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# The Role of the Principal in Improving Student Achievement in Low-Wealth Rural Elementary Schools

Mark D. Linton  
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# The Role of the Principal in Improving Student Achievement in Low-Wealth Rural Elementary Schools

## **Abstract**

Increased levels of accountability, mandated implementation of common core learning standards, and shrinking state funds for public schools have created unique challenges for principals seeking to increase student achievement levels. Schools located in states receiving Race to the Top (RTT) funds must measure teacher and principal growth by adopting evaluation systems based on student achievement measures. These issues are more significant for rural school administrators, who must pair these demands with the confining nature of small-town life; the multiple and sometimes conflicting tasks; and the lack of opportunity for professional camaraderie and growth. Although a large body of literature has identified principal behaviors that can lead to improved student achievement, few studies have focused on contextual factors in New York State rural schools. Using Leithwood's four core leadership practices as a framework, this study examined the perspectives of principals in low-wealth New York rural elementary schools. The study used a qualitative research design including a phenomenological strategy to learn about the lived experiences of 10 New York State rural elementary school principals. Data was collected using semi-structured interviews. Analysis of transcripts identified principal core and specific practices related to improving student achievement. Understanding the impact that principals' practices have on student achievement can provide guidance to school leaders in low-wealth rural elementary schools intent on improving.

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The Role of the Principal in Improving Student Achievement in  
Low-Wealth Rural Elementary Schools

By

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Supervised by

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## **Dedication**

Dr. Michael Wischnowski provided the pathway needed to begin the journey of earning a doctoral degree at St. John Fisher College. However, without the patience, guidance, and support of my dissertation committee members, Dr. Marie Cianca and Dr. Diane Reed, overcoming the inevitable “bumps in the road” of my doctoral degree journey would not have been possible. Thank you Dr. Cianca and Dr. Reed for providing me with the valuable skills and experiences needed to be a researcher. Thank you, too, for helping me grow as an educator and person.

Dr. Guillermo Montes and Dr. Mike Wischnowski were willing and able to provide support and feedback throughout the doctoral program. Their humor, knowledge, and encouragement were invaluable assets. Betsy Christiansen, thank you for always knowing which way to turn and for offering reassurance whenever it was needed.

I could not have selected a better group in which to travel this learning journey than Lucky Cohort 7. The diverse perspectives and collective intellect, caring, and camaraderie are unmatched. Fab Five (Annmarie, Nic, Pam, Tanya) my group, my friends, my confidants, I will always remember you. Thank you for everything!

The encouragement and support from colleagues at the Geneseo Central School is indicative of the culture in the school and community. Thank you to the administrative team for all of your help and encouragement. The faculty and staff at the Geneseo Elementary School are the best. Thank you for all you do on behalf of students.

The life lessons learned from my parents, David and Peggy Linton, created the foundation needed for the completion of the dissertation journey. Their roots are in rural life, and I am indebted to them forever. My father- and mother-in-law, Jim and Claire Chen, have always provided the love and support that our family needed at just the right times. Thank you.

There are not enough words to express my love and gratitude to my wife, Adele. Her support and ability to keep everything together allowed me to continue moving forward. She wouldn't let me quit and has always supported my desire to grow and learn. Needless to say, I would not have completed this dissertation journey without her.

This dissertation is dedicated to my children, Claire Margaret Linton and Brian David Linton. They inspire me and provide the love, support, and levity needed to keep all things in perspective. My hope is that they will be lifelong learners who set the bar high and then exceed their expectations.

## **Biographical Sketch**

Mark D. Linton is currently the principal of Geneseo Elementary School in Geneseo, New York. Mr. Linton completed his undergraduate studies at the State University of New York at Geneseo and graduated with his Bachelor of Arts/Sciences Degree in Special Education and in N-6 Elementary Education. He earned his Master of Sciences Degree in School Counseling and his Certificate of Advanced Study and School District Administrator Certificate at the State University of New York at Brockport.

Mr. Linton volunteers to work with undergraduate- and graduate-level students from the Ella Cline Shear School of Education at the State University of New York at Geneseo. Mr. Linton's contributions to the Ella Cline Shear School of Education led to an honorary membership to the college's Chapter of Kappa Delta Pi, the International Honor Society in Education and Speech and Communicative Disorders. Mr. Linton has been a volunteer at the Genesee Valley Special Olympics for over 25 years.

Mr. Linton began the Executive Leadership Program at St. John Fisher College in Pittsford, New York in 2012. He completed the program studies in 2014. Mr. Linton pursued his research on *The Role of the Principal in Improving Student Achievement in Low-Wealth Rural Elementary Schools*. His studies were completed under the direction of Dr. Marie Cianca and Dr. Diane Reed.

## **Abstract**

Increased levels of accountability, mandated implementation of common core learning standards, and shrinking state funds for public schools have created unique challenges for principals seeking to increase student achievement levels. Schools located in states receiving Race to the Top (RTT) funds must measure teacher and principal growth by adopting evaluation systems based on student achievement measures. These issues are more significant for rural school administrators, who must pair these demands with the confining nature of small-town life; the multiple and sometimes conflicting tasks; and the lack of opportunity for professional camaraderie and growth. Although a large body of literature has identified principal behaviors that can lead to improved student achievement, few studies have focused on contextual factors in New York State rural schools. Using Leithwood's four core leadership practices as a framework, this study examined the perspectives of principals in low-wealth New York rural elementary schools. The study used a qualitative research design including a phenomenological strategy to learn about the lived experiences of 10 New York State rural elementary school principals. Data was collected using semi-structured interviews. Analysis of transcripts identified principal core and specific practices related to improving student achievement. Understanding the impact that principals' practices have on student achievement can provide guidance to school leaders in low-wealth rural elementary schools intent on improving.

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## **Chapter 1: Introduction**

If United States high-poverty rural and small-town schools were combined into one district, it would be the largest, poorest, most racially diverse district in the nation (Strange, 2011). However, rural and small-town schools are not one district. They are spread out and include a wide range of socioeconomic variability. For example, an average of 33% of the nation's public schools is rural, but only 6.6% of schools in Massachusetts are rural and 78.6% of schools in South Dakota are rural. More than half of all rural students in the U. S. attend school in eleven states (Strange, Johnson, Showalter, Klein, & Rural School and Community Trust, 2012). One of these 11 states is New York.

In the United States, the median number of students attending rural schools by state is 141,486. According to 2009 data from the National Center for Education Statistics, New York State was eighth out of 50 states and served 348,738 rural students. The fact that rural schools are a dispersed group with high rates of poverty has impacted their political clout and has left them weakly represented when legislators discuss educational issues (Strange, 2011). This chapter examines the links between a school's location, a school's wealth, and student achievement. In addition, background is provided regarding how wealth and achievement measures have placed students in low-wealth rural schools at a disadvantage when compared to students in more affluent suburban districts (Ortlieb & Cheek, 2008).

Furthermore, rural school principals have recently faced significant changes in their roles. Increased levels of accountability, implementation of common core learning standards, and shrinking state funds for public schools have created unique challenges for principals seeking to increase student achievement levels. Pairing these demands with the confining nature of small-town life, the loss of privacy, the multiple and often conflicting tasks, and the lack of opportunity for professional camaraderie and growth has magnified these issues for rural school administrators (Buckingham, 2001). Principals working in low-wealth schools and schools located in rural areas may have been particularly impacted by Federal and State educational initiatives.

Despite decades of school improvement efforts, it is unclear what effect the principal's role has on improving student learning (Leithwood, Louis, Anderson, & Wahlstron, 2004). A review of the changing role of the principal, the impact of federal and state mandates on schools, and the application of a leadership framework to the work of principals in low-wealth rural elementary schools in New York State provides necessary information for principals seeking to increase student achievement.

### **History of the Principal's Role**

The role of principal in public schools began in the United States when Cyrus Pierce became the head teacher of the first normal school. This public teacher-training academy, established in Lexington, Massachusetts in 1864, required all teachers to use the normal curriculum and to practice teaching under the supervision of Pierce (Pulliam & Van Patten, 2007). Supervision by a principal was one of the new roles within schools. Additionally, principals oversaw the establishment of new schools during the late 1800s. These graded schools were called elementary schools and included kindergarten through

eighth grades (Provenzo & Provenzo, 2009). Over time, as United States societal and political influences presented themselves, the purpose of schooling and the responsibilities of the principal changed. Immigration, urbanization, world wars, the Great Depression, the social turmoil of the 1960s and 1970s, a federal report entitled *A Nation at Risk*, and the high-stakes accountability movement that began in the 1990s led to an examination of the role of the principal in creating schools that could meet the needs of all students (Sutton & Soderstrom, 1999). While many aspects of the principal's job are similar to those in the past, increases in accountability have required principals to conduct a wider range of duties.

The 21st century principal works in more complex environments that have included more specialized services with increasing levels of regulation. There are demands from multiple stakeholders, and increased accountability requirements have implications for schools and for individuals. The role of the principal has required high levels of energy and expertise during a time when there has been increased participation of the federal government in schools (Hulley & Dier, 2009). Furthermore, principals in low-wealth rural schools have faced unique challenges in meeting the expectations created by federal and state accountability measures.

According to the National Center for Education Statistics (NCES) (2007), principals of public schools located in rural/small town locations were more likely to be teaching in addition to serving as principal (38%) compared to principals of public schools in large towns (22%) or central city locations (16%). In addition, schools located in rural communities have fewer instructional coordinators and supervisors to assist principals with increased responsibilities. NCES indicated that 97% of schools located in

central city communities have these supports, 68% of urban fringe/large towns have them, and just 29% of rural school communities have these additional administrative services. Principals in rural schools have on average two years less experience than their urban and large town counterparts, and have lower average salaries. These disparities are magnified by the fact that a lower percentage of districts in rural communities offer professional development in management techniques, technology, budgeting, advances in teaching and curriculum, and supervision than districts in central cities or large towns (NCES, 2007). These facts highlight the differences between rural schools and schools in other environments; however, the requirements of No Child Left Behind (NCLB) and Race to the Top (RTT) initiatives require principals in all schools to complete the same tasks. These factors place principals in rural schools in unique positions relative to their colleagues in other school environments.

### **Influence of Federal Government**

One of the primary federal laws to impact United States public schools in the 21<sup>st</sup> century was the No Child Left Behind Act of 2001 (NCLB). NCLB required all states to have statewide systems of accountability as a means for assuring that all public schools and school districts make adequate yearly progress (AYP). This aspect of the law was intended to hold states accountable for making sure that every school is helping its students improve academically. By law, all children should be performing at the proficiency level in reading, language arts, math, and science. AYP is the minimum level of performance school districts and schools must achieve every year to meet this goal (New York State Education Department, 2009). NCLB also mandated that all students be brought to grade-level proficiency in English language arts and mathematics by the year

2014 (Mei-Jiun, 2013). The law stated, all students, including low-income students, students from major racial and ethnic groups, students with disabilities, and students with limited English proficiency must reach state's proficient levels by 2013-2014 (Rossell, 2006). States were required to develop sanctions and rewards based on each school's AYP.

Many states, including New York State, adopted a growth model for measuring AYP. This model allowed progress to be demonstrated over time. As long as schools were making progress they were protected from possible sanctions. Schools that failed to make AYP faced increasing levels of oversight. Five consecutive years of inadequate progress led to possible school closure (NYSESED, 2009). NCLB was not reauthorized in 2008 due to a lack of evidence supporting the effectiveness of the law. This led to waivers for United States public schools that eased some aspects of NCLB. The flexibility offered to schools by the United States Education Department was provided so state and local reform efforts designed to improve academic achievement and increase the quality of instruction for all students could move forward in a way that was not initially considered by NCLB (United States Department of Education, 2012). The federal government offered additional incentives to public schools willing to accept the challenge of implementing these new initiatives.

In 2009, the United States Congress and the administration of President Barack Obama signed the American Recovery and Reinvestment Act (ARRA). This law was enacted in response to an economic recession and was intended to promote economic growth. One goal of the law was to create new jobs and to save existing ones (United States Government, 2011). RTT, a competitive grant for states vying to receive high

levels of federal funding for public education, is one key aspect of the federal ARRA. A prerequisite to receiving RTT funding was a commitment from schools to develop rigorous college- and career-ready standards and high-quality assessments (United States Department of Education, 2010). Whereas NCLB accountability focused on the progress at the school-level by measuring AYP, schools located in states receiving RTT funds have been required to measure teacher and principal growth by adopting evaluation systems based on student achievement measures (Montes, 2012). Student achievement on state assessments has been the primary measure used to monitor teacher and principal effectiveness. These assessments are based on the national common core learning standards and are developed within each state. Students are administered the assessments in English language arts and math. One state that qualified for RTT funds and that has implemented these changes is New York State.

### **Influence of New York State Government**

In 2010, New York State was awarded \$700 million in federal RTT funds. As part of the application process, the New York State Education Department and the Board of Regents agreed that schools would create new teacher and principal evaluation systems (New York State Education Department, 2010a). The new system was implemented during the 2011-2012 school year and included multiple measures of effectiveness. Under the new system, each teacher and principal receives an annual professional performance review (APPR) resulting in a single composite effectiveness score and a rating of highly effective, effective, developing, or ineffective. The composite score includes three components. These are (a) student growth on state assessments or a comparable measure of student growth, (b) locally selected measures of student achievement that are

comparable across classrooms, and (c) other measures of teacher/principal effectiveness. These other measures may include items such as portfolios, observations, and professional development. (New York State Education Department, 2013).

Under RTT, composite scores are placed on a continuum of effectiveness and teachers and principals are given a rating. If a teacher or principal is rated developing or ineffective, the school district is required to develop and implement a teacher or principal improvement plan. Under the new system, tenured teachers and principals who earn two consecutive annual ineffective ratings may be charged with incompetence and considered for termination through an expedited hearing process. The law further provides that all evaluators must be appropriately trained and that appeals procedures are to be locally established (New York State Education Department, 2010a).

In response to NCLB regulations, New York State public schools administer assessments in English language arts and mathematics in grades 3-8. Under NCLB, scores on these measures have been used to determine a school's adequate yearly progress. As part of RTT, New York State Assessment scores now include teacher and principal evaluations as well as the assessments established under NCLB. Given that just 46% of the State's rural elementary schools scored above the New York State average (55% proficiency) on the 2011 Grade 4 New York State Language Arts Assessment (NYS ELA), principals and teachers in low scoring schools must seek to improve student performance regardless of the wealth level of the school district.

For the purposes of the dissertation study, school wealth was based on a district's Combined Wealth Ratio (CWR) and Free and Reduced-Price Lunch (FRPL) percentage. Combined Wealth Ratio is determined by combining Pupil Wealth Ratio, a measure of

property wealth in a given district and Alternate Pupil Wealth Ratio, a measure of personal income. The average CWR for all New York State schools is 1.0 (NYSED, 2012). According to the United States Department of Agriculture (USDA) (2012), in order to qualify for free lunch status, a family must be within 130% of the Federal Poverty Guidelines. To qualify at the reduced level, a family must be between 131% and 185% of the Federal Poverty Guidelines. For a family of four, the poverty level is an annual income of \$23,050, so a family income up to \$29,965 would qualify at the free level (USDA, 2012). Using these two factors provided a more accurate picture of school district wealth and the level of wealth within the student population.

On the 2011 Grade 4 NYS ELA, 15 of the top 20 highest scoring rural schools were considered low-wealth schools. These low-wealth schools demonstrated high scores despite being in low-wealth communities and serving high rates of impoverished students. The high scores indicate that the schools have been meeting the challenge of raising student achievement on such tests. As such, these rural elementary schools may be used as models for similar schools looking to improve their levels of achievement on the New York State English language arts assessment.

### **Principals in Low-Wealth Rural Schools**

The impact of a school's location on student achievement has been illustrated in a number of studies. A narrative review of research on school location showed that even after accounting for family socioeconomic status (SES), there are significant differences between urban, rural, and suburban schools (Sirin, 2005). Children living in rural areas have limited access to many community-based resources (Collins, Bronte-Tinkew & Logan, 2008). A contributing factor to poor access to these resources has been a lack of

public transportation systems. Because of this, children in rural households have been three times more likely to be without transportation than children from non-rural households (Collins et al., 2008).

Sirin (2005) indicated that socioeconomic status is not only directly linked to academic achievement but also indirectly linked through multiple interacting systems, one of which is school/neighborhood location. Rural districts generally have offered lower salaries than suburban and urban districts (Schwartzbeck Duggan, Price, Redfield, Morris, Cahape Hammer, 2003). As a result, retaining and training high-quality teachers and administrators has been particularly challenging in low-wealth rural schools (Arnold, Newman, Gaddy, & Dean, 2005).

A study conducted by Durham and Johnelle Smith (2006) demonstrated that children living in metropolitan (urban) counties outperform children living in nonmetropolitan (rural) counties on measures of early literacy abilities at the beginning of kindergarten. Children living in nonmetropolitan areas, who are economically disadvantaged, showed the greatest disparity in early literacy skills relative to their metropolitan peers (Durham & Johnelle Smith, 2006). Thus, rural elementary-level students may be most at risk of low-achievement. Furthermore, Alexander, Entwisle, and Olson (2007) indicated that the achievement gap across social lines becomes more evident during the primary grades and that the overall trend has been that the relationship between socioeconomic status and academic achievement increases significantly starting from primary school and continuing to middle school (Sirin, 2005).

Rural schools in New York State attempting to become more effective have been confronting many of the same obstacles as rural schools across the country. Principals

help to create schools that result in all students meeting challenging standards (Cotton, 2003). Although principals cannot change the demographics of the school or the socioeconomic status of students, they can impact the level of learning that students achieve.

### **Problem Statement**

Given education reform agendas, all principals have an increased level of responsibility for instructional leadership. However, increased levels of accountability and competing duties associated with the principal's role can interfere with a focus on instructional leadership. According to Portin (2004) schools operate within seven core leadership practices: (a) instructional leadership, (b) cultural leadership, (c) managerial leadership, (d) human resources leadership, (e) strategic leadership, (f) external development leadership, and (g) micro-political leadership. In larger schools, these duties are distributed across multiple people, and in some schools, principals are responsible for leading each of these areas (Portin, 2004). However, in many cases rural school principals fill multiple duties within the district. In addition to the pressures of these leadership roles, state and federal mandates have created other stresses that are distinctive to rural school leaders. These mandates often have increased the workload and expanded the responsibility of already stretched school leaders without increasing the resources necessary for the mandates to be accomplished (Canales, Tejeda-Deigado, & Slate, 2008). Unlike large schools with sizeable administrative staffs and more resources, small school leaders often have faced these challenges alone. Nonetheless, rural school principals have been required to meet the same accountability standards as their counterparts in larger schools.

The decision to utilize reading scores as the basis for determining school success in this study was due to the overarching impact that reading has on student success. Ward-Cameron (2013) stated that literacy is so embedded in daily life; it is hard to imagine not being able to read or write. According to Mullis, Martin, and Foy (2013), schools have seen increasing literacy integration across subject areas in teaching and learning, including greater emphasis on reading within subject areas. Literacy has been stressed because fourth grade students have been shown to be at a disadvantage in learning mathematics and science as well as demonstrating high performance on the Trends in International Mathematics and Science Study (TIMSS) assessment if they lack reading skills (Mullis et al., 2013).

Because some schools have struggled to meet the academic needs of low-income students, researchers have attempted to identify the impact the principal has on student achievement (Cotton, 2003) in that educational leadership is an important characteristic of higher-achieving schools (Witzier, Bosker, & Kruger, 2003). According to the research, principals should have high expectations for teacher and student achievement, supervise teachers, coordinate the curriculum, emphasize basic skills, and monitor student progress (Witzier et al., 2003).

Like principals in most school environments, principals in low-wealth rural areas have been responsible for leading their schools to increased levels of student achievement. However, there has been a lack of guidance for principals. In 2005, a group of researchers from Midcontinent Research for Education and Learning conducted a literature review of 498 studies pertaining to rural education. Just seven of these studies were related to the behaviors and practices of rural school administrators, and only one

was deemed to be high quality (Arnold et al., 2005). Given the unique role of the rural school principal, the lack of high quality research in rural settings indicates the need for additional guidance.

New York State schools are funded primarily through local property taxes. However, property taxes inherently discriminate against rural areas, because farm and woodlands are taxed less than residential and commercial property. As a result, rural districts have been less able to generate the revenues needed to provide an equitable education. Furthermore, relative to suburban and urban districts, a high percentage of rural school budgets have high transportation costs. Overall, lower revenues, higher per-pupil costs, and low levels of discretionary spending have created tight budgets for rural schools (Beeson, 2001).

Limited studies in rural school environments, scarce resources, tight budgets, and increased responsibilities have created unique circumstances for elementary school principals in rural schools. Evidence has challenged the wisdom of leadership development initiatives that use a one-size-fits-all approach or do not recognize differences in leadership practices required by differences in organizational context. For instance, being the principal of a large high school requires quite different abilities than being the principal of a small elementary school (Leithwood et al., 2004).

Given the complex role of the principal and the scarcity of rural-specific research, school administrators have been making decisions with limited knowledge of how their behavior contributes to student achievement. According to Reeves (2006), this lack of knowledge has led to a lack of understanding of which antecedents lead to excellence in student achievement. Identifying the actions of rural school principals that lead to

improved student achievement was the goal of this dissertation study. An outcome of the study was guidance for rural school principals, some who work in isolated school environments. Leithwood, Louis, and Anderson's (2012) core leadership practices guided this work.

### **Theoretical Framework**

Historical influences regarding the core purpose of public schooling have led to changes in the duties of elementary school principals. After the American Revolution, leaders saw a national purpose for education. They believed schools could be critical to building a new democracy and committed to the promise of an American culture. Today, the purpose of education is to improve equity and excellence for all students in all the nation's schools (Rebell, 2012). Some of these schools are located in impoverished areas and include high rates of student poverty. Although students in high-poverty schools can achieve high academic performance, this is unlikely without effective leadership (Leithwood, Harris & Strauss, 2013).

Academic achievement has been used as the primary indicator of a successful school (Lynch, 2012). In the early and mid-1970s, Edmonds (1982) identified schools meeting the needs of low-income students. Schools with high numbers of impoverished students that demonstrated high levels of academic achievement became known as effective schools (Edmonds, 1982). Edmonds identified six characteristics of effective schools: (a) strong instructional leadership, (b) a strong sense of mission, (c) effective instructional behaviors, (d) high expectations for all students, (f) frequent monitoring of student achievement, and (g) safe and orderly environments (Lezotte, 2012).

Like Edmonds (1982), Leithwood et al. (2004) conducted research in the United States and Canada pertaining to high-achieving, low-wealth schools. In addition to reviewing the outcomes of other research, Leithwood et al. conducted research on educational leadership in the United States and abroad. Leithwood began this work in the late 1980s and focused on the role that school leaders play in promoting student achievement. Leithwood and several colleagues refined the framework by reviewing the work of other educational researchers.

Hallinger and Heck (1996) furthered research into the role of the principal by exploring the impact of the principal's role on school effectiveness. Hallinger and Heck (1999) examined empirical research that took place between 1980 and 1995 and identified the following three key practices of educational leadership: (a) purposes, (b) people, and (c) structures and social systems. Marzano, Waters, and McNulty (2005) conducted a meta-analysis of leadership practices and identified 21 leadership behaviors that promoted improved student achievement.

Leithwood's recent work (Leithwood & Harris, 2010; Leithwood et al., 2013), conducted between 2005 and 2010 occurred across urban, suburban, and rural contexts in nine states within the United States. The study involved 43 school districts, including 180 elementary, middle and secondary schools. The school-level review examined the role of principal leadership in schools that were transformed from low-achieving to high-achieving schools (Leithwood & Harris, 2010). Leithwood and Harris (2010) combined the results of the study with the findings of prior research and created four categories of core leadership practices intended to guide the work of principals; (a) setting directions, (b) developing people, (c) redesigning the organization, and (d) improving the

instructional program. Each of the broad categories is supported by additional leadership practices (Leithwood, Louis, & Anderson, 2012). Leithwood's focus on the role of school-level leadership practices, his inclusion of samples across multiple school contexts (rural, suburban, and urban), and the applicability of his four broad categories and leadership practices have made Leithwood's framework a viable choice for this study.

### **Leithwood's Four Categories of Core Leadership Practices**

This section explicates the four categories of core leadership practices as set forth by Leithwood et al. (2012). The four categories include setting directions, developing people, redesigning the organization, and improving instructional practice.

**Setting directions.** The broad practice of setting directions refers to the principal's ability to provide a focus for the work of individuals and groups within the school. The specific practices that support setting directions are building a shared vision, fostering the acceptance of group goals, creating high performance expectations, and communicating the direction (Leithwood et al., 2012). The collection of these practices creates a concentrated and motivated effort toward a common purpose of higher achievement.

**Developing people.** This area requires the principal to be aware of individual strengths and needs of staff within the school. In addition to supporting instructional practices, the principal must motivate individuals and celebrate accomplishments. The specific practices that principals must demonstrate within this category are providing individualized support and consideration, offering intellectual stimulation, and modeling appropriate values and practices (Leithwood et al., 2012). The goal of this work is to

improve the knowledge and skills of individuals and to promote their application of these knowledge and skills.

