to student achievement, studies suggest that job-embedded professional learning leads to improved practice, which, according to Croft et al., leads to better

student achievement. Studies have also shown that distributed leadership leads to involvement of teachers in decision-making, which leads to an overall sense of belonging and connection to common goals and initiatives. It is recommended to train teachers and administrators on the process of quantitative data analysis and evaluation and monitoring of specific programs to better determine their effect on student achievement.

In order to influence local school policy, schools should become familiar with the connection between the two constructs and student achievement. According to this research, there was not a significant relationship among the constructs of job-embedded professional learning, distributed leadership and student achievement. In order to influence local policies, a link will need to be clearly recognized by local, state or federal governmental agencies before the constructs are fully supported. One such link may come from job-embedded professional learning leading to improved teacher practices, which in turn affects student achievement (Croft et al., 2010). Distributed leadership may actively engage teachers so that the school's mission and goals are achieved through a common, unified perspective (Darling-Hammond, 1993). Both constructs may indirectly impact student achievement while also creating teacher competency and an increase in staff morale.

Recommendations for Future Research

The findings of this research have revealed several aspects of the study that may need to be altered in order to add insight to future exploration of distributed leadership and job-embedded professional learning.

1. Further research is recommended regarding the relationships among leadership style, professional learning and student achievement.

2. Future research should provide training to familiarize participants with the meaning of constructs that is intended by researchers.
3. Teachers should be surveyed with an instrument that limits the likeability factor of the principal. The instrument should clearly discern between different ratings to prevent the raters from scoring primarily in the first category.
4. Research should be geared toward local, state, and federal policy for implementation of professional learning that can be earned during the school work day, since studies have shown that job-embedded professional learning from experts within the school building offers on-going coaching, feedback, observations and modeling.
5. It is recommended that teachers and administrators be trained in the process of quantitative data analysis and evaluation and monitoring of specific programs to better determine their effect on student achievement.

Summary

The primary purpose of this study was to analyze the relationships among job-embedded professional learning, distributed leadership and student achievement. The two constructs of job-embedded professional learning and distributed leadership were analyzed through the responses of teachers and administrators in a district School Improvement Survey. Their relationship to student achievement was analyzed through a quantitative protocol in which achievement was operationalized with scores from a national test.

It was determined through quantitative statistical analyses that job-embedded professional learning and distributed leadership are highly related. According to research, job-embedded professional learning exists best within a distributed leadership framework (Mayrowetz, 2008). It was also determined through quantitative analysis that job-embedded professional learning and distributed leadership were not related to student achievement when the researcher controlled for the ability level of the students and socio-economics. Therefore, other practices to increase student achievement may be equally as effective.

Despite some limitations, recommendations for future policy and practice were made. Those recommendations included schools implementing job-embedded professional learning within a distributed leadership framework for maximum effectiveness. It was also recommended that teachers and administrators be more thoroughly trained on the constructs. It was recommended that a survey be used to limit principal likeability factor. In light the lack of quantitative studies examining how the constructs affect student achievement, it was suggested that teachers and administrators be trained on how to effectively evaluate and monitor their professional learning, leadership style and other programs through a quantitative data analysis. Lastly, it was recommended that local, state and federal policy should be evaluated in order to embed professional learning into the regular school day for teachers.

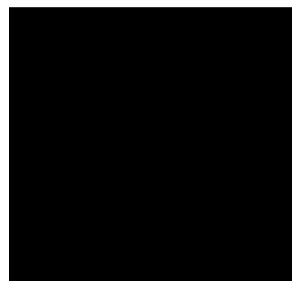
APPENDIX A

SAMPLE SCHOOL'S RESPONSE SCHOOL IMPROVEMENT SURVEY

2010 School Improvement Survey

for

[REDACTED] *Elementary School*



Office of Accountability
March 2010

	Elementary School
--	--------------------------

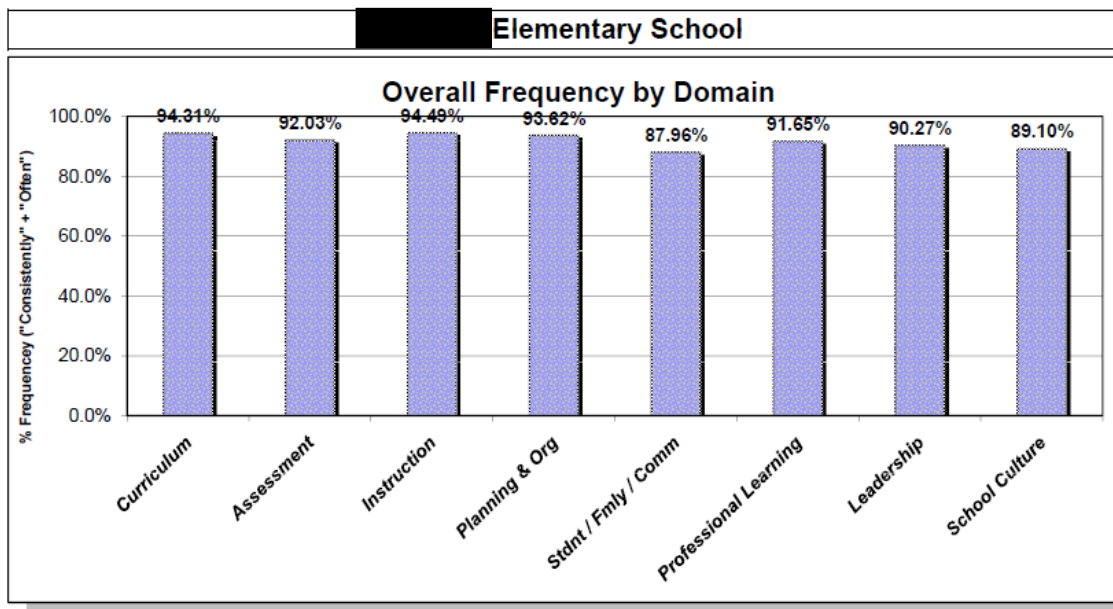
Demographics at a glance...

Total Student Participants:	382
Total Parent Participants:	145
Total Staff Participants:	102
Total:	629

<p>Students report their gender as:</p> <p style="padding-left: 40px;">Female: 48.4%</p> <p style="padding-left: 40px;">Male: 51.6%</p> <p>Students report their grade as:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">K</td><td style="width: 10%;">-</td><td style="width: 10%;">6</td><td style="width: 10%;">-</td></tr> <tr><td>1</td><td>-</td><td>7</td><td>-</td></tr> <tr><td>2</td><td>-</td><td>8</td><td>-</td></tr> <tr><td>3</td><td>30.6%</td><td>9</td><td>-</td></tr> <tr><td>4</td><td>37.9%</td><td>10</td><td>-</td></tr> <tr><td>5</td><td>31.5%</td><td>11</td><td>-</td></tr> <tr><td></td><td></td><td>12</td><td>-</td></tr> </table>	K	-	6	-	1	-	7	-	2	-	8	-	3	30.6%	9	-	4	37.9%	10	-	5	31.5%	11	-			12	-	<p>Students report their ethnicity as:</p> <p style="padding-left: 40px;">Nat. American: 1.1%</p> <p style="padding-left: 40px;">Asian: 2.7%</p> <p style="padding-left: 40px;">Black: 13.9%</p> <p style="padding-left: 40px;">Hispanic: 8.5%</p> <p style="padding-left: 40px;">Pacific Islander: 0.3%</p> <p style="padding-left: 40px;">White: 73.5%</p>
K	-	6	-																										
1	-	7	-																										
2	-	8	-																										
3	30.6%	9	-																										
4	37.9%	10	-																										
5	31.5%	11	-																										
		12	-																										

<p>Parents report their students' gender as:</p> <p style="padding-left: 40px;">Female: 48.9%</p> <p style="padding-left: 40px;">Male: 51.1%</p> <p>Parent participation by grade:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">K</td><td style="width: 10%;">19.8%</td><td style="width: 10%;">6</td><td style="width: 10%;">-</td></tr> <tr><td>1</td><td>17.3%</td><td>7</td><td>-</td></tr> <tr><td>2</td><td>16.7%</td><td>8</td><td>-</td></tr> <tr><td>3</td><td>12.3%</td><td>9</td><td>-</td></tr> <tr><td>4</td><td>9.9%</td><td>10</td><td>-</td></tr> <tr><td>5</td><td>24.1%</td><td>11</td><td>-</td></tr> <tr><td></td><td></td><td>12</td><td>-</td></tr> </table>	K	19.8%	6	-	1	17.3%	7	-	2	16.7%	8	-	3	12.3%	9	-	4	9.9%	10	-	5	24.1%	11	-			12	-	<p>Parents report their students' ethnicity as:</p> <p style="padding-left: 40px;">Nat. American: -</p> <p style="padding-left: 40px;">Asian: 5.3%</p> <p style="padding-left: 40px;">Black: 12%</p> <p style="padding-left: 40px;">Hispanic: 1.5%</p> <p style="padding-left: 40px;">Pacific Islander: -</p> <p style="padding-left: 40px;">White: 81.2%</p>
K	19.8%	6	-																										
1	17.3%	7	-																										
2	16.7%	8	-																										
3	12.3%	9	-																										
4	9.9%	10	-																										
5	24.1%	11	-																										
		12	-																										

<p>Staff reported their position as:</p> <p style="padding-left: 40px;">Administrator: 2.9%</p> <p style="padding-left: 40px;">Teacher: 88.2%</p> <p style="padding-left: 40px;">Certified Support: 5.9%</p> <p style="padding-left: 40px;">Other: 2.9%</p> <p>Staff participation by grade level:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">K</td><td style="width: 10%;">-</td><td style="width: 10%;">6</td><td style="width: 10%;">-</td></tr> <tr><td>1</td><td>13.3%</td><td>7</td><td>-</td></tr> <tr><td>2</td><td>18.9%</td><td>8</td><td>-</td></tr> <tr><td>3</td><td>14.4%</td><td>9</td><td>-</td></tr> <tr><td>4</td><td>12.2%</td><td>10</td><td>-</td></tr> <tr><td>5</td><td>15.6%</td><td>11</td><td>-</td></tr> <tr><td></td><td></td><td>12</td><td>-</td></tr> </table> <p style="padding-left: 40px;">Staff working with Multiple Grades: 25.6%</p>	K	-	6	-	1	13.3%	7	-	2	18.9%	8	-	3	14.4%	9	-	4	12.2%	10	-	5	15.6%	11	-			12	-	<p>Staff report their years of service as:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">0 - 3</td><td style="width: 80%;">5.7%</td></tr> <tr><td>4 - 7</td><td>17.0%</td></tr> <tr><td>8 - 13</td><td>37.5%</td></tr> <tr><td>14 - 19</td><td>21.6%</td></tr> <tr><td>20+</td><td>18.2%</td></tr> </table> <p>Years of service at this school:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">0 - 3 years</td><td style="width: 80%;">18.2%</td></tr> <tr><td>4 - 7 years</td><td>71.6%</td></tr> <tr><td>8 - 12 years</td><td>3.4%</td></tr> <tr><td>13+ years</td><td>6.8%</td></tr> </table>	0 - 3	5.7%	4 - 7	17.0%	8 - 13	37.5%	14 - 19	21.6%	20+	18.2%	0 - 3 years	18.2%	4 - 7 years	71.6%	8 - 12 years	3.4%	13+ years	6.8%
K	-	6	-																																												
1	13.3%	7	-																																												
2	18.9%	8	-																																												
3	14.4%	9	-																																												
4	12.2%	10	-																																												
5	15.6%	11	-																																												
		12	-																																												
0 - 3	5.7%																																														
4 - 7	17.0%																																														
8 - 13	37.5%																																														
14 - 19	21.6%																																														
20+	18.2%																																														
0 - 3 years	18.2%																																														
4 - 7 years	71.6%																																														
8 - 12 years	3.4%																																														
13+ years	6.8%																																														



Percent Overall Frequency:		
Student: 90.72%	Parent: 91.41%	Staff: 94.55%
Overall Frequency: 91.84%		

