Teacher Perceptions of Leadership in High Poverty Schools

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TEACHER PERCEPTIONS OF LEADERSHIP IN HIGH POVERTY SCHOOLS

A Dissertation

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by

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Advisor: Dr. Kent Seidel
Abstract

The purpose of this study was to determine the priorities of school principals in high poverty schools that have the potential to make the greatest impact on student achievement. The study utilized secondary data analysis of a survey given to all Colorado educators to measure perceptions of school conditions, including leadership, along with school student achievement data. The TELL (Teaching, Empowering, Learning and Leading) Colorado survey was administered online to educators. The survey constructs were analyzed using Leithwood and Riehl’s framework for effective leadership actions. These actions include: setting direction, developing people, redesigning the organization and managing the instructional program. The participants of the study are 167 schools designated by the state of Colorado as being high-poverty. Data were analyzed using both descriptive and inferential analyses. Schools were studied within two groups. Schools identified as “Centers for Excellence” by the state of Colorado are designated high-poverty, high-growth schools. A second, larger group of schools was classified as high-poverty, low-growth. Leadership survey items were analyzed for both groups and comparisons made between the two. Overall, results indicated that the higher perception of leadership within a school, the more likely the school was to be designated a ‘Center of Excellence’ by the state.
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Chapter One: Introduction

Background

These are uncertain times. Poverty rates have soared to unprecedented heights in this recession. Families find themselves spiraling further into economic decline. Between 2007 and 2008, the US Census reported the first statistically significant annual increase in the poverty rate since 2004. The US Census website reports the 2008 poverty rate (13.2 percent) as the highest since 1997 (U.S. Census Bureau, 2009). With increasing poverty, the United States faces a crisis of unparalleled proportions. The economic and social crisis naturally extends to the arena of education. According to Kozol (2000) education is one thing that will help children move out of poverty. Add to this an increasing emphasis for schools to raise student achievement and you have a compelling argument for conducting research on effective school practices to support children living in poverty. The purpose of this study was to determine the actions of school principals in high poverty schools that have the potential to make an impact on student achievement.

Schools are under increasing pressure to produce results. Because of these economic challenges in our country, schools have entered an era of accountability like no other. With the implementation of No Child Left Behind (NCLB) in 2001, the federal government became increasingly involved in monitoring the performance of schools. No Child Left Behind includes annual testing for all students in grades 3-8 in reading and
mathematics. The goal of the annual testing is to bring all students to “proficient” levels on state tests by the 2013-14 school year. Schools are expected to make “adequate yearly progress” (AYP) towards this goal. Schools that fall short of meeting this goal are subject to corrective measures. Increased performance emphasis placed on schools by NCLB has created an educational culture driven by results. Never before have schools been faced with the intense pressure of getting results from students, as measured by standardized test scores.

In this time of increased accountability and focus on sustained improvement, attention is being given to students from poverty and schools that serve these populations. The achievement gap looms like a dark cloud as schools focus on improving the quality of education and life for students with low socio-economic status. NCLB has been the subject of educational debate. Darling-Hammond (2007) explained that NCLB created an unequal school system that unfairly penalizes schools that serve students from poverty and sets unrealistic targets for achievement on state tests. NCLB has disproportionately and negatively impacted students from poverty and the schools that serve them. On the other hand, NCLB focuses on increasing annual standardized test scores for all students, including disaggregated sub-groups that have traditionally been overlooked in the accountability system and, some would argue, in the schools themselves. NCLB also calls for highly qualified teachers in every classroom. From this point of view, NCLB has added a level of accountability to schools and raised the standards for performance of teachers, schools, and teacher preparation institutions.

There is no formula for schools to achieve results. In fact, the path is often simply trial and error by practitioners in the educational field. One factor that stands out
with clarity amidst the fog of school improvement is the importance of teacher quality. The impact of the classroom teacher remains the most important factor in the battle to improve student achievement for all students, especially those living in poverty (Darling-Hammond, 2000). Unfortunately, schools that serve students in poverty are often the training ground for inexperienced teachers.