**Redesigning the organization.** Redesigning the organization requires the principal to create the conditions that promote collaboration and that allow individuals to maximize their talents. A collaborative culture, a structure that supports collaboration, productive relationships with families, and connecting the school to the wider community are the practices that lead to an environment where the skills and knowledge that are fostered when developing people can be effectively applied (Leithwood et al., 2012).

**Improving instructional practice.** Principal practices in this area are focused on staffing programs, providing instructional support, monitoring school activity, protecting staff from distractions to their work, and aligning resources (Leithwood et al., 2012). This area is the leadership practice that has the most direct impact on students, compared to the other three categories (Leithwood et al., 2012).

### **Statement of Purpose**

The purpose of this dissertation study was to provide insight into the leadership practices of principals in selected higher achieving rural elementary schools in New York State. The study used a qualitative approach that included coded interviews with principals of low-wealth elementary schools viewed through the lens of four leadership practices by Leithwood et al. (2012). This study adds to the body of research on rural schools and provides elementary school principals in rural New York State schools with guidance for improving student achievement. The study specifically explored the presence of core leadership practices by Leithwood et al. (2012) of principals in successful rural elementary schools.

## Research Questions

While many low-wealth schools have low levels of student proficiency, some are successful (Barley & Beesley, 2007). A review of Upstate New York schools by Thomas (2012) indicated that several small rural schools, which are not considered affluent, scored in the upper quartile on New York State Achievement measures. The identification of the principal's impact on student achievement could prove useful for principals in rural schools. In New York State, rural areas account for more than half of the school systems, boards of cooperative education services (BOCES), and colleges (New York State Rural Schools Association, 2013). Upstate New York has been defined in a number of different ways. For the purposes of the dissertation study, upstate New York refers to the 49 counties outside of the greater New York City metropolitan area. There are approximately 350 rural school districts within these counties. The four core leadership practices of Leithwood et al. (2012) provided the framework for the development of research questions.

1. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe their influence on the levels of student performance on Grade 3-5 New York State ELA Assessments?
2. Which actions, if any, do principals in low-wealth rural elementary schools in Upstate New York consider most relevant to improving student achievement on the New York State English Language Arts Assessment in grades 3, 4 and 5?

3. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe the influence of social and environmental factors of a rural community on their ability to redesign the organization?

### **Significance of Study**

A key component of No Child Left Behind (NCLB) and Race to the Top (RTT) reforms is the focus on accountability measures for school principals regardless of the setting of the school. Senators from Wyoming, North Carolina, and Oklahoma have expressed concerns that the NCLB and RTT initiatives are urban-centered and have failed to take rural schools into account (Dillon, 2010). As a result, rural schools have been obligated to spend many of their scarce resources to comply with government regulations (Bryant, 2010). The impact of NCLB and RTT on rural schools is further exacerbated by the lack of research studies relevant to rural education (Barley & Beesley, 2007).

Development of the knowledge base in a given field takes place incrementally through a series of studies that examine the phenomenon from different perspectives and using a variety of methods (Hallinger & Heck, 2009). Educators in successful low-wealth rural elementary schools have overcome unique obstacles, and research into the experiences of principals in these schools contributes to the ability to align leadership practices to conditions of school context. Such alignment provides a research-based guide for principals working in an era of evidence-based practice. Identifying the specific skills that selected rural school principals perceived as most important serves as a guide for principals seeking to improve student achievement in rural settings. Overall, the dissertation study adds to the literature by examining the rural school principalship and determining how contextual factors impact principals' decisions.

This study also adds to the field of education beyond the elementary school level. Study results add to the area of policy development. A better understanding of schools' contextual factors may help in developing policies that are more flexible and more adaptable given the variety of contexts for school improvement, particularly in rural settings. Additionally, educational leadership programs can consider context-specific leadership responsibilities in course curriculum and content.

### **Definition of Terms**

This section contains definitions of key terms used throughout the dissertation. Each term is defined based on the research literature or how it is used within the educational field.

**Combined Wealth Ratio (CWR).** The CWR represents a school district's income and property values compared to the state average. An average CWR equals 1. School districts with a CWR higher than 1 are wealthier than average (Timbs, 2012). The Combined Wealth Ratio's for New York State Public Schools range from .165 to 28.577 (Timbs, 2012).

**Free and Reduced-Price Lunch (FRPL).** A federally funded source so school districts can provide meals for low-income students. To qualify for free lunch status, a family must be within 130% of the Federal Poverty Guidelines. A family must be between 131% and 185% of the Federal Poverty Guidelines to qualify at the reduced level (Tribiano, 2012). Family income up to \$28,665 would qualify at the free level. At the reduced level, a family income of up to \$40,793 would qualify (Tribiano, 2012).

**Higher-achieving school.** For the purposes of this study, a higher-achieving school is school whose students outperform similar schools on literacy measures.

**Low-wealth elementary school.** For the purposes of the dissertation study, a district's combined wealth ratio and percentage of students receiving free and reduced-price lunches will be used to determine levels of wealth. The New York State Education Department defined elementary schools as schools containing at least one grade lower than 6 and no grade higher than 9

**No Child Left Behind Act of 2001 (NCLB).** A federal law established in 2002 also known as Public Law 107–110, NCLB was approved by the 107th United States Congress for the purpose “of closing the achievement gap with accountability, flexibility, and choice, so that no child is left behind.” (20 USC 6301.)

**Proficient.** This descriptor applies to a level of student performance on New York State Assessments. Students scoring at levels 3 or 4 on a four-point scale are considered “proficient.” The New York State Education Department (NYSED) established scaled scores that correspond with each level, 1-4 (NYSED, 2010b).

**Rural.** According to New York State Education Law, Article 24, Section 1203 (1990), “rural area” shall mean any county with less than 200,000 population, or any town which has a population of less than 150 persons per square mile. “Small” is defined, herein, as any district of 2,500 pupils or less. (New York State Rural Schools Association, 2013).

## **Summary**

This chapter provided background information about the evolving role of elementary school principals in rural school environments. Specifically, the chapter introduced the principal's role in meeting accountability requirements and the challenges confronted in raising student achievement in low-wealth, rural schools. Despite state and

federal education initiatives aimed at improving student achievement, principals in schools located in high-poverty areas confront additional obstacles. Research has consistently demonstrated that school and non-school factors have impacted the rate and level of achievement on standardized measures. In addition, rural school communities have confronted unique challenges and students from impoverished backgrounds struggle to attain high levels of achievement. Lacour and Tissington (2011) recognized the obstacles that students in rural areas must face, such as: fewer community resources and limited access due to a lack of reliable public transportation systems. Ladd (2011) and Books (2004) also highlight the significant differences in school quality based on community wealth. A study conducted by Durham and Johnelle Smith (2006) indicated that areas that were more economically disadvantaged and that had resources that were widely dispersed were found in the most isolated rural areas. According to Durham and Johnelle Smith, students in isolated rural areas begin school with the greatest relative disadvantage in early literacy ability. Research also showed that principals can have a positive impact on student achievement. Principals who focus on setting directions, developing people, improving instruction, and redesigning the organization to meet the needs of their school contexts have been shown to increase the likelihood of improved student achievement for all students.

Chapter 2 contains a review of the literature regarding the impact of poverty on learning, the unique characteristics of rural environments, and the application of the framework from Leithwood et al. (2012) to school improvement. The literature review also includes information about successful schools and school leadership. Literature pertaining to New York State principal accountability measures is also reviewed. The

literature review provides a foundation for this study's research methods described in Chapter 3. Chapter 4 presents the findings and analysis of qualitative data gathered from interviews with principals in low-wealth higher-achieving rural elementary schools. Chapter 5 provides a discussion, an interpretation, and recommendations based on this study's findings.

## **Chapter 2: Review of the Literature**

### **Introduction and Purpose**

Data collected through the No Child Left Behind Act (NCLB) and Race to the Top (RTT) has suggested that progress toward closing the achievement gap for poor students is slow and inconsistent (Wooleyhand, 2013). In an effort to build a better understanding of what has contributed to issues surrounding student achievement and the role of the principal in supporting student achievement, it is necessary to consider school context and how context impacts student outcomes.

The review of the literature contained in this chapter begins with an examination of the effects of poverty on learning. Next, higher-achieving schools and rural school environments are described. Then the chapter contains a review of increased levels of accountability for schools in states receiving the federal RTT grant monies, specifically New York State, the implications for principals in rural schools, and the leadership practices that support school improvement. The chapter concludes with a brief overview of the framework for school leadership by Leithwood et al. (2012) that leads to higher-achieving schools. An emphasis is placed on core leadership practices and the relevance of those practices to this dissertation study. The framework described by Leithwood et al. (2012) guides the following research questions for this study:

1. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe their influence on the levels of student performance on Grade 3-5 New York State ELA Assessments?

2. Which actions, if any, do principals in low-wealth rural elementary schools in Upstate New York consider most relevant to improving student achievement on the New York State English Language Arts Assessment in grades 3, 4 and 5?
3. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe the influence of social and environmental factors of a rural community on their ability to redesign the organization?

### **Poverty and Schools**

Many factors prevent schools from assisting impoverished students to reach high levels of achievement. Booker, Invernizzi, and McCormick (2007) demonstrated that large differences exist between schools with high poverty rates and those that have more resources. These differences are in the academic and financial areas. One factor has been the availability of resources afforded to low-income students. A lack of resources causes many students living in poverty to struggle to reach the same academic achievement levels of students not living in poverty (Lacour & Tissington, 2011). Murnane (2007) noted that children living in poverty tend to be clustered in low-performing schools staffed by untrained teachers and many of these low-wealth schools also suffer from high rates of teacher turnover and poor teacher training (Booker et al., 2007). Other factors affecting student achievement have included income, source of income, and the mother's education level (Lacour & Tissington, 2011). According to Barton and Coley (2007), literacy development begins long before children enter formal education and is critical to their success in school. One socioeconomic difference Barton and Coley noted was that by age 4, the average child in a professional family hears about 20 million more words

than the average child in a working-class family, and about 35 million more words than children in families receiving public assistance. Sirin (2005) indicated that socioeconomic status has been directly linked to academic achievement through multiple interacting systems, one of which is school/neighborhood location.

The issue of fewer resources also impacts students in rural areas. For instance, Krashen (1997) stated that privileged children in California schools have far better school libraries, better public libraries, and more access to bookstores. Even when schools have libraries, how those facilities are managed makes a difference. High-poverty schools often restrict student access to the library and do not allow students to take books home while affluent schools do not place these restrictions on students (Krashen, 1997). Ladd (2011) wrote that states also differ in the quality of their education systems. For example, test scores in Massachusetts exceed their predicted levels given the state's 12% child poverty rate, while test scores in California are well below those predicted for its 20% poverty rate (Ladd, 2011). This difference may be in part because of California's history of limiting spending on education (Ladd, 2011). Nonetheless, the overall negative relationship between the child poverty rate and student performance is clear. The logical implication of the low achievement of poor children relative to their better off counterparts is that average test scores are likely to be lower in schools, districts, or states with high proportions of poor children than in those with fewer poor children (Ladd, 2011).

An issue unique to rural areas is the lack of reliable transportation systems, which makes it difficult for children in low-income rural areas to access valued activities (Bickel, Smith & Eagle, 2002). In districts that have attempted school consolidation as a

means to address a lack of resources, practical transportation problems have continued to make school choice difficult or impossible for students to exercise (Bickel et al., 2002).

The percentage of children in the United States, ages 6 to 11 (middle childhood), living in low-income families increased from 40% to 45% between 2006 and 2011. A higher percentage of children ages 6 to 11 living in rural areas are more likely to live in low-income families compared to those living in urban areas (Addy, Engelhardt, & Skinner, 2013). Reardon (2011) stated that the achievement gap between children from high-income and low-income families has been roughly 30% to 40% larger among children born in 2001 than among those born 25 years earlier.

Family income has been proven to be a factor that impacts student achievement, and many schools have struggled to meet the needs of these students (Reardon, 2011). Children from low-income families often start school behind their peers who come from more affluent families, as shown in measures of school readiness (Ferguson, Bovaird, & Mueller, 2007). In fact, before entering kindergarten, the average cognitive score of children in the highest SES group is 60% higher than the scores of the lowest SES group (Duncan et al., 2007).

Books' (2004) analysis of the United States Department of Education's Early Childhood Longitudinal Study comparing kindergarten students from wealthy and poor families indicated that socioeconomic status accounted for more of the unique variation in cognitive scores than any other factor. This finding was reinforced by a review of New York State schools presented by Thomas (2012). These data showed that the performance of students from many low-wealth New York State public elementary schools on state assessments is lower than more affluent elementary schools. Thomas wrote that

socioeconomic factors give some suburban districts an advantage. Additionally, Herbers et al. (2012) found that early educational problems for children at-risk due to poverty can be predictive of school achievement in later grades. Similarly, the results of a study conducted by Duncan et al. (2007) indicated that school-entry reading and math skills are almost always statistically significant predictors of later reading and math achievement.

The literature review pertaining to poverty and learning identified specific obstacles to student achievement. Lacour and Tissington (2011) identified a lack of resources, mother's level of education, and level and source of income as factors influencing learning. Bickel et al. (2002) identified that a lack of public transportation systems limits rural students' access to community resources and removes the option of school choice. The findings of Reardon (2011), Herbers et al., and Barton and Coley (2007) demonstrated that early literacy experiences have a significant impact on students' school experiences. Finally, Ladd (2011) and Sirin (2005) linked neighborhood wealth to school quality.

While most low-wealth schools have performed below predicted achievement levels on state assessments, some schools with high levels of poverty have achieved above expectations (Taylor, Pearson, Clark, & Walpole, 2000). Consequently researchers have attempted to identify the practices of higher-achieving schools.

### **Higher-Achieving Schools**

A federal report, *A Blueprint for Reform* (United States Education Department, 2011), included proposals for improving school reforms and the grant application for *Race to the Top and School Improvement*. In *A Blueprint for Reform*, the United States Education Department proposed four models for turning around the lowest performing

schools. Two of these models included replacing the principal and two included closing the school.

In response to these proposals, the Executive Director of the National Association of Elementary School Principals (NAESP) agreed with the initiative to identify and improve low performing schools. However, she stated the NAESP took the position of disagreeing with the approach to the reform initiative of replacing principals as the first step in turning around low-performing schools. Instead, members of the NAESP supported a plan that would provide the needed resources to existing principals of low-performing schools. These resources identified include the necessary time, talent, and tools (Adelman & Taylor, 2011).

Adelman and Taylor (2011) contended that *A Blueprint for Reform* is limited by its focus on two components: improving instructional programs and managing available school resources. Adelman and Taylor included a third component in their framework that requires schools to address the barriers to teaching and student learning. The barriers identified by Adelman and Taylor included environmental factors such as family, neighborhood, school, and peers and person factors such as medical issues, behavioral issues, and inadequate nutrition. These barriers, which impede student learning, must be addressed by utilizing school and community resources (Adelman & Taylor, 2011). How these resources are utilized is part of identifying the characteristics of higher-achieving schools, which can serve as a guide for improving low-performing schools using less drastic measures for change than those recommended in *A Blueprint for Reform*.

In response to increases in performance-based accountability for schools, Elmore (2003) proposed that state accountability policies must be adapted to support low-

performing schools. Elmore's (2003) research regarding low-performing elementary and middle schools suggested that government policies are often based on cultural biases and that low-performing schools must learn how to include internal accountability processes. Elmore argued that current accountability systems must be redesigned and that the following actions should be taken: (a) develop state and local supports for low-performing schools, (b) create systems that can determine which low-performing schools are improving and which are not, (c) require school districts to develop system-wide instructional improvement strategies, (d) create incentives to stabilize teacher and administrator populations in low-performing schools, and (d) continuously examine and improve the design of accountability systems (Elmore, 2003). Federal and state policies are resources for schools seeking to improve, and recommendations for school improvement also exist at the school level.

Research into higher-achieving K-12 public schools has identified multiple factors that contribute to improved academic achievement. Cawelti (2001), after studying six districts that made significant achievement gains over a five-year period, identified high-performance traits that each school system utilized during its turnaround. These traits included (a) the development of programs, policies, and teaching strategies that lead to higher levels of achievement for all students; (b) decentralization of management, including budgeting, to the building level; (c) establishing teams to monitor performance data and plan for improvements; (d) providing staff development time to analyze whether local and state curricula and assessments are aligned; (e) ensuring that teachers routinely assess skills before introducing new material, (f) differentiating instruction for students at different levels and reinforcing learned skills throughout the year to ensure retention; and

(g) committing to research-based planning for improvement. Each district also had to prepare for a change in culture that conflicted with long held traditions and practices (Cawelti, 2001).

Similarly, Togneri and Anderson (2003) studied five high-poverty districts that were improving student achievement. Districts in Togneri and Anderson's study ranged from smaller rural districts of 3,000 students and larger urban districts that included 45,000 students. The study sites were located in Texas, California, Minnesota, Maryland, and Rhode Island. Togneri and Anderson identified seven practices in these improving districts: (a) having the courage to acknowledge poor performance and the desire to find solutions, (b) putting in place a system-wide approach to improving instruction. (c) instilling visions that focused on student learning and guided instructional improvement, (d) making decisions based on data and not instinct, (e) adopting new approaches to professional development that involved a district-organized set of strategies, (e) redefining leadership roles, and (f) committing to maintaining reform over the long haul. They also found that school boards or superintendents maintained continuity for 8 to 10 years (Togneri and Anderson, 2003).

Dessoiff (2012) also found elements necessary for school improvement. Dessoiff described three commitments outlined by Marzano et al. (2005): (a) developing a system of individual student feedback at the district, school and classroom levels; (b) ensuring effective teaching in every classroom, with evaluations of teachers and principals; and (c) building background knowledge for all students. A meta-analysis of 69 studies completed by Marzano et al. (2005) identified 11 factors related to effective schools, which were categorized into school-level, teacher-level, and student-level factors. In addition, the

study identified the relationship of principal leadership and student achievement as measured by standardized tests. Overall, the research identified 21 leadership responsibilities as correlated with improved student achievement.

Researchers have continued to examine how school-level factors can be applied across various school environments so the achievement gap between low-wealth and high-wealth schools can be closed. In an attempt to determine the characteristics of higher-achieving elementary schools, Johnson, Livingston, Schwartz, and Slate (2000) explored the beliefs that different constituent groups have regarding the characteristics of higher-achieving schools. Johnson et al. reviewed journal articles, textbooks, and online materials from 1976 to 2001. These documents, representing the views of teachers, parents, and administrators were analyzed and factors that contribute to a higher-achieving school were identified and compared to existing effective schools research. The results of the review confirmed much of what has been reported in prior research on higher-achieving schools (Johnson et al., 2000).

One characteristic of higher-achieving schools that was reinforced by Johnson et al. (2000) was the value of parent involvement. School size appeared to be a factor in how parents responded. The beliefs of parents in smaller schools and of parents in rural schools were more favorable than those in larger schools. Parents in small rural elementary schools believed that higher-achieving schools had greater levels of parent involvement. One review contained the results of a phone survey that included 20,792 parents. Respondents indicated that they valued communication regarding the progress of their children and awareness of opportunities to volunteer at the school. In addition, parents unanimously agreed on two indicators of a higher-achieving school: a safe and

comfortable classroom environment and frequent communication regarding their child's progress. Parents in both elementary and secondary schools identified the principal's leadership style as a critical component of a higher-achieving school.

A review of teachers' perspectives conducted by Johnson et al. (2000) on higher-achieving schools resulted in the identification of a variety of factors. First, teachers who responded believed that a school principal's ability to motivate teachers, level of commitment, and level of innovation to enhance teachers' abilities was a key factor of a higher-achieving school. Teachers in rural elementary schools also identified strong leadership, a safe, orderly environment, clearly defined curriculum and goals, parent involvement, high expectations, monitoring student progress, and professional development as key components in a higher-achieving school. One difference between some teachers' views and the basic tenet of higher-achieving schools research was the belief that all students can learn the skills to be successful in school (Johnson et al., 2000).

In addition to parents' and teachers' views of higher-achieving schools, Johnson et al. (2000) identified principals' views of higher-achieving schools. Elementary school principals identified six critical components of a higher-achieving school: (a) clear school mission, (b) safe and orderly environment, (c) high expectations, (d) student time on task, (e) home-school relations, and (f) monitoring student progress. A preferred leadership style was not identified; however, specific leadership behaviors were seen as creating a higher-achieving school. Principals who demonstrated support and caring for students and teachers, who were strong instructional leaders, and who involved parents and community members were likely to have higher-achieving schools. Principals did not

consider socioeconomic status to be a deterrent to high achievement (Johnson et al., 2000).

Nagle, Hernandez, Embler, McLaughlin, and Doh's (2006) reviewed teacher practices and concluded that four school-level characteristics were present in higher-achieving low-income rural elementary schools. Nagle et al. used a cross-case research design while researching 13 high-poverty rural elementary schools in Delaware, Maryland, and Pennsylvania. Through their research Nagle et al. identified characteristics of these effective low-income schools: (a) high standards for student performance and behavior, and access to general education curriculum; (b) high-level of staff and student stability and collaboration with community; (c) high level of parent and community involvement in school programs; and (d) support for at-risk students and creative use of resources (Nagle et al., 2006). The perspective of other constituents within the school was also used to support the research.

Demographic factors also have impacted school effectiveness. A four-year study in Vermont compared the attributes of successful and unsuccessful schools. Lipson, Mosenthal, Mekkelsen, and Russ (2004) completed a four-year, multi-phase, mixed methods study in Vermont and compared the attributes of successful and unsuccessful schools. Lipson et al. examined available demographic data of the state's K-5 public schools and used a cluster analysis procedure to group schools based on seven indicators. These indicators included percentage of students receiving free and reduced-price lunches, number of students with limited English proficiency, student-teacher ratio, poverty index within a community, educational attainment of adults in the community, school size, and average teacher salary.

Over 200 schools were included in the Lipson et al. (2004) study and were divided into three clusters: Uptown, Main Street, and Country. The cluster analysis revealed the following similarities within each cluster. The 36 Uptown schools in this study represented the largest schools in the state and included affluent urban and suburban school districts. Uptown schools had the highest teacher salaries, highest per pupil expenditures, and lowest percentages of students receiving free and reduced-priced lunches. The 104 Main Street schools in the study were midsized and included middle-income families. Main Street schools' communities had lower levels of educated adults than Uptown schools but higher levels than Country schools. Main Street schools also had higher percentages of students receiving free and reduced-price lunches than Uptown schools but lower than Country schools. The Country schools group consisted of 79 small rural schools with high percentages of students receiving free and reduced-price lunches and high poverty indexes. Many of the adults in the community of Country schools had limited education and both teacher salaries and per-pupil expenditures were much lower than Uptown schools.

From these three clusters, 18 schools were identified as being successful. Successful schools were defined as having 80% of second and fourth grade students meet or exceed state standards on three tests of reading at these two grades. Students in second grade were assessed using the Developmental Reading Assessment (DRA). The DRA is administered individually and students' reading fluency, comprehension, and accuracy are measured. Fourth grade students were administered state assessment measures called the New Standards Reference Exams. These exams required students to read passages, answer open-ended questions, summarize, analyze and evaluate ideas from the text

(Lipson et al., 2004). Applying these criteria to the cluster analysis revealed that Country schools and Uptown schools accounted for five schools each and Main Street schools comprised the remaining eight successful schools.

Lipson et al. (2004) studied six schools, two successful schools from each cluster, during the first year of the study. During the second year, three unsuccessful schools, one from each cluster, were studied. The actions and events described by principals and teachers in successful schools were plotted on a timeline, and these participants could clearly identify the progression of events that led to school success. Characteristics of successful schools emerged following an analysis of field notes, interview data, and work samples. Unsuccessful schools were studied in the same way as successful schools. The final two years of the study were spent analyzing assessment data and conducting a trend analysis of schools across the state. During the last year of the study, researchers conducted additional research at the unsuccessful schools. At the completion of data analysis the researchers were able to identify common elements that differentiated successful from unsuccessful schools.

A study by Lipson et al. (2004) noted that schools, regardless of context, have a significant impact on student achievement. According to Lipson et al., the data indicate students, teachers, and community members can create successful school environments by applying context-specific strategies. The overall finding was that successful school environments require flexibility and creativity (Lipson et al., 2004). Moreover, although the Lipson et al. study identified a number of qualities that were present in successful schools, they, like others found that no single approach or program leads to successful

student outcomes. What mattered more was the fidelity and rigor in which selected approaches to literacy instruction were implemented (Lipson et al., 2004).