Note: Professional Learning items only appear on the staff survey

Division of Accountability and Research
March 2010

██████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Domain

████████████████████ Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
C 1.1	Written and Aligned Curriculum Documents	100.0	--	--	100.0
C 1.2	Horizontal and Vertical Alignment	96.8	--	--	96.8
C 1.3	Curriculum Planning Process	97.3	98.1	95.7	96.7
C 2.1 / C 2.2	School-wide Curriculum Collaboration / Systematic and Consistent Approach to Collaborative Planning	92.8	98.4	87.8	89.2
C 2.2 / C 3.2	Systematic and Consistent Approach to Collaborative Planning / Curriculum Monitoring System	78.9	--	--	78.9
C 3.1	Monitor and Evaluate Curriculum Implementation	96.9	--	--	96.9
C 3.2	Curriculum Monitoring System	92.3	--	--	92.3
A 1.1	Cohesive, Comprehensive System for Assessing Student Progress	94.5	--	--	94.5
A 1.2	Teacher Articulation of Standards and Assessments	100.0	--	--	100.0
A 1.3	Teacher Collaboration Regarding Desired Results and Assessments	85.2	--	--	85.2
A 2.1	Diagnostic Assessment	91.4	89.5	--	99.0

██████████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Domain

██████████ Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
A 2.2	Formative Assessment	89.9	88.1	92.9	99.0
A 2.3	Summative Assessment	94.5	94.5	--	94.6
A 2.4	Balanced Assessment	89.3	87.4	--	96.7
A 3.1	Comprehensive Feedback-Adjustment Process	100.0	--	--	100.0
I 1.1	Shared Framework for Instruction	99.0	--	--	99.0
I 1.2	Consensus-Driven Framework for Instruction	93.5	--	--	93.5
I 1.3	Learning Goals Aligned with GPS	97.0	96.7	94.2	99.5
I 2.1	Research-Based Learning Strategies and Processes	96.5	96.2	95.6	100.0
I 2.2	Higher-Order Thinking Skills, Processes, and Habits	95.7	--	93.5	99.0
I 2.3	Differentiated Instruction	95.4	--	93.5	100.0
I 2.5	Flexible Grouping of Students	99.0	--	--	99.0

██████████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Domain

██████████ Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
I 2.6	Timely, Systematic, Data-Driven Interventions	86.9	83.2	--	100.0
I 2.7	Use of Technology	84.6	79.3	92.6	93.8
I 3.1	High and Clear Expectations	96.9	98.7	89.8	100.0
I 3.2	Clear, Challenging, Aligned Learning Goals	97.6	99.1	93.1	98.9
I 3.3	Students' Personal Efficacy and Responsibility	92.1	--	--	92.1
PO 1.1	Written School Vision and Mission Reflective of System Vision and Mission	86.1	--	76.9	98.9
PO 2.1	Process for Continuous Improvement	94.1	--	--	94.1
PO 2.3	School Improvement Plan Implementation Monitored	97.8	--	--	97.8
PO 3.1	Collaborative Planning for Fiscal Management and Resource Distribution	96.6	97.3	94.3	100.0
PO 3.2	Effective Selection and Use of Resources	88.4	85.6	--	98.9
PO 4.1	Rules, Policies, and Procedures Articulated	96.0	95.2	96.9	100.0

██████████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Domain

Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
PO 4.2	Instructional Time Maximized	91.5	86.7	95.9	96.9
PO 4.3	Physical Plant Maintained and Up-to-Date	92.4	88.6	99.3	96.9
SFC 1.1	Communication Between School and Parents and Community	92.1	89.1	92.5	100.0
SFC 1.2	School Promotes Parenting Skills	70.6	--	--	70.6
SFC 1.4	Parents and Community Members Feel Welcomed in the School	89.4	89.0	90.1	91.4
SFC 2.1	Organizational Structures and Processes Encourage Student, Family, Community Involvement	81.8	76.8	83.4	93.3
SFC 3.1 / 3.2	Seamless Connection Between School and Community Agencies / Cross-Institutional Partnerships	91.7	--	--	91.7
PL 1.1 / 1.5	Learning Teams / Job-Embedded Learning and Collaboration	94.5	--	--	94.5
PL 1.2 / 2.2 / 2.5	Learning Community / Evaluating Impact of Professional Learning / Alignment of Professional Learning with Expected Outcomes	95.7	--	--	95.7
PL 1.3	Instructional Leadership Development and Service	88.5	--	--	88.5
PL 1.4 / 2.1	School Culture for Team Learning and Continuous Improvement / Collaborative Analysis of Data	97.7	--	--	97.7

██████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Domain

██████ Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
PL 1.6	Resources Support Job-Embedded Professional Learning	99.0	--	--	99.0
PL 2.3	Interpreting and Using Research Results	77.0	--	--	77.0
PL 2.4	Long-Term, In-Depth Professional Learning	91.3	--	--	91.3
PL 2.7	Knowledge about Effective Group Processes	97.9	--	--	97.9
PL 3.1	Classroom Practices Reflect an Emotionally and Physically Safe Learning Environment	96.8	--	--	96.8
PL 3.2	Deep Understanding of Subject Matter and Instructional Strategies	92.5	--	--	92.5
PL 3.3	Sustained Development of Deep Understanding of Content and Strategies	96.7	--	--	96.7
PL 3.4	Partnerships to Support Student Learning	70.5	--	--	70.5
L 1.1	School Leadership Understanding of Curriculum, Assessment, and Instruction	97.1	--	95.8	98.9
L 1.2 / 1.3	School Leadership Demonstrates the Role of Lead Learners / Impact of School Leadership as Lead Learners	96.4	96.1	95.3	97.7
L 1.4	School Leadership Coaches, Supervises, and Monitors Curriculum, Assessment, and Instruction	95.3	--	--	95.3

██████████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Domain

██████████ Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
L 2.1	Development and Implementation of Policies, Practices, and Procedures	89.4	88.1	89.6	99.0
L 2.2	Availability and Distribution of Instructional Resources	95.6	--	--	95.6
L 2.3	Visibility of School Leaders	84.4	83.1	83.5	91.8
L 3.1	Distributed Leadership and Governance	86.5	--	85.8	88.8
L 3.2	Development and Use of Staff Leadership Skills	89.0	--	--	89.0
L 3.3	Use of Central Office, Regional, and State Resources	79.0	--	--	79.0
L 4.1	School Leadership Team Operational and Representative	88.5	--	--	88.5
L 4.2	Protocols for School Leadership Team Operation	97.5	--	--	97.5
L 4.3	School Leadership Team Data-Driven	94.6	--	--	94.6
SC 1.1	School Culture Supports Academic Achievement of Learners	95.7	96.1	93.3	97.8
SC 1.2 / 1.3	School Culture Supports Social Growth and Development of Learners / School Culture Supports Emotional Growth and Development of Learners	96.8	--	--	96.8

██████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Domain

██████ Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
SC 2.1	Rules, Practices, and Procedures Support Positive Relationships and Interactions	94.2	94.8	91.2	95.9
SC 2.2	School Celebrates and Acknowledges Achievements and Accomplishments	70.0	60.3	80.5	90.7
SC 2.4	School Reinforces Self-Governance and Self-Improvement of Students and Staff	87.8	88.2	86.5	87.8

██████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Priority Ranking

██████ Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
C 1.1	Written and Aligned Curriculum Documents	100.0	--	--	100.0
A 1.2	Teacher Articulation of Standards and Assessments	100.0	--	--	100.0
A 3.1	Comprehensive Feedback-Adjustment Process	100.0	--	--	100.0
I 2.5	Flexible Grouping of Students	99.0	--	--	99.0
I 1.1	Shared Framework for Instruction	99.0	--	--	99.0
PL 1.6	Resources Support Job-Embedded Professional Learning	99.0	--	--	99.0
PL 2.7	Knowledge about Effective Group Processes	97.9	--	--	97.9
PO 2.3	School Improvement Plan Implementation Monitored	97.8	--	--	97.8
PL 1.4 / 2.1	School Culture for Team Learning and Continuous Improvement / Collaborative Analysis of Data	97.7	--	--	97.7
I 3.2	Clear, Challenging, Aligned Learning Goals	97.6	99.1	93.1	98.9
L 4.2	Protocols for School Leadership Team Operation	97.5	--	--	97.5

██████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Priority Ranking

Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
C 1.3	Curriculum Planning Process	97.3	98.1	95.7	96.7
L 1.1	School Leadership Understanding of Curriculum, Assessment, and Instruction	97.1	--	95.8	98.9
I 1.3	Learning Goals Aligned with GPS	97.0	96.7	94.2	99.5
C 3.1	Monitor and Evaluate Curriculum Implementation	96.9	--	--	96.9
I 3.1	High and Clear Expectations	96.9	98.7	89.8	100.0
C 1.2	Horizontal and Vertical Alignment	96.8	--	--	96.8
SC 1.2 / 1.3	School Culture Supports Social Growth and Development of Learners / School Culture Supports Emotional Growth and Development of Learners	96.8	--	--	96.8
PL 3.1	Classroom Practices Reflect an Emotionally and Physically Safe Learning Environment	96.8	--	--	96.8
PL 3.3	Sustained Development of Deep Understanding of Content and Strategies	96.7	--	--	96.7
PO 3.1	Collaborative Planning for Fiscal Management and Resource Distribution	96.6	97.3	94.3	100.0
I 2.1	Research-Based Learning Strategies and Processes	96.5	96.2	95.6	100.0

██████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Priority Ranking

Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
L 1.2 / 1.3	School Leadership Demonstrates the Role of Lead Learners / Impact of School Leadership as Lead Learners	96.4	96.1	95.3	97.7
PO 4.1	Rules, Policies, and Procedures Articulated	96.0	95.2	96.9	100.0
I 2.2	Higher-Order Thinking Skills, Processes, and Habits	95.7	--	93.5	99.0
SC 1.1	School Culture Supports Academic Achievement of Learners	95.7	96.1	93.3	97.8
PL 1.2 / 2.2 / 2.5	Learning Community / Evaluating Impact of Professional Learning / Alignment of Professional Learning with Expected Outcomes	95.7	--	--	95.7
L 2.2	Availability and Distribution of Instructional Resources	95.6	--	--	95.6
I 2.3	Differentiated Instruction	95.4	--	93.5	100.0
L 1.4	School Leadership Coaches, Supervises, and Monitors Curriculum, Assessment, and Instruction	95.3	--	--	95.3
L 4.3	School Leadership Team Data-Driven	94.6	--	--	94.6
A 2.3	Summative Assessment	94.5	94.5	--	94.6
A 1.1	Cohesive, Comprehensive System for Assessing Student Progress	94.5	--	--	94.5

██████████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Priority Ranking

Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
PL 1.1 / 1.5	Learning Teams / Job-Embedded Learning and Collaboration	94.5	--	--	94.5
SC 2.1	Rules, Practices, and Procedures Support Positive Relationships and Interactions	94.2	94.8	91.2	95.9
PO 2.1	Process for Continuous Improvement	94.1	--	--	94.1
I 1.2	Consensus-Driven Framework for Instruction	93.5	--	--	93.5
C 2.1 / C 2.2	School-wide Curriculum Collaboration / Systematic and Consistent Approach to Collaborative Planning	92.8	98.4	87.8	89.2
PL 3.2	Deep Understanding of Subject Matter and Instructional Strategies	92.5	--	--	92.5
PO 4.3	Physical Plant Maintained and Up-to-Date	92.4	88.6	99.3	96.9
C 3.2	Curriculum Monitoring System	92.3	--	--	92.3
I 3.3	Students' Personal Efficacy and Responsibility	92.1	--	--	92.1
SFC 1.1	Communication Between School and Parents and Community	92.1	89.1	92.5	100.0
SFC 3.1 / 3.2	Seamless Connection Between School and Community Agencies / Cross-Institutional Partnerships	91.7	--	--	91.7

██████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Priority Ranking

Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
PO 4.2	Instructional Time Maximized	91.5	86.7	95.9	96.9
A 2.1	Diagnostic Assessment	91.4	89.5	--	99.0
PL 2.4	Long-Term, In-Depth Professional Learning	91.3	--	--	91.3
A 2.2	Formative Assessment	89.9	88.1	92.9	99.0
L 2.1	Development and Implementation of Policies, Practices, and Procedures	89.4	88.1	89.6	99.0
SFC 1.4	Parents and Community Members Feel Welcomed in the School	89.4	89.0	90.1	91.4
A 2.4	Balanced Assessment	89.3	87.4	--	96.7
L 3.2	Development and Use of Staff Leadership Skills	89.0	--	--	89.0
L 4.1	School Leadership Team Operational and Representative	88.5	--	--	88.5
PL 1.3	Instructional Leadership Development and Service	88.5	--	--	88.5
PO 3.2	Effective Selection and Use of Resources	88.4	85.6	--	98.9