Aside from the quality of the teacher, schools and districts continue to search for variables that will make a difference in student achievement. School reform is a complex process with many potential impacting factors. While there is no silver bullet to education reform, one such factor, cited by Leithwood, Harris & Hopkins (2008), has been found to be second only to classroom teaching as an influence on pupil learning: school leadership.

The demanding nature of the principalship has been well documented. Fredericks (1992) noted,

A major need continues to be what I define as ‘simultaneous management skill’ or the ability to deal effectively with people, instructional programs, community interests, finance, building concerns, local and state regulations, and central office requirements within a single day, and sometimes within a single hour. (p. 62)

Fredericks noted the demanding and all-encompassing nature of the work of building principals. Reeves (2006) explained how the demands for principals’ time are out of line with reality. He advocates a more focused approach to school leadership.

In addition to the daily demands of principals, there is an increasing focus from the political arena for both teachers and principals to get results. In Colorado, Senate Bill 191 was introduced in April 2010. The Bill intends to base 55 percent of teacher evaluations on student academic growth and 66 percent of principal evaluations on a
combination of the school’s academic growth and the demonstrated effectiveness of the teachers in the school. Colorado State Senator Michael Johnston, who is credited with introducing the bill said, “We are here today because we know the only solution to the problem of American education right now is great teachers and leaders. They are the solution to the issue, not the problem” (Meyers, 2010). Since politicians are now calling to link leadership to student achievement, it follows to study the impact of leadership related to achieving excellent results with all students. Fullan (2006) describes the work of closing the achievement gap through “turnaround leadership” as a reform agenda linking education to society as a whole.

Leadership Research

Leadership is the cornerstone of any great improvement effort. Whether a business on the verge of improvement, or a school on the edge of reform, leadership has the power to unlock the potential of the organization. Without it, reform efforts stand little chance. Collins (2001) wrote of the potential of leadership in the business arena to transform companies. Through an analysis of companies who had gone from “good” to “great” as measured by financial success, Collins describes how all of the successful companies had a “Level 5” leader at its center. These are leaders who are not flashy, but get the job done and get results for their companies. It is not a big leap to connect Collins’ findings to the work of school leadership. In fact, Fullan (2003) agrees and makes the argument that schools need “Level 5” leaders as principals. Fullan goes so far as to say that ensuring effective principals in our schools is a moral imperative.

Since leadership in schools has the potential to impact change in a way that is second only to classroom teaching, it is worth researching the effects of leadership in
schools upon student learning. The role of the principal has shifted over the last ten years to having a stronger focus on instructional duties, yet the managerial responsibilities of the principalship have not lessened (Portin, Shen & Williams, 1998). Principals find themselves having to make choices about which areas of leadership they will spend their time on, since there are only so many hours in each day.

Several different models of leadership are found in the literature. An increased emphasis on instructional leadership has emerged in the last twenty years. Instructional leadership developed out of the effective schools movement of the 1980s and situated the principal as the primary source of instructional expertise in a school. Instructional leadership called upon principals to be more than just good managers. Under this new framework leaders were expected to understand classroom practice at deep levels and lead the school with instruction as their primary focus (Marks & Printy, 2003).

Beyond instructional leadership, an increased emphasis on transformational leadership has emerged. Transformational leadership can be described as an expansion of instructional leadership. Marks and Printy (2003) explain that transformational leadership seeks to develop the capacity of the stakeholders with the goal of improving the organization. Developing collective capacity of the organization and the people within it is the aim of transformational leadership. Instructional leadership and transformational leadership have emerged as the two dominant paradigms of principal leadership in the research.