Specific practices and attributes were present in successful schools that were absent or minimally present in similar unsuccessful schools. A focus of Lipson et al. (2004) was the organizational features that support literacy instruction, and Lipson et al. found that successful schools had teachers who were knowledgeable about literacy instruction and classroom management. Sound management skills allowed teachers to implement teaching strategies that supported small group or individualized instructional practices. Teachers in successful schools also participated in on-going professional development and were able to articulate the learning that influenced their classroom practices. In addition to teacher factors, opportunities for students to read and write were also a critical attribute in successful schools. Furthermore, students in successful schools had access to classroom books, and primary classrooms dedicated 20 minutes and intermediate-level classrooms dedicated 50 minutes for students to read. Successful school schedules were organized to support literacy instruction by allowing for uninterrupted literacy blocks. The final attribute identified by Lipson et al. was commitment. Commitment was characterized by stability in administration and teaching staff. Successful schools included a high level of shared commitment toward the goal of improved literacy.

While there were observable traits in successful schools, unsuccessful schools also had identifiable attributes. Lipson et al. (2004) found that participants from unsuccessful schools were unable to identify specific procedures or activities that

occurred in literacy planning. Unsuccessful schools also had higher rates of administrative turnover and ambiguity about goals for the literacy program.

Consistent with Lipson et al., Stockard (2011) found that a highly structured approach to reading led to improved student achievement. Stockard (2011) focused on reading achievement in three rural elementary schools in the Midwestern United States. Stockard found that a highly structured approach to reading instruction in kindergarten had a significant impact on student performance on the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), an assessment of beginning reading skills. Stockard's study included 4,117 students in grades K-3, and the average percentage of students receiving free and reduced price lunches was 49%. The results of Stockard's study indicated that students who received full exposure to a selected structured reading program demonstrated higher achievement on local measures and on state achievement measures in reading than students who received less than full exposure. For example, fourth grade students in Stockard's study scored higher on state achievement tests than in previous years, and they scored higher than the national average. Stockard's study also showed that teachers benefited from having explicit professional development in implementing the reading program. Supporting explicit professional development is consistent with prior research on improving rural schools, which indicated teacher pedagogical skills play a major role in improving student achievement (Stockard, 2011).

In a qualitative study conducted in 21 high-performing, high-needs rural schools located in the central United States, interviews and case studies allowed researchers to gather information about perceived factors that contributed to high performance at these high-needs schools (Barley & Beesley, 2007). High-need was based on percentage of

students receiving free and reduced-price lunch and high-performance was determined by assessment scores. After conducting phone interviews with selected school constituents, the following factors were identified as contributing to school success: high expectations, focus on student learning, use of data, individualization of instruction, teacher retention and professional development, and alignment of curriculum with assessments. Five schools were selected for site visits where additional information was gathered from principal interviews. As a result, the following factors were also identified as contributing factors to high-performing schools: a supportive relationship with the community, high teacher retention, and high expectations for students. The rural school environment supported close relationship with the community and was thought to help schools enact high expectations and assist principal leadership (Barley & Beesley, 2007).

### **Characteristics of Rural Schools**

Effective schools research has focused on characteristics that impact student achievement within schools, whereas educators in high-needs schools often have been trying to ameliorate the non-school factors that influence the performance of students in school. The three studies described in this section examined the geographic influences on learning, the significance of school size on learning, and the impact of rural environments on early learning experiences.

The first study, conducted by Durham and Johnelle Smith (2006), attempted to determine whether kindergarten students varied in their early literacy readiness based on metro and non-metro status, family social capital resources, and preschool childcare. Researchers were interested in this topic due to the importance of emergent literacy skills. Emergent literacy skills can be predictive of early reading readiness. Kindergarten

student data and county-level data were used to estimate a two-level hierarchical linear model to test the relationship between early literacy ability and individual and county demographic and structural factors. Results showed that there was a direct association between living in a nonmetropolitan county and early literacy ability at the beginning of kindergarten, but that the direction and strength of these relationships depended on students' ethnicity and socioeconomic status and the social and economic characteristics of the county (Durham & Johnelle Smith, 2006).

Durham and Johnelle Smith (2006) used student-level data from the first two waves of the Early Childhood Longitudinal Study–Kindergarten Cohort (ECLS–K). The ECLS–K included cognitive assessments and other background information from a nationally representative sample of kindergarteners (National Center for Educational Statistics, 2002). Federal Information Processing Standards (FIPS) codes for the state and county were used to match individual student cases to county-level economic and social information from other data sources. The dependent variable was the initial reading assessment given to kindergarteners immediately after the start of the school year. Student scores included a composite of students' ability to recognize letters, beginning and ending sounds of words, sight words, and to read words in context. Kindergarten students' performance on the initial reading assessment was indicative of the learning experiences that occurred in the home environment before entering formal schooling.

Durham and Johnelle Smith (2006) used 1990 United States Census codes to identify metro and non-metro areas. United States Census data were also used to identify demographic information for particular counties. This information included ethnicity, income, and education levels for families. A parent questionnaire was administered to

determine individual demographic data. Finally, factor analysis was used to create a variable measuring the parent's sense of social support from her community. Given the importance placed on pre-school, a value was created to identify the type of pre-school experiences each child had. Variables were created for home-based care, Head Start, center-based care, care by a relative, and care by a non-relative. A hierarchical linear modeling, which creates unbiased estimates of relationships, was used to account for the number of clustered variables being used in the study (Durham & Johnelle Smith, 2006).

The results of the Durham and Johnelle Smith (2006) study show that on average, students in metropolitan areas scored significantly higher than their nonmetropolitan counterparts. Areas that were more economically disadvantaged and that had resources that were widely dispersed were found in the most isolated rural areas. According to Durham and Johnelle Smith, students in isolated rural areas begin school with the greatest relative disadvantage in early literacy ability. Rural areas also had higher rates of people without a high school diploma, higher percentages of households below the poverty line, and lower median household income (Durham & Johnelle Smith, 2006).

An advantage of densely populated areas, like urban environments, is access to community resources that support students' early learning (Neuman, 2009). The New Song Project in Baltimore was an example of community-supported early intervention program that has proven to eliminate the impact of poverty on early learning deficits. High-quality care and highly trained teachers were keys to the success of the New Song Project. Programs targeting early intervention also have been located in community-based settings like hospitals, libraries, and health clinics (Neuman, 2009). However, lack

of public transportation, limited community resources, and isolation can limit these opportunities for families in rural areas.

A study conducted by Ortleib and Cheek (2008) sought to determine why education policies are generalized across all school environments even though students' life experiences and background knowledge are, in part, created by where they live. Using a 10-week study in four second grade classrooms, Ortleib and Cheek described the unique differences and similarities in characteristics of rural and urban reading teachers. The goal of the research was to add to the limited number of research studies that have been performed in rural communities so appropriate intervention plans can be developed for rural children. For the purposes of their study, Ortleib and Cheek used 2005 United States Census data to identify urban and rural areas. Subgroups like urban-fringe, suburban, small town, and others were not analyzed. Two research questions guided the study: (a) what characteristics of highly-regarded teachers are vital to students' success in both rural and urban schools, and (b) how does effective reading instruction coincide and/or differ from rural to urban areas? (Ortleib & Cheek, 2008)

The primary data collection method of the Ortleib and Cheek (2008) study included observations of four second-grade reading teachers in public schools in urban and rural school environments. The schools in the Ortleib and Cheek study were located in separate school districts, which was crucial in establishing the basis for the study. Participants were selected based on their recognized school-wide reputation for being highly valued reading teachers. Data were gathered primarily using Spradley's (as cited in Ortleib & Cheek, 2008) ethnographic research sequence. This approach included broad ethnographic questions while collecting data through observations of the teachers. Daily

observations were conducted for five weeks at each location. In each of the classrooms, observations lasted for the 90 minute reading block every other day. Field notes, fieldwork journals, audio recordings, work samples, and other artifacts constituted the ethnographic record. The activities carried out in each setting (e.g., modeling, assessment, verbal communication, and classroom management) were noted (Ortlieb & Cheek, 2008).

Primary data sources were triangulated with secondary data sources, including formal and informal interviews of both the principals and the classroom teachers at each school. Using the constant comparative method, data collection and analysis occurred simultaneously, including inductive behavior-category coding with a comparison of all incidents observed (Ortlieb & Cheek, 2008). Emerging analysis guided target areas for future observations until themes emerged by comparing aspects of the urban classroom environment to the rural classroom environment.

Within the urban school, 98% of students received free and reduced-price lunches (Ortlieb & Cheek, 2008). Within this school, students were assessed using the Iowa Test of Basic Skills (ITBS) and the state's educational standardized tests. The student-to-teacher ratio was 15:1, and all but two faculty members were certified teachers in the state. In 2005, its school performance score was 89.4 out of a total score of 180, attaining two stars out of a five-star ranking.

The rural school in the Ortlieb and Cheek (2008) study was located in a sparsely populated area where agriculture and fisheries are the predominant means of work. Located along the banks of the Mississippi River, this southern community consisted of approximately 30,000 residents, 4,000 of whom are educated in the public school system.

In 1990, the elementary and junior high schools consolidated to form a K-8 school in an effort to better provide their students with the necessary materials to excel in their academic endeavors. All faculty members were certified teachers. As a whole, 76% of students (550 of 726) received free and reduced-price lunches. The student-to-teacher ratio was 16:1. In 2005, its school performance score was 89.0 out of 180; giving the school a two-star rating out of a possible of five stars (Ortlieb & Cheek, 2008).

Ortlieb and Cheek (2008) were able to identify features of reading instruction unique to each school setting. In the rural school, a sense of community improved aspects of the classroom environment. The researchers found that students who attended schools in rural settings were more likely to see their teachers outside of class, and based on observations, the researchers argued that the connections between teachers and students' families improved student behavior within the classroom. Additionally, students in the rural school were provided independence when selecting texts and they were encouraged to work with partners or in small groups.

In contrast, Ortlieb and Cheek (2008) found that teachers in urban classrooms were less likely to see their students outside of the school building. Moreover, student behavior management in the urban classrooms was more likely to be handled between the teacher and the student than in the rural school, where teachers were more likely to contact parents directly. Another factor that was observed to be different between urban and rural settings was instructional style. In urban schools, students were more likely to be given independent work to complete, and students in urban settings spent more time rereading basal texts as a means of independent practice. Ortlieb and Cheek suggested that this approach may have increased students' performance on classroom assessments,

but it may have limited higher-level thinking skills that may be attained through reading and discussion. Ortlieb and Cheek highlighted the environmental and social differences that existed between urban and rural school settings. There were clear instructional differences and differences in classroom environments based on the location of each school, and the differences were accompanied by varying levels of expectations for students and beliefs about supporting student learning.

Chenowith (2010) studied 22 public schools in various environments to determine the practices of principals in high-performing, high-needs schools. The schools studied met the following criteria: majority of enrolled students were low-income students and were students of color, high absolute achievement (nearly all students met or exceeded state standards), high relative achievement (larger percentages of low-income students and students of color met or exceeded standards than in other schools in their respective states), no entrance standards for students, and for the most part, were neighborhood schools. Chenowith conducted interviews with the principals of these schools and identified five insights pertaining to school leadership that contributed to success in these schools. These insights were:

1. It is everyone's job to run the school.
2. Inspect what you expect—and expect that all students will meet or exceed standards.
3. Be relentlessly respectful—and respectfully relentless.
4. Use student achievement data to evaluate decisions.
5. Do whatever it takes to make sure students learn.

Chenowith stated, “The leaders in these schools know it’s up to them to create the conditions under which their kids will learn” (p. 21). Her comment captured the idea that school leaders have increased responsibilities for demonstrating their roles in contributing to student success.

### **Principal Effectiveness**

Principals are responsible for many aspects of school management including internal and external expectations from different constituent groups. For instance politicians, tax payers, Boards of Education, parents, employees, and students have expectations of the principal; these constituents may have competing interests. As a result of these varying pressures, principals must cope successfully in a number of different areas (Federici & Skaalvik, 2012).

Combining student achievement with principal accountability makes an examination of the role of the principal critical and can serve to determine his or her instructional leadership ability (Marks & Nance, 2007). Hallinger and Heck (1998) reviewed empirical research conducted between 1980 and 1995 that explored the role of principal leadership and student achievement. Hallinger and Heck’s review, while dated, reinforced the belief that principals have a measurable influence on school effectiveness and student achievement. One of the consistent findings was the indirect role principals have in framing, communicating, and sustaining the school’s purposes and goals. In addition, principals who shared and distributed leadership responsibilities and who emphasized involving parents in the school fostered greater effectiveness (Hallinger & Heck, 1998). Hallinger and Heck also found that principals encouraged greater levels of parental involvement in higher-achieving elementary and high schools. It was also noted

that parental participation and expectations have a corresponding impact on principals. Finally, effective principals promoted human resource development within the school. For example, structures were created so teachers in higher producing elementary and high schools could spend more time than their counterparts from low-producing schools in the direct classroom supervision and support of teachers. Teachers with effective principals also helped coordinate the school's instructional program, solve instructional problems collaboratively, secure teacher resources, and provide in-service and staff development activities (Hallinger & Heck, 1998).

The role of the teachers identified by Hallinger and Heck (1998) was further supported by Robinson, Lloyd, and Rowe (2007) who conducted a meta-analysis to identify in-school practices that impacted student achievement, Robinson et al. argued that the average effect of instructional leadership on student outcomes was three to four times that of transformational leadership. Robinson et al. found five sets of leadership practices: establishing goals and expectations; resourcing strategically; planning, coordinating, and evaluating teaching and the curriculum; promoting and participating in teacher learning and development, and ensuring an orderly and supportive environment.

Principal leadership, however, does not happen in a vacuum. Leithwood et al. (2013) identified school-factors that impact principal effectiveness. First, assessing the primary area within the school that needs to be addressed is an essential task of the principal (Leithwood et al. 2013). In order to assist in identifying the needs of the school, Leithwood et al. (2013) set forth four categories for examination: (a) rational school conditions pertain to the routine and organization functions, (b) emotional school functions require principals to attend to the emotional needs of teachers, (c)

organizational conditions relate to the policies, culture, and structures of the school, and (d) family and community conditions require principals to create and maintain strong connections to families and community organizations. A principal's ability to identify which area will improve student achievement impacts the influence the principal's effectiveness.

In a study completed by the National Institute for Excellence in Teaching (NIET) (2010), teacher qualifications cause the greatest variance in student achievement. According to the result of the NIET study, the second highest factor influencing student learning is the role of the school principal. Although student achievement hinges on the quality of the teacher, the principal's influence on the implementation, planning, and evaluation of curriculum can affect the context in which effective teaching occurs (Goldring, Huff, May, & Camburn, 2009). In fact, the Wallace Foundation's review of school leadership revealed that classroom factors account for about a third of student achievement variations while leadership accounted for a quarter (Leithwood et al., 2004). The analysis of leadership's connection to student learning by Leithwood et al. (2012) was built on prior research as well as on data from surveys, interviews, visits to schools, and state test scores on literacy and mathematics assessments. One of the areas discussed in Leithwood's work is principal leadership practices perceived by both teachers and principals to be essential to supporting instruction.

### **Leadership and Learning**

Kenneth Leithwood, Professor of Educational Leadership and Policy at the University of Toronto, has published more than 70 refereed journal articles, and has authored or edited more than 30 books based on his research in school leadership,

educational policy and organizational change. In 2004, Leithwood completed a five-year research project, commissioned by the Wallace Foundation, and aimed at determining how state, district, and school-level leadership influences student learning (Leithwood et al., 2004). Leithwood's work on successful school leadership practices and the resulting framework developed from the Wallace Foundation project provides the foundation for the dissertation study.

Several researchers have drawn on Leithwood's work on educational leadership including educational and management researcher Fullan, educational researchers Hallinger and Heck (1998, 1999, 2009, 2010), Marzano et al. (2005), and Yukl (2012) an organizational leadership researcher (Leithwood et al., 2012). While Leithwood is known internationally, much of his research has taken place in the United States.

Leithwood's work with the Wallace Foundation resulted in a framework of core practices "essential for successful leaders" (Protheroe, 2011). The four elements of the framework are

1. Setting directions
2. Developing people (e.g., providing individualized support to teachers);
3. Redesigning the organization (e.g., restructuring to support collaboration);
4. Managing the instructional program

**Vision and direction setting.** Leithwood et al. (2004) labeled the first of these categories of research on leadership impact "setting directions." The principal's ability to help groups within the school community develop shared understandings about the school and its activity and goals was a factor that emerged frequently in the literature as contributing to school success (Hallinger & Heck, 2010). According to the research,

principals of successful schools are able to design goals that communicate a compelling expectation for the direction of the school (Hallinger & Heck, 2010). This ability to set direction in a way that purposefully mediates the concerns of individual school stakeholders to arrive at shared purpose is characteristic of communitarian leadership (Marzano et al., 2005).

**Human resource development.** The second broad category of research evidences the impact of leadership in “developing people” (Leithwood et al., 2004). Empirical connections have been established between school leadership and the attitudes of teachers (Brookover & Lezotte, 1979; Louis, Wahlstrom, Leithwood, & Anderson, 2010) and their instructional practices in the classroom (Brookover & Lezotte, 1979; Louis et al., 2010).

While the principal’s impact on student outcomes is often described in the literature as “indirect” (Louis et al., 2010), leaders’ abilities to influence the development of teachers has tangential impact on multiple school factors. Principals talented in providing continued support of teachers through ongoing learning, a structure that Sergiovanni (2009) has called “teacher-centeredness” (p. 106), have been successful in influencing the attitudes and instructional practices of teachers (Louis et al., 2010).

**Redesigning the organization/managing the instructional program.**

Leithwood et al. (2004) labeled the third broad category of research on the impact of leadership on schools “redesigning the organization.” While what is taught in schools is widely determined by state education policies, there is agreement that how content is taught, when it is taught, and by whom it is taught remains largely a school leadership decision (Louis et al., 2010). In this way, the principal has a great deal of school level influence over learning design, and over the structures that support learning.

## **Leadership and Increased Accountability**

Information regarding the principal's influence on student learning has become increasingly necessary. In New York State, the recognition that principals play an important role in advancing student achievement has led to more specific evaluation processes, which increases the stakes for poor performance.

The role of the principal became even more salient following the August 2010 announcement by the U.S. Department of Education that New York State had been awarded \$696,646,000 in the second round of the federal Race to the Top competition (NYSED, 2011). As a result, the New York State Board of Regents adopted regulations that required a statewide principal performance evaluation system that includes multiple measures of educator effectiveness. Included in these measures are student achievement scores on New York State Assessments and on locally adopted achievement measures. The new regulations, which took effect during the 2011-2012 academic year, established a comprehensive evaluation system for all school principals in New York State. Principal evaluations now are used by districts to make a range of employment decisions, including promotion, retention, tenure determinations, termination, and supplemental compensation (NYSED, 2011).

The new evaluation system required that each principal receive an annual professional performance review (APPR) resulting in a single composite effectiveness score and a rating of highly effective, effective, developing, or ineffective. If a principal has been rated developing or ineffective, the school district is required to develop and implement an improvement plan. Tenured principals with a pattern of ineffective performance, defined as two consecutive annual ineffective ratings, may be charged with

incompetence and considered for termination through an expedited hearing process (NYSED, 2011). These increases in accountability coupled with existing responsibilities confronting principals may lead to more stress for principals.

A study conducted by Friesen and Sarros (1989) examined the predictors of burnout among 635 teachers and 128 school administrators. The study examined three areas: emotional exhaustion, depersonalization, and personal accomplishment. Emotional exhaustion was defined as the feelings of overextension and exhaustion caused by daily work pressures. Depersonalization referred to the development of negative attitudes and impersonal responses towards colleagues in the workplace and personal accomplishment referred to feelings of inadequate personal achievement and a diminished sense of self-esteem. Results indicated that the greatest predictor of emotional exhaustion for school-based administrators was overall work stress. Satisfaction with workload was also a predictor of emotional exhaustion for school-based administrators. Other predictors of personal accomplishment for administrators pertained to satisfaction with security and involvement, advancement, and autonomy (Friesen & Sarros, 1989).

Friedman (2002) conducted a study to identify the common work-related stressors encountered by principals and to assess their relative impact of predicting school principal burnout. A sample of 821 elementary and secondary, male and female school principals participated in the study. They completed a self-report questionnaire containing two scales: a burnout scale and a role-pressures scale. Results of the study showed that burnout was affected mostly by pressures stemming from teachers and parents, and to a lesser extent, from overload (qualitative and quantitative). The findings implied that principals who feel that their leadership is challenged or rejected feel

strongly stressed and eventually burned-out (Friedman, 2002). These facts may create challenges for principals attempting to make changes that could lead to improved student achievement.

Despite all the research pointing to the pressures placed on principals, the review of the research failed to identify studies pertaining specifically to rural schools in New York State. In addition, the primary measure used for identifying school wealth was free and reduced-price lunch percentages, which may not always provide an accurate measure of school wealth. This study addressed these gaps in the literature by focusing on low-wealth rural schools in New York State using two wealth measures: Combined Wealth Ratio and free and reduced-price lunch percentages.

### **Summary**

Regulations associated with state and federal education reforms have raised the level of accountability for New York State public school principals. As a result, the identification of principal practices that positively impact student achievement has become increasingly necessary. A review of the research linking leadership to student achievement recognizes that there are obstacles that principals must address. First, the duties assigned to the principal have evolved and the environments in which principals work have become increasingly complex. Second, children from low-income families have often started school already behind their peers who come from more affluent families, as shown in measures of school readiness (Ferguson et al., 2007). Third, a lack of access to transportation systems has made it difficult for children in low-income rural areas to access to valued activities (Bickel et al., 2002). Despite these challenges, practices for higher-achieving schools have been identified.

Practices for higher-achieving schools were identified by Cawelti (2001), Togneri and Anderson (2003) and Dessoff (2012). These researchers identified traits that school systems utilized during improvement efforts. Effective school practices must be integrated with factors associated with school context.

State and federal regulations are applied to all schools in the same way, even though there are distinct contextual differences between urban, suburban, and rural schools. Rural school environments have unique characteristics that impact student achievement. Results of a study conducted by Durham and Johnelle Smith (2006) showed that there is a direct association between living in nonmetropolitan counties and lower early literacy ability at the beginning of kindergarten. As stated by Durham and Johnelle Smith, students in isolated rural areas begin school with the greatest relative disadvantage in early literacy ability. Rural areas also had higher rates of people without a high school diploma, higher percentages of households below the poverty line, and lower median household income (Durham & Johnelle Smith, 2006). However, Ortlieb and Cheek (2008) found that a rural school had a strong sense of community that improved aspects of the classroom environment, and students who attended schools in rural settings students were more likely to see their teachers outside of class. Nevertheless, dispersed populations within rural environments have created challenges for principals trying to access community supports for students.

Although student achievement is hinged on the quality of the teacher, the principal's influence on the implementation, planning, and evaluation of curriculum has been shown to affect the context in which effective teaching occurs (Goldring et al., 2009). Principal effectiveness has been addressed in the research literature, but limited

studies have pertained to the role of the principal in rural school environments. This chapter concludes with a brief overview of a framework for effective school leadership by Leithwood et al. (2012) with an emphasis on core leadership practices and their relevance to this study. The leadership framework for learning completed by Leithwood et al. (2012) takes school context into account, thus providing a useful framework to guide the study.

Because student learning is impacted by school-level and contextual factors (Lezotte & McKee-Snyder, 2011; Marzano et al., 2005; Reardon, 2011; Sirin, 2005), and principal leadership has been known to be pivotal to a school's success (Wilson, 2011), a qualitative research method was used in this dissertation study. As described by Corbin and Strauss (2008), a qualitative study will most effectively capture the unique, detailed, and complex experiences of principals. The application of a qualitative methodology will build an understanding of how elementary school principals in low-wealth rural schools impact student learning. The methodology is described in Chapter 3 of this dissertation.

## **Chapter 3: Research Design Methodology**

### **Introduction**

The role of the elementary school principal has evolved since American public schools began in 1864 (Pulliam & Van Patten, 2007). The role of the principal requires high levels of energy and expertise during a time when there is increased participation of the federal government in schools (Hulley & Dier, 2009). The 21<sup>st</sup> century principal works in complex environments that include specialized services with increasing levels of regulation (Hulley & Dier, 2009). Comparisons of standardized test scores drive rewards and sanctions that often penalize schools with the least advantaged students (Cushman, 1997). Principals face demands from multiple stakeholders and recent accountability requirements have implications for schools and for individuals.

In New York State (NYS), one factor leading to increased levels of accountability is the state's participation in the Race to the Top (RTT) federal grant. Schools located in states receiving RTT funds must measure teacher and principal growth by adopting evaluation systems based on student achievement measures (Montes, 2012). As a result, New York State public elementary school principals have been evaluated, in part, on student performance on the Grade 3-5 New York State English Language Arts (ELA) and Math Assessments. Although a considerable body of research has been developing on how large high-poverty urban and suburban schools are addressing the accountability requirements there is little research into how high-poverty rural schools

are responding to performance based accountability reform (Nagle et al., 2006). This dissertation study works to address this gap in the research.