██████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Priority Ranking

Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
SC 2.4	School Reinforces Self-Governance and Self-Improvement of Students and Staff	87.8	88.2	86.5	87.8
I 2.6	Timely, Systematic, Data-Driven Interventions	86.9	83.2	--	100.0
L 3.1	Distributed Leadership and Governance	86.5	--	85.8	88.8
PO 1.1	Written School Vision and Mission Reflective of System Vision and Mission	86.1	--	76.9	98.9
A 1.3	Teacher Collaboration Regarding Desired Results and Assessments	85.2	--	--	85.2
I 2.7	Use of Technology	84.6	79.3	92.6	93.8
L 2.3	Visibility of School Leaders	84.4	83.1	83.5	91.8
SFC 2.1	Organizational Structures and Processes Encourage Student, Family, Community Involvement	81.8	76.8	83.4	93.3
L 3.3	Use of Central Office, Regional, and State Resources	79.0	--	--	79.0
C 2.2 / C 3.2	Systematic and Consistent Approach to Collaborative Planning / Curriculum Monitoring System	78.9	--	--	78.9
PL 2.3	Interpreting and Using Research Results	77.0	--	--	77.0

██████ County School District
 2010 School Improvement Opinion Survey
 GSS Standards Report
 Organized by Priority Ranking

Elementary School					
GSS	Standard Synopsis	Overall Frequency	Respondent Group Frequencies		
			Students	Parents	Staff
SFC 1.2	School Promotes Parenting Skills	70.6	--	--	70.6
PL 3.4	Partnerships to Support Student Learning	70.5	--	--	70.5
SC 2.2	School Celebrates and Acknowledges Achievements and Accomplishments	70.0	60.3	80.5	90.7

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Curriculum

Overall Domain Frequency: 94.31

GSS: C 1.1 Written and Aligned Curriculum Documents	Staff: Our written curriculum documents are aligned with GPS/QCC and are used to guide instruction. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		86	94.5
Often:	*		*		5	5.5
Infrequently:	*		*		0	0.0
Never:	*		*		0	0.0
No Basis to Judge:	*		*		2	-
Overall Standard Frequency:	100.0					

GSS: C 1.2 Horizontal and Vertical Alignment	Staff: Our curriculum has been aligned horizontally and vertically in order to support students' mastery of the GPS/QCC standards. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		65	70.7
Often:	*		*		24	26.1
Infrequently:	*		*		3	3.3
Never:	*		*		0	0.0
No Basis to Judge:	*		*		2	-
Overall Standard Frequency:	96.8					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Curriculum

Overall Domain Frequency: 94.31

GSS: C 1.3 Curriculum Planning Process	Staff: Our curriculum maps and units are designed to ensure all students participate in a curriculum that requires depth of understanding and rigor.					
	Parent: The curriculum prepares my student for the next grade level, educational experience, or the work force.					
Student: I have a lot of opportunities to learn new things at my school.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	269	72.9	93	67.4	55	59.1
Often:	93	25.2	39	28.3	35	37.6
Infrequently:	6	1.6	4	2.9	3	3.2
Never:	1	0.3	2	1.4	0	0.0
No Basis to Judge:	9	-	1	-	4	-
Overall Standard Frequency:	97.3					

GSS: C 2.1 / C 2.2 School-wide Curriculum Collaboration / Systematic and Consistent Approach to Collaborative Planning	Staff: We meet to collaborate on the design and implementation of the curriculum.					
	Staff: Our teachers have a shared understanding of what students are expected to know, do, and understand at all grade levels and in all subject areas.					
Parent: I understand what my student is expected to know, do and understand in all subject areas.						
Student: I understand what I am expected to know, do and understand in all subject areas.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	254	67.7	142	50.9	114	62.0
Often:	115	30.7	103	36.9	50	27.2
Infrequently:	6	1.6	30	10.8	20	10.9
Never:	0	0.0	4	1.4	0	0.0
No Basis to Judge:	4	-	1	-	6	-
Overall Standard Frequency:	92.8					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Curriculum

Overall Domain Frequency: 94.31

GSS: C 2.2 / C 3.2 Systematic and Consistent Approach to Collaborative Planning / Curriculum Monitoring System	Staff: Our teachers analyze student work collaboratively to build consensus for a common understanding of proficiency and rigor. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		38	42.2
Often:	*		*		33	36.7
Infrequently:	*		*		19	21.1
Never:	*		*		0	0.0
No Basis to Judge:	*		*		1	-
Overall Standard Frequency:	78.9					

GSS: C 3.1 Monitor and Evaluate Curriculum Implementation	Staff: Administrators and teacher leaders monitor and evaluate implementation of the curriculum through a consistent and systematic school-wide process. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		79	81.4
Often:	*		*		15	15.5
Infrequently:	*		*		3	3.1
Never:	*		*		0	0.0
No Basis to Judge:	*		*		2	-
Overall Standard Frequency:	96.9					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Curriculum

Overall Domain Frequency: 94.31

GSS: C 3.2 Curriculum Monitoring System	Staff: Performance data and the review of student work are used to revise curriculum implementation and to align resources. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		58	63.7
Often:	*		*		26	28.6
Infrequently:	*		*		7	7.7
Never:	*		*		0	0.0
No Basis to Judge:	*		*		5	-
Overall Standard Frequency:	92.3					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Assessment

Overall Domain Frequency: 92.03

GSS: A 1.1 Cohesive, Comprehensive System for Assessing Student Progress	Staff: We use a comprehensive system for assessing student progress toward meeting the GPS/QCC.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		62	68.9
Often:	*		*		23	25.6
Infrequently:	*		*		5	5.6
Never:	*		*		0	0.0
No Basis to Judge:	*		*		3	-
Overall Standard Frequency:		94.5				

GSS: A 1.2 Teacher Articulation of Standards and Assessments	Staff: Based on learning gaps and problems identified through assessment data, instruction is adjusted to improve overall and individual student achievement.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		69	71.9
Often:	*		*		27	28.1
Infrequently:	*		*		0	0.0
Never:	*		*		0	0.0
No Basis to Judge:	*		*		3	-
Overall Standard Frequency:		100.0				

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Assessment

Overall Domain Frequency: 92.03

GSS: A 1.3 Teacher Collaboration Regarding Desired Results and Assessments	Staff: Teachers collaborate to design assessments aligned to the GPS/QCC.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		44	50.0
Often:	*		*		31	35.2
Infrequently:	*		*		13	14.8
Never:	*		*		0	0.0
No Basis to Judge:	*		*		3	-
Overall Standard Frequency:	85.2					

GSS: A 2.1 Diagnostic Assessment	Staff: Diagnostic assessments are used to adjust instruction to accommodate students' readiness levels.					
	Parent: There is no associated item on the parent survey.					
Student: If I have trouble with my work, my teacher tries to find out why.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	207	56.3	*		59	61.5
Often:	122	33.2	*		36	37.5
Infrequently:	29	7.9	*		1	1.0
Never:	10	2.7	*		0	0.0
No Basis to Judge:	14	-	*		3	-
Overall Standard Frequency:	91.4					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Assessment

Overall Domain Frequency: 92.03

GSS: A 2.2 Formative Assessment	<p>Staff: Teachers use a variety of formative assessments to monitor student progress and adjust instruction.</p> <p>Parent: My student has the opportunity to demonstrate what he/she has learned in a variety of ways (e.g. projects, reports, writing assignments, tests).</p> <p>Student: My teacher changes the way he/she teaches if he/she sees that students are having problems with the lesson.</p> <p>Student: I have the opportunity to demonstrate what I have learned in a variety of ways (e.g. projects, reports, writing assignments, tests).</p>					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	358	50.1	91	65.0	78	83.9
Often:	272	38.0	39	27.9	14	15.1
Infrequently:	75	10.5	10	7.1	1	1.1
Never:	10	1.4	0	0.0	0	0.0
No Basis to Judge:	45	-	0	-	0	-
Overall Standard Frequency:	89.9					

GSS: A 2.3 Summative Assessment	<p>Staff: Teachers use a variety of summative assessment tasks to evaluate student achievement of GPS/QCC.</p> <p>Staff: Collaboration on data analysis guides and informs grade-level and school-wide decision making.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: I am tested on what is taught in class.</p> <p>Student: My teacher uses many different ways to see if I am learning the material.</p>					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	509	68.2	*		121	65.8
Often:	196	26.3	*		53	28.8
Infrequently:	35	4.7	*		9	4.9
Never:	6	0.8	*		1	0.5
No Basis to Judge:	12	-	*		7	-
Overall Standard Frequency:	94.5					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Assessment

Overall Domain Frequency: 92.03

GSS: A 2.4 Balanced Assessment	Staff: Our students' ability to self-monitor and self-evaluate is enhanced through the use of variety of assessments. Parent: There is no associated item on the parent survey. Student: I am able to talk with my teacher on a regular basis about my progress.					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	167	46.8	*		47	50.5
Often:	145	40.6	*		43	46.2
Infrequently:	34	9.5	*		3	3.2
Never:	11	3.1	*		0	0.0
No Basis to Judge:	20	-	*		4	-
Overall Standard Frequency:	89.3					

GSS: A 3.1 Comprehensive Feedback Adjustment Process	Staff: Assessment data are used to plan and adjust instruction for each student, subgroup of students, and the school as a whole. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	*		*		70	72.2
Often:	*		*		27	27.8
Infrequently:	*		*		0	0.0
Never:	*		*		0	0.0
No Basis to Judge:	*		*		2	-
Overall Standard Frequency:	100.0					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Assessment

Overall Domain Frequency: 92.03

GSS: (No Associated Standard)	Staff: There is no associated item on the staff survey.					
	Parent: My student receives regular feedback on his/her work.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		101	71.6	*	
Often:	*		32	22.7	*	
Infrequently:	*		8	5.7	*	
Never:	*		0	0.0	*	
No Basis to Judge:	*		0	-	*	
Overall Standard Frequency:	94.3					

GSS: (No Associated Standard)	Staff: There is no associated item on the staff survey.					
	Parent: I receive feedback on my student's progress on a regular basis.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		83	57.6	*	
Often:	*		46	31.9	*	
Infrequently:	*		15	10.4	*	
Never:	*		0	0.0	*	
No Basis to Judge:	*		0	-	*	
Overall Standard Frequency:	89.5					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

County School District
 2010 School Improvement Opinion Survey

 Elementary School

Domain: Assessment

Overall Domain Frequency: 92.03

GSS: (No Associated Standard)	Staff: There is no associated item on the staff survey. Parent: My student's teachers adequately communicate with me about his/her progress. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		102	72.9	*	
Often:	*		28	20.0	*	
Infrequently:	*		8	5.7	*	
Never:	*		2	1.4	*	
No Basis to Judge:	*		0	-	*	
Overall Standard Frequency:	92.9					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Instruction

Overall Domain Frequency: 94.49

GSS: I 1.1 Shared Framework for Instruction	Staff: An organizing framework that aligns curriculum, assessment, and instruction is utilized to plan quality teaching and learning.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		83	85.6
Often:	*		*		13	13.4
Infrequently:	*		*		1	1.0
Never:	*		*		0	0.0
No Basis to Judge:	*		*		2	-
Overall Standard Frequency:	99.0					

GSS: I 1.2 Consensus-Driven Framework for Instruction	Staff: Teachers plan together to design, monitor, and revise instruction.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		49	53.3
Often:	*		*		37	40.2
Infrequently:	*		*		6	6.5
Never:	*		*		0	0.0
No Basis to Judge:	*		*		1	-
Overall Standard Frequency:	93.5					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Instruction

Overall Domain Frequency: 94.49

GSS: I 1.3 Learning Goals Aligned with GPS	Staff: Learning goals are aligned with GPS/QCC.					
	Staff: Learning goals are explicitly communicated to our students.					
Parent: Learning goals are communicated to my student by the teacher.						
Student: I am aware of the curriculum standard that we are working on in class each day.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	254	70.0	95	68.3	174	90.2
Often:	97	26.7	36	25.9	18	9.3
Infrequently:	11	3.0	6	4.3	1	0.5
Never:	1	0.3	2	1.4	0	0.0
No Basis to Judge:	15	-	3	-	5	-
Overall Standard Frequency: 97.0						

GSS: I 2.1 Research-Based Learning Strategies and Processes	Staff: Teachers use a variety of research-based instructional strategies.					
	Parent: Lessons are presented in a variety of ways to support the instructional needs of my student.					
Parent: My student's teachers are enthusiastic about learning.						
Student: My teacher has several different ways to teach things so I can be successful.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	233	63.0	189	69.2	78	84.8
Often:	123	33.2	72	26.4	14	15.2
Infrequently:	13	3.5	10	3.7	0	0.0
Never:	1	0.3	2	0.7	0	0.0
No Basis to Judge:	8	-	11	-	1	-
Overall Standard Frequency: 96.5						