The role of the principal can be one of influence and promise for reform. The position of principal is a challenging one, filled with high stress and pressure to increase student achievement. Principals are found to have high turnover rates. One study found
the average length of tenure for principals to be only about 12 years (Buckingham, Donaldson, & Marnik, 2005). Another study by Fuller, Young, and Orr (2007) found that in Texas, 50% of building leaders leave the principalship within 5 years and 75% leave within 10 years. Add to this the fact that urban schools are more likely to have less experienced principals and principals who received their undergraduate degree from lower ranked colleges (Baker, Punswick & Belt, 2010). With such a short term, plans to retain strong leadership must be considered if schools are to increase and sustain their performance.

In high poverty schools, where leadership tends to be less experienced, more focus needs to be given to attracting and retaining talented leadership in order to close the achievement gap. Mitgang (2003) found it is difficult to retain school principals with low SES, high poverty, and low per pupil spending. In addition to Fuller, et al. (2007), cited just above, Papa (2002) found urban principals more likely to leave the principalship compared to those who lead in suburban schools. Baker, et al. (2010) found that in schools with a higher population of Black students, the principalship was the least stable. Furthermore, schools with lower student outcomes have less experienced principals (Fuller, Baker, & Young, 2007; Papa, 2002).

In this time of unparalleled poverty and increasing political pressure, education continues to search for ways to increase the performance of students. Linking the effects of leadership to student achievement has been the focus of research (Leithwood & Jantzi, 2008; Leithwood & Mascall, 2008; Day, Summons, Hopkins, Leithwood & Kington, 2010; Leithwood, Harris & Hopkins, 2010; Nettles & Herrington, 2007). The effect of a strong principal has proven to have both direct and indirect effects upon student
achievement. Nettles and Herrington (2007) found relationships between selected school leadership practices and student learning, indicating a direct effect of leadership upon student learning. However, most studies indicate indirect effects of leadership upon student outcomes, mediated by other factors.

This study utilized Leithwood’s four core leadership practices as a framework for analyzing leadership actions. This framework was chosen since it has been utilized with high-poverty schools and it encompasses many of the more complex frameworks into four straightforward actions. These actions are:

1. Setting direction,
2. Developing people,
3. Redesigning the organization, and
4. Managing the instructional program.

Statement of the Problem

The problem of understanding which leadership actions make an impact on student achievement for schools exists across the nation. Adding to the problem is the limited body of research specific to high-poverty schools. Context-specific studies of leadership are limited to mostly case studies and are not generalizable. Furthermore, according to Harris (2002) most large-scale studies have focused on low-performing, high-poverty schools. Research needs to be done to delineate the practices of effective leadership in high-poverty schools.

While there have been numerous studies regarding leadership and the impact upon student achievement, few have dealt directly with principals who lead high-poverty schools. Considering the increased focus on schools from poverty and the growing
numbers of students who find themselves living in poverty, research needs to focus on the principals of these schools. Day, et al. (2008) advocate the need for more context specific research of educational leadership. Since the educational leadership literature claims that the context in which leaders work impacts what leaders do, it makes sense to study leaders in unique contexts, such as high-poverty schools. Ylimaki, Jacobson and Drysdale (2007) recommend expanding research to include practices of principals of high-poverty schools. O’Donnell and White (2005) agreed, “By identifying the strength of the relationships between specific principal behaviors and student achievement, educational leaders and politicians will gain a more accurate understanding of the leadership behaviors necessary to improve student performance” (p. 57). Fredericks (1992) advocates for research to support urban principals who are faced with challenges unique to schools in poverty.