Among the factors that have contributed to student achievement is the geographic location of a school. A narrative review of research on school location showed that even after accounting for family socioeconomic status, there are significant differences between urban, rural, and suburban schools (Sirin, 2005). For example, rural parents work longer hours but earn less than their urban counterparts, and longer hours mean that parents are less available to spend time with children. Moreover, a high percentage of low-wealth, rural children live in single parent families (Dill, 1998). Additionally, rural parents have less access to community resources, less access to high quality preschool child care (Early et al., 2007), and have less time to engage in meaningful conversations with their children. Relative to their urban and suburban peers, children living in rural areas have limited access to many community-based resources (Collins et al., 2008). A contributing factor to poor access to these resources is a lack of public transportation systems. As a result, children in rural households are three times more likely to be without transportation than are children from non-rural households (Collins et al., 2008). Like rural schools across the United States, New York State rural schools confront many of these challenges.

In New York State, rural areas account for more than half of the school systems, boards of cooperative education services (BOCES), and colleges (New York State Rural Schools Association, 2013). Upstate New York has been defined in a number of different ways. For the purposes of this study, Upstate New York refers to the 49 counties outside

of the greater New York City metropolitan area. There are approximately 350 rural school districts within these counties.

In addition to a school's geographic location, the income level of a student's family also has been shown to impact academic achievement. As of 2011, the income achievement gap (the average achievement difference between a child from a family at the 90th percentile of the family income distribution and a child from a family at the 10th percentile) was nearly twice as large as the black-white achievement gap (Reardon, 2011). Through multiple studies, the United States Department of Education has indicated results that demonstrate that student and school poverty adversely affected student achievement (Lacour & Tissington, 2011). Lacour and Tissington (2011) reported that a 2001 United States Department of Education study of third through fifth grade students from 71 high-poverty schools, found the following effects of poverty on student achievement: the students scored below norms in all years and grades tested; students who lived in poverty scored significantly worse than other students; and schools with the highest percentages of poor students scored significantly worse initially, but closed the gap slightly as time progressed. Numerous individual studies have found similar results.

While many low wealth schools have low levels of student proficiency, some are successful (Barley & Beesley, 2007). A review of Upstate New York schools by Thomas (2012) indicated that several small rural schools, which are not considered affluent, scored in the upper quartile on New York State Achievement measures. The identification of the principal's impact on student achievement could prove useful for principals in rural schools; however, a review of the literature failed to uncover specific strategies for principals in rural schools. Given the lack of scholarly research conducted

in rural settings (Arnold et al., 2005), there is limited information available to help guide principals seeking to improve student achievement in low-wealth rural elementary schools. As such, research is needed to provide some insights into the role of the principal in guiding success in rural schools. This chapter describes the methodology that will be used to seek answers to the questions raised by the lack of research. The general perspective, research context, research participants, procedures, and instruments used for collecting and analyzing data for this study are discussed in detail.

### **Research Methodology**

This study used a qualitative research design, which included a phenomenological strategy and a naturalist approach. The phenomenological method of research provides a world view based on the perspectives of principals in selected New York rural elementary schools (Kvale & Brinkman, 2009). The naturalist paradigm is based on the importance of context, complexity, and the examination of the interaction of many factors (Rubin & Rubin, 2012). Within this paradigm, the interpretive constructivist believes that understanding is gained by learning how people interpret the events and human interactions in the world around them. The researcher is concerned with the meanings and values people assign to events (Rubin & Rubin, 2012).

The study sought to understand how elementary school principals experience their roles in promoting student achievement, thus a basic qualitative research design was most appropriate. According to Creswell (2009), qualitative research methodology is best suited to examine and understand the experiences of those being studied. The qualitative approach involves studying a small number of participants (Creswell, 2009), and lends itself to uncovering experiences that are unique, detailed, and complex (Corbin &

Strauss, 2008). For the purposes of the dissertation study, perspectives were gathered using a narrative approach that included semi-structured interviews with elementary school principals in higher-achieving low-wealth rural schools. The data from the interviews was supported by observations collected during the interviews using field notes to provide depth and help uncover the principal behaviors that support improved student achievement (Roberts, 2010).

Qualitative researchers use a theoretical lens or perspective to guide their studies. A selected theoretical lens shapes the questions asked, informs data collection and analysis, and can provide a call for action or change (Creswell, 2009). This lens also guides the researcher as to what may be important to study and the people that need to be studied. Finally, a theoretical perspective informs the researcher on how the final accounts need to be written (Creswell, 2009).

This study was guided by Leithwood's (2012) core leadership practices which identified major categories of principal leadership. The research questions for this qualitative study were:

1. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe their influence on the levels of student performance on Grade 3-5 New York State ELA Assessments?
2. Which actions, if any, do principals in low-wealth rural elementary schools in Upstate New York consider most relevant to improving student achievement on the New York State English Language Arts Assessment in grades 3, 4 and 5?

3. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe the influence of social and environmental factors of a rural community on their ability to redesign the organization?

The study included an interview protocol for identifying the practices of elementary school principals that promote higher levels of student achievement. The participants were identified through a review of data pertaining to school and community wealth, school location, and grade level scaled scores on the New York State Grade 3-5 English Language Arts Assessment, which allowed for the identification of higher-achieving low-wealth rural elementary schools in New York State. These elementary schools became the context for the study. On-site interviews were conducted to gather information regarding school context and for determining principal-specific behaviors that may contribute to high levels of achievement for all students.

### **Research Context**

The following factors were considered for identification of participating schools:

1. Rural elementary schools that contain grades kindergarten through fifth grades.
2. School districts whose Combined Wealth Ratio (CWR) is at or below the average New York CWR, and whose Free and Reduced-Price Lunch (FRPL) percentage is at or above the average FRPL for all New York State rural schools in 2010, 2011 and 2012.
3. School Districts whose 2010, 2011 and 2012 average scaled scores on the Grade 3-5 New York State English Language Arts Assessment (ELA) are above the average for all New York State rural schools.

4. Schools that administered the Grade 3-5 New York State ELA to 40 or more students in grades 3, 4, and 5 during the 2009-2010, 2010-2011 and 2011-2012 school years.
5. The geographic location of the school within New York State will not be a factor in identifying schools.

For the purposes of determining the context for this study, a master list of eligible New York State rural elementary schools was generated. Three sources were used for determining the contents of this document. First, a list of participating members of the New York State Rural Schools' Association was referenced. The New York State Rural Schools Association is a statewide organization representing the interests of, initiating research for, and providing service and information to the small and rural school districts of New York State (New York State Rural Schools Association, 2013). Schools outside of the upstate New York region were deleted. Second, the New York State Education Department's Information and Reporting Services was accessed. This source includes a list of New York State public schools by school type (rural, urban, and suburban). Upstate New York rural schools, which were not included on the New York State Rural Schools' Association member list, were added to the master list. Third, the New York State School Report Card (2013) database was accessed to determine enrollment, wealth, and assessment information for each eligible rural school district for the 2010-2012 school years.

**Rural schools.** This study took place in New York State rural elementary schools selected based on the criteria set forth in the previous section. New York State Center for Rural Schools' data (2013) indicated that 299 of the state's 697 public schools are in rural

areas and 65 schools are in towns located in distant or remote locations. A total of 360,000 students are educated in New York's rural schools. As a result of the criteria used for identifying schools, 253 schools were identified as possible contexts for this study.

An issue that confounds research in rural environments has been the varied definitions of "rural" (Arnold et al., 2005). For the purposes of the dissertation study, the definition provided in New York State Education Law, Article 24, Section 1203 (1990) was used. This definition reads, "'Rural Area' shall mean any county with less than two hundred thousand population, or any town which has a population of less than one hundred fifty persons per square mile" (New York State Center for Rural Schools, 2013). Thus, rural areas in New York State account for more than half of the school systems, boards of cooperative education services, and colleges (New York State Rural Schools Association, 2013).

**Higher-achieving New York State rural elementary schools.** Marzano (2003) defined a highly effective school as a school that almost entirely overcomes the impact of students' backgrounds on their academic achievement. Lezotte and McKee-Snyder (2011) defined an effective school as one characterized by high overall student achievement with no significant gaps in achievement across subgroups in the student population. The New York State Education Department defined elementary schools as schools containing at least one grade lower than 6 and no grade higher than 9. These definitions were used for identifying possible schools for inclusion in the study.

For the purposes of the dissertation study, student performance on New York State (NYS) grade 3-5 English Language Arts Assessments (ELA) was used to determine

whether or not a school is a higher-achieving school. As stated by Cameron (2013) and Mullis et al. (2013), literacy is embedded in daily life and is increasingly integrated across subject areas. Mullis et al. (2013) also stated that fourth grade students who lack reading skills have been shown to be at a disadvantage in learning mathematics and science. NYS rural schools' grade 3-5 ELA standard scores were averaged for the 2010-2012 school years. Low-wealth school districts whose New York State ELA 3-5 average standard score was at or above the average of all rural schools were identified as potential contexts for this study.

**Wealth factors.** Studies based on United States administrative data often approximate socioeconomic status by using eligibility for free and reduced-price lunch as a measure for low family income (Ladd, 2011). Given that the socioeconomic status of a child's parents has always been one of the strongest predictors of the child's academic achievement (Reardon, 2011), percentage of students receiving Free and Reduced-Price Lunch (FRPL) was considered in this study. Furthermore, the location of a school, as in an urban, rural, or suburban setting, has been shown to influence various factors related to education (Bouck, 2004). For example, the location of a school is often associated with the socioeconomic status level of the school (Bouck, 2004). New York State school district wealth is measured using a Combined Wealth Ratio (CWR). Combined Wealth Ratio is determined by combining Pupil Wealth Ratio, a measure of property wealth in a given district, and Alternate Pupil Wealth Ratio, a measure of personal income. The average CWR for all New York State schools is 1.0 (NYSED, 2012). The Combined Wealth Ratio of potential sites was used as a second wealth factor in this study.

**Accountability groups.** The federal No Child Left Behind Act requires schools to monitor the Adequate Yearly Progress of all students and of specified sub-groups, also known as accountability groups. In New York State public schools, an accountability group is defined as having 40 or more students enrolled during the test administration period (NYSED, 2013). One of these accountability groups is Economically Disadvantaged Students. For the purposes of this study, New York State rural elementary schools that had fewer than 40 students enrolled in grades 3, 4, or 5 during 2010, 2011, or 2012 test administration were not considered as potential participants in this study. The researcher obtained permission from St. John Fisher College's Institutional Review Board (IRB). The IRB provides an objective perspective and ensures that basic ethical principles underlie behavioral research involving human subjects (United States Department of Health and Human Services, 1979).

### **School Identification and Research Participants**

Participating schools for this study were identified from the 254 Upstate New York rural schools. The 2010-2012 New York State School Report Card (2013) data was used and schools were selected based on the following criteria:

1. Grade-level cohorts of 40 or more students;
2. Above average standard scores for grades 3, 4, and 5 on the New York State English Language Arts Assessment (NYS ELA);
3. Below average Combined Wealth Ratios (CWR); and
4. Above average free and reduced-price lunch (FRPL) percentages.

The list of potential sites for this study included 254 rural elementary schools.

Once eligible schools were identified, purposeful sampling strategies were used to identify participants for the study because it is preferred that all participants have a minimum of two to three years of administrative experience within the same school. The length of principal tenure is salient because according to Wilson (2011), principal leadership has been known to be pivotal to a school's success and particularly critical in schools that have ranked persistently low performing over time. The preferred time frame of two to three years in the principal's current position allowed for the establishment of the principal's actions and beliefs within the school.

Eligible participants were contacted by phone to determine their willingness to participate in the study. Codes for participants and qualifying information such as total years of administrative experience and years as principal in current school were documented (Appendix A). School locations and identities of participants were anonymized and coded to guard privacy.

According to Creswell (2007) the number of participants in phenomenological studies can range from 1 to 325. Dukes (1984) stated, when conducting phenomenological studies, the sample size may include three, five, or even 10 subjects. In phenomenological studies, the task demands extensive study of a small sample, allowing participants to speak for themselves and to reveal the logic of their experiences (Dukes, 1984). Two factors were considered when determining the number of participants for this study. First, how many interviews will provide enough information to address the research questions? According to Eisenfeld (2007), the sample should be large enough so that the researcher will see important patterns and to ensure confidence that the findings reflects the attitudes of the target population. Second, the amount of time

needed to conduct, transcribe, analyze, and present the interview data should be considered. Eisenfled (2011) also stated that incentives for participation will increase the response rate, however, institutional review board guidelines indicated that incentives should not be so large as to be considered coercive. Thus, participants were given a \$25 gift card.

### **Instruments Used in Data Collection**

The following instruments were used to collect data.

1. Table including site name, principal's name, and contact information (Appendix A).
2. Interview Protocol and observation notes (Appendix B).
3. Table aligning interview questions with research questions (Appendix C).

Semi-structured interviews are useful for understanding themes of the everyday experiences from the subjects' perspectives (Kvale & Brinkmann, 2009). Semi-structured interviews are professional interviews that have a purpose and involve a specific approach and technique. Interviews provide in-depth information pertaining to participants' experiences and viewpoints of a particular topic (Turner, 2010). The semi-structured interview format provides participants with some guidance on what to talk about by including key questions that help to define the areas to be explored. However, the semi-structured nature of the interview allows the interviewer the flexibility to pursue an idea or response in more detail (Gill, Stewart, Treasure, & Chadwick, 2008). The flexibility of this approach, particularly compared to structured interviews, also allows for the discovery of information that is important to participants but may not have been thought of as relevant by the researcher (Gill et al., 2008).

This research included an interview protocol to facilitate each interview in a consistent manner (Appendix B). The interview protocol included verbal prompts that briefly described the study, highlighted the purpose, described what will occur during the interview, and ended with thanking the interviewee for participating. Space to record pertinent information related to the study including the date, time, and location of the interview, the name of the interviewee, participant consent to audio record the interview, and for the researcher to record observations was also included. In designing the interview protocol, a table aligning interview questions with research questions was used to ensure research questions were addressed (Appendix C). Pilot sessions using the interview protocol and audio devices took place with two rural elementary school principals who are not part of the research sample. As a result, interview protocol and recording formats were adjusted and finalized.

Interview sessions were audio recorded in a digital format as a means for obtaining the most authentic text possible. Furthermore, Creswell (2009) suggested that an observation protocol be utilized to record descriptive notes and reflective notes. In this study, researcher observations were noted and were a part of the interview protocol (Appendix B).

### **Procedures in Data Collection and Analysis**

A basic framework provides a clear structure for organizing and interpreting qualitative data (Baxter, 2013). Creswell (2009) described the steps in qualitative data analysis as an interactive process that includes various stages. According to Creswell, the researcher moves back and forth between the stages throughout the study. The study used Creswell's (2009) data analysis structure as guide. Audio recordings were transcribed by

a third party professional transcriptionist as a means for organizing and preparing information. Transcriptions were read to gain a general sense of the information shared and to reflect on possible meanings (Creswell, 2009). Thoughts and reflections were recorded in a journal. Transcriptions were emailed to participants as a means for checking the accuracy of statements, and participants were asked to confirm the accuracy of final transcriptions.

Prior to beginning the interviews, participants received the informed consent letter (Appendix D) and had the opportunity to ask any questions concerning their involvement in the study. The interview began only after the participant signed the consent form.

Confidentiality was maintained during the interviews and no identifiers were used during the interview process. Confidentiality was maintained by coding the responders' names and the name of school districts. No identifying information was shared. Interview data, tapes, and any supporting documentation have been kept in a locked, secure area in the researcher's possession for a minimum of three years from the conclusion of the dissertation process. When the data will no longer be used by the researcher, the raw data will be destroyed.

Data was coded using both predetermined codes and emerging codes. Predetermined codes were established using Leithwood's (2012) core leadership practices, which allowed data to be analyzed against the theoretical framework (Creswell, 2009). Emerging codes were developed after multiple reviews of the data. Once codes were established, qualitative data analysis (QDA) software was utilized to code, sort, and organize information. Use of QDA software aids in storing and locating qualitative data and may be used for comparing codes. Software was used to group significant statements

into codes or themes that respond to each of the research questions. Coding was used to generate themes that guided the findings section of the study (Creswell, 2009). Codes were created using the following sources: Principal Interview Protocol, study Research Questions, information in literature review, and characteristics of higher-achieving schools. A narrative description of the findings has been presented and tables and figures have been used to support the descriptions as needed. Finally, data was interpreted to determine what was learned, and a determination of the study's meaning within the Leithwood's framework of core leadership practices is presented (Creswell, 2009).

**Credibility.** Creswell (2009) described various approaches for increasing the accuracy and credibility of a qualitative study. The use of interview protocols and specifying the steps for analyzing data promotes consistency and increases the trustworthiness of the qualitative approach. Several strategies can also be used to increase the credibility of a qualitative study. First, asking participants to review interview transcripts allows one to check the accuracy of statements; this approach is called member checking. Using the data from several participants to create and justify themes is a form of triangulation that was used to ensure the credibility of the study. Observation notes and audiotapes also were transcribed as a means for checking the accuracy of interviews. Finally, a clarification regarding the bias of the researcher was used. Issues surrounding researcher bias is discussed in the next section.

### **The Researcher**

A limitation to the qualitative content analysis of research data is that it may lead the researcher to examine the data used in developing themes with an informed, yet strong bias (Hsieh & Shannon, 2005). In addition, a researcher may give excessive

emphasis on the framework or theory guiding the study and thus not see other situational aspects of the phenomenon under study (Hsieh & Shannon, 2005). As a means for addressing this concern, a narrative containing comments about how background and work history will shape interpretations of the data (Creswell, 2009) is included in this section.

The researcher is the key instrument in qualitative research (Creswell, 2007) and reflectivity is a core characteristic of qualitative research (Creswell, 2009). Describing the professional background of a researcher promotes the validity of a study and exposes possible prejudices that may influence interpretation of data gathered during the data collection process. As such, maintaining an awareness of these prejudices and being reflective throughout the research process was an important part of this dissertation work. One way to mitigate researcher bias is through reflections and observations recorded in a journal. A second tool for bracketing researcher positionality is through a brief narrative regarding the researcher's professional background.

The researcher proposing this study has been a public educator 25 years, a building-level administrator for 14 years of those years, and is currently an elementary school principal in a rural school district in Upstate New York. The researcher has worked as an educator in four rural school districts and in three high-wealth suburban districts. The researcher has experienced annual evaluation partially based on student performances in the New York State Grade 3-5 English Language Arts Assessment. Additionally, the researcher's experiences as a special education teacher, general education teacher, school counselor, and administrator have allowed him to view schools from varied perspectives and have made him increasingly aware of the struggles that

many students and families from impoverished backgrounds confront. As such, the researcher is an insider to the phenomenon being studied and thus may take certain aspects of the phenomenon for granted rather than questioning it as an outsider would. However, as an insider, the researcher has an understanding of the phenomenon and was able to quickly establish rapport with the study participants.

### **Summary**

Consideration of the different aspects of research methods is critical to creating a plan that addresses the researcher's problem statement. Selecting a general perspective for completing the study is a necessary first step in research methodology. In addition, clear identification of the context and participants for the study are critical. Finally, selecting instruments for collecting and analyzing information is important to supporting a cohesive plan for answering research questions and for increasing the reliability and validity of this study. A well-planned methodological approach that addresses the given problem statement adds credibility to the study and increases the likelihood that research results can serve as a guide to other's in the field.

This chapter outlined the research design and methodology for this qualitative study. A description of the research context and the selection of the study participants were provided. In addition, information pertaining to the data collection process, as well as procedures for data analyses of semi-structured interviews using qualitative data analysis software was provided. Finally, this chapter described the suitability of the research design, procedures for maintaining confidentiality, and ethical assurances.

## Chapter 4: Results

### Introduction

This study examined the principal's role in improving student achievement in low-wealth rural elementary schools. The study examined lived experience of principals through a qualitative analysis of interview responses. The four core leadership practices identified by Leithwood et al. (2012) provided the framework for the development of research questions and were the filter for analyzing interview data. The study was designed to answer the following questions:

1. How do elementary school principals in selected Upstate New York State low wealth rural schools describe their influence on the levels of student performance on Grade 3-5 New York State ELA Assessments?
2. Which actions, if any, do principals in low-wealth rural elementary schools in Upstate New York consider most relevant to improving student achievement on the New York State English Language Arts Assessment in grades 3, 4, and 5?
3. How do elementary school principals in selected Upstate New York State low wealth rural schools describe the influence of social and environmental factors of a rural community on their ability to redesign the organization?

Following a review of principals' responses to each research question, identified themes were viewed through the lens of the core leadership practices by Leithwood et al.

(2012) and corresponding specific leadership practices. Table 4.1 shows the core leadership practices and corresponding specific leadership practices.

Table 4.1

*Core Leadership Practices and Specific Practices*

Setting Directions	Developing People	Refining and Aligning the School Organization	Improving the Instructional Program
Building a shared vision	Providing individualized support	Building collaborative cultures	Staffing the program
Acceptance of group goals	Offering intellectual stimulation	Restructuring the organization to support collaboration	Providing instructional support
Creating high performance expectations	Modeling appropriate values	Building productive relationships with families and communities	Monitoring school activity
Communicating the direction		Connecting the school to the wider community	Buffering staff from distractions to their work
			Aligning resources

*Note.* Adapted from. *Linking leadership to student learning*. K. A. Leithwood, K. S.

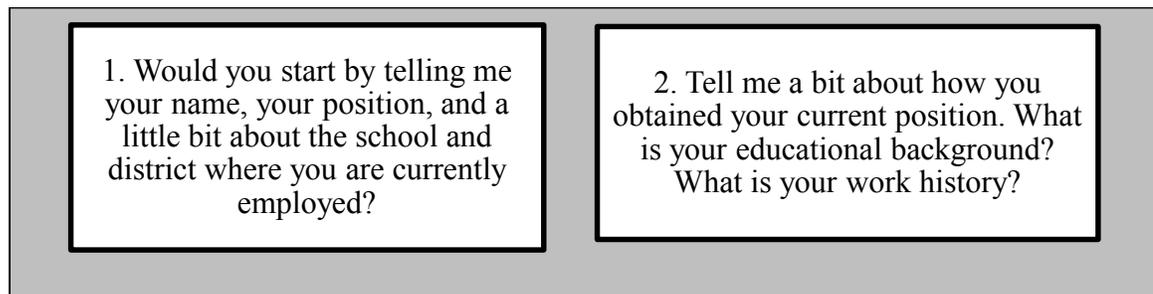
Louis, S. E. Anderson, 2012, Copyright 2012 by Jossey-Bass.

Column headings in Table 4.1 represent the core leadership practices. The core leadership practices are comprised of three to five specific practices, which are listed under each core practice.

Chapter 4 is organized into three sections. The chapter begins with a review of demographic information pertaining to schools identified as research sites. Next, the chapter presents interview data collected in response to the study's three research questions. Each section contains figures showing each research question and the aligned

interview protocol questions. In the final section, respondents' perspectives are examined for their overall relationship to four leadership practices (Leithwood et al. 2012). The chapter concludes with a summary of research findings.

### **Demographics of Participating Schools**



*Figure 4.1.* Alignment of demographics and interview protocol.

Figure 4.1 includes the questions from the study's interview protocol asked to gather demographic information. Statistical data pertinent to the environments of study participants included school district wealth measures, school achievement measures, and principals' years of experience. One of the criteria in the research design was to include schools that administered the Grade 3-5 New York State ELA. Two schools in the study did not meet this criterion and include grades pre-kindergarten through fourth grades. This change in sampling plan was necessary because of the limited number of schools that were eligible for selection according to the sampling plan originally developed for the study. Table 4.2 includes demographic information of selected schools and principal participants. Pseudonyms were assigned to each school to maintain principal anonymity.

Table 4.2

*Demographic Information Pertaining to Participating Schools and Principals*

School Pseudonym	Free and Reduced Priced Lunch Percentage for District	% Free and Reduced Priced Lunch for School	Points Above Average Scaled Score	Years of Principal's Experience in Current Position
Aquarius	44	46	8	8
Gemini	56	62	5	25
Hercules	40	46	6	3
Libra	47	47	6	12
Lynx	43	52	3	2
Orion	52	55	4	10
Pegasus	40	52	3	7
Pisces	43	47	2	13
Taurus	47	54	6	10
Ursa Major	47	55	5	10

*Note.* Demographic data pertains to low-wealth rural elementary schools participating in this study. Information in columns 2, 3, and 4 are averages from 2010-2012. Column 5 is based on principal's experience as of 2013-2014 school year.

School names in Table 4.2 are arranged alphabetically. Each row in the table provides information regarding free and reduced-priced lunch averages for the school district and the participating elementary school building, New York State Assessment information expressed in scaled scores, and principals' years of experience in administration. A review of the first and second columns showed that participating elementary schools' free and reduced-priced lunch percentages are equal to or greater than their school districts' free and reduced-priced lunch average percentages. The data in Table 4.2 aids in understanding the key factors relevant to this study: school wealth,

student achievement, and principal leadership experiences. For example, recognizing that participating schools had varied levels of wealth adds clarity to what is meant by low-wealth. Awareness of principals' years of administrative experience can be considered as a factor impacting their influence and actions impacting student achievement. Ultimately, knowledge of participants and the schools in which they work assists readers in understanding that each context had unique characteristics that must be considered.