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Instruction

Overall Domain Frequency: 94.49

GSS: 12.2 Higher-Order Thinking Skills, Processes, and Habits	Staff: Teachers emphasize and encourage learners to use higher-order thinking skills and mental habits of mind.					
	Parent: My student's teachers encourage students to use higher order thinking skills and processes.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		96	70.1	66	68.8
Often:	*		32	23.4	29	30.2
Infrequently:	*		8	5.8	1	1.0
Never:	*		1	0.7	0	0.0
No Basis to Judge:	*		2	-	1	-
Overall Standard Frequency: 95.7						

GSS: 12.3 Differentiated Instruction	Staff: Differentiated instruction, adjustment of content, product, process and/or learning environment, is provided to support students according to their instructional needs.					
	Parent: Teachers at this school provide instructional support to help my student be successful.					
Parent: The school provides academic opportunities for special needs students (e.g. learning disabled, physically challenged, gifted and talented students)						
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		168	67.7	68	70.1
Often:	*		64	25.8	29	29.9
Infrequently:	*		14	5.6	0	0.0
Never:	*		2	0.8	0	0.0
No Basis to Judge:	*		32	-	2	-
Overall Standard Frequency: 95.4						

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Instruction

Overall Domain Frequency: 94.49

GSS: 12.5 Flexible Grouping of Students	Staff: We utilize flexible grouping based on ongoing diagnosis and formative assessment to enhance student learning. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		70	74.5
Often:	*		*		23	24.5
Infrequently:	*		*		1	1.1
Never:	*		*		0	0.0
No Basis to Judge:	*		*		2	-
Overall Standard Frequency:	99.0					

GSS: 12.6 Timely, Systematic, Data-Driven Interventions	Staff: Systematic and data-driven interventions are required for our students who need additional assistance to master standards. Parent: There is no associated item on the parent survey. Student: There are opportunities to participate in programs for additional instruction if I need it (e.g. after school programs, etc.)					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	189	57.4	*		69	75.0
Often:	85	25.8	*		23	25.0
Infrequently:	41	12.5	*		0	0.0
Never:	14	4.3	*		0	0.0
No Basis to Judge:	50	-	*		2	-
Overall Standard Frequency:	86.9					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Instruction

Overall Domain Frequency: 94.49

GSS: I 2.7 Use of Technology	Staff: Technology is effectively utilized to maximize student learning. Parent: My student has adequate opportunities to use technology in school. Student: I am able to use technology at school as a tool for learning.					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	158	42.5	84	62.2	35	36.5
Often:	137	36.8	41	30.4	55	57.3
Infrequently:	65	17.5	8	5.9	6	6.3
Never:	12	3.2	2	1.5	0	0.0
No Basis to Judge:	8	-	10	-	1	-
Overall Standard Frequency:	84.6					

GSS: I 3.1 High and Clear Expectations	Staff: Our students are engaged in work that is authentic, standards-driven and requires higher-order reasoning. Parent: My student has homework that supports classroom instruction. Student: My teacher assigns homework so that I can practice what I learned in class.					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	297	78.8	92	67.2	74	78.7
Often:	75	19.9	31	22.6	20	21.3
Infrequently:	5	1.3	9	6.6	0	0.0
Never:	0	0.0	5	3.6	0	0.0
No Basis to Judge:	5	-	3	-	1	-
Overall Standard Frequency:	96.9					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Instruction

Overall Domain Frequency: 94.49

GSS: I 3.2 Clear, Challenging, Aligned Learning Goals	Staff: Teachers and students work collaboratively to establish high expectations and challenging learning goals.					
	Parent: Teachers hold high expectations for all students. Parent: The level of instruction is appropriate for my student. Student: My teacher believes I can learn. Student: My teacher expects me to do my best.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	665	88.7	185	67.8	59	64.8
Often:	78	10.4	69	25.3	31	34.1
Infrequently:	7	0.9	17	6.2	1	1.1
Never:	0	0.0	2	0.7	0	0.0
No Basis to Judge:	9	-	7	-	1	-
Overall Standard Frequency:	97.6					

GSS: I 3.3 Students' Personal Efficacy and Responsibility	Staff: Students identify and apply evaluation criteria and monitor achievement of those criteria utilizing such tools as benchmark, work, rubrics, anchor papers, scoring guides, and evaluation checklists.					
	Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		46	52.3
Often:	*		*		35	39.8
Infrequently:	*		*		6	6.8
Never:	*		*		1	1.1
No Basis to Judge:	*		*		3	-
Overall Standard Frequency:	92.1					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Instruction

Overall Domain Frequency: 94.49

GSS: (No Associated Standard)	Staff: There is no associated item on the staff survey.					
	Parent: I am satisfied with the educational program offered to students at this school.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		88	62.9	*	
Often:	*		44	31.4	*	
Infrequently:	*		6	4.3	*	
Never:	*		2	1.4	*	
No Basis to Judge:	*		0	-	*	
Overall Standard Frequency:	94.3					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

[REDACTED] County School District
 2010 School Improvement Opinion Survey

[REDACTED] Elementary School

Domain: Planning and Organization

Overall Domain Frequency: 93.62

GSS: PO 1.1 Written School Vision and Mission Reflective of System Vision and Mission	Staff: Our school's vision and mission guides and informs our continuous school improvement process. Parent: A current school vision and mission is communicated to parents. Student: There is no associated item on the student survey.					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	*		60	44.8	79	81.4
Often:	*		43	32.1	17	17.5
Infrequently:	*		21	15.7	1	1.0
Never:	*		10	7.5	0	0.0
No Basis to Judge:	*		5	-	0	-
Overall Standard Frequency:	86.1					

GSS: PO 2.1 Process for Continuous Improvement	Staff: Our school improvement plan was created with staff input. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	*		*		64	76.2
Often:	*		*		15	17.9
Infrequently:	*		*		4	4.8
Never:	*		*		1	1.2
No Basis to Judge:	*		*		7	-
Overall Standard Frequency:	94.1					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Planning and Organization

Overall Domain Frequency: 93.62

GSS: PO 2.3 School Improvement Plan Implementation Monitored	<p>Staff: Our administrators and the school leadership team monitor the implementation of the school improvement plan and its impact upon student achievement.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		65	72.2
Often:	*		*		23	25.6
Infrequently:	*		*		1	1.1
Never:	*		*		1	1.1
No Basis to Judge:	*		*		7	-
Overall Standard Frequency:	97.8					

GSS: PO 3.1 Collaborative Planning for Fiscal Management and Resource Distribution	<p>Staff: Our school goals are aligned with district goals.</p> <p>Parent: My student has sufficient and appropriate resources to support instruction (e.g. books, computers, maps, etc.).</p> <p>Parent: Decisions are made mostly by considering what is best for students.</p> <p>Student: I have enough resources to support my work (books, computers, maps, etc.)</p>					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	264	71.4	166	62.9	84	92.3
Often:	96	25.9	83	31.4	7	7.7
Infrequently:	9	2.4	14	5.3	0	0.0
Never:	1	0.3	1	0.4	0	0.0
No Basis to Judge:	10	-	17	-	1	-
Overall Standard Frequency:	96.6					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Planning and Organization

Overall Domain Frequency: 93.62

GSS: PO 3.2 Effective Selection and Use of Resources	Staff: Human, technological, and material resources are effectively selected and used to ensure the academic success of all learners.					
	Parent: There is no associated item on the parent survey.					
Student: Media Center resources such as books, magazines, and computer programs are available to me during the school day.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	181	49.2	*		56	57.7
Often:	134	36.4	*		40	41.2
Infrequently:	46	12.5	*		1	1.0
Never:	7	1.9	*		0	0.0
No Basis to Judge:	12	-	*		1	-
Overall Standard Frequency:	88.4					

GSS: PO 4.1 Rules, Policies, and Procedures Articulated	Staff: A safe learning environment is planned, implemented, and maintained by our school staff and administrators.					
	Parent: A safe learning environment is planned, implemented, and maintained by school staff and administrators.					
Parent: My student feels safe when at school and while participating in school events.						
Parent: Teachers and administrators enforce school rules in a fair and consistent manner.						
Parent: School policies, practices, and behavior reflect high expectations for students.						
Student: School rules are enforced by teachers and administrators.						
Student: We practice safety drills at my school.						
Student: I feel safe when I am at school.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	777	69.6	404	73.9	95	96.9
Often:	286	25.6	126	23.0	3	3.1
Infrequently:	49	4.4	12	2.2	0	0.0
Never:	5	0.4	5	0.9	0	0.0
No Basis to Judge:	24	-	15	-	0	-
Overall Standard Frequency:	96.0					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

[REDACTED] County School District
 2010 School Improvement Opinion Survey

Elementary School

Domain: Planning and Organization

Overall Domain Frequency: 93.62

GSS: PO 4.2 Instructional Time Maximized	Staff: Instructional time is maximized, and no interruptions occur to detract from time on learning. Parent: Students at this school behave so that learning can take place. Parent: Instruction time is a priority at our school. Student: Students at my school behave so learning can take place.						
	Response	STUDENT		PARENT		STAFF	
		N	%	N	%	N	%
	Consistently:	100	27.6	174	64.2	58	59.8
	Often:	214	59.1	86	31.7	36	37.1
Infrequently:	41	11.3	9	3.3	2	2.1	
Never:	7	1.9	2	0.7	1	1.0	
No Basis to Judge:	19	-	13	-	1	-	
Overall Standard Frequency:		91.5					

GSS: PO 4.3 Physical Plant Maintained and Up-to-Date	Staff: Our school facility is adequately maintained, clean, and conducive for teaching and learning. Parent: The school building is clean, attractive, and conducive to learning. Student: Our school is clean.						
	Response	STUDENT		PARENT		STAFF	
		N	%	N	%	N	%
	Consistently:	185	50.3	113	80.7	69	71.1
	Often:	141	38.3	26	18.6	25	25.8
Infrequently:	32	8.7	1	0.7	3	3.1	
Never:	10	2.7	0	0.0	0	0.0	
No Basis to Judge:	11	-	0	-	0	-	
Overall Standard Frequency:		92.4					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Planning and Organization

Overall Domain Frequency: 93.62

GSS: (No Associated Standard)	Staff: There is no associated item on the staff survey.					
	Parent: Attendance is important to my student's learning.					
Student: Attendance is important to my learning.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	238	67.0	116	82.9	0	
Often:	84	23.7	24	17.1	0	
Infrequently:	23	6.5	1	0.7	0	
Never:	10	2.8	0	0.0	0	
No Basis to Judge:	23	-	3	-	0	-
Overall Standard Frequency:	93.1					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Student / Family / Community

Overall Domain Frequency: 87.96

GSS: SFC 1.1 Communication Between School and Parents and Community	<p>Staff: Opportunities for communication exist in both directions between the home and school.</p> <p>Parent: My student's school communicates the importance of daily attendance.</p> <p>Parent: I am satisfied with the level of communication from this school.</p> <p>Parent: Opportunities for communication exist in both directions between the home and school.</p> <p>Parent: This school keeps parents informed about school programs and activities.</p> <p>Parent: I use technology resources such as email and school web pages to stay informed about school events.</p> <p>Student: There are opportunities for communication between home and school.</p>					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	205	57.6	465	66.6	75	80.6
Often:	112	31.5	181	25.9	18	19.4
Infrequently:	34	9.6	36	5.2	0	0.0
Never:	5	1.4	16	2.3	0	0.0
No Basis to Judge:	21	-	3	-	0	-
Overall Standard Frequency:	92.1					

GSS: SFC 1.2 School Promotes Parenting Skills	<p>Staff: Opportunities exist for parents to participate in training and informational sessions to enhance student performance.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	*		*		19	25.3
Often:	*		*		34	45.3
Infrequently:	*		*		18	24.0
Never:	*		*		4	5.3
No Basis to Judge:	*		*		21	-
Overall Standard Frequency:	70.6					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Student / Family / Community

Overall Domain Frequency: 87.96

GSS: SFC 1.4 Parents and Community Members Feel Welcomed in the School	Staff: Parents feel welcome in our school.					
	Parent: I feel welcome in my student's school.					
Student: One of my parents has visited the school at least once this school year.						
Student: My school invites parents to visit.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	510	68.3	99	70.2	54	58.1
Often:	155	20.7	28	19.9	31	33.3
Infrequently:	58	7.8	10	7.1	7	7.5
Never:	24	3.2	4	2.8	1	1.1
No Basis to Judge:	11	-	0	-	2	-
Overall Standard Frequency:		89.4				