“As schools face increased public and political demands for improved performance, meeting these demands becomes particularly problematic for schools in high-poverty communities” (Mulford, Kendall, Ewington, Edmunds, Kendall & Silins, 2008 p. 463). Students living in poverty are not achieving at the same levels as their peers. While achievement levels of poor children have increased slightly over time, the gap between children from low-income families and their more affluent peers persists despite reform efforts from federal, state and local levels. Reeves (2006) indicated that schools, and even entire school systems are capable of closing the achievement gap with the right leadership. Harris (2007) explained,

To ensure that all students reach proficiency, schools must not only address student disadvantage, but they must completely overcome the disadvantages, by helping these students learn at faster rates than others-in some cases, much faster
rates. This makes schools completely responsible for educational inequality, including that which arises before the student reached school age. (p. 371)

With leadership at the center of school improvement efforts, a focus on principals who lead schools beating the odds is central to understanding reform in these schools.

As a principal of a high-poverty school, this research topic held personal implications as well. As the leader of a 2009 and 2010 Center of Excellence school in Denver, I wanted to analyze patterns of leadership among these types of schools and uncover commonalities. Worth noting is that my school was not included in the data set, due to having a response rate less than fifty-one percent.

**Purpose of the Study**

The purpose of this study was to determine teacher perceptions of school leadership in high poverty schools, within both Centers of Excellence schools and high-poverty, low-growth schools. While many research studies have focused on effective leadership practices, far fewer studies have focused on leadership practices of principals in high-poverty schools. Schools that serve high-poverty communities are faced with different and greater challenges than low-poverty schools. Despite the additional challenges, high-poverty schools are charged with increasing student achievement at the same level as all other schools. With the increased accountability all schools face, it is worth analyzing teacher’s perceptions of leadership in high-poverty schools. By documenting teacher’s perceptions of leaders in schools beating the odds, this study attempted to delineate leadership priorities that may be of use to other principals of high-poverty schools.

Ylimaki et al. (2007) found,
There are marked similarities in leadership practice that may hold important clues to improving the life chances of children being educated in these settings. Now more than ever, all children need and deserve principals with the commitment, passion, and leadership skills to make a difference. (p. 380)

Mulford et al. (2008) concluded that research on successful principals in high poverty, high performing schools needs to be given more priority.

Principal professional development is often a mixed bag of activities, some of which have little relevance or application to the daily demands of the profession. Nettles and Herrington (2007) advocate for professional development for principals based on evidence of the direct effects “designed to guide principals in their organizational and instructional practices” (p. 733). Barnes, Camburn, Sanders and Sebastian (2010) found in a study of urban principals that it is difficult to transform principal practice through sustained professional development. This study sets out to shed some light on principal actions that could make a difference, which could potentially guide principal professional development and practice. Fredericks (1992) also focuses on the importance of principal professional development that prepares principals who are faced with restructuring their schools, which meets the unique needs of urban principals.

Research Questions

Research questions of the study were:

1. What is the relationship between building vision and setting direction and student achievement in high-poverty schools?

2. What is the relationship between understanding and developing people and student achievement in high-poverty schools?

3. What is the relationship between redesigning the organization and student achievement in high-poverty schools?
4. What is the relationship between managing the teaching and learning program and student achievement in high-poverty schools?

Hypotheses

Null Hypothesis

\((H_0)\) Among high-poverty schools, the mean perceived quality of leadership of high-growth schools is equal to or lower than that of low-growth schools.

Hypothesis

\((H_a)\) Among high-poverty schools, the mean perceived quality of leadership of high-growth schools is higher than that of low-growth schools.

Limitations

As with any research, this study has limitations that may limit its generalizability. First, the study represents teachers’ perceptions rather than the observed practices of their principals. Second, since the survey was optional to complete, non-respondents may have differed in their responses than those who actually responded to the survey. Third, the survey does not consider all of the variables that have been established by the research to examine the effects of leadership upon student achievement. A further limitation of this study is the ability to generalize the results to other high-poverty, high-growth schools. Within each school there are several mediating variables and without controlling for these, it is difficult to fully comprehend the full impact of leadership upon student achievement. Finally, Colorado may have unique factors that make this study less generalizable to other states.