Participating schools had varied configurations. For example, five schools were part of a K-12 campus configuration and five schools were located away from their district's middle school, high school, and district office. Principals in schools that were part of a K-12 campus valued having administrative colleagues with whom to collaborate. The principal at Lynx ES said,

So we do work really, really closely...So we've really worked hard to force ourselves to schedule time together to say here's what's going on in the building, you know, how can I help you with this or how can I help you with that and that's just not the nuts and bolts of the daily workings of the building but curriculum, we talk a lot about ELA and math, and what do I need to do in 6<sup>th</sup> grade and then 5<sup>th</sup> grade because our 7<sup>th</sup> grade teachers are saying such and such.

One school, Pisces Elementary, had an assistant principal to assist with administrative duties. Pisces also had the largest enrollment of all participating schools.

### **Data Analysis and Findings**

This section reports the findings of the study as related to the study's three research questions. Research questions were aligned with specific questions from the interview protocol and are shown at the beginning of each section of analysis.

**Principal’s influence on student achievement.** Figure 4.2 shows Research Question 1 and the interview questions designed to provide insight into the question. Analysis of participant responses revealed three overarching themes. These themes, entitled “assets that affect achievement,” “may I have your attention, please,” and “mandate is an obstacle to influence,” seek to describe the ways in which principals in higher-performing low-wealth rural schools influence student achievement.

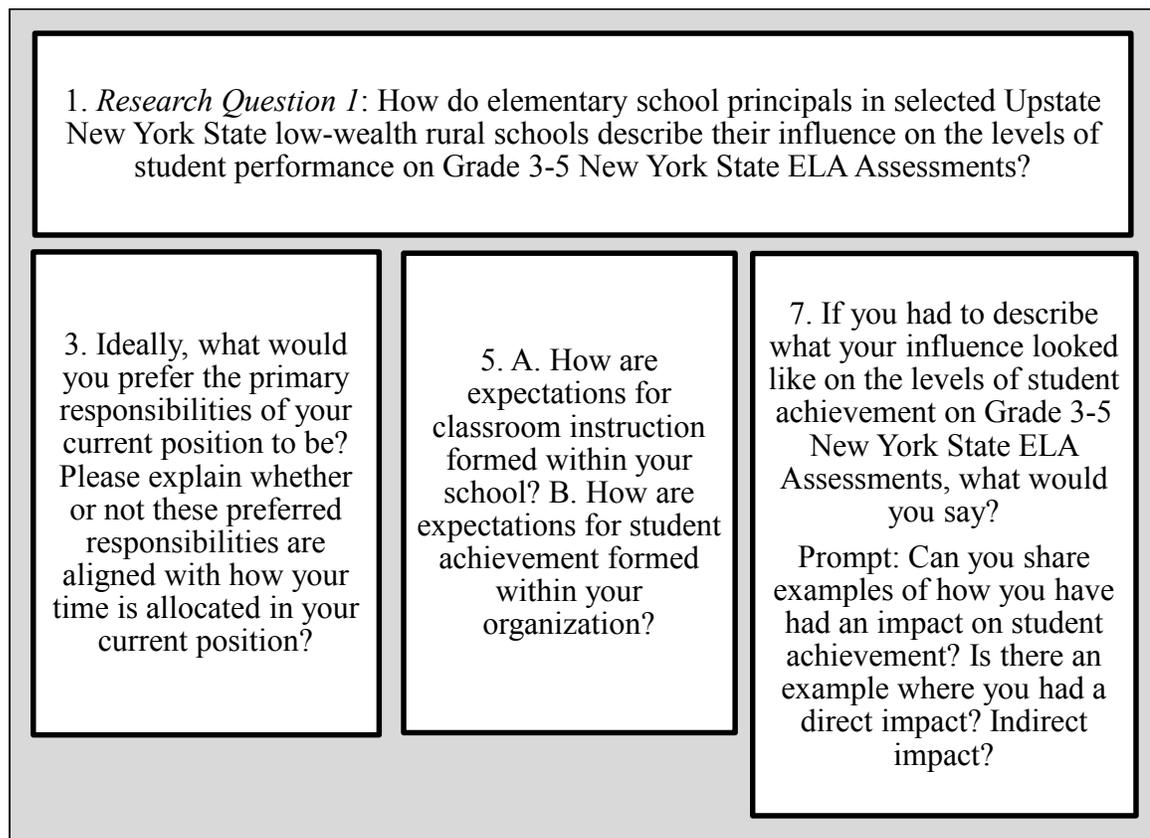


Figure 4.2. Alignment of Research Question 1 with interview protocol.

**Assets that affect achievement.** Principals’ shared that their greatest influence was in the form of providing resources to teachers. A review of responses shows that resources include materials, time, and student achievement data.

*Materials.* Principals in higher achieving low-wealth rural elementary schools stated that ensuring that students and teachers had the resources they needed to be successful is one of their primary responsibilities. In addition, these resources should be used within and between grade levels. Orion Elementary School's principal summed up her influence by saying:

I think I've worked hard to secure resources with teachers. I'm always saying "What is it that you need"? So, I think one of the biggest things is I'm always trying to meet the needs of the classroom teachers so they have what they need to teach the curriculum.

Aquarius Elementary School's principal said, "I view my job as the person to provide resources to my teachers, so I'm their sounding board." This belief was echoed by the principal of Ursa Major Elementary: "I think what I do is provide the support that the teachers need." She went on to say, ". . . we purchase whatever materials that they're looking for that they want to use."

Lynx Elementary School's principal made a similar statement, "My influence is being able to make resources available to teachers, I think that's where I could say my influence is most evident, is giving them the materials that they need, the time they need to improve their instruction." Finally, the principal at Taurus Elementary School believed his primary influence is achieved by ". . . ensuring that we have standards-based curriculum and making sure the curriculum is being taught." He also indicated that resources must be dedicated to instruction in order for this work to happen.

Principals also influence achievement by assuring that common resources are aligned within and between grade levels. The second year principal at Lynx Elementary

School discussed the importance of aligning building-level assessments with building-level interventions. She identified the act of acquiring a common reading assessment for all grades that is supported by the use of literacy intervention kits. She attributes this action to “bringing our below-benchmark kids up to benchmark so they can be competitive with their peers.”

The principal from Aquarius ES said, “You’ve got to have, besides a consistent program for teaching kids to read, you’ve got to have a consistent program to teach them to write.”

The following statement from the principal at Orion Elementary School demonstrates her commitment to aligning resources:

I know that was always a challenge when I first got here, too. Different classrooms used different materials and it was like, No! We’re in this boat together, we need to have consistent expectations, we need to have a consistent approach, terminology, I mean we’ve got it as far as just making sure we’re using the same terminology, you know we use the same paper heading.

Principals’ influence went beyond providing material resources. Providing teachers with time to teach was also viewed as critical to influencing student achievement.

*Time.* All 10 participating principals developed the master schedules for their schools. Five respondents indicated that their ability to provide ample time for literacy instruction is an area of their influence on student achievement.

In Lynx Elementary School, teachers had a 90 minute block of time dedicated to literacy instruction. During the literacy block, students were not allowed to be taken out

of class for any reason. Teachers were empowered to say, “You can’t take my students at this time.” Libra Elementary School’s principal made a similar statement: “You may not touch a kid during reading, math, or AIS time, and everybody has gotten used to this now that those are our priorities, this is what we think is important.” She closed by saying, “This is what’s protected and we will provide the best instruction we can there.”

Requiring all students to be in class during the literacy block increased the amount of time that all students were taught in a heterogeneous group by their general education classroom teacher.

At Orion Elementary School, the principal worked collaboratively with teachers to develop the schedule. The end result was summarized in this way: “We agreed as a faculty when we first started doing the schedule that it was important to have time, blocks of time, devoted to just not having any interruptions.” She went on to say,

When we created the master schedule we made sure that our K through 2 populations didn’t have any specials until at least 10:30 in the morning. So from 8:30 to 10:30 K through 2 has absolutely no specials. So they’ve got at least a two hour block that they can devote to reading and ELA the first thing in the morning.

The schedule at Pegasus Elementary School also included 90 minutes of uninterrupted time for literacy instruction. Arranging and utilizing strategies that provide additional time for supporting students was another way that principals used time as a resource for influencing student achievement.

How principals assign time for additional support looked different in each school. At Pegasus Elementary School, an additional adult went into classrooms for 20 minutes a day to support students in small groups or individually depending on what the classroom

teacher requested. Pegasus Elementary and Ursa Major Elementary dedicated time and resources for 1:1 reading instruction with first grade students. Gemini Elementary offers after-school support for third through fifth grade students one day a week, seven weeks prior to the New York State Assessments. Transportation was provided for students who choose to stay for this support.

*Data.* Information regarding student progress was shared primarily through the use of data. This practice was evident to some degree in every school and was reinforced by the principal at Orion Elementary School. “We’ve done a lot with data analysis over the years, we have someone from our local BOCES come in and talk about the data with the teachers and kind of pull it all apart . . .” The principal from Libra Elementary School referred to the use of data as a means for targeting resources for students: “. . . we look at our data meetings, we see every six weeks, we put services in place for every child be it enrichment or remediation, every six weeks we look at every single kid grades K to 6.”

Providing data as a resource was not enough; principals also influenced achievement by encouraging teachers and support service providers to alter their instructional practices in response to achievement results. The principal from Ursa Major said,

. . . last year, just like everybody else, our test scores were down . . . I think it’s how you respond to that. So let’s say you do have a year where your test scores are down, so how do you respond, you pick up your curriculum, you take a look at it, you get your teachers together, you form a committee, you take a look at everything you do and you figure out what you can do better. So I guess the third thing would be your response to whatever test scores you do have.

At Orion Elementary School, the principal attributed much of their success to data analysis and response:

. . . I think a big piece of our success too has been the data analysis, you need to relook at where your weak spots are and target those and you know, try to close those gaps, it's a constant thing, you know, just when we've been doing some data analysis and we're getting a handle on the old assessments then everything changed. . .

The next theme pertaining to Research Question 1 is how principals influence students, staff, and community through varied forms of communication. This theme is entitled, "may I have your attention, please."

***May I have your attention, please.*** Five principals indicated that they communicate their visions or expectations via newsletters, faculty meetings, data review meetings, and during summer work sessions. New teacher orientation was also a time when principals created high performance expectations for instruction. Three principals mentioned using the morning announcements as a means for communicating expectations for students.

Two principals discussed how district-level goals were jointly established with the school's superintendent, administrators, and Board of Education members all contributing. The primary source used for goal-setting was state assessment information. Principals shared these goals with faculty. Three principals described how expectations for high-quality instruction and for student learning are built into the culture of the school. As the principal from Ursa Major Elementary School stated,

We have an incredible tradition here and it's kind of hard to explain. Everybody pretty much lets you know what needs to be done and we do have high expectations whether it's academic or behavior, so we try to run a tight ship...

The principal from Aquarius Elementary School put it this way:

I have to say, I'm principal at one of the best little kept secrets in the North Country. My teachers know that we have a rural, poverty-stricken district, but my teachers never treat the kids like that, like they can't learn. So the expectation starts from day one when they walk in through the building, they're accepted for who they are, they're expected to learn, they're expected to try their best.

***Mandate is an obstacle to influence.*** The final theme in response to Research Question 1 is "Mandate is an obstacle to influence." Participant responses indicated that the greatest obstacles to carrying out their preferred activities were required duties that have principals in classrooms more. The primary obstacles were the requirements aligned with the Annual Professional Performance Review (APPR) process. Principals had less flexibility in determining which classrooms they visited because they had to attend to new observation requirements. Completing lengthy observation of all teachers limited principals' abilities to supervise specific teachers needing more support.

All study participants indicated that they would prefer to be spending more time in classrooms interacting with students and teachers. The principal at Libra Elementary School summed up these sentiments by saying, "If I could just spend the time with the teachers and students in the classroom and doing more instructional pieces that would be great." Interestingly, eight out of 10 principals indicated that their actual responsibilities

do not align with their ideal responsibilities. Specific comments from principals assisted in understanding this outcome further.

Meetings and paperwork associated with APPR responsibilities consumed a great deal of principals' time. The following statement from Pegasus Elementary School's principal explains how requirements of the observation process impacted her use of time:

I would think primarily our APPR system and the observations that I have to do. I don't have an assistant and so if I count all the observations, including final ones which are their professional summaries, I have to do 143. So, it's very, very, very time consuming and takes up a great deal of my time.

The perspectives of principals in higher achieving low-wealth elementary schools identified specific ways in which they influence student achievement. In the next section, the views of participants are examined through the lens of the core leadership practices and applicable specific leadership practices developed by Leithwood et al. (2012).

*Applying Leithwood's framework to Research Question 1.* Participating principals' experiences and perceptions regarding their influence on student achievement were confirmed by applying the following core leadership practices: setting directions, developing people, refining and aligning the school organization, and improving the instructional program (Leithwood et al., 2012). Application of the framework developed by Leithwood et al. (2012) shows the interconnectedness of principals' influence. Libra Elementary School's principal description of how data meetings provide opportunities for influence within multiple areas can be applied to some of the practices described by Leithwood et al. (2012):

I would say it's pretty influential. I mean we're talking about what's going on instructionally with individual kids and grade levels. . . . I can help guide where if I know a teacher is struggling they bring it right up immediately . . . I know I sound like a broken record, but I think those data meetings are important because it's that communication with teachers and finding out what's going on with every kid and what teachers need.

The principal, grade-level teachers, and support services providers at Libra met every six weeks to review student progress on common assessments. Libra Elementary School relied on data meetings to monitor students' progress, monitor instructional practices, and identify students for additional supports. In addition, the principal influenced group goals, influenced the development of individual teachers, and fostered collaboration during data meetings. Each of the core leadership practices described by Leithwood et al. (2012) is evident in the collaborative data meeting process at Libra Elementary School. Two of Leithwood's core practices emerged as most prevalent in the responses from principals in higher achieving low-wealth rural elementary schools in upstate New York.

*Improving the instructional program.* Participants' influence was aligned primarily with the core practice of improving the instructional program. Four specific practices in this area mentioned include (a) monitoring school activity, (b) staffing the program, (c) providing instructional support, and (d) aligning resources.

Participating principals' descriptions of providing resources, such as materials, time, and data for teachers are representative of the specific practice of aligning resources (Leithwood et al., 2012). The specific practice of monitoring school activity was

exclusive to using data. Creating blocks of time for literacy instruction and protecting this time from outside services is an example of the specific practice of buffering staff from distractions to their work (Leithwood et al., 2012).

All principals described how their preferred activities related to improving the instructional program were inhibited by requirements pertaining to the APPR process. The theme entitled “mandate is an obstacle to influence” highlighted how requirements of the APPR process limited principals’ ability to provide instructional support and monitor school activity to the degree they would prefer. Instructional support and monitoring school activity are specific practices within the core practice of improving the instructional program (Leithwood et al. 2012).

*Setting directions.* “May I have your attention, please” is the theme most closely aligned with the core practice of setting directions. All participants used varied forms of communication as a means for applying the specific practices of building a shared vision and communicating the direction. Principals seized opportunities at assemblies and on the morning announcements to encourage students and faculty to try their best and to focus on learning. Parents were kept informed of school goals via parent newsletters and emails. Presentations to the Board of Education were also used as a means for informing community members about school data and subsequent learning goals.

Two practices identified by Leithwood et al. (2012) that were not present within responses to Research Question 1 are developing people and refining and aligning the school organization. However, these core practices were present in responses to Research Questions 2 and 3.

**Principal’s actions and student achievement.** Research Question 2 sought to determine which principals’ actions were most relevant to improving student achievement. A review of participant responses led to the identification of four overarching themes, these are: “pay attention to people,” “you are not alone,” “together we can,” and “hiring the right people and putting them in the right places.” Figure 4.3 displays Research Question 2 and associated interview questions.

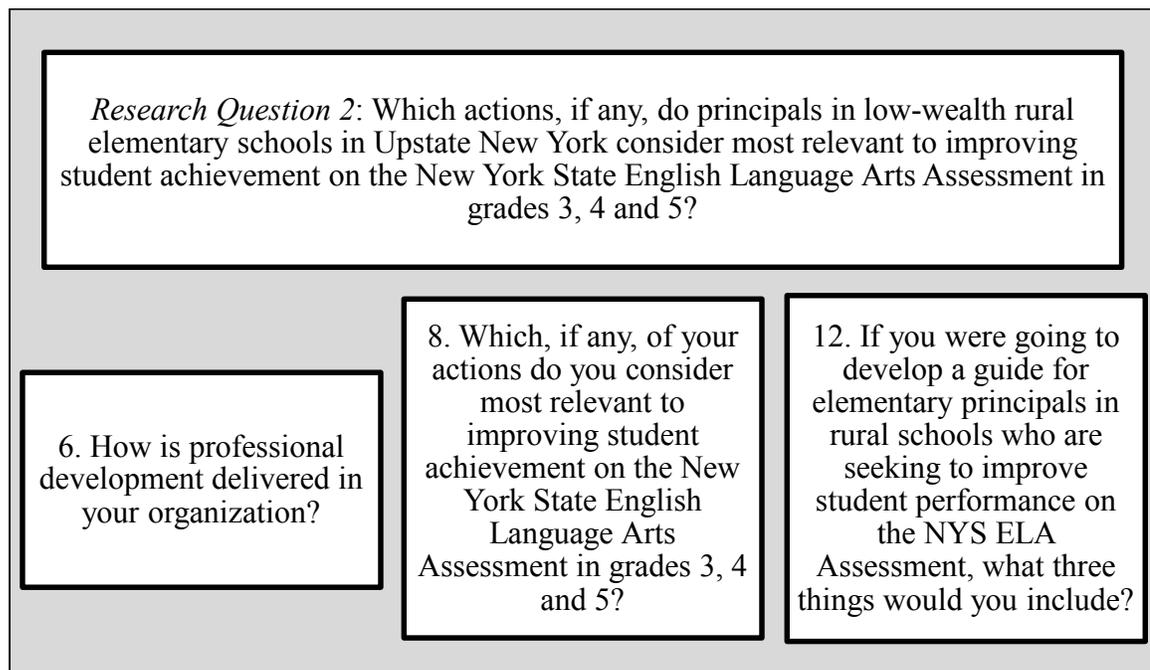


Figure 4.3. Alignment of Research Question 2 with interview protocol.

***Pay attention to people.*** Participating principals described how actions related to supporting faculty and students impacted work within the school. For example, some principals recognized student achievement by offering prizes such as a new pencil, sending a positive postcard to parents, or displaying student work on a centrally located bulletin board. Other principals viewed themselves as cheerleaders or encouragers for staff and students. Encouragement, support, and recognition were considered important pieces of communicating expectations and improving student achievement.

The following examples illustrate the variety of ways that people were encouraged and supported within participating schools. Orion Elementary School's principal said, "I think the greatest impact is probably just the conversations with teachers about this is what we're doing and the encouragement for them to be consistent and to be on the same page as a grade level."

The principal at Pisces Elementary School described her role in recognizing the value of her faculty.

I think number one is my outstanding dedicated teachers, they are number one. I said, I actually mentioned you in this assembly. I told them that there was someone coming and I was going to tell you why we do so well and my teachers were all there and they were so proud to hear that the first thing on the list was them, they're number one. But in addition to that they're very collegial, they all help, if one person doesn't get it this staff will all work together to get that person to understand. I mean they just work so well together.

The principal at Gemini Elementary encouraged her faculty through reassurance:

I think that I've instilled in my teachers that I just want the students to get up there and to do their best and that's all I ask of my teachers, just tell me you're prepared and you prepared them the best that you can and no matter how the chips fall we'll deal with it, that's all I need to know, and they do, they take it very, very seriously.

At Aquarius Elementary School, the principal said she tells her staff, "You're a great teaching staff, I'm blessed to have you, I couldn't think of anyplace better to work than here. I also tell them when we know better we do better." She also reinforced the

collective impact staff has in supporting New York State Assessment performance. Their efforts were recognized with the following actions:

Can I take claim for everything that those state tests are? No, because they're the ones doing the work with those kids every day, 180 days a year and it starts in kindergarten. Like during state testing last week, I put chocolate in everybody's mailbox and some teachers were like, 'Are we really supposed to get chocolate?' I go yeah, it started in kindergarten. I bought cinnamon rolls through the cafeteria because everybody loves our cinnamon rolls . . . hey there's a special treat in the elementary faculty room today, there's cinnamon rolls. This isn't just a three, four, five test, this starts with you in kindergarten and if you don't do what you're supposed to do they can't take them to where they have to take them.

Finally, the principal at Hercules Elementary School focused on building trust.

This was expressed in the following way:

Probably giving teachers the freedom to try new things because if they're not afraid, because isn't ultimately the review books just that they're afraid to stretch out and try to give them the opportunity to have the professional exploration or you know what you're doing, like to explore and to try.

One principal, after reviewing student performance data on the New York State ELA Assessment, developed a plan for directly supporting one grade level:

. . . I made it my principle goal this year that I was going to monitor fifth grade because they were our lowest scores for ELA and math out of my three grade levels and I just didn't know what happened. So this year I meet with the team every other week to discuss okay we started off with this is last year's kids' scores

so let's make predictions about where they should be able to go this coming year. Because they were coming off strong fourth grade test scores, and we talked about what was the curriculum and what they needed to be working on. So we made sure there was fiction and non-fiction being read daily in the classrooms.

***You are not alone.*** When it comes to supporting faculty and providing professional development, participating principals utilized other sources and the individual strengths of faculty within their schools. The goal of the principal at Gemini Elementary School was to allow each teacher to use and develop her strengths. She put forth the following suggestion:

Invest in your teachers . . . provide quality staff development. For example, sometimes I send only one person to like they're having a workshop at BOCES, that person will come back and report out to our entire faculty and share the handouts, that's a pre-requisite. I also have teachers that once I find out what your strength is I play to it, and then I make you a leader in that area.

This practice was confirmed by the principal at Lynx Elementary School:

I think the first thing would be to find out who are your experts and your leaders in your building. Who is a resource that you can use, and I think you need to really work to make those teachers teacher leaders. So you need to know where your strength is in your building and build off of that.

Another example of how professional development was delivered is through the use of instructional coaches. Instructional coaches are able to provide individualized support on an on-going basis. The principal from Pegasus Elementary School described the process this way:

I would have professional development in literacy be a priority and have it be ongoing, and within the school... In our school, teachers actually go out in the building as a group sometimes, go into classrooms and look at different aspects of it (literacy instruction), so it's very much within the school and the coaching goes on where, if for example our primary literacy coach is paired up with one of our newer kindergarten teachers so she's in that classroom regularly, like you know regularly, several times a week, coaching and modeling and co-teaching and all of that so I think that that's really important.

The principal at Libra Elementary School, like three others, arranged for professional development to occur through the local Board of Cooperative Educational Services (BOCES).

We get some really focused professional development through our BOCES where we, I'll use our writing initiative right now. We have a staff developer who comes in once a month and speaks with every grade level for an hour and a half. We do a rotating sub so we can have targeted conversations about what our need is, here's what the goal is before next month, and move on, go implement and get the feedback.

The principal at Ursa Major Elementary School saw value in supporting individuals. She said, "You have to have the ability to support. If you have a teacher that's struggling, so what's your support for that teacher"?

Creating the conditions for utilizing other resources as a means for providing professional development was one action that participating principals said was relevant to improving student achievement. Principals also valued teamwork.

***Together we can.*** At Pisces Elementary School the principal referred to the value of teaching perseverance and positive thinking. She added, “. . . relationships, building relationships, working together as a team, modeling what you want.” In addition, all students at Pisces Elementary School support the students and staff on the day that New York State Assessments are administered. The principal at Pisces described the event this way:

The little children, the little kindergarteners with their little fingers, they’ll make signs you know, ‘Good Luck,’ ‘You Can Do It’! and they’ll hold them up and they’ll wave these little pompoms and the third and fourth grade children walk all the way through the school and the school is just lined with all these little ones and all the teachers, and we just cheer them on. We’re like, believe in yourself. I look at the state testing time as it’s just like any other competition. To me this is a learning competition, you know, and you do that for football, or any other sport. . .

The principal at Pisces Elementary School also conducted an assembly with third and fourth grade students where she educated the students about how the other schools in the county performed on the prior year’s state assessment. A rank list of the county’s school was displayed based on proficiency on the NYS ELA and NYS Math. Students were encouraged to move, or to keep, Pisces Elementary School at the top of the ranking.

The principal at Taurus Elementary School described how teachers work together in his school to review what to teach and how to teach it.

So we put together teams as inclusive as possible in the summertime. We use our professional development days during the school year to allow folks to get together and talk about curriculum. At our last faculty meeting . . . pre-K through

2 got together in teams, in grade level teams and talked about the core knowledge series that they're using trying to find a way to streamline that so that it would become less how shall we say less cumbersome.