GSS: SFC 2.1 Organizational Structures and Processes Encourage Student, Family, Community Involvement	Staff: Opportunities exist for parents and community members to participate in school governance, decision making, and problem solving.					
	Parent: I have opportunities to give input into school decisions.					
Parent: I am encouraged to play a role in helping this school to be a better place.						
Parent: A wide variety of opportunities exist for me to volunteer and assist in the educational program.						
Student: I feel my opinion is valued and that I am part of the decision making process at school.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	140	40.6	210	52.6	46	51.1
Often:	125	36.2	123	30.8	38	42.2
Infrequently:	47	13.6	44	11.0	5	5.6
Never:	33	9.6	22	5.5	1	1.1
No Basis to Judge:	33	-	21	-	7	-
Overall Standard Frequency:		81.8				

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Student / Family / Community

Overall Domain Frequency: 87.96

GSS: SFC 3.1 / 3.2 Seamless Connection Between School and Community Agencies / Cross-Institutional Partnerships	Staff: School and community partnerships exist to provide a network of support for our students. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		45	52.9
Often:	*		*		33	38.8
Infrequently:	*		*		7	8.2
Never:	*		*		0	0.0
No Basis to Judge:	*		*		9	-
Overall Standard Frequency:	91.7					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Professional Learning

Overall Domain Frequency: 91.65

GSS: PL 1.1 / 1.5 Learning Teams / Job-Embedded Learning and Collaboration	<p>Staff: Teachers and administrators participate in job-embedded professional learning and collaboration addressing curriculum, assessment, instruction, and technology.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		61	67.0
Often:	*		*		25	27.5
Infrequently:	*		*		5	5.5
Never:	*		*		0	0.0
No Basis to Judge:	*		*		3	-
Overall Standard Frequency:	94.5					

GSS: PL 1.2 / 2.2 / 2.5 Learning Community / Evaluating Impact of Professional Learning / Alignment of Professional Learning with Expected Outcomes	<p>Staff: The principal and other school leaders set clear expectations and monitor the effectiveness of professional learning on teacher practices and student learning.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		65	69.9
Often:	*		*		24	25.8
Infrequently:	*		*		3	3.2
Never:	*		*		1	1.1
No Basis to Judge:	*		*		0	-
Overall Standard Frequency:	95.7					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included in percentage calculations.

43

Division of Accountability and Research
March 2010

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Professional Learning

Overall Domain Frequency: 91.65

GSS: PL 1.3 Instructional Leadership Development and Service	Staff: Opportunities exist for teachers in our school to participate in instructional leadership development.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		43	49.4
Often:	*		*		34	39.1
Infrequently:	*		*		9	10.3
Never:	*		*		1	1.1
No Basis to Judge:	*		*		9	-
Overall Standard Frequency:		88.5				

GSS: PL 1.4 / 2.1 School Culture for Team Learning and Continuous Improvement / Collaborative Analysis of Data	Staff: The principal and other leaders utilize data to plan for professional learning.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		67	76.1
Often:	*		*		19	21.6
Infrequently:	*		*		2	2.3
Never:	*		*		0	0.0
No Basis to Judge:	*		*		7	-
Overall Standard Frequency:		97.7				

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Professional Learning

Overall Domain Frequency: 91.65

GSS: PL 1.6 Resources Support Job- Embedded Professional Learning	Staff: The professional learning activities at my school are connected to our school improvement goals.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		64	68.1
Often:	*		*		29	30.9
Infrequently:	*		*		1	1.1
Never:	*		*		0	0.0
No Basis to Judge:	*		*		1	-
Overall Standard Frequency:		99.0				

GSS: PL 2.3 Interpreting and Using Research Results	Staff: Teams meet to review and study current research to make informed instructional decisions.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		41	45.1
Often:	*		*		29	31.9
Infrequently:	*		*		20	22.0
Never:	*		*		1	1.1
No Basis to Judge:	*		*		5	-
Overall Standard Frequency:		77.0				

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Professional Learning

Overall Domain Frequency: 91.65

GSS: PL 2.4 Long-Term, In-Depth Professional Learning	Staff: The staff participates in long-term in-depth professional learning which is aligned with our school improvement goals.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		45	49.5
Often:	*		*		38	41.8
Infrequently:	*		*		8	8.8
Never:	*		*		0	0.0
No Basis to Judge:	*		*		1	-
Overall Standard Frequency:	91.3					

GSS: PL 2.7 Knowledge about Effective Group Processes	Staff: Teachers and administrators have the knowledge and skills necessary to collaborate.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		69	73.4
Often:	*		*		23	24.5
Infrequently:	*		*		2	2.1
Never:	*		*		0	0.0
No Basis to Judge:	*		*		2	-
Overall Standard Frequency:	97.9					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Professional Learning

Overall Domain Frequency: 91.65

GSS: PL 3.1 Classroom Practices Reflect an Emotionally and Physically Safe Learning Environment	<p>Staff: Our professional learning prepares us in practices that convey respect for diverse cultural backgrounds and high expectations for all students.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		55	59.8
Often:	*		*		34	37.0
Infrequently:	*		*		3	3.3
Never:	*		*		0	0.0
No Basis to Judge:	*		*		1	-
Overall Standard Frequency:	96.8					

GSS: PL 3.2 Deep Understanding of Subject Matter and Instructional Strategies	<p>Staff: Our professional learning prepares teachers to adjust instruction and assessment to meet the needs of diverse learners.</p> <p>Staff: Our teachers participate in professional learning to deepen their content knowledge.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		112	59.9
Often:	*		*		61	32.6
Infrequently:	*		*		14	7.5
Never:	*		*		0	0.0
No Basis to Judge:	*		*		2	-
Overall Standard Frequency:	92.5					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Professional Learning

Overall Domain Frequency: 91.65

<p>GSS: PL 3.3 Sustained Development of Deep Understanding of Content and Strategies</p>	<p>Staff: Our professional learning designs are purposeful and are aligned with specific individual group needs.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	*		*		54	60.7
Often:	*		*		32	36.0
Infrequently:	*		*		3	3.4
Never:	*		*		0	0.0
No Basis to Judge:	*		*		4	-
Overall Standard Frequency:	96.7					

<p>GSS: PL 3.4 Partnerships to Support Student Learning</p>	<p>Staff: Professional learning in our school provides opportunities for teachers and administrators to learn how to involve families in their children's education.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	*		*		27	30.7
Often:	*		*		35	39.8
Infrequently:	*		*		21	23.9
Never:	*		*		5	5.7
No Basis to Judge:	*		*		5	-
Overall Standard Frequency:	70.5					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Leadership

Overall Domain Frequency: 90.27

GSS: L 1.1 School Leadership Understanding of Curriculum, Assessment, and Instruction	Staff: Our principal and other school administrators exhibit a deep understanding of curriculum, assessment, and instruction.					
	Parent: The principal and school leaders are knowledgeable about the curriculum, instruction, and assessment.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		87	74.4	75	80.6
Often:	*		25	21.4	17	18.3
Infrequently:	*		4	3.4	1	1.1
Never:	*		1	0.9	0	0.0
No Basis to Judge:	*		21	-	1	-
Overall Standard Frequency:	97.1					

GSS: L 1.2 / 1.3 School Leadership Demonstrates the Role of Lead Learners / Impact of School Leadership as Lead Learners	Staff: Our principal and other school administrators are actively involved in the learning community, including serving as active members on study teams and promoting meaningful professional learning.					
	Staff: Our principal and other school administrators keep the school focused on student learning and promote sustained and continuous improvement.					
Parent: School administrators make sure learning comes first.						
Student: Our school administrators have high expectations for students.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	256	71.1	83	64.3	127	73.0
Often:	90	25.0	40	31.0	43	24.7
Infrequently:	10	2.8	4	3.1	2	1.1
Never:	4	1.1	2	1.6	2	1.1
No Basis to Judge:	18	-	10	-	11	-
Overall Standard Frequency:	96.4					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Leadership

Overall Domain Frequency: 90.27

GSS: L 1.4 School Leadership Coaches, Supervises, and Monitors Curriculum, Assessment, and Instruction	Staff: Our principal and other school administrators utilize multiple types of data to drive and monitor school-wide instructional decisions.					
	Parent: There is no associated item on the parent survey.					
Student: There is no associated item on the student survey.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		63	74.1
Often:	*		*		18	21.2
Infrequently:	*		*		4	4.7
Never:	*		*		0	0.0
No Basis to Judge:	*		*		8	-
Overall Standard Frequency:	95.3					

GSS: L 2.1 Development and Implementation of Policies, Practices, and Procedures	Staff: Our principal and other school administrators implement policies, practices, and procedures that ensure a safe and orderly learning environment.					
	Parent: The principal and school leadership ensure that a school wide discipline plan is implemented consistently so that discipline issues do not detract from instructional time.					
Student: School leaders keep the school safe and orderly.						
Student: School administrators let students know what is expected of them.						
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	441	60.9	63	54.8	87	88.8
Often:	197	27.2	40	34.8	10	10.2
Infrequently:	55	7.6	8	7.0	1	1.0
Never:	31	4.3	4	3.5	0	0.0
No Basis to Judge:	30	-	24	-	0	-
Overall Standard Frequency:	89.4					

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School
Domain: Leadership
Overall Domain Frequency: 90.27

GSS: L 2.2 Availability and Distribution of Instructional Resources	<p>Staff: Our principal and other school administrators maximize the availability and distribution of instructional resources focused on school learning goals.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>																																																							
Response	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">STUDENT</th> <th colspan="2">PARENT</th> <th colspan="2">STAFF</th> </tr> <tr> <th>N</th> <th>%</th> <th>N</th> <th>%</th> <th>N</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Consistently:</td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">68</td> <td style="text-align: center;">75.6</td> </tr> <tr> <td>Often:</td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">18</td> <td style="text-align: center;">20.0</td> </tr> <tr> <td>Infrequently:</td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">4</td> <td style="text-align: center;">4.4</td> </tr> <tr> <td>Never:</td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.0</td> </tr> <tr> <td>No Basis to Judge:</td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">*</td> <td></td> <td style="text-align: center;">3</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Overall Standard Frequency:</td> <td colspan="6" style="text-align: center;">95.6</td> </tr> </tbody> </table>		STUDENT		PARENT		STAFF		N	%	N	%	N	%	Consistently:	*		*		68	75.6	Often:	*		*		18	20.0	Infrequently:	*		*		4	4.4	Never:	*		*		0	0.0	No Basis to Judge:	*		*		3	-	Overall Standard Frequency:	95.6					
	STUDENT		PARENT		STAFF																																																			
	N	%	N	%	N	%																																																		
Consistently:	*		*		68	75.6																																																		
Often:	*		*		18	20.0																																																		
Infrequently:	*		*		4	4.4																																																		
Never:	*		*		0	0.0																																																		
No Basis to Judge:	*		*		3	-																																																		
Overall Standard Frequency:	95.6																																																							

GSS: L 2.3 Visibility of School Leaders	<p>Staff: Our principal and other school administrators are visible to staff, students, and parents and participate in subject and/or grade level meetings.</p> <p>Parent: The principal and other school administrators are accessible to parents when needed.</p> <p>Parent: The principal and school leadership are consistently visible to staff, students, and parents.</p> <p>Student: The principal and other school administrators are often visible around the school.</p>																																																							
Response	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">STUDENT</th> <th colspan="2">PARENT</th> <th colspan="2">STAFF</th> </tr> <tr> <th>N</th> <th>%</th> <th>N</th> <th>%</th> <th>N</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Consistently:</td> <td style="text-align: center;">153</td> <td style="text-align: center;">42.4</td> <td style="text-align: center;">142</td> <td style="text-align: center;">55.7</td> <td style="text-align: center;">57</td> <td style="text-align: center;">58.8</td> </tr> <tr> <td>Often:</td> <td style="text-align: center;">147</td> <td style="text-align: center;">40.7</td> <td style="text-align: center;">71</td> <td style="text-align: center;">27.8</td> <td style="text-align: center;">32</td> <td style="text-align: center;">33.0</td> </tr> <tr> <td>Infrequently:</td> <td style="text-align: center;">46</td> <td style="text-align: center;">12.7</td> <td style="text-align: center;">28</td> <td style="text-align: center;">11.0</td> <td style="text-align: center;">6</td> <td style="text-align: center;">6.2</td> </tr> <tr> <td>Never:</td> <td style="text-align: center;">15</td> <td style="text-align: center;">4.2</td> <td style="text-align: center;">14</td> <td style="text-align: center;">5.5</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2.1</td> </tr> <tr> <td>No Basis to Judge:</td> <td style="text-align: center;">15</td> <td style="text-align: center;">-</td> <td style="text-align: center;">25</td> <td style="text-align: center;">-</td> <td style="text-align: center;">0</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Overall Standard Frequency:</td> <td colspan="6" style="text-align: center;">84.4</td> </tr> </tbody> </table>		STUDENT		PARENT		STAFF		N	%	N	%	N	%	Consistently:	153	42.4	142	55.7	57	58.8	Often:	147	40.7	71	27.8	32	33.0	Infrequently:	46	12.7	28	11.0	6	6.2	Never:	15	4.2	14	5.5	2	2.1	No Basis to Judge:	15	-	25	-	0	-	Overall Standard Frequency:	84.4					
	STUDENT		PARENT		STAFF																																																			
	N	%	N	%	N	%																																																		
Consistently:	153	42.4	142	55.7	57	58.8																																																		
Often:	147	40.7	71	27.8	32	33.0																																																		
Infrequently:	46	12.7	28	11.0	6	6.2																																																		
Never:	15	4.2	14	5.5	2	2.1																																																		
No Basis to Judge:	15	-	25	-	0	-																																																		
Overall Standard Frequency:	84.4																																																							