The primary limitation of this study is the ability to generalize the results to other high-poverty, high-growth schools. Each school setting has a unique set of challenges and factors that may contribute to or hinder student achievement outcomes. Within each
school there are several mediating variables and without controlling for these, it is
difficult to accurately determine the full impact of leadership upon student achievement.

**Definition of Terms**

Included are definitions of key terms for the purpose of promoting clarity and
providing a deeper perspective of the concepts of the proposed research.

**Balanced Leadership**

A framework for leadership from McREL, derived from meta-analysis of studies
linking leadership actions to student achievement. This framework formed the
basis for Marzano’s 21 Leadership Responsibilities.

**Building Vision**

A set of leadership practices aimed at inspiring the team. Developing and
inspiring others to do the work in schools. Setting direction and goals for the
future. (Leithwood et al., 2008)

**Centers of Excellence**

“Each year, the Colorado Department of Education recognizes public schools in the state
that enroll a student population of which at least seventy-five percent are at-risk pupils
and that demonstrate the highest rates of student longitudinal growth, as measured
by the Colorado Growth Model. This award program was established in 2009 by the
Education Accountability Act of 2009 (SB 09-163)” (Retrieved March 17, 2011 from
http://www.cde.state.co.us/cdeawards/ctrsofexcellence.htm).

**Colorado State Assessment Program (CSAP)**

A standardized state test of Reading, Writing, Mathematics and Science,
administered yearly to determine student progress in achieving state standards.
Collective Leadership

Leadership distributed among a group of stakeholders within a school. See also “Distributed Leadership”.

Developing People

The leadership practice of building the capacity of staff members through professional development and modeling desired behaviors, including professional and emotional intelligence. (Leithwood et al., 2008)

Distributed Leadership

The intentional sharing of leadership responsibilities amongst members of a school community. Schools operate with many leaders, rather than one leader.

High-growth schools

Schools identified as falling in the highest quartile of student growth for the state in Reading, Mathematics and Writing.

High poverty schools

High poverty schools are defined by free and reduced lunch percentage. High-poverty schools for the purpose of this study are those identified with 62.2-100% Free and Reduced Lunch population.

Instructional Leadership

Leadership that focuses on instructional issues such as monitoring teacher practice, facilitating data teams, engaging others in talk about instruction and focusing on the academics of school.
Managing the Instructional Program

Leadership practices including planning and supervising instruction, monitoring the school’s progress and protecting staff from external demands. (Leithwood et al., 2008)

Mediating Factors

Mediating factors are those within education that have the potential to impact student achievement, either positively or negatively. Examples include building conditions, teacher quality, and resources.

Redesigning the Organization

Focusing others on collaboration, structures and relationships with parents and the community. Shaping school culture (Leithwood et al., 2008).

Restructuring

The process a school must go through if deemed by the state or federal government to be ineffective. Redesigning the instructional program.

School Leadership

A single leader or group of leaders who oversee the overall operations of the school, including instructional practice of teachers.

Setting Directions

Setting a focus or direction for a school community through building a shared vision, setting group goals and holding high expectations for performance (Leithwood, et al.).
Transformational Leadership

The process of engaging others in the leadership of the school to the point of transforming the organization and the individuals who work for it to their greatest potential. Working with individuals and teams to build capacity of the organization.

Vision

A statement or group of ideas articulated to the school community about the purpose of the organization. A belief system of the ideal state of the school.
Chapter Two: Review of the Literature

Introduction

The importance of leadership to school improvement is well documented in the literature. “Schools that make a difference in students’ learning are led by principals who make a significant and measurable contribution to the effectiveness of staff and in the learning of pupils in their charge” (Hallinger & Heck, 1998, p. 158). Effective leaders lead effective schools. Delaney (1995) found the leadership style of the principal as the most important factor contributing to school-based management and school improvement. This literature review outlines the importance of leadership in schools as well as the predominant models of leadership in education today. It examines the research specific to leadership in high-poverty schools. Finally, the review will analyze studies connected to teacher perceptions of leadership.