At Libra Elementary School the principal used data meetings to support collaboration. She described the use of data meetings in the following way:

Yes we incorporated those now, we used to have a separate team that had these people and then what we found out was we'd have a data meeting and then those people would go and have another meeting and were still talking about the same thing, where this year we're all one now, we're not going to do separate meetings. So we're loading all that information in there (data tracking system) so we can pull up these reports, what worked, what didn't work and we use it but we're now one team again rather than and it's protecting people's time. . .

The principal at Orion Elementary School promoted a collaborative culture for the purpose of creating consistency within and between grade levels:

We have what we call liaison team which is a person from each grade level, we meet once a month, sometimes we'll take an entire day, and we would just have conversations about what we're doing and consistency. We will talk across a grade level and then both vertically and horizontally so that we have that consistency with expectations.

Participating principals all agreed that hiring and supporting a high-quality faculty that cares about students and student learning is one of the most important actions they can take to support student achievement.

*Hiring the right people and putting them in the right places.* Examples regarding the importance of hiring high-quality people were expressed by the principals at Ursa

Major and Pisces Elementary Schools. The principal from Ursa Major Elementary said,

I guess the one thing I feel probably most strongly about is the process in which we use to hire teachers. She went on to say . . . we hire good people, good character, quality people, and they know our district and they understand our students. The most important thing is they have that relationship with the students where they care so much about them, you know, they're more worried about how they do on the test than anyone else.

Pisces Elementary School's principal echoed this sentiment: "I've hired amazing teachers and I look for people that will go above and beyond, not clock watchers . . . I want to know what you are like on the inside, you know."

At times, existing staff were reassigned to strengthen the instructional program. At Pegasus Elementary School the principal was strategic about staffing. She made changes as a means for increasing the knowledge of teachers between grade levels. The principal described her reasoning this way:

I also moved people after my first year. I really upset the apple cart quite a bit. I actually took at least one person and most of the time it was more than one, and if you were in fifth grade I moved you to fourth grade and I showed them the new standards. I also put my strongest team at third grade, because a). It's third grade which is a huge turn of the page, and b). If I have my strongest team at third then in order for the fourth and fifth to have the same growth they have to step up their game as well.

*Applying Leithwood's framework to Research Question 2.* Responses to interview questions aligned with Research Question 2 highlighted a number of relevant actions that principals take to impact student achievement. The four themes identified within this section can be paired with three core practices from Leithwood et al. (2012): developing people, refining and aligning the school organization, and improving the instructional program.

*Developing people.* Most notably the themes “pay attention to people” and “you are not alone” highlighted the value that principals place on the practice of developing people. Specific practices of providing individualized support and consideration, offering intellectual stimulation, and modeling appropriate values and practices can all be found in some form within principals responses.

*Refining and aligning the school organization.* The specific practices of building collaborative cultures and restructuring the organization to support collaboration were notable within the theme entitled “together we can.”

*Improving the instructional program.* Staffing the program is one specific practice under the core practice of improving the instructional program. The theme “hiring people and putting them in the right places” supported the specific practice from Leithwood et al. (2012) of staffing the program. Another specific practice within this area, providing instructional support, was also evidenced within principals’ responses.

**Influence of rural environments on redesigning organization.** Figure 4.4 shows Research Question 3 and aligned interview questions from this study’s interview protocol. These questions sought to understand the influence that social and environmental factors of a rural community have on principals’ ability to redesign the

organization. According to study participants, there were rewards and challenges to being a principal in low-wealth rural elementary schools. One challenge to the role was finding time to complete building-level responsibilities. Other challenges specific to the rural environments in this study were expressed within the theme “hurdles to enhancing achievement”. Three additional themes described in this section are “reaching out,” “more than a school,” and “more than a principal.”

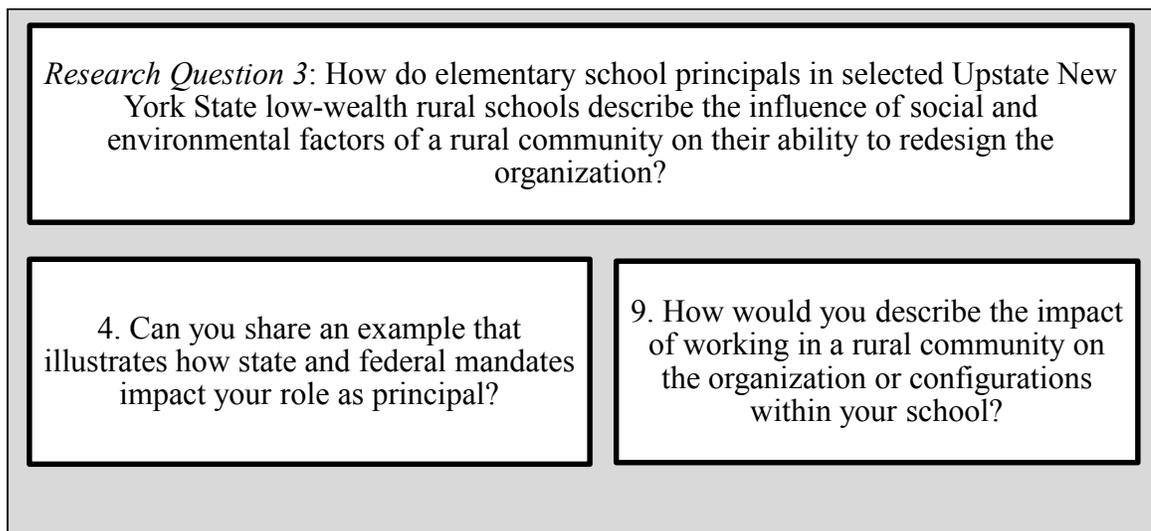


Figure 4.4. Alignment of Research Question 3 with interview protocol.

***Hurdles to enhancing achievement.*** Hurdles for rural elementary school principals may be compounded by the fact that principals fulfill district-level duties in addition to being the building principal. All 10 of the principal participants in the study were assigned to district-level responsibilities. Some of these responsibilities included 504 chairperson, coordinator for state and federal grants, overseer of K-12 special education programming, committee on special education chairperson, recorder and monitor for faculty professional development, and K-12 arts in education coordinator.

***State and federal mandates.*** When asked what is the impact, if any, of state or federal mandates on their roles as principals, all respondents said the new Annual

Professional Performance Review (APPR) process had the greatest bearing. The effect of required classroom observations and associated paperwork is exemplified in the comment from the principal at Aquarius Elementary School:

I mean the amount of time it takes to do the observations even like I understand last year was my learning curve cause we switched to a new software program and everything but it takes me about, by the time you do the pre-observation, the observation, the post observation, those are three periods in a week and then it takes me almost an hour of typing before that post observation. So whether that gets done during the school day or I'm doing it late at night after I put my child to bed or early in the morning beforehand I know that I've got to get it done because they need their feedback. So I'd say to my teachers it takes an estimated 2 to 2 and one-half hours for every observation.

The principal at Gemini Elementary School stated the following in regard to new APPR procedures:

And I have been doing pre-conferences, post conferences, spending an hour and a half in every room and then of course going home and writing the observation and I've been, it's very involved and I found that this year I devoted like every Saturday to working on it. We had prior to this a very good observation and evaluation system. It was particularly good for non-tenured teachers, the probationary what they had to do. They would have to set goals, meet with me to have their goals approved and then submit documentation for the three goals that they chose, that they did it and then I would evaluate them on that along with their observations and it was very worthwhile and it worked and I have a great faculty

as a result of that process. Now I think the intention behind APPR was good, I understand it, but in a way I think it was kind of punitive to districts who were doing a good job before and now I think they intended one outcome but I think they got another outcome.

Taurus Elementary School's principal stated it this way:

Now, I would tell you, before the new APPR came along, which was designed to get principals into classrooms, I was in the classroom more. It's ironic that trying to get all of the paperwork done that's had the exact opposite effect.

The principal from Lynx Elementary School recognized there were some positive aspects to the new APPR requirements but reiterated that the observation process has been time consuming:

Yes, and I love the APPR, I know it's a pain, it's a ton of paperwork and it's a ton of time, but really the conversations I'm having with teachers are incredible, I never would have imagined the teachers could even engage in some of those conversations and they can. It's very reassuring that they know what they're doing and they know what they're talking about, you know, so I'm enjoying the APPR but it is an incredible amount of time put into it. That is what I spend most of my time doing, something related to APPR.

*Transportation and isolation.* One reason that transportation and isolation are specific to rural environments is due to the number of square miles that often make up the boundaries of rural school districts. Table 4.3 shows the area in total square miles for each school in this study and, as a point of comparison, the land area in square miles of six high-achieving Upstate New York suburban districts.

Table 4.3

*School District Land Area in Total Square Miles*

School District Pseudonym	Total Square Miles	High-Achieving Upstate Suburban School District Pseudonym	Total Square Miles
Aquarius	236.7	Mercury	8.1
Gemini	329.7	Venus	43
Hercules	100.3	Mars	49.5
Libra	111.6	Jupiter	30
Lynx	56.5	Saturn	40
Orion	372.1	Milky Way	40.9
Pegasus	97.8		
Pisces	72.6		
Taurus	221.6		
Ursa Major	93.4		

*Note.* Information retrieved from <http://www.usa.com/find-schools/>

In Table 4.3, the geographic size of a school district has implications for students and for schools within the district. Depending on where families live, the distance from school can impact parent involvement and students' access to school-related activities. For schools, transportation costs preclude some schools from offering after-school activities and some students have to ride the school bus for an hour before arriving to school (Beeson, 2001). This topic was mentioned by the principal in the Orion Elementary School:

I think it's going to go back to some of what I had talked about earlier, it was just our distance, our travel is significant for a lot of our families...we have to worry

about the transportation piece and how they're going to get there and you know, it's significant. You'll have families who will say I just don't have the gas money to go. I can't, you know, we talk a lot here about kids' diets and things like that, they just don't have access to the fresh fruits and vegetables that if they were just to go to the supermarket.

Taurus Elementary School's principal said,

Well the impact is that you know our children are spread out all over the place; in fact I want to say Taurus children probably spend a lot more time on the bus than they do in the other schools in the district.

The isolated nature of rural schools was also stated as a disadvantage to students trying to get their basic needs met. The principal from Lynx Elementary School said,

We don't have a lot of resources in our county. It's very frustrating sometimes because we're right on the edge of another county, we're a mile, you know, our school district borders on this other county in fact there's a couple houses that are technically in that county so it's very frustrating to be teased by that county's resources that are available to their schools. Our county's mental health system and social service system is so understaffed, there are no resources for parents, there are minimal useful resources for parents. They have to travel to go get something and if you don't have the gas money . . .

The principal from Gemini Elementary School expressed the impact of isolation this way:

. . . You know, some people live 40 minutes away on a bus, some of these roads you get back up there and it is way up and transportation is a problem and it's very isolated on some of these back roads. You know some people do not have

technology in their homes simply because there's no internet out there, it's too far out.

She continued:

One of the disadvantages is that we're so isolated and I mentioned to you earlier that some kids have very little contact with the outside world and for example, we have a Walmart 12 miles from here and that may be some of the farthest distance some kids have traveled.

*Losing services.* Every participating principal was confronting staffing issues due to declining enrollments and declining resources. For example two schools had to reduce library services due to budget cuts. The principal from Pegasus Elementary School made the following comment as her voice cracked and her eyes watered:

We have, for example, she's losing her job and I could just cry about it, but a wonderful librarian who she is so up on the Common Core and incorporates that into her library lessons and she also collaborated with the art teacher and they did this project put your beak in a book...

A similar sentiment was expressed by the principal at Aquarius Elementary School:

Our librarian went from full time to part time, she's following the state regulations, and we have two teaching assistants in there but it's not the same as having a full time librarian and then they've made cuts in all of the departments in the high school where they had to trim it back a little bit because we didn't have the enrollment.

The principal at Gemini Elementary School shared how declining enrollment has led her district to close an elementary school and the impact this had on her role:

Between that and all the meetings that we have had regarding closing the building, you know, what do you do with the materials, reassignment of staff, shared staff, we've had a tremendous amount of meetings on that. So it has been an exceptional year. Usually I'm more internal, this year it's like I'm being pulled outside of the building a lot more meetings than usual. When I come in I put out the fires, I do an observation, you know, I see kids and I see teachers and they're just lined up to see me.

***Reaching Out.*** Principal interviews revealed that the nature of low-wealth rural school environments led to significant efforts at connecting with families and the wider community. This was exemplified by the principal at Orion ES:

We have some clinics here on site, mental health clinic that comes one day a week and have a set aside space just for them to provide service to our students because of our rural nature we are 25 miles from bigger areas that would provide services to our students, mental health services, doctors, physicians, that kind of a thing.

When recommending actions to other rural school principals, the principal from Libra Elementary School said:

Make sure you connect with your other resources be it another school district or like for us it's our BOCES for training, making sure you reach out and utilize every resource you have available...you can't be afraid to reach out.

The following story from the principal at Gemini Elementary School highlighted how the school has connected with the broader community to support students:

Now luckily we have a strong law enforcement presence and some of our teachers are married on County Sheriff's Department deputies and so a while ago, maybe

10 years ago or longer they came up with this idea of shop with a cop and different organizations and individuals would contribute money, make a donation and then each year around Christmas time they would collect that money, they would select students K through 12 and about 50 representatives from Sheriff's Department would take, you know 50 adults would accompany about 100 children and each student would have about \$100 to spend on whatever they needed.

Libra Elementary School's principal explained how her school has connected to the community:

Our school psychologist does like a backpack program at the beginning of the school year. Our school nurse runs a secret Santa program and that is community wide, that's not even just for the school, but anybody who needs help there we actually, I think we're going to start it, it hasn't happened yet, right now we have kids who have lost or need glasses so we found a wonderful website where we can get new glasses for kids for \$10 to \$15 and I will gladly get you a new pair of glasses to make sure those things are, you know, those are just routine things that have happened here that we're just making sure that you have those things.

***More than a school.*** Seven principal participants described the school as the "heart" or the "hub" of the community. This comment from the principal at Ursa Major Elementary School described how the community has been drawn to the school, "The school is the center of the community so everything is centrally kind of located here, youth sports, and that kind of thing is all here."

The principal from Libra Elementary School also described how the school has been the place where families and community members attend events:

I mean we're it here, the school is the biggest functioning thing that you have going on. We have a fine arts festival tonight, it will bring out hundreds of people here because we are the hub of everything and that's what you will find in all of our rural schools is there's not much else but the school.

The following story from the principal at Lynx Elementary School also highlighted the value that school activities bring to her rural community and how she has been able to connect with families and students:

I mean it's a small community, the school buildings are the center of the community, and this is where all the action is. If families want to go out and do something as a family, there's always something going on, you know, this is where they, this is where everybody comes, there's not anything else anywhere for them in the district for them to go to so it's nice in that if you go to a basketball game you see the elementary kids, you see the middle school kids and you see families that are together. So you know everybody, you can say hi.

The principal at Orion Elementary described how her school has provided services to students and has tried to get to know families even before their children enter school:

We're very fortunate that we're able to offer them a number of things. Holiday time we offer up gifts and we have a local correction officer union that donates food and grocery carts and I hang on to them sometimes throughout the year and if we know there's a vacation coming up I can contact the family and say, 'Hey,

look I've got a grocery cart would that be helpful to you?' It does it opens a lot of doors and I mean that's just one of the things we do. We have a backpack program where we send food home with kids for the weekend. We have a number of families that participate in that, so that's another kind of foot in the door. Our PSAT worker, again which is a social service worker . . . she too is a great resource that provides rides. We have a play group here for pre-school children one day a week where they can come in with the parent and it gets them into the school, you know the PSAT worker if they need transportation, you know, we're getting those families in early, building up that relationship with them. Really, at times they'll call us when they need something and that's really what we strive to do is just be here to meet the needs of the whole child and the family. You know, if the family needs are being met, the child's needs are going to be met. So we spend a lot of time working on relationships.

The social/environmental factors highlighted in this section have allowed principals to connect with families and outside service providers as a means for improving services for students. Building productive relationships with families had a reciprocal effect at Pegasus Elementary School. Pegasus Central School District was in the midst of relocating the elementary school, due to a flood. The positive connection to the community was significant as school personnel tried to get the temporary school open for students. Pegasus' principal told the following story:

We had some parents who would, I don't even know how they even found out but they would be there whenever we'd get like a truckload of things and they'd be unloading and organizing and labeling them in the gym and it was great. Our PTO

is fantastic and then there were parents who really aren't in PTO that just wanted to help and then there were you know just community members who wanted to help and so that was, it was nice to see when so many of them were in terrible shape themselves.

Pisces Elementary School's principal described the value of family connections in this way:

Families that reach out to others, it just touches my heart I just love it. The community here is very kind and they really care about children and we have a strong and effective PFO, a lot of fundraising, and they buy wonderful things for our school like the parent and community involvement. They're grateful for everything you've done, you just can't buy that you know, I just love that part of our community in our school, that's just oh boy, and it means everything to me. You know, if I've, it's important for me to build that trust with parents...

***More than a principal.*** Principals in higher achieving low-wealth elementary schools valued their roles within rural school environments. They also took a great deal of ownership of their students, staff, and school.

*Ownership.* When asked about the impact working in a rural environment has on the role of the principal, multiple responses highlighted the value of relationships and connectedness. Responses also gave insight into how the principal assists in connecting the school to the wider community and how oftentimes principals need to be creative.

The Hercules Elementary School principal made this comment:

I go to the kids, I got to throw out the little league pitch for opening day, I mean that's, I love that just as much as I love coming to school and that's I guess a

community thing. You know, my husband says I'm a rock star when we go to the grocery store because you've got to be careful when you go cause it's, and I like that, I mean I like that as part of the job. I think what it would be like if I lived somewhere and came in.

This same principal shared a time when living and working in the same rural community was a disadvantage:

I think it's just being, it's my, it's living here I think is the biggest advantage is that work, not work, there's really no delineation it's all one. I have a disadvantage, maybe that will come up as an advantage and that's simply I made a Child Protective Services call on a child, and the report was founded and that same parent is going to wait on me at a local restaurant, so it's that total embeddedness [sic] and how to handle those type of situations with dignity and respect and be very sensitive as well. That can be a disadvantage . . .

The principal from Libra Elementary School echoed the sentiment that working in a rural school had many advantages:

I love it. I love my job, I love my kids, my families, you know, there are days where it just rips me up, but I always used to say this when I first started that I was going to go in the special education because that was a tough group and no one wanted to do that job, and okay and I loved it, and so now you know I have a direct impact on 300 kids a day that I see them every day, I know them all and I love spending that time.

Pisces Elementary School's principal also expressed her sense of ownership in the school with the following statement, "So now I've got the whole school and it's mine, it's what I've always wanted, I do love it, I love my school you know. It's a good place."

*Creativity.* Principals frequently referred to the need to be creative when it came to utilizing resources. The Orion Elementary School principal stated, "So again, it's just going to go back to services, and we have to be a little more creative sometimes because we just can't run to the store or send a parent here or there." The principal from Gemini Elementary School believed her knowledge and experiences gained from coordinating her district's state and federal grants was an advantage: "So I've learned how to think creatively when using grant money to meet some of our needs." The principal from Lynx Elementary School reiterated these beliefs:

Well we have limited resources. We have a high poverty rate as you know. I think it makes you think a little more creatively about your programs, how and when you provide them. We have parents who don't have transportation, so if we want kids above and beyond the school day we need to provide transportation or we can't expect that we'll get very good attendance. So you have to be creative in planning your budget because that costs money, extra bus runs. We're adding a 5:00 bus next year so we can have some after school programs for elementary.

Connections to families and the community created positive situations for principals. These relationships might assist principals who want, or need, to make changes within their schools. The value of these connections is further highlighted using the core leadership practices of Leithwood et al. (2012).

*Applying Leithwood's framework to Research Question 3.* Responses to interview questions aligned with Research Question 3 provided insight into how some characteristics of rural school environments impact a principal's ability to redesign the organization. The four themes identified within this section can be categorized within two core practices of Leithwood et al. (2012): refining and aligning the school organization and improving the instructional program.

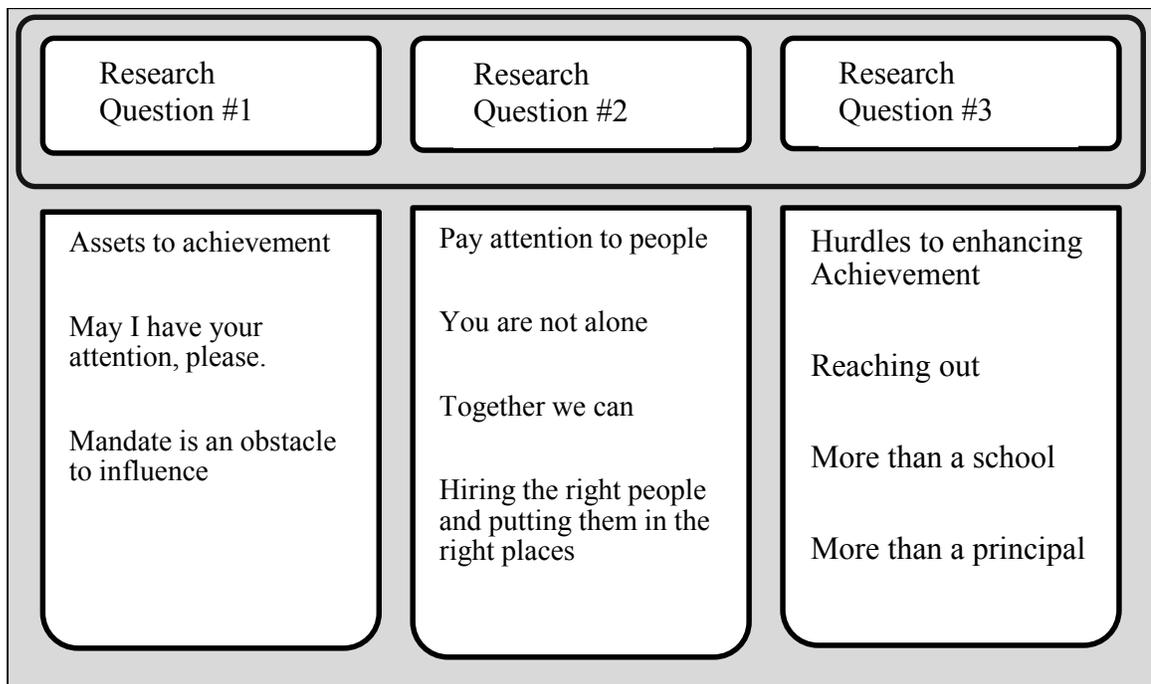
*Refining and aligning the school organization.* Participants' descriptions regarding the value of building productive relationships with families and communities and connecting the school to the wider community are key components of the core practice, Refining and Aligning the School Organization. Principals were able to leverage these relationships to provide low-wealth students and families with resources and services.

*Improving the instructional program.* Respondents' emphasis on the specific practices of staffing the program and aligning resources make improving the instructional program an important practice for principals working in low-wealth rural school schools. The need to be creative with staffing and resources due to declining enrollments was highlighted by participating principals. The specific practice, aligning resources, was mentioned in the context of issues related to the transportation and isolation.

Developing people and setting directions are two practices not expressed by principals in response to questions seeking to answer Research Question 3. In addition, participating principals indicated that state and federal mandates impeded their efforts to improve the instructional program.

## Summary

This chapter provides an analysis of participants' insights into which leadership actions most influence student achievement. Demographic information of participating schools is presented. Participating principals' responses to the study's three research questions led to unique themes aligned with the core leadership practices of Leithwood et al. (2012). Themes that emerged in response to each research question are shown in Figure 4.5.



*Figure 4.5.* Research questions and subsequent themes.

Figure 4.5 includes headings that represent the three research questions for this study. The boxes under each heading include the themes that emerged in response to the aligned interview protocol questions.

Responses to the study's three research questions and the resulting themes lead to the identification of three overarching premises: relationships, resources, and reaching out. Principals in the study took the time to establish relationships within the school and

within the broader community. These relationships were developed for the purposes of supporting teachers and the academic and social-emotional needs of students.

Resources related to materials, time, and data were critical components to creating instructional alignment within and between grade levels. Providing material resources for teachers so they can meet the needs of all students was described as a universal obligation of participating principals. Protecting instructional times during literacy blocks and providing enough time for literacy instruction sent important messages about what is valued. Changes in enrollment and reductions in funding required the elementary school principals in low-wealth rural elementary schools to be flexible and creative with people resources.

Student learning data was also a critical resource within participating schools. Meetings to review student learning data allowed principals to monitor school activity and student progress. Data meetings allowed for the creation of trusting and collaborative environments and for on-going professional development. Participating principals communicated expectations and provide necessary support to teachers during data meetings.