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Leadership

Overall Domain Frequency: 90.27

GSS: L 3.1 Distributed Leadership and Governance	<p>Staff: Our principal and other school administrators collaborate with staff members and other stakeholders to elicit input and provide opportunities for shared decision-making and problem-solving.</p> <p>Parent: School leadership has created an environment in which staff, parents, and community are in partnership to promote student achievement.</p> <p>Parent: School leadership is responsive to my questions and concerns</p> <p>Student: There is no associated item on the student survey.</p>					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	*		154	59.5	46	51.7
Often:	*		68	26.3	33	37.1
Infrequently:	*		28	10.8	6	6.7
Never:	*		9	3.5	4	4.5
No Basis to Judge:	*		22	-	6	-
Overall Standard Frequency:		86.5				

GSS: L 3.2 Development and Use of Staff Leadership Skills	<p>Staff: Staff members have opportunities to serve in a variety of leadership roles.</p> <p>Parent: There is no associated item on the parent survey.</p> <p>Student: There is no associated item on the student survey.</p>					
	Response	STUDENT		PARENT		STAFF
	N	%	N	%	N	%
Consistently:	*		*		31	34.1
Often:	*		*		50	54.9
Infrequently:	*		*		7	7.7
Never:	*		*		3	3.3
No Basis to Judge:	*		*		5	-
Overall Standard Frequency:		89.0				

*Item was not surveyed in this respondent group
Note: "No Basis to Judge" responses are not included
in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Leadership

Overall Domain Frequency: 90.27

GSS: L 3.3 Use of Central Office, Regional, and State Resources	Staff: Our school receives help from outside agencies like Metro RESA, colleges, businesses and the Ga. Dept. of Education. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		22	38.6
Often:	*		*		23	40.4
Infrequently:	*		*		11	19.3
Never:	*		*		1	1.8
No Basis to Judge:	*		*		37	-
Overall Standard Frequency:	79.0					

GSS: L 4.1 School Leadership Team Operational and Representative	Staff: Our school has a fully operational Leadership Team that is representative of our entire staff. The team conducts regular, results-driven meetings and exists to address student achievement and overall academic success. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		53	60.9
Often:	*		*		24	27.6
Infrequently:	*		*		7	8.0
Never:	*		*		3	3.4
No Basis to Judge:	*		*		3	-
Overall Standard Frequency:	88.5					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: Leadership

Overall Domain Frequency: 90.27

GSS: L 4.2 Protocols for School Leadership Team Operation	Staff: Our Leadership Team has a system for handling business, making decisions, and solving problems. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		53	64.6
Often:	*		*		27	32.9
Infrequently:	*		*		2	2.4
Never:	*		*		0	0.0
No Basis to Judge:	*		*		10	-
Overall Standard Frequency:	97.5					

GSS: L 4.3 School Leadership Team Data-Driven	Staff: Our Leadership Team uses current data to identify student achievement needs. Staff: Our Leadership Team uses current data to identify school performance needs. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		*		137	74.9
Often:	*		*		36	19.7
Infrequently:	*		*		9	4.9
Never:	*		*		1	0.5
No Basis to Judge:	*		*		5	-
Overall Standard Frequency:	94.6					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

████████ County School District
 2010 School Improvement Opinion Survey

████████ Elementary School

Domain: Leadership

Overall Domain Frequency: 90.27

GSS: (No Associated Standard)	Staff: There is no associated item on the staff survey. Parent: The administration at my student's school is effective. Student: There is no associated item on the student survey.					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	*		71	52.6	*	
Often:	*		45	33.3	*	
Infrequently:	*		15	11.1	*	
Never:	*		4	3.0	*	
No Basis to Judge:	*		6	-	*	
Overall Standard Frequency:	85.9					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: School Culture

Overall Domain Frequency: 89.1

GSS: SC 1.1 School Culture Supports Academic Achievement of Learners	Staff: Our school provides support to promote the academic achievement of all learners. Parent: The overall school culture provides support and practices that provide for the academic achievement of all learners. Student: I know how to ask for help if I don't understand the lesson.																																																						
Response	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center; border-bottom: 1px solid black;">STUDENT</th> <th colspan="2" style="text-align: center; border-bottom: 1px solid black;">PARENT</th> <th colspan="2" style="text-align: center; border-bottom: 1px solid black;">STAFF</th> </tr> <tr> <th style="text-align: center; border-bottom: 1px solid black;">N</th> <th style="text-align: center; border-bottom: 1px solid black;">%</th> <th style="text-align: center; border-bottom: 1px solid black;">N</th> <th style="text-align: center; border-bottom: 1px solid black;">%</th> <th style="text-align: center; border-bottom: 1px solid black;">N</th> <th style="text-align: center; border-bottom: 1px solid black;">%</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Consistently:</td> <td style="text-align: center;">269</td> <td style="text-align: center;">71.2</td> <td style="text-align: center;">89</td> <td style="text-align: center;">65.4</td> <td style="text-align: center;">73</td> <td style="text-align: center;">80.2</td> </tr> <tr> <td style="text-align: right;">Often:</td> <td style="text-align: center;">94</td> <td style="text-align: center;">24.9</td> <td style="text-align: center;">38</td> <td style="text-align: center;">27.9</td> <td style="text-align: center;">16</td> <td style="text-align: center;">17.6</td> </tr> <tr> <td style="text-align: right;">Infrequently:</td> <td style="text-align: center;">13</td> <td style="text-align: center;">3.4</td> <td style="text-align: center;">7</td> <td style="text-align: center;">5.1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2.2</td> </tr> <tr> <td style="text-align: right;">Never:</td> <td style="text-align: center;">2</td> <td style="text-align: center;">0.5</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1.5</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.0</td> </tr> <tr> <td style="text-align: right;">No Basis to Judge:</td> <td style="text-align: center;">4</td> <td style="text-align: center;">-</td> <td style="text-align: center;">5</td> <td style="text-align: center;">-</td> <td style="text-align: center;">0</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: right;">Overall Standard Frequency:</td> <td colspan="5" style="text-align: center;">95.7</td> <td></td> </tr> </tbody> </table>	STUDENT		PARENT		STAFF		N	%	N	%	N	%	Consistently:	269	71.2	89	65.4	73	80.2	Often:	94	24.9	38	27.9	16	17.6	Infrequently:	13	3.4	7	5.1	2	2.2	Never:	2	0.5	2	1.5	0	0.0	No Basis to Judge:	4	-	5	-	0	-	Overall Standard Frequency:	95.7					
STUDENT		PARENT		STAFF																																																			
N	%	N	%	N	%																																																		
Consistently:	269	71.2	89	65.4	73	80.2																																																	
Often:	94	24.9	38	27.9	16	17.6																																																	
Infrequently:	13	3.4	7	5.1	2	2.2																																																	
Never:	2	0.5	2	1.5	0	0.0																																																	
No Basis to Judge:	4	-	5	-	0	-																																																	
Overall Standard Frequency:	95.7																																																						

GSS: SC 1.2 / 1.3 School Culture Supports Social Growth and Development of Learners / School Culture Supports Emotional Growth and Development of Learners	Staff: Our school supports and enhances the social and emotional growth and development of all learners. Parent: There is no associated item on the parent survey. Student: There is no associated item on the student survey.																																																
Response	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center; border-bottom: 1px solid black;">STUDENT</th> <th colspan="2" style="text-align: center; border-bottom: 1px solid black;">PARENT</th> <th colspan="2" style="text-align: center; border-bottom: 1px solid black;">STAFF</th> </tr> <tr> <th style="text-align: center; border-bottom: 1px solid black;">N</th> <th style="text-align: center; border-bottom: 1px solid black;">%</th> <th style="text-align: center; border-bottom: 1px solid black;">N</th> <th style="text-align: center; border-bottom: 1px solid black;">%</th> <th style="text-align: center; border-bottom: 1px solid black;">N</th> <th style="text-align: center; border-bottom: 1px solid black;">%</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Consistently:</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">72</td> <td style="text-align: center;">77.4</td> </tr> <tr> <td style="text-align: right;">Often:</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">18</td> <td style="text-align: center;">19.4</td> </tr> <tr> <td style="text-align: right;">Infrequently:</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3.2</td> </tr> <tr> <td style="text-align: right;">Never:</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.0</td> </tr> <tr> <td style="text-align: right;">No Basis to Judge:</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td style="text-align: center;">0</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: right;">Overall Standard Frequency:</td> <td colspan="5" style="text-align: center;">96.8</td> </tr> </tbody> </table>	STUDENT		PARENT		STAFF		N	%	N	%	N	%	Consistently:	*	*	*	72	77.4	Often:	*	*	*	18	19.4	Infrequently:	*	*	*	3	3.2	Never:	*	*	*	0	0.0	No Basis to Judge:	*	*	*	0	-	Overall Standard Frequency:	96.8				
STUDENT		PARENT		STAFF																																													
N	%	N	%	N	%																																												
Consistently:	*	*	*	72	77.4																																												
Often:	*	*	*	18	19.4																																												
Infrequently:	*	*	*	3	3.2																																												
Never:	*	*	*	0	0.0																																												
No Basis to Judge:	*	*	*	0	-																																												
Overall Standard Frequency:	96.8																																																

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School

Domain: School Culture

Overall Domain Frequency: 89.1

GSS: SC 2.1 Rules, Practices, and Procedures Support Positive Relationships and Interactions	Staff: School policies, practices, and experiences promote respect for individual differences. Parent: The overall school culture supports and enhances the sense of belonging for all students. Parent: At this school, people are treated fairly and with respect. Student: All cultures are respected and valued at my school. Student: Students here get along well with each other. Student: I am expected to respect teachers, administrators, and other students.						
	Response	STUDENT		PARENT		STAFF	
		N	%	N	%	N	%
	Consistently:	733	67.6	168	61.8	71	74.0
	Often:	295	27.2	80	29.4	21	21.9
	Infrequently:	43	4.0	21	7.7	2	2.1
Never:	13	1.2	3	1.1	2	2.1	
No Basis to Judge:	49	-	9	-	0	-	
Overall Standard Frequency:		94.2					

GSS: SC 2.2 School Celebrates and Acknowledges Achievements and Accomplishments	Staff: Our school celebrates the achievement and accomplishments of our students, staff, and school community. Parent: The school ensures that celebrations of achievement occur in the school. Student: The principal and others frequently celebrate student achievement.						
	Response	STUDENT		PARENT		STAFF	
		N	%	N	%	N	%
	Consistently:	101	29.7	50	39.1	47	49.0
	Often:	104	30.6	53	41.4	40	41.7
	Infrequently:	95	27.9	17	13.3	9	9.4
Never:	40	11.8	8	6.3	0	0.0	
No Basis to Judge:	37	-	12	-	1	-	
Overall Standard Frequency:		70.0					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included
 in percentage calculations.

██████████ County School District
 2010 School Improvement Opinion Survey

██████████ Elementary School						
Domain: School Culture						
Overall Domain Frequency: 89.1						
GSS: SC 2.4 School Reinforces Self-Governance and Self-Improvement of Students and Staff	<p>Staff: Our school culture reflects an atmosphere of trust and openness among all stakeholders.</p> <p>Parent: There is at least one adult in the school I can talk to.</p> <p>Parent: I am comfortable talking with administrators at my student's school about concerns.</p> <p>Student: There is an administrator at my school that I can talk with if I have a problem.</p> <p>Student: There is at least one adult in the school I can talk to.</p>					
Response	STUDENT		PARENT		STAFF	
	N	%	N	%	N	%
Consistently:	447	63.9	172	64.4	51	56.7
Often:	170	24.3	59	22.1	28	31.1
Infrequently:	50	7.2	22	8.2	7	7.8
Never:	32	4.6	14	5.2	4	4.4
No Basis to Judge:	61	-	13	-	4	-
Overall Standard Frequency:	87.8					

*Item was not surveyed in this respondent group
 Note: "No Basis to Judge" responses are not included in percentage calculations.

APPENDIX B
MODIFIED INTERVIEW INSTRUMENT FOR TEACHERS AND
ADMINISTRATORS

Teacher Leadership:

1. Are there opportunities for teachers to develop and assume instructional leadership roles? Please describe. L3.2, L4.1 (Georgia Department of Education, 2009)
2. Does the principal seek input into decisions and use the team approach? How is data used in making instructional decisions? L1.1,L1.4, L3.1, L4.2, L4.3
3. Does distributed leadership within the school impact student achievement? How do you know? Explain if this is based on your perceptions, empirical data, or other sources.

Teacher Professional Learning:

1. How are your professional learning needs identified? PL2.1
2. How does the school structure and schedule support and resources for job embedded professional learning? PL1.5
3. Does job-embedded professional learning within the school impact student achievement? How do you know? Explain if this is based on your perceptions, empirical data, or other sources.

Administrator Leadership:

1. Are there opportunities for teachers to develop and assume leadership roles? Please describe. L3.2,L4.1
2. Describe the purpose of the school leadership team. Describe a typical meeting. How does the team receive input from and communicate with the faculty and staff? L4.1, L4.2
3. Does distributed leadership within the school impact student achievement? How do you know? Explain if this is based on your perceptions, empirical data, or other sources.

Administrator Professional Learning:

1. How do you structure, schedule and model support for job-embedded professional learning? PL1.4, PL1.5
2. How is professional learning evaluated in terms of implementation and impact on instruction? Describe any formative or summative measures used to measure impact on learning. How do you monitor professional learning? PL1.6, PL2.2, PL3.3
3. Does job-embedded professional learning within the school impact student achievement? How do you know? Explain if this is based on your perceptions, empirical data, or other sources.

APPENDIX C

UNIVERSITY OF SOUTHERN MISSISSIPPI IRB APPROVAL LETTER


THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

 118 College Drive #5147
 Hattiesburg, MS 39406-0001
 Tel: 601.266.6820
 Fax: 601.266.5509
 www.usm.edu/irb

**HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
 NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
 Projects that exceed this period must submit an application for renewal or continuation.

 PROTOCOL NUMBER: **11012702**

 PROJECT TITLE: **A Critical Analysis of Job-Embedded Professional Learning Within a Distributed Leadership Framework**

 PROPOSED PROJECT DATES: **01/26/2011 to 12/31/2011**

 PROJECT TYPE: **Dissertation**

 PRINCIPAL INVESTIGATORS: **Ashley Jimerson**

 COLLEGE/DIVISION: **College of Education & Psychology**

 DEPARTMENT: **Educational Leadership & School Counseling**

 FUNDING AGENCY: **N/A**

 HSPRC COMMITTEE ACTION: **Expedited Review Approval**

 PERIOD OF APPROVAL: **05/02/2011 to 05/02/2012**

Lawrence A. Hosman
 Lawrence A. Hosman, Ph.D.
 HSPRC Chair

5-5-2011
 Date

APPENDIX D
SUPERINTENDENTS' PERMISSION TO SURVEY LETTER
AND CONSENT FORM

3631 Essex Avenue
Atlanta, GA 30339
January 4, 2011

Superintendent's Name
District's Name
District Address
City, State Zip Code

Dear Superintendent:

I am Ashley Jimerson, a doctoral candidate at The University of Southern Mississippi. I am conducting research on the effects of distributed leadership and job-embedded professional learning on student achievement. I would like your written permission to interview principals and teachers in your district. This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, 601-266-6820.

With your permission, this survey will be distributed to _____ (school names inserted here). I will distribute the survey instrument to building principals and teachers. It is not expected to take longer than 20 minutes to complete. A copy of the survey instrument and instructions are attached for your reference.

If you consent to have the listed elementary schools participate in this research, please sign and date the enclosed consent form and return it in the self-addressed, stamped envelope.

Thank you for your consideration. If you have any questions, you can contact me at ashley.jimerson@cobbk12.org or 404-210-8186.

Sincerely,
Ashley Jimerson
Doctoral Candidate
The University of Southern Mississippi

Consent to Participate in Educational Leadership Interview

As superintendent of _____ District, I give Ashley Jimerson permission to conduct educational research at the following schools:

_____ (schools will be listed here).

This research will be conducted on the effects of distributed leadership and job-embedded professional learning on student achievement. Permission is granted to interview teachers and building principals. I understand participation in this interview is voluntary. All responses will be kept confidential. No individuals will be identified in any of the reports.

Superintendent's Signature

Date

APPENDIX E

PRINCIPALS' SURVEY INSTRUCTIONS

3631 Essex Avenue
Atlanta, GA 30339
January 4, 2011

Principal's Name
School's Name
School Address
City, State Zip Code

Dear Principal:

I am Ashley Jimerson, a doctoral candidate at The University of Southern Mississippi. I am conducting research on the effects of distributed leadership and job-embedded professional learning on student achievement. I would like your written permission to interview 3rd grade mathematics teachers and administrators in your school. This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, 601-266-6820.

With your permission, this interview will be conducted at _____ (school name inserted here) during a pre-determined date and time. It is not expected to take longer than 20 minutes to complete. A copy of the interview questions and instructions are attached for your reference.

If you consent to participate and allow your teachers to participate in this research, please sign and date the enclosed consent form and return it in the self-addressed, stamped envelope.

Thank you for your consideration. If you have any questions, you can contact me at Ashley.jimerson@cobbk12.org or 404-210-8186.

Sincerely,
Ashley Jimerson
Doctoral Candidate
The University of Southern Mississippi

Consent to Participate in Educational Leadership Interview

As principal of _____ School, I give Ashley Jimerson permission to conduct educational research at the following school, _____ (schools will be listed here).

This research will be conducted on the effects of distributed leadership and job-embedded professional learning on student achievement. Permission is granted to interview teachers and administrators. I understand participation in this interview is voluntary. All responses will be kept confidential. No individuals will be identified in any of the reports.

Principal's Signature

Date

REFERENCES

- American Educational Research Association (2005). Teaching teachers: Professional development to improve student achievement. *Research Points*, 3(1), 1-3.
- Baker, K., & Branch, K. (2002). Concepts underlying organization effectiveness: trends in the organization and management science literature. *Managing Science as a Public Good; Overseeing Publicly-Funded Science*, Unpublished manuscript.
- Barnard, C. I. (1938). *The functions of the executive*. Cambridge, MA: Harvard University Press.
- Barry, D. (1991). Managing the bossless team: Lessons in distributed leadership. *Organizational Dynamics*, 20, 31-47.
- Bass, T. (2006). To be or not to be: Influencing educators' decisions to enter the principalship. *AASA Journal of Scholarship and Practice*, 2(4), 19-30.
- Bell, L., Bolan, R., & Cubillo, L. (2003) A systematic review of the impact of school headteachers and principals on student outcomes. *EPPI Center*, Retrieved from http://eppi.ioe.ac.uk/EPPIWeb/home.aspx?page=/reel/review_groups/leadership/review_one.htm
- Brookfield, S. (1986). *Understanding and facilitating adult learning: A comprehensive analysis of principles and effective practices*. San Francisco, CA: Jossey-Bass.
- Brooks, J., & Brooks, M. (1993). *In search of understanding: The case for constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.

- Carson, J., Marrone, J., & Tesluk, P. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, 50(5), 1217-1234.
- Collins, J. (2001). *Good to great*. New York, NY: HarperCollins.
- Council of Chief State School Officers (2010). *State Consortium on Education Leadership*. Retrieved from http://www.ccsso.org/Resources/Programs/State_Consortium_on_Education_Leadership_%28SCEL%29.html
- Covey, S. (1989). *The 7 habits of highly effective people: powerful lessons in personal change*. New York, NY: Fireside.
- Creswell, J. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Croft, A., Cogshall, J., Dolan, M., Killion, J., & Powers, E. (2010). What it is, who is responsible, and how to get it done well. *Job-Embedded Professional Development*. (Issue Brief). Retrieved from http://www.JEPD_issue_brief.pdf
- Darling-Hammond, L. (1993). Reframing the school reform agenda. *Phi Delta Kappan*, 54(10), 754.
- Darling-Hammond, L. (1998). *Investing in quality teaching: state-level strategies*. (Issue Brief). Denver, CO: Education Commission of the States.
- Darling-Hammond, L., & Richardson, N. (2009). Research review/teacher learning: what matters? *How Teachers Learn*, 66(6). Retrieved from <http://www.ascd.org/publications/educational-leadership/feb09/vol66/num05/toc.aspx>
- Day, D., Gronn, P., & Salas, E. (2004). Leadership capacity in teams. *Leadership Quarterly*, 15(6). Retrieved from http://www.sciencedirect.com/science?_

ob=ArticleURL&_udi=B6W5N-4DM4THN-
 2&_user=10&_coverDate=12%2F01%2F2004&_rdoc=1&_fmt=high&_orig=search
 ch&_origin=search&_sort=d&_docanchor=&view=c&_searchStrId=1582423216
 &_rerunOrigin=google&_acct=C000050221&_version=1&_urlVersion=0&_user
 id=10&md5=c2887f959653bcd3167007cca2a78b5c&searchtype=a

- DuFour, R. (1999). Help wanted: Principals who can lead professional learning communities. *NASSP Bulletin*, 8(604), 12.
- DuFour, R. (2004). Leading edge: the best staff development is in the workplace, not in a workshop. *Journal of Staff Development*, 25(2). Retrieved from <http://www.learningforward.org/news/jsd/dufour252.cfm>
- DuFour, R. & Eaker, R. (1998). *Professional learning communities at work*. Bloomington, IN: Solution Tree.
- Education Week. (2004). *Teacher quality*. Retrieved from <http://www.edweek.org/ew/issues/teacher-quality/>
- Ericsson, K. A., (2000). Expert performance and deliberate practice. Retrieved from <http://www.psy.fsu.edu/faculty/ericsson/ericsson.exp.perf.html>
- Eisenhardt, K. & Bourgeois, L. (1998). Politics of strategic decision making in high-velocity environment: Toward a midrange theory. *Academy of Management Journal*, 31(4), 737-770.
- Ensley, M. & Pearce, C. (2000). Vertical and shared leadership in new venture top management teams: Implications for new venture performance. *Presented to the 20th Annual Entrepreneurship Research Conference*, Babson Park, MA.

- Fitzpatrick, K. & Campisi, J. (2009). A multiyear approach to student-driven investigations in exercise physiology. *Advanced Physiology Education*, 4(1), 349–355.
- Flanary, D. (2009). Building leadership capacity. *Principal leadership*, 10(4), 60-62.
- Fosnot, C. (2005). Constructivism revisited: Implications and reflections. *The Constructivist*, 16(1). Retrieved from <http://www.odu.edu/educ/act/journal/vol16no1/fosnot.pdf>
- Fullan, M. (1993). Why teachers must become change agents. *Educational leadership*, 50(6). Retrieved from <http://www.csus.edu/indiv/j/jlinekd/EDTE%202227/Fullen%20change.pdf>
- Fullan, M. (2000). The three stories of educational reform. *Phi Delta Kappan*, (April). Retrieved from http://www.michaelfullan.ca/Articles_02/04_02.pdf
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.
- Fullan, M. (2003). *The moral imperative of school leadership*. Thousand Oaks, CA: Corwin Press.
- Fullan, M. (2005). *Leadership and sustainability: system thinkers in action*. Thousand Oaks, CA: Corwin Press.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), Retrieved from <http://aztla.asu.edu/ProfDev1.pdf>

Georgia Department of Education (2009). *Georgia Performance on School Standard:*

Closing the Gap. Retrieved from

[http://www.doe.k12.ga.us/DMGetDocument.aspx/GAPSS%](http://www.doe.k12.ga.us/DMGetDocument.aspx/GAPSS%20FINAL%20Rev%20PRINT%20READY%208-6-08.pdf?p=6CC6799F8C1371F69AFD687F0E577BA957BAB65DFB64F20BB39AA35E20E8694E&Type=D)

[20FINAL%20Rev%20PRINT%20READY%208-6-08.pdf?p=6CC6799F8C1371](http://www.doe.k12.ga.us/DMGetDocument.aspx/GAPSS%20FINAL%20Rev%20PRINT%20READY%208-6-08.pdf?p=6CC6799F8C1371F69AFD687F0E577BA957BAB65DFB64F20BB39AA35E20E8694E&Type=D)

[F69AFD687F0E577BA957BAB65DFB64F20BB39AA35E20E8694E&Type=D](http://www.doe.k12.ga.us/DMGetDocument.aspx/GAPSS%20FINAL%20Rev%20PRINT%20READY%208-6-08.pdf?p=6CC6799F8C1371F69AFD687F0E577BA957BAB65DFB64F20BB39AA35E20E8694E&Type=D)

Gibb, C. (1954). Leadership. *Handbook of Social Psychology*, 2(1), 877-917.