Reaching out was often required within participating school districts due to issues related to transportation and isolation. The lack of access to public transportation and the distance from community centers meant that some families in low-wealth rural areas had difficulty accessing supports and services. Reaching out to community organizations and to families allowed higher achieving low-wealth rural elementary school personnel to provide medical and mental health services. Additional resources such as school supplies, personal care items, and food were also provided to families.

Using the framework from Leithwood et al. (2012) as the lens for interpreting principals' practices in low-wealth rural elementary schools allowed for the identification of specific actions and influences that impact student learning. Filtering principals' responses through the framework of Leithwood et al. (2012) helped to see how two themes, "mandate is an obstacle to influence" and "hurdles to enhancing achievement," limited principals from completing tasks that they believed would increase their influence even more. Principals spoke exclusively about the impediments posed by tasks pertaining to the APPR process. Required meetings regarding teacher observations and resulting paperwork limited their ability to attend to teachers who may have needed additional support and to monitor instruction and students to the degree they desired. APPR requirements assigned to principals who served in multiple capacities within a K-12 organization limited time that could be committed to more specific practices of developing people, monitoring school activity, and providing instructional support.

It also is important to note that, while collaboration with families and community organizations allowed school personnel to meet the social, emotional and some basic needs of students, principals in this study did not talk about specific academic programs that target students from low-income families. Analysis of transcripts attributes this to a belief that high expectations are held for all students and a belief that all students can attain high expectations. The following comment from the principal at Ursa Major Elementary School supported this point:

We don't look at any, I mean nobody knows who's free and reduced lunch, they're all kids, there's no, I think that's probably a good point to make is that we

expect high expectations from everyone, it doesn't matter who their parents are or where they live.

Chapter 5 includes a discussion and interpretation based on the results presented in Chapter 4. Implications of findings and limitations to the study are also presented.

Chapter 5 closes with recommendations and a conclusion.

## **Chapter 5: Discussion**

### **Introduction**

Rural school principals have faced significant changes in their roles. Increased levels of accountability, implementation of common core learning standards, and shrinking state funds for public schools have created unique challenges for principals seeking to increase student achievement levels. Pairing these demands with the confining nature of small-town life, the loss of privacy, the multiple and often conflicting tasks, and the lack of opportunity for professional camaraderie and growth has magnified these issues for rural school administrators (Buckingham, 2001). Principals working in low-wealth schools and schools located in rural areas may have been particularly impacted by Federal and State educational initiatives.

Combining student achievement with principal accountability makes an examination of the role of principals critical and can serve to determine their instructional leadership ability (Marks & Nance, 2007). In New York State, regulations associated with state and federal education reforms have raised the level of accountability for public school principals. As a result, the identification of principal practices that positively impact student achievement has become increasingly necessary.

The purpose of this study was to provide insight into the leadership practices of principals in selected higher achieving rural elementary schools in New York State. Research examining the experiences of principals in successful low-wealth rural elementary schools allowed for the identification of leadership practices specific to rural

environments. Identified leadership practices, therefore, can help provide a research-based guide for principals working in an era of evidence-based practice. While research practices are general and may be applicable in urban, suburban, and rural school environments, identifying the specific skills that selected rural school principals perceived as most important can serve as a guide for principals seeking to improve student achievement in rural settings. Overall, the dissertation study adds to the literature by examining the rural school principalship and how factors pertaining to school setting impact principals' decisions.

The researcher used a qualitative approach to develop an understanding of the individual perceptions and experiences of principals working in low-wealth rural elementary school environments. Participant responses were viewed through the lens of four leadership practices described by Leithwood et al. (2012). Leithwood et al. identified core and specific leadership practices, which were developed from the study of schools in urban, suburban, and rural school environments. The research completed by Leithwood et al. highlights the influence that school structures and settings have on principals' behaviors (Leithwood et al., 2012). Leithwood and Harris's (2010) school-level review examined the role of principal leadership in schools that were transformed from low-achieving to high-achieving schools. The recognition of Leithwood et al. (2012) of the impact school setting has on leadership practices coupled with the unique characteristics of rural school environments made the framework particularly applicable to the dissertation study.

The results of the study add to the body of research on rural schools and provide elementary school principals in rural New York State schools with guidance for

improving student achievement The research was guided by the following research questions:

1. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe their influence on the levels of student performance on Grade 3-5 New York State ELA Assessments?
2. Which actions, if any, do principals in low-wealth rural elementary schools in Upstate New York consider most relevant to improving student achievement on the New York State English Language Arts Assessment in grades 3, 4, and 5?
3. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe the influence of social and environmental factors of a rural community on their ability to redesign the organization?

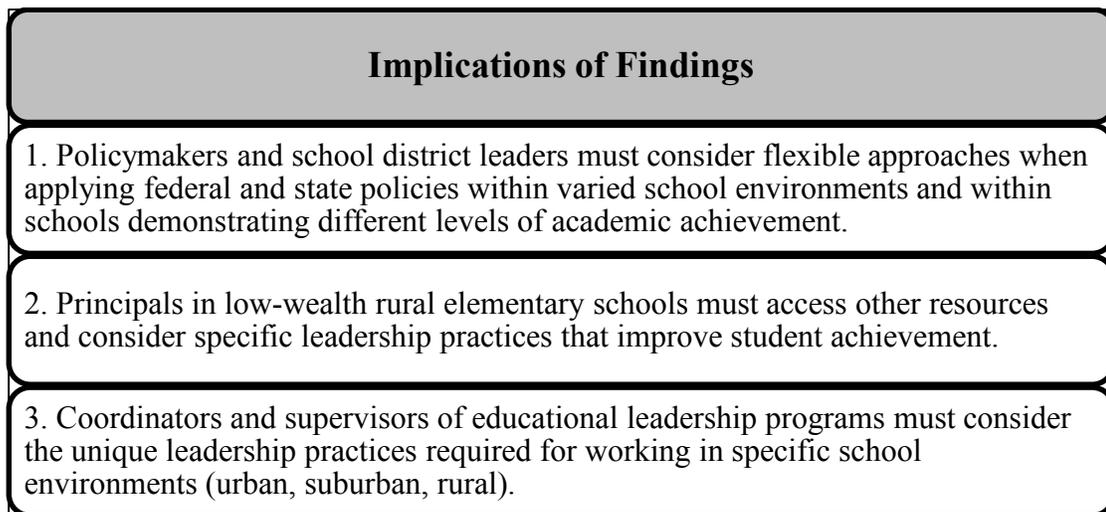
Chapter 5 includes a discussion and interpretation of the results set forth in Chapter 4 of this dissertation. Chapter 5 is divided into four sections. The first section describes the implications of the findings from interviews of principals in higher achieving low-wealth elementary schools in Upstate New York. The second section includes a discussion of the limitations of the study. In the third section, recommendations for future research and for practicing principals in low-wealth rural elementary schools are discussed, and the final section provides a summary of the chapter and a conclusion of the dissertation.

### **Implications of the Findings**

The results from this study led to implications related to guiding and supporting principals in low-wealth rural schools. Implications for educational policy

implementation within varied school environments are discussed first in this section. Policy implementation leads to considerations for policymakers and for rural school district leaders who must apply policy mandates. The second sub-section includes the implications for practicing rural elementary school principals seeking to improve student achievement within their schools. The third sub-section focuses on the implications for coordinators and supervisors of educational leadership programs seeking to prepare principals to work in varied school environments.

Figure 5.1 provides a visual representation of three implications of the study's findings. The first implication relates to the application of educational policies within rural school environments. The second implication pertains to the principals in low-wealth rural schools seeking to increase student achievement, and the third implication is for coordinators and supervisors of educational leadership programs to consider environment-specific practices for prospective school leaders.



*Figure 5.1.* Implications of the study's findings.

**Implications for policymakers and school district leaders.** All participating principals in this study indicated that requirements associated with No Child Left

Behind (NCLB) and Race to the Top (RTT) were the primary obstacles to their ability to spend more time interacting with faculty members and students. Specifically, meetings and paperwork attached to Annual Professional Performance Review (APPR) processes inhibited principals from being proactive in addressing student and teacher concerns and in managing the school environment. The principal from Gemini Elementary highlighted how APPR requirements have reduced the effectiveness of an existing evaluation process.

I'm spending, you know, like we had prior to this a very good observation and evaluation system. It was particularly good for non-tenured teachers, the probationary what they had to do. They would have to set goals, meet with me to have their goals approved and then submit documentation for the three goals that they chose, that they did it and then I would evaluate them on that along with their observations and it was very worthwhile and it worked and I have a great faculty as a result of that process. Now I think the intention behind APPR was good, I understand it, but in a way I think it was kind of punitive to districts who were doing a good job before and now I think they intended one outcome but I think they got another outcome.

Implementation of mandated policies also has implications for district-level leaders in low-wealth rural schools. In the dissertation study, principals were required to conduct various district-level duties such as chairing district-level committees, overseeing district-level curriculum work, coordinating special programs within the school, and coordinating testing. While some participating principals believed they benefitted from

being involved in K-12 functions, these district-level responsibilities coupled with new APPR requirements created additional time limitations for supervising faculty.

The results of the dissertation study confirmed Bryant's (2010) concern that rural schools have been obligated to spend many of their scarce resources to comply with government regulations. Prior to changes from New York State's participation in the federal Race to the Top grant, NCLB accountability focused on the progress at the school-level by measuring adequate yearly progress (AYP). New York State schools, like schools in other states receiving RTT funds, now are required to measure teacher and principal growth by adopting evaluation systems based on student achievement measures (Montes, 2012). As stated by Canales et al. (2008), state and federal mandates have increased the workload and expanded the responsibility of already stretched school leaders without increasing the resources necessary for the mandates to be accomplished. Rural schools are unlike large schools with sizeable administrative staffs and more resources. Nonetheless, rural school principals are required to meet the same accountability standards as their counterparts in larger schools.

An issue unique to rural areas is the lack of reliable transportation systems, which makes it difficult for children in low-income rural areas to access valued activities (Bickel et al., 2002). The principals interviewed in the dissertation study stated similar concerns. Specifically, the principals mentioned the struggles of reaching lower-wealth families living on the perimeters of the district. When offering after-school activities that required students' parents to provide transportation, participation was limited to students with access to transportation because providing transportation for students attending

after-school activities is an additional cost that may be neglected. Thus, funding for transportation is an area with implications for district-level leaders.

Transportation was not the only finding identified as being impacted by funding. Two of the principals interviewed described how library services had been reduced due to budget cuts. One school cut the librarian position completely, and one school reduced library services to half-time. This finding is especially salient in light of Krashen's (1997) research that found high-poverty schools often restrict student access to the library and do not allow students to take books home while affluent schools do not place these restrictions. Furthermore, Collins et al. (2008) found that children living in rural areas have limited access to many community-based resources. A contributing factor to poor access to these resources is the lack of public transportation systems (Collins et al., 2008). If students have limited access to books at school and no access to public transportation services, budget cuts will have real implications for students from low-wealth families.

**Implications for practicing principals.** The findings from the dissertation study indicate that the greatest implication for practicing principals is the management of resources. Principals in this study recognized the value of providing resources that support instruction and that are aligned with various grade levels. Their focus and support extended to all grades, not just grades where New York State Assessments are administered. For example, early literacy instruction in pre-kindergarten and primary grade-levels (K-2) was supported and teachers at these early grades were recognized for success on New York State Assessments in grades 3, 4, and 5. Primary resources include faculty, students, time, school, and community. Within the dissertation study, principals

managed people resources, such as substitute teacher schedules and staff schedules, so classroom teachers could attend data meetings. Regular data meetings provided an arena for principals to influence improved learning by managing people resources. Oftentimes, principals reassigned support personnel as a result of needs that were discussed during data meetings. Additionally, building-level literacy coaches or teacher leaders were utilized during data meetings to provide professional development. Resources also involved principals managing schedules to support adequate instructional time for literacy instruction, supporting the needs of students and families, and supporting the needs of the community.

*Data meetings.* Cawelti (2001), after studying six districts that made significant achievement gains over a five-year period, identified three data-related traits that were present in the six high-performing schools: (a) establishing teams to monitor performance data and plan for improvements, (b) providing staff development time to analyze whether local and state curricula and assessments are aligned, and (c) ensuring that teachers routinely assess skills before introducing new material. Nagle et al. (2006) identified characteristics of 13 higher-achieving high-poverty rural elementary schools in Delaware, Maryland, and Pennsylvania. Characteristics of these effective low-income schools were: (a) high standards for student performance and behavior, and access to general education curriculum; (b) high-level of staff and student stability and collaboration with community; (c) high level of parent and community involvement in school programs; and (d) support for at-risk students and creative use of resources (Nagle et al., 2006). The perspective of other constituents within the school was also used to support the research.

Additional studies of higher achieving low-wealth schools (Barley & Beesley, 2007; Chenowith, 2010; Dessoiff, 2012; Johnson et al., 2000) identified the importance of using student data for monitoring student progress and for providing support to students requiring additional supports.

The findings from the dissertation research are consistent with the cited literature in that the principals interviewed accomplished multiple tasks through the use of regular data meetings. Student learning data was the focus during data meetings, but principals also had the ability to use data meetings to create trusting and productive relationships with faculty. Principals also used data meetings to monitor school activities, provide ongoing professional development, share expectations, and provide instructional resources where needed.

Data meetings also provided the principals with a forum for recognizing and encouraging faculty. Participating principals demonstrated the ability to provide intellectual stimulation and encouragement during data meeting conversations. These actions motivated teachers and reinforced a collaborative environment. This finding is consistent with empirical connections established between school leadership and the attitudes of teachers (Brookover & Lezotte, 1979; Louis, Wahlstrom, Leithwood, & Anderson, 2010) and their instructional practices in the classroom (Brookover & Lezotte, 1979; Louis et al., 2010).

The regularly scheduled data meetings also allowed the principals in the dissertation study to address four of the seven traits found in Togneri and Anderson's (2003) study of higher achieving high poverty schools. These are (a) having the courage to acknowledge poor performance and the desire to find solutions, (b) putting a system-

wide approach in place to improving instruction, (c) instilling visions that focus on student learning and guiding instructional improvement, and (d) making decisions based on data rather than instinct (Togneri and Anderson, 2003).

***Supporting literacy blocks.*** Principals in this study were conscientious about managing the resource of time. The principals recognized the importance of creating dedicated time for literacy instruction, a finding consistent with the work Lipson et al. (2004). Lipson et al. found that successful schools had organizational features that support literacy instruction and that successful school schedules were organized to support literacy instruction by allowing for uninterrupted literacy block.

Principals in this study were equally attentive to literacy instruction at primary-level grades (K-2). Attending to early literacy instruction is a practice that is supported by the literature. Durham and Johnelle Smith (2006) found that children living in nonmetropolitan areas, who are economically disadvantaged, showed the greatest disparity in early literacy skills relative to their metropolitan peers. Thus, rural elementary-level students may be most at risk of low-achievement. Furthermore, Alexander, Entwisle, and Olson (2007) indicated that the achievement gap across social lines becomes more evident during the primary grades. An implication of this finding is that practicing principals need to prioritize literacy instruction for all grade levels when creating master schedules for the school year.

***Resources for supporting families.*** Adelman and Taylor (2011), when creating a framework for school improvement, included a component that requires schools to address the barriers to teaching and student learning. Some of the barriers identified by Adelman and Taylor (2011) include environmental factors such as family issues, medical

issues, behavioral issues, and inadequate nutrition. Similarly, Nagle et al., (2006) studied 13 low-wealth rural schools and identified characteristics of the most effective schools. One of the features particularly salient to the dissertation findings was support for at-risk students and creative use of resources (Nagle et al., 2006).

The principals provided such support in a variety of ways. For example one issue presented during principal interviews and confirmed by the literature (Bickel et al., 2002; Durham & Johnelle Smith, 2006; Lacour & Tissington, 2011) is the complication created by a lack of transportation and isolation. This issue was discussed in the previous section in relation to implications for district level leaders and the allocation of funds. However, this issue also has direct implications for principals who remain responsible for scheduling events regardless of funding for transportation. Specifically, the principals in the dissertation study discussed how transportation needs had to be considered anytime services, school concerts, or school activities were offered before or after the regular school day.

Issues with transportation were not limited to bringing students to school events. The districts in the dissertation study included many low-wealth families who lacked vehicles for transporting their children to medical services (including dental care), a situation that was further exacerbated by the distance needed to travel to the nearest medical facilities. Lack of reliable transportation also was related to limited money for purchasing non-perishable goods needed to support a family. The principals participating in the dissertation study addressed some of these basic needs of families and students by collaborating with community resources. For example, the majority of schools had a backpack program. These programs required the schools to collaborate with local food

pantries or with other school families who could donate non-perishable items. School personnel would then place non-perishable items into selected students' backpacks so they could take them home.

Another school addressed health needs through an annual health fair at the school where families could make appointments to meet with physicians and dentists. This school also provided busing for families seeking these services. Similarly, other schools provided mental health services to families during the school day. Services were delivered by an outside service provider in a private part of the building, and a social worker provided transportation for parents who needed this support. Yet another school assisted families by accessing an online resource for securing inexpensive eyeglasses and providing them to applicable students and families. Thus, the dissertation findings indicate that principals are responsible for finding creative ways to collaborate with community resources to address the needs of the families within the district that go beyond the mandates of RTT or the Common Core.

***Community needs.*** Another finding from the dissertation study with implications for rural school principals was the significant role their schools played within the broader community. The study identified that, in rural environments, the school is frequently considered the community's center. School-sponsored music concerts, sporting events, plays, and art shows provide the entertainment for most of the communities represented in the study. This finding is consistent with the research of Nagle et al. (2006), which identified parent and community involvement as a characteristic of effective low-wealth schools. Johnson et al. (2000) also found that schools that involved parents and community members were likely to be higher-achieving. Likewise, Barley and Beesley's

(2007) study of 21 high-performing rural schools noted a supportive relationship with the community was a contributing factor to schools' success. Barley and Beesley (2007) also indicated that rural school environments supported close relationship with the community and was thought to help schools enact high expectations and assist principal leadership.

### **Implications for coordinators and supervisors of educational leadership**

**programs.** Leithwood et al. (2004) indicated that evidence has challenged the wisdom of leadership development initiatives that use a one-size-fits-all approach or do not recognize differences in leadership practices required by differences in organizational context. For instance, succeeding as the principal of a large high school requires quite different strategies than succeeding as the principal of a small elementary school.

This study of higher-achieving low-wealth rural elementary schools suggests that organizational context may also include the geographic environment in which a school is located. An examination of the schools in the dissertation study indicates that rural school environments possess unique qualities; specifically the geographic size of the rural school districts and the role that school activities play within the community. Furthermore, limited access to resources due to isolation or limited options for transportation impact school families and require schools to be creative in helping students and families meet some of their basic needs. These traits require specialized actions by school principals.

An action highlighted by the principals in higher performing low-wealth rural elementary schools was the importance of developing positive relationships with parents, staff, and students. This finding is consistent with the work of Hallinger and Heck (1998) who found that principals encouraged greater levels of parental involvement in higher-

achieving elementary and high schools. This finding is also supported by Johnson et al. (2000) who recognized that principals who demonstrate support and caring for student and teachers and who involve parents and community members are likely to have higher-achieving schools.

One characteristic of highly-effective schools not specifically referred to by the principals in this study, but was referred to in the literature, is the need for a safe and orderly environment (Johnson et al., 2000; Lezotte, 2012). However, the lack of this factor within the findings does not mean that the participating principals did not value this characteristic of higher performing schools. In fact, the findings indicate that the participating school principals supported activities that promote positive character traits and high expectations for behavior.

The lack of reference to a safe and orderly environment within the interview transcripts may be representative of the findings of Ortlieb and Cheek (2008) who found that, in the rural school, a sense of community improved aspects of the classroom environment. Ortlieb and Cheek also found that students who attended schools in rural settings were more likely to see their teachers outside of class, and based on observations, the researchers argued that the connections between teachers and students' families improved student behavior within the classroom. Conversely, Ortlieb and Cheek (2008) found that teachers in urban classrooms were less likely to see their students outside of the school building. Moreover, student behavior management in urban classrooms was more likely to be handled between the teacher and the student than in the rural school, where teachers were more likely to contact parents directly. Thus, it may be that the

principals did not directly address the issue of building a safe and orderly environment because it is an integral part of the community in which they work.

Finally, principals in the dissertation study fulfilled additional duties relating to K-12 organization. This finding is consistent with a study completed by the National Center for Education Statistics (NCES) (2007). The NCES (2007) found schools located in rural communities have fewer instructional coordinators and supervisors to assist principals with increased responsibilities. NCES indicated that 97% of schools located in central city communities have these supports, 68% of urban fringe/large towns have them, and just 29% of rural school communities have these additional administrative services. These disparities are magnified by the fact that a lower percentage of districts in rural communities offer professional development in management techniques, technology, budgeting, advances in teaching and curriculum, and supervision than districts in central cities or large towns (NCES, 2007). The implication of this finding is that rural principals continue to be required to fill many responsibilities and do so with few resources. Thus the effective rural principal is someone who is creative, able to manage time well, and is able to connect with the faculty, students, and community in a variety of ways in order to meet a range of needs.

### **Limitations of the Study**

The scope of the dissertation study was limited to principals working in low-wealth rural elementary schools in upstate New York. Principals in private and parochial schools were not included in this study. Thus, any generalizations are limited to principals in public rural elementary schools. Private and parochial schools were excluded from the study because they are not required to administer New York State

Assessments, and the use of performance data on the New York State English Language Arts Assessment was one criterion for selection in the study.

### **Recommendations**

The findings of the dissertation study and the review of literature lead to a number of recommendations. This section first discusses recommendations for future research regarding the role of the principal in improving student achievement in low-wealth rural schools. The second section discusses recommendations for policy makers and school district leaders. The third section contains recommendations for practicing principals. The last section contains recommendations for coordinators and supervisors of educational leadership programs.

**Future research.** The dissertation study analyzed the perspective of principals within low-wealth rural elementary schools. Future qualitative studies might consider interviewing other school personnel regarding the principal's influence on improving student achievement. Additional viewpoints can serve to confirm the practices of principals and can add to the perspectives of principal participants.

This study identified practices and skills utilized by principals in low-wealth rural schools. Additional studies could delve more deeply into building-level structures, particularly data meetings. Given that all principals in this study identified data meetings as an area where they had influence, an examination of specific interactions, protocols and procedures, and resulting actions of data meetings could further support the work of principals.

## **Policymakers and school district leaders**

When the goal of educational policy is improving low-performing schools, requiring effective schools to change already-successful practices seems counter-productive. Leithwood et al. (2012) summed it up well by stating, “. . . fostering good teaching requires examining how leadership is integrated in a way that is responsive to the particular conditions facing schools” (p. 228). Therefore, policymakers should consider the specific factors of school environments and of school performance when implementing new policies.

Lipson et al. (2004) noted that schools, regardless of context, have a significant impact on student achievement and that students, teachers, and community members can create successful school environments by applying context-specific strategies. The overall finding of Lipson et al. was that successful school environments require flexibility and creativity. As such, using a one-size-fits-all approach to policy implementation demonstrates a failure to recognize the wide variation in New York State’s public school system.

Policymakers, therefore, may find it productive to provide specialized assistance to school leaders required to apply policies within their unique local school environments. The dialogue between policymakers and school personnel could begin by asking, “How can this policy be implemented within your school district, knowing that we must adhere to the spirit of the law while seeking to maintain many of the positive practices you have in place”? A question such as this demonstrates a level of adaptability and flexibility in the application of policy.

Given new RTT requirements, district-level leaders may want to examine how current district-level duties are distributed within their districts. An examination of existing practices and identification of other possible supports may lead to relief for principals seeking time to support and supervise faculty. Other school personnel or outside services might assist with the completion of district-level duties.

District leaders in rural schools also need to consider transportation costs for after-school activities. Doing so may provide a specific benefit to students living on the fringes of the school district boundaries. Another budget consideration is the preservation of library services. School library services allow students to access books not available within the community. Rural school districts that fail to account for transportation for after-school activities and who cut library services are neglecting two areas that have direct impact on students from lower-wealth families.

### **Principals**

The lack of research studies considering the unique qualities of rural environments (Barley & Beesley, 2007) increases the need for information to guide principal leadership in rural education. Suggestions resulting from the dissertation study offer support to principals seeking to align leadership practices to conditions of the rural school environment. Practicing principals must utilize resources inside and outside of school as a means for addressing multiple needs within their school communities.

**Data meetings.** Regularly scheduled data meetings are a must for rural school principals seeking to increase student achievement. One outcome of data meetings can be to identify teacher leaders within the school who can support on-going professional development. Teacher leaders can also assist principals in managing building-level

duties. For example, teachers from specific grade-levels or a single teacher representative from multiple grade-levels can manage student data information and assist in facilitating meetings. Principals can also utilize outside resources, such as the local Board of Cooperative Educational Services (BOCES) for assistance in data analysis or professional development. Using key people within grade level teams and having an instructional coach to support teachers proved useful for the principals in this study. For example, collaborative teams and instructional coaches improved communication within and between grade levels regarding curriculum (what to teach), instructional practices (how to teach), and student achievement (learning). Instructional coaches who worked within schools or came to schools through BOCES partnerships allowed for targeted professional development and provided assistance with analyzing and using student data. Instilling collaborative cultures and utilizing outside resources allowed time-strapped principals to complete other duties.