Glickman, C., Gordon, S., & Ross-Gordon, J. (2001). *Supervision and instructional leadership: a developmental approach*. Boston, MA: Allyn and Bacon.

Gronn, P., & Rawlings-Sanaei, F. (2003). Recruitment, retention, and development of school principals. *Australian Journal of Education*, 47(2), 172-184.

Gusky, T. (2000). *Evaluating Professional Development*. Thousand Oaks, CA: Corwin Press.

Gusky, T. (2003). Professional development that works: What makes professional development effective? *Phi Delta Kappan*, 84(10). Retrieved from <http://www.questia.com/googleScholar.qst?docId=5001940468>

Gusky, T. (1995). Results-oriented professional development: in search of an optimal mix of effective practices. *Northwest Regional Educational*.

Hallinger, P. & Heck, R. (1996). In the principal's role in school effectiveness: A review of methodological issues. Retrieved December 17, 2010 from http://philiphallinger.com/papers/Hallinger_methods_Handbook.pdf.

Hargreaves, A., & Fink, D. (2000, April). The three dimensions of reform. *Educational Leadership*, 57(7) 30-34.

- Hargreaves, A., & Fink, D. (2006). *Sustainable leadership*. San Francisco, CA: Jossey-Bass.
- Harris, A. (2004). Distributed leadership for school improvement: Leading or misleading. *Educational Management Administration and Leadership*, 32, Retrieved from http://www.icponline.org/index.php?option=com_content&task=view&id=130&Itemid=50.
- Harris, A. (2005). Leading or misleading? Distributed leadership and school improvement. *Journal of Curriculum Studies*. Retrieved from <http://faculty.ed.uiuc.edu/westbury/jcs/Vol37/harris.htm>
- Harris, A., & Spillane, J. (2008). Distributed leadership through the looking glass. *Management in Education*, 22(1), 31-34. doi: 10.1177/0892020607085623
- Harris, A., & Lambert, L. (2003) *Building leadership capacity for school improvement*. Maidenhead, UK: Open University Press.
- Haycock, K. (1998). *Good teaching matters*. Washington, DC: Education Trust.
- Herman Miller, Inc. (2004). *Quantifying and fostering organizational effectiveness*. Retrieved from http://swat.gis.ksu.edu/documents/org_effectiveness.pdf
- Hirsh, S. (2009). Information for policy makers about professional development that improves student results. *NSDC Policy Points*, 1(2), Retrieved from <http://www.nsd.org/news/policypoints/policypoints4-09.pdf>
- Joyce, B., & Showers, J. (2002). *Student achievement through staff development*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations*. New York, NY: John Wiley.

- Katzenbach, J. (1997). The myth of the top management team. *Harvard Business Review*, 75, 83-93.
- Kayrooz, C., & Fleming, M. J. (2008). *Distributed leadership: Leadership in context*. UNESCO-APEID International Conference: "Quality Innovations for Teaching and Learning." Retrieved from http://www.unescobkk.org/fileadmin/user_upload/apcid/Conference/12thConference/paper/Carol_Kayrooz.pdf
- Kelleher, J. (2003). Professional development that works: A model for assessment-driven professional development. *Phi Delta Kappan*, 84(10). Retrieved from <http://www.questia.com/googleScholar.qst?docId=5001940472>
- Knowledge & Skills: Building a Future. (2005). Retrieved from <http://www.eduweb.vic.gov.au>
- Leithwood, K., Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. New York, NY: The Wallace Foundation.
- Leithwood, K. & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement. *Journal of Educational Administration*, 38(2), 112-129.
- Leithwood, K. & Mascal, B. (2008). Collective leadership effects on student achievement. *Educational Administration Quarterly*, 46(4), 463-490.
- Lewin, K., Lippitt, R., & White, R., (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology*, 10(3). 271-301.
- Lewis, A., & Paik, S. (2001). Add it up: Using research to improve education for low-income and minority students. *Poverty & Race*, 8. Retrieved from

http://www.doe.k12.ga.us/DMGetDocument.aspx/pl_effective_development.pdf?p=4BE1EECF99CD364EA5554055463F1FBB77B0B70FECF5942E12E123FE4810FFF5F253235D64DC6CBA8D176093078506A2&Type=D

- Little, J. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, 91, 509-536.
- Louis, K. (1996) Teachers' professional community in restructuring schools. *American Educational Research Journal*, 33(4), 757-798.
- Louis, K., Leithwood, K., Anderson, S., & Wahlstrom, K. (2010). *Investigating the links to improved student achievement*. New York, NY: The Wallace Foundation.
- Lumsden, L. (1998). Teacher morale. *ERIC Digest*, 120. Retrieved <http://cepm.uoregon.edu/publications/digests/digest120.html>
- Mahoney, J. T. (2002). 'The relevance of Chester I. Barnard's teachings to contemporary management education: Communicating the aesthetics of management.' *International Journal of Organization Theory and Behavior*, 5(1). Retrieved from <http://organizationsandmarkets.files.wordpress.com/2009/09/mahoney-j-chester-barnard.pdf>.
- Malone, B., Sharp, W., Thompson, J. (2006). *The Indiana principalship: Perceptions of principals, aspiring principals, and superintendents*. Paper presented to Midwestern Educational Research Association, Chicago, IL.
- Manz, C. & Sims, H. (1993). *Business without bosses*. New York, NY: Wiley.
- Marzano, R., Waters, J. & McNulty, B. (2003). Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement. *McREL*. Retrieved from <http://www.mcrel.org>

- Marzano, R., Waters, J., & McNulty, B. (2005). *School leadership that works*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Mayrowetz, D. (2008). Making sense of distributed leadership: Exploring the multiple usages of the concept in the field. *Educational Administration Quarterly*, 44(3), 424-435.
- MacBeath, J. (1998). *Effective school leadership: responding to change*. London, UK: Paul Chapman.
- McQueen, A. (1999). Survey: Teachers feel unprepared for specialties. *Star Tribune*, 19.
- Mid-continent Research for Education and Learning, (2000). *Asking the right questions: A leader's guide to systems thinking about school improvement*. Retrieved from www.mcreal.org/59822TG_AskingRightQuestions-1.pdg
- Mintzberg, H. & Waters, J. (1985). Of strategies, deliberate and emergent. *Strategic Management Journal*, 6, 257-271.
- Monk, D. (1994). Subject matter preparation of secondary mathematics and science teachers and student achievement. *Economics of Education Review*, 13(2), 125-145.
- Morris, M., Chrispeels, P., & Burke, P. (2003). Professional development that works: The power of two: Linking external with internal teachers' professional development. *Phi Delta Kappan*, 84. Retrieved from <http://www.questia.com/googleScholar.qst?docId=5001940482>
- National Board for Professional Teaching Standards (1999). *What teachers should know and be able to do*. Retrieved from: www.nbpts.org.

- National Staff Development Council (2009). *Standards for Staff Development*. Retrieved from <http://www.nsd.org/standfor/definition.cfm>
- Newmann, F., & Wehlage, G. (1995). Successful school restructuring. *Center on Organization and Restructuring of Schools*. Retrieved from http://www.wcer.wisc.edu/archive/cors/Successful_School_Restruct.html
- North Central Regional Educational Laboratory (1994). *Professional development: Changing times*. Retrieved from <http://www.ncrel.org/sdrs/areas/issues/envrnmnt/go/94-4sprk.htm>
- North Central Regional Educational Laboratory (2010). *Policy-School leaders and suitability*. Retrieved from http://www.aspa.asn.au/index.php?option=com_content&view=article&id=34:policy-school-leaders-shortage-and-suitability&catid=16:policies-and-statements&Itemid=37
- O'Neil, H., & Drillings, M. (1994). *Motivation: Theory and Research*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Putnam, R., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29(1), 4–15.
- Reeves, D. (2007). Leading to change/teaches step up. *Educational Leadership*, 65(1). Retrieved from http://newburghschools.org/subpages/cni/articles/September_2007_Teachers_Step_Up.pdf
- Reeves, D. (2009). The learning leader/model teachers. *Educational Leadership*, 66(5). Retrieved from http://jo-online.vsb.bc.ca/bondi/wp-content/uploads/2009/01/educational-leadership_how-teachers-learn_the-learning-leader-_model-teache.pdf

- Robinson, V., Lloyd, C., & Rowe, K. (2008). The impact of leadership on student outcomes: Analysis of the differential effects of leadership types. *Educational Administration Quarterly*, 44(5). Retrieved from <http://www.e-lderar.org/documents/RS/pdfs/Robinson1.pdf>
- Rosenholz, S. (1989) *Teachers' workplace: The social organization of schools*. White Plains, NY: Longman.
- Roy, P. (2009). Focused, job-embedded learning leads to quality teaching. *The Learning System*. Retrieved from <http://www.learningforward.org/news/getdocument.cfm?articleID=1829>
- Senge, P. (1996). *The fifth discipline: the art and practice of the learning organization*. New York, NY: Doubleday/Currency.
- Sergiovanni, T. (1996). *Leadership for the schoolhouse: How is it different? Why is it important?* Boston, MA: Pearson.
- Sergiovanni, T. (2006). *The principalship: A reflective practice perspective*. (5th ed.). Boston, MA: Pearson Education, Inc.
- Shaw, M. & Shaw, L. (1962). Some effects of sociometric grouping upon learning in a second grade classroom. *Social Psychology*, 57, 453-458.
- Silins, H., & Mulford, B. (2002). Schools as learning organisations: The case for system, teacher and student learning. *Journal of Educational Administration*, 40(5), 425-446.
- Simon, H. (1947), *Administrative behavior: A study of decision-making processes in administrative organization*. New York, NY: Free Press.

- Southwest Educational Development Laboratory- SEDL (2010). www.sedl.org. Retrieved May 15, 2010, from <http://www.sedl.org/change/leadership/history.html>
- Sparks, D. (1994). A paradigm shift in staff development. *Journal of Staff Development*, 15(4).
- Spillane, J. (2005). www.nescobkk.org. Retrieved February 22, 2010, from <http://sdexter.net/courses/589/downloads/SpillaneLeadership05.pdf>
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2001). Investigating school leadership practice: A distributed perspective. *Educational Researcher*, 30, 23–28.
- Spillane, J., Halverson, R., & Diamond, J. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies*, 36, 3–34.
- Stolp, S. (1994). www.eric.uoregon.edu. Retrieved from <http://eric.uoregon.edu/publications/digests/digest091.html>
- Storey, A. (2004). The problem of distributed leadership in schools. *School Leadership and Management*, 24, 249–265.
- Stauss, A., & Corbin, J. (1998). *Basics of qualitative research: grounded theory procedures and techniques* (2nd ed.). Newbury Park, CA: Sage Publications.
- Tableman, B. & Herron, A. (2004). www.outreach.msu.edu. Retrieved from www.outreach.msu.edu/bpbriefs/issues/brief31.pdf
- Tienken, C. & Stonaker, L. (2007) www.nscd.org. Retrieved from <http://www.nscd.org/news/getDocument.cfm?articleID=1443>
- U.S. Bureau of Labor and Statistics (2010). www.bls.gov. Retrieved from <http://www.bls.gov/mfp/>

- Vroom, V. H., & Jago, A. G. (2007). The role of the situation in leadership. *American Psychologist*, 62, 17-24.
- Weber, M. (1905). *The protestant ethic and the spirit of capitalism: And other writings*. New York: Penguin Group.
- Wilms, W. (2009, October). *Educational leadership*, 67(2), 40-44.
- Yates, D. & Hyten, C. (1998). *High performing self-managed work teams: A comparison of theory to practice*. Thousand Oaks, CA: Sage Publications.
- Yoon, K., Duncan, T., Lee, S., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues and Answers Report, REL 2007 No. 033). Washington, DC: U.S. Department of Education, Regional Educational Laboratory Southwest.
- Zepeda, S. (1999). *Staff development: Practices that promote leadership in learning communities*. Larchmont, NY: Eye On Eye.