Data meetings also allow principals to establish and reinforce collaborative environments. Fostering collaboration requires principals to possess skill in group facilitation. Collaborative relationships can lead to creative solutions for supporting students. In addition, collaboration within and between grade levels can improve curriculum alignment and sharing of material resources. Examples of how participating principals in this study encouraged collaboration include the use of regularly scheduled grade-level meetings and the creation of liaison teams that met to discuss topics that needed to be shared between each grade level.

Principals in low-wealth rural elementary schools also must identify meaningful literacy measures of student learning. Information shared during data meetings allows

principals to monitor activities related to student learning and teaching practices. As a result, services can be assigned to support students with additional learning needs or to teachers who may need specialized professional development. As a participant in grade level data meetings, principals can monitor whole-school activities and manage resources within and between grade levels.

**Supporting literacy instruction primary grade levels.** Data meetings were held for all grade levels within the schools studied. This allowed principals and teachers to identify students who could benefit from early intervention. Some schools provided one-to-one instruction for identified first grade students. Participating principals in this study valued the contribution of primary-level instruction to student performance on Grade 3-5 New York State Assessments. When New York State Assessment results were received, principals recognized the collective roles that all faculty play in the success of students.

**Supporting families and students.** Most rural school environments include students and families who live on the periphery of the school district and are a considerable distance from the school building or community resources. This unique feature of rural schools leads to a number of recommendations for principals in rural school environments. First, rural school principals must be cautious about promoting village-centered or community-centered activities. Efforts to recognize and support activities in locations outside of the community center can increase participation for students who live in more isolated areas. When activities are offered within the community center, transportation for more isolated families should be considered. Second, transportation for students living on the outskirts of school district boundaries must be considered when offering activities before and after school so that all students

have equal access. Third, rural school principals seeking to ameliorate non-school factors that interfere with learning must consider accessing community resources. Community resources, such as medical, dental, mental health supports and non-perishable items can be provided to students and families in need. School personnel or parents volunteers could transport families who do not have access to a vehicle or who are unable to drive.

**Creating an inviting environment.** Principals in low-wealth rural schools must plan school activities with the knowledge that the school is often the community center. Principals can seize these opportunities to establish rapport with families and community members. These relationships not only improve the public's perception of the school, but can also lead to additional opportunities for parents and family members to volunteer and support school activities.

Principals in rural elementary schools must be prepared to juggle multiple responsibilities and to manage various tasks on a regular basis. Most importantly, principals in rural elementary schools must attend to relationships inside and outside of the school. Identifying and fostering leaders within the school faculty and creating conditions that lead to collaboration can help principals accomplish tasks related to communication, professional development, and curriculum alignment. Rural school principals must be intentional about reinforcing productive relationships with families and connecting their schools to resources within the broader community. These actions are critical to meeting the needs of students in rural school environments. Research completed by Karen Chenowith supports many of these recommendations.

Chenowith (2010) interviewed 22 public school principals in higher-performing, high poverty schools that were located in various school environments. As a result,

Chenowith (2010) identified five insights pertaining to school leadership that closely align with the findings of this dissertation study. Chenowith's first recommendation, *It is everyone's job to run the school*, aligns with the findings of this study and principals' identification of teacher leaders and the inclusion of family and community resources to support students. Principals in this study recognized the value of sharing responsibility of school management and the necessity of accessing outside resources in order to meet the needs of students. Two of Chenowith's recommendations, *Inspect what you expect—and expect that all students will meet or exceed standards* and *Use student achievement data to evaluate decisions*, were accomplished by principals in this study through the use of data meetings. Chenowith's last two recommendations, *Be relentlessly respectful—and respectfully relentless* and *Do whatever it takes to make sure students learn* were also represented by principals in this study. An example of this is represented by the principal at Gemini Elementary School who dedicates a bulletin board in the main hall to showing students' work. The bulletin board includes the message that students and staff are expected to persevere and they are expected to be respectful. Principals in this study also mentioned their dedicated teaching staffs that go above and beyond so students can achieve. Chenowith's study and this dissertation study were completed with practicing principals. Educational leadership training programs can prepare prospective principals by considering school environment as a factor in leadership decisions.

### **Coordinators and Supervisors of Educational Leadership Programs**

Like policymakers, coordinators and supervisors of educational leadership programs must consider the unique characteristics of school environments when planning learning tasks. Examples from the dissertation study highlight the unique

characteristics of rural school environments. These include the connection that a rural school principal has within the community, the special considerations that a principal must make when planning school activities, and the fact that rural school principals have fewer adult supports to assist with carrying out mandated activities. These realities of the rural school principalship are in contrast to principals' roles in other school environments. Learning outcomes should require prospective principals to consider which leadership practices are best applied within which school environments. As a result, educational leadership preparation programs can encourage prospective school leaders to think critically about applying leadership skills. This can be accomplished by inviting principals from different school environments to speak to prospective leaders about their leadership practices. Prospective school leaders can apply specific practices based on simulations and readings referencing specific school environments.

Leadership programs can promote the structures that participating principals in this study used within their schools. When teaching about practices of rural schools principals a list of practices can be provided to prospective school leaders. However, it is equally important to teach "the symbolic side of school" (Deal & Peterson, 1994, p.6). As Deal and Peterson (1994) state, "When school principals or leadership teams attend to both administrative imperatives and the desire to shape a meaningful school culture, high performing organizations are the predictable result" (p.10).

Figure 5.2 provides a summary of findings and implications from this study. Column for the findings represent the three areas associated with the study's research questions. Column headings represent groups that may want to consider the

implications of this study’s findings.

<b>Findings</b>		
<b>Principals’ Influence on Student Achievement</b>	<b>Principals’ Actions and Student Achievement</b>	<b>Influence of Rural Environment on Redesigning the Organization</b>
Assets that affect achievement <ul style="list-style-type: none"> <li>• Materials</li> <li>• Time</li> <li>• Data</li> </ul>	Pay attention to people <ul style="list-style-type: none"> <li>• You are not alone</li> <li>• Together we can</li> <li>• Hiring the right people and putting them in the right places</li> </ul>	Hurdles to enhancing achievement <ul style="list-style-type: none"> <li>• State and Federal mandates</li> <li>• Transportation and isolation</li> <li>• Losing services</li> </ul>
“May I have your attention, please?”		Reaching Out
Mandate is an obstacle to influence.		More than a School
		More than a Principal
<b>Implications</b>		
<b>Rural Elementary School Principals</b>	<b>Policymakers and District-Level Leaders</b>	<b>Planners and Coordinators of Educational Leadership Programs</b>
<ul style="list-style-type: none"> <li>• Principals in low-wealth rural elementary schools must access other resources and consider specific leadership practices that improve student achievement.</li> <li>• Use multiple formats for communicating goals.</li> <li>• Access teacher leaders to assist with completion of building-level duties.</li> </ul>	<ul style="list-style-type: none"> <li>• Policymakers and school district leaders must consider flexible approaches when applying federal and state policies within varied school environments and within schools demonstrating different levels of academic achievement.</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinators and supervisors of educational leadership programs must consider the unique leadership practices required for working in specific school environments (urban, suburban, rural).</li> </ul>

*Figure 5.2.* Summary of study findings and implications.

Figure 5.3 represents a summary of recommendations generated as a result of this study’s findings and a review of this study’s implications for rural elementary school principals, policymakers and district-level leaders, and planners and coordinators of educational leadership programs.

<b>Recommendations</b>		
<b>Rural Elementary School Principals</b>	<b>Policymakers and District-Level Leaders</b>	<b>Planners and Coordinators of Educational Leadership Programs</b>
<ul style="list-style-type: none"> <li>• Conduct regularly scheduled data meetings with each grade level.</li> </ul>	<ul style="list-style-type: none"> <li>• Policymakers should consider the specific factors of school environments and of school performance when implementing new policies.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider unique characteristics of rural school environments during instruction.</li> </ul>
<ul style="list-style-type: none"> <li>• Attend to literacy instruction in primary-level grades (Pre-K-2).</li> </ul>	<ul style="list-style-type: none"> <li>• Policymakers may find it productive to provide specialized assistance to school leaders required to apply policies within their unique local school environments.</li> </ul>	<ul style="list-style-type: none"> <li>• Address specific skills and practices required by rural school principals.</li> </ul>
<ul style="list-style-type: none"> <li>• Provide protected time blocks for literacy instruction.</li> </ul>	<ul style="list-style-type: none"> <li>• District-level leaders may want to examine how current district-level duties are distributed within their districts</li> </ul>	<ul style="list-style-type: none"> <li>• Promote critical thinking by asking prospective school leaders to apply specific skills to varied school environments.</li> </ul>
<ul style="list-style-type: none"> <li>• Access community resources to assist in meeting needs of students and families living on the periphery of the district.</li> </ul>	<ul style="list-style-type: none"> <li>• District-level leaders must consider the impact of budget cuts related to transportation and library services on students from low-income families.</li> </ul>	<ul style="list-style-type: none"> <li>• Pair technical aspects of leadership related to management with symbolic aspects of leadership.</li> </ul>
<ul style="list-style-type: none"> <li>• Create and inviting environment and attend to broader community when planning school activities</li> </ul>		

*Figure 5.3.* Summary of study recommendations.

## **Conclusion**

If the high-poverty rural and small-town schools within the United States were combined into one district, it would be the largest, poorest, and most racially diverse

district in the nation (Strange, 2011). However, rural and small-town schools are not one district. They are spread out and include a wide range of socioeconomic variability. The fact that rural schools are a dispersed group with high rates of poverty has impacted their political clout and has left them weakly represented when legislators discuss educational issues (Strange, 2011).

Furthermore, the role of the principal has seen many changes since Cyrus Pierce took over as principal of the normal school in Lexington, Massachusetts in 1864. Increased levels of accountability, implementation of common core learning standards, and shrinking state funds for public schools have created unique challenges for principals seeking to increase student achievement levels. Principals help to create schools that result in all students meeting challenging standards (Cotton, 2003). Although principals cannot change the demographics of the school or the socioeconomic status of students, they can impact the level of learning that students achieve.

This dissertation provided information regarding the principal's role in meeting accountability requirements and the challenges confronted in raising student achievement in low-wealth, rural schools. Despite state and federal education initiatives aimed at improving student achievement, principals in schools located in high-poverty areas confront additional obstacles. Research has consistently demonstrated that school and non-school factors have impacted the rate and level of achievement on standardized measures. In addition, rural school communities have confronted unique challenges and students from impoverished backgrounds struggle to attain high levels of achievement. Lacour and Tissington (2011) recognized the obstacles that students in rural areas face including fewer community resources and limited access due to a lack of reliable public

transportation systems. Ladd (2011) and Books (2004) also highlighted the significant differences in school quality based on community wealth. Research also has shown that principals can have a positive impact on student achievement. Principals who focus on setting directions, developing people, improving instruction, and redesigning the organization to meet the needs of their school contexts have been shown to increase the likelihood of improved student achievement for all students.

A review of the research linking leadership to student achievement identified unique obstacles that rural principals must address. Additionally, Cawelti (2001), Togneri and Anderson (2003), and Dessoff (2012) identified traits that school systems utilize during improvement efforts. Thus effective school practices must be integrated with factors associated with school context.

State and federal regulations are applied to all schools in the same way, even though there are distinct contextual differences between urban, suburban, and rural schools, and each environment has unique characteristics that impact student achievement. The challenges unique to rural communities include the direct association between living in nonmetropolitan counties and lower early literacy ability at the beginning of kindergarten (Durham & Johnelle Smith, 2006) and that the dispersed populations within rural environments create challenges for principals trying to access community supports for students.

Although student achievement is hinged on the quality of the teacher, the principal's influence on the implementation, planning, and evaluation of curriculum has been shown to affect the context in which effective teaching occurs (Goldring et al., 2009). Thus research on principal effectiveness is relevant when considering how to

address the educational needs of students. However, even though principal effectiveness has been addressed in the research literature, limited studies have focused on the role of the principal in rural school environments.

The dissertation research worked to address the gap in the literature by using a framework for effective school leadership that includes an emphasis on core leadership practices (Leithwood et al., 2004). The leadership framework for learning takes school context into account, thus providing a useful framework to guide the study. The research was conducted using a qualitative research method in order to effectively capture the unique, detailed, and complex experiences of participating principals (Corbin & Strauss, 2008). Thus, the application of a qualitative methodology added to the understanding of how elementary school principals in low-wealth rural schools impact student learning.

The research involved a semi-structured interview protocol to aid in the consistency in which principal interviews were completed. These interviews were conducted with 10 principals from higher-achieving low-wealth rural schools in upstate New York. Interviews were audio recorded and transcribed and the resulting transcripts were emailed to participants to check the accuracy of statements. During analysis, the principal's responses were filtered using Leithwood's framework of four core leadership practices. Participating principals' responses to the study's three research questions led to unique themes aligned with core leadership practices developed by Leithwood et al. (2012).

Responses to the study's three research questions and the resulting themes led to the identification of three overarching premises: relationships, resources, and reaching out. Principals in the study took the time to establish relationships for the purpose of

supporting teachers and the academic and social-emotional needs of students. Resources related to materials, time, and data were critical components of creating instructional alignment within and between grade levels. Elementary school principals in low-wealth rural elementary schools needed to flexibly and creatively respond to changes in enrollment and budget reductions. Data meetings allowed for the creation of trusting and collaborative environments and for on-going professional development. Participating principals communicated expectations and provided necessary support to teachers during data meetings. Participating principals considered how a lack of public transportation meant that some families in low-wealth rural areas had difficulty accessing supports and services. Reaching out to community organizations and families allowed higher achieving low-wealth rural elementary school personnel to provide medical and mental health services to families that lived on the periphery of the school district.

Coding principals' responses through the framework of Leithwood et al. (2012) helped expose how state and federal mandates and district-level requirements created obstacles for some principals. Principals spoke exclusively about impediments posed by tasks pertaining to the APPR process. Required meetings regarding teacher observations and resulting paperwork limited their ability to attend to teachers who may have needed additional support and to monitor instruction and students to the degree they desired. APPR requirements coupled with additional K-12 responsibilities limited the amount of time principals could dedicate to activities related to developing people, monitoring school activity, and providing instructional support.

An examination of this study's findings led to the identification of implications and recommendations policymakers and district-level leaders, planners and coordinators

of educational leadership programs, and for elementary principals in rural schools. The relatively small size of rural school districts and the dispersed nature of rural communities, limits their clout with educational policymakers. The results from studying ten lower-wealth higher-achieving rural elementary schools in Upstate New York can serve to encourage a more flexible approach to policy implementation requirements. Planners and coordinators of educational leadership programs may need to consider the addition of guest speakers and readings that address the unique leadership skills needed within urban, suburban, and rural school environments. Prospective schools leaders can be encouraged to think critically about what skills and practices are required for environment-specific scenarios. Finally, elementary school principals in rural school environments who are seeking to improve student achievement within their schools can use the results of this study as guide for conducting their work.

Principals in this study shared how they influenced student achievement despite the impediments associated with state and federal policy requirements and the tasks related to district-level roles. Participating principals used research-supported practices to improve the culture of their schools and the performance of their students. Principals in higher-achieving low-wealth rural elementary schools creatively managed resources within their schools. Regularly scheduled data meetings served as forums for principals to monitor instructional practices, attend to student learning needs, and meet the professional development needs of faculty members. Principals' knowledge of their communities and use of available community resources allowed them to overcome obstacles associated with rural environments. Some of these obstacles include family isolation, lack of public transportation, and limited resources for families.

Participating principals' positive attitudes and expressions of appreciation for their schools and faculties was a refreshing component of this dissertation study. Principals' humble acceptance of how their actions and established practices contributed to higher-than-average student achievement in schools with lower-than-average wealth reinforced the need to develop a guide for rural school principals seeking to improve student achievement.

Like principals in most school environments, principals in low-wealth rural areas are responsible for leading their schools to increased levels of student achievement. However, there is a lack of guidance for principals. According to Arnold (2005), a group of researchers from Midcontinent Research for Education and Learning conducted a literature review of 498 studies pertaining to rural education. Just seven of these studies were related to the behaviors and practices of rural school administrators, and only one of these studies was deemed to be high quality. Limited studies in rural school environments, scarce resources, tight budgets, and increased responsibilities have created unique circumstances for elementary school principals in rural schools. Given the complex role of the principal and the scarcity of rural-specific research, school administrators are making decisions with limited knowledge of how their behavior contributes to student achievement.

The purpose of this dissertation study was to provide insight into the leadership practices of principals in selected higher achieving rural elementary schools in New York State. This study adds to the body of research in rural education, specifically related to rural school principals. The study's findings regarding principals' influence and actions

may be used to guide rural elementary school principals seeking to improve student achievement within their schools.

The use of a qualitative methodology provided insight into the perspectives of participating principals and how their roles in unique rural school environments contributed to the success of their teachers and students. The stories of elementary school administrators in low-wealth rural elementary schools highlighted the impact that executive leaders have while adhering to specific leadership practices. First, principals in this study held teachers in high regard; these actions are supported by Ton (2014) who states that positive outcomes require competent, motivated employees. Participants recognized the accomplishments of their staffs and the collaborative nature of their school environments. The value of human capital was reinforced through these interactions. Second, the conscientious way that participating administrators facilitated support for students and families in need highlighted one of the strengths of rural schools. School personnel knew school district families and the students who might need food, books, or services. Examples of how schools provided transportation for school activities, access to literature, or access to medical services underscored principals' attention to the needs of marginalized groups within their schools. Third, participating principals in this study made certain that high expectations were maintained for all students and that instructional resources and supports were utilized to support students in achieving these expectations.

Finally, principals admitted the need for continuous improvement. Structures, such as data meetings, were used to monitor student learning and instructional practices. The humility of participating principals and their desire to help others develop as

educators are contributing factors to success within their schools. Some of the lessons gleaned from this research are: valuing human capital, developing relationships with the constituent groups, fostering an environment that cares and has high expectations for all students, and recognizing that a leader can always be better for the sake of students. Each of these lessons can be applied to the understanding of successful executive leadership.

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## Appendix A

### Participants

Site	Principal	Email address	Phone

**Codes for Participants**

Site	Principal	Years of Experience	Years in Current District	Site/Principal Code

## **Appendix B**

### **Interview Protocol (Principals in Rural Elementary Schools)**

Thank you for agreeing to speak with me today. I am a doctoral candidate at St. John Fisher College and I am conducting research on the principal's role in promoting student achievement on the NYS 3-5 English Language Arts Assessment. In our interview today, I would like to discuss topics pertaining to your experiences as a principal and how rural elementary school principals can best promote student achievement.

You were selected to participate in this study because you are a principal in a higher-achieving low-wealth rural elementary school. The interview should last about an hour. Everything you say will be kept confidential; your name and school will not be associated with any specific comments or conclusions expressed in the study. You may be identified by position (example, principal), but your school will not be attached to that description. In addition, I will be interviewing other rural elementary school principals and this will further protect your identity.

With your permission, I will be recording our interview today for purposes of transcription. The recording will not be used in any publication or presentation. The files containing the recording will be de-identified as soon as possible, but the only identifier on them will be a participant code that cannot be connected to your name by anyone but my dissertation committee and me. I will be contacting you to provide you an opportunity to review your transcript.

Do you have any questions before we start?

**Interview Protocol (Principals in Rural Elementary Schools)**

Interview Location:

Date:

Participant Name:

Time:

Consent to audiotape interview: If yes, sign here: \_\_\_\_\_

1. Would you start by telling me your name, your position, and a little bit about the school and district where you are currently employed?
2. Tell me a bit about how you obtained your current position. What is your educational background? What is your work history?
3. Ideally, what would you prefer the primary responsibilities of your current position to be? Please explain whether or not these preferred responsibilities are aligned with how your time is allocated in your current position?
4. Can you share an example that illustrates how state and federal mandates impact your role as principal?
5. How are expectations for classroom instruction formed within your school?  
How are expectations for student achievement formed within your organization?
6. How is professional development delivered within your school?
7. If you had to describe what your influence looked like on the levels of student achievement on Grade 3-5 New York State ELA Assessments, what would you say?  
Prompt: Can you share examples of how you have had an impact on student achievement? Is there an example where you had a direct impact? Indirect impact?

8. Which, if any, of your actions do you consider most relevant to improving student achievement on the New York State English Language Arts Assessment in grades 3, 4 and 5?

9. How would you describe the impact of working in a rural community on the organization or configurations within your school?

10. A. Can you tell me a story that highlights an advantage of working in a rural school environment?

B. Can you tell me a story that highlights a disadvantage of working in a rural school environment?

C. Overall, how would you describe the impact of working in a rural school on your role as a principal?

11. How does working in a rural school environment impact parent/community involvement?

12. If you were going to develop a guide for elementary principals in rural schools who are seeking to improve student performance on the NYS ELA Assessment, what three things would you include?

13. Is there anything you would like to add regarding the role of elementary school principals in rural environments that I have not asked you about?

Thank you for your time.

## Appendix C

### Alignment of Interview Protocol with Research Questions

Research Question	Interview Protocol Question Aligned to Research Question
<p>1. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe their influence on the levels of student performance on Grade 3-5 New York State ELA Assessments?</p>	<p>3. Ideally, what would you prefer the primary responsibilities of your current position to be? Please explain whether or not these preferred responsibilities are aligned with how your time is allocated in your current position?</p> <p>5. A. How are expectations for classroom instruction formed within your school? B. How are expectations for student achievement formed within your organization?</p> <p>7. If you had to describe what your influence looked like on the levels of student achievement on Grade 3-5 New York State ELA Assessments, what would you say? Prompt: Can you share examples of how you have had an impact on student achievement? Is there an example where you had a direct impact? Indirect impact?</p>
<p>2. Which actions, if any, do principals in low-wealth rural elementary schools in Upstate New York consider most relevant to improving student achievement on the New York State English Language Arts Assessment in grades 3, 4 and 5?</p>	<p>6. How is professional development delivered in your organization?</p> <p>8. Which, if any, of your actions do you consider most relevant to improving student achievement on the New York State English Language Arts Assessment in grades 3, 4 and 5?</p> <p>12. If you were going to develop a guide for elementary principals in rural schools who are seeking to improve student performance on the NYS ELA Assessment, what three things would you include?</p>
<p>3. How do elementary school principals in selected Upstate New York State low-wealth rural schools describe the influence of social and environmental factors of a rural community on their ability to redesign the organization?</p>	<p>4. Can you share an example that illustrates how state and federal mandates impact your role as principal?</p> <p>9. How would you describe the impact of working in a rural community on the organization or configurations within your school?</p> <p>10. A. Can you tell me a story that highlights an advantage of working in a rural school environment? B. Can you tell me a story that highlights a disadvantage of working in a rural school environment? C. Overall, how would you describe the impact of working in a rural school on your role as a principal?</p> <p>11. How does working in a rural school environment impact parent/community involvement?</p>

## Appendix D

### St. John Fisher College Informed Consent Form

**Title of study:** The Role of the Low-Wealth Rural Elementary School Principal in Improving Student Achievement

**Name of Researcher:** Mark D. Linton

**Faculty Supervisors:** Dissertation Chairperson: Dr. Marie Cianca 585- 899-3878

**Committee Member:** Dr. Diane Reed 585-385-7297

**Purpose of study:** The purpose of this study is to provide insight into the leadership practices of principals in selected higher-achieving rural elementary schools in New York State. Ultimately, this study will add to the body of research on rural schools and will provide elementary school principals in rural New York State schools with a guide for improving student achievement. The study will specifically explore the presence of four core leadership practices of principals in successful rural elementary schools.

**Approval of study:** This study has been reviewed and approved by the St. John Fisher College Institutional Review Board (IRB).

**Place of study:** The interviews will take place at the following schools:

**Length of participation:** Interviews are estimated to last one hour.

Additional time will be needed so the researcher can verify the accuracy of the information shared during interviews.

**Risks and benefits:** The expected risks and benefits of participation in this study are explained: There are no identified risks or benefits for participation in this study.

**Method for protecting confidentiality/privacy:** Confidentiality will be maintained during the interviews and no identifiers will be used during the interview process. Confidentiality will be

maintained by coding the responders' names and the name of school districts. No identifying information will be shared. Confidentiality statements will be signed by the transcription company. Interview data, recordings, and any supporting documentation will be maintained in a locked, secure area in the researcher's possession for a minimum of three years from the conclusion of the dissertation process.

**Your rights:** As a research participant, you have the right to:

1. Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
2. Withdraw from participation at any time without penalty.
3. Refuse to answer a particular question without penalty.
4. Be informed of the results of the study.

I have read the above, received a copy of this form, and I agree to participate in the above-named study.

Name (Participant) \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

Name (Researcher) \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_

If you have any further questions regarding this study, please contact the researcher listed above for appropriate referrals.