Leithwood, Harris and Hopkins (2008) reviewed the key findings of successful school leadership and noted that leadership has significant effects on the quality of a school and on student outcomes. They wrote, “As far as we are aware, there is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership” (p. 29). The research on school leadership is extensive, although not always in philosophical agreement. Witziers, Bosker and Kruger (2003) noted “educational leadership has been conceptualized and operationalized in many different ways, thereby making the results hardly
complementary and difficult to compare” (p. 400). First, the effects of leadership will be outlined.

**Effects of Leadership**

Research has found certain characteristics of effective leadership and the potential impact these have on student achievement. Most research indicates the effect of leadership on student outcomes is indirect (Day et al., 2008). Mediating factors are found to intervene with the impact of leadership upon student achievement. Leithwood et al. (2008) explained that the combined direct and indirect effects of school leadership are small, but significant. Nettles and Herrington (2007) explain that certain principal actions do in fact have a direct impact upon student achievement.

The research on educational leadership can be conceptualized into three different models. The first is the direct effect model that attempts to link leadership to student achievement. More recent research searches for indirect effects in relation to student outcomes. Witziers et al. (2003) explained the distinction. The direct effects model attempts to connect leader’s actions to school outcomes and measure them separate from other variables. Direct effect models, according to Hallinger and Heck (1998) tend to find no significant relationship between leadership and student achievement, or occasionally weak effects.

Witziers et al. (2003) conducted a quantitative meta-analysis focused on studies between 1986 and 1996 into the direct effects of educational leadership linked to student achievement. They concluded as a result “school leadership does have a positive and significant effect on student achievement” (p. 408). Since there appear to be limitations
with direct effect models, research often utilizes indirect effect models as a way to account for the leadership impact upon student achievement.

The indirect or mediated effects model hypothesizes that leaders make an impact on student achievement through indirect pathways. Witziers et al. (2003) found “The leader’s contribution is mediated by other people, events, and organizational and cultural factors” (p. 401). Hallinger and Heck (1998) asserted that studies employing the indirect effect models indicated a greater impact of school leadership upon student achievement than direct effect studies. Furthermore, indirect effects are found less frequently, but statistically significant and confirm the view that principals contribute to school effectiveness and improvement.

Supovits, Sirindides, and May (2010) confirmed that principals have an indirect effect upon student learning through their influence on teachers’ practice and communication around instruction. They found that principal effects are likely to be mediated by other school and classroom factors than solely by the principal.

Day, Sammons, Hopkins, Leithwood and Kington (2008) developed a framework to guide research on leadership effects that included moderating variables, which serve to link leadership practices to student learning outcomes. According to the review by Hallinger and Heck (1998), leadership explained 5 to 7 percent of the variation in student learning across schools.

A third conceptual approach to analyzing school leader effects upon student achievement was the reciprocal effects model. This model emphasized the relationship between principals and the school environment as interactive (Hallinger & Heck, 1998).
**Instructional Leadership**

The increased attention given to improving student achievement in schools has led to a change in the principal’s role in public education. Witziers et al. (2003) explained that research on educational leadership in the seventies and eighties was primarily focused on finding direct effects of instructional leadership on student outcomes. As a result, principals are no longer expected to function only as managers of their buildings, but are asked to cast their leadership nets wider. They are now asked to be instructional leaders. Marzano, Waters and McNulty (2005) indicated that while instructional leadership is one of the most popular themes in educational leadership of late, it is not easily defined. Instructional leadership came out of an emphasis on increasing performance of teachers in schools and the overall effectiveness of schools.

O’Donnell and White (2005) define the primary role of the principal as facilitating effective teaching and learning with the aim of increasing student achievement. In order to be an instructional leader, principals must have knowledge of content (Graczewski, Knudson & Holtzman, 2009). Instructional leaders regularly engage teachers in relevant professional development. Niece (1993) described effective instructional leaders as, “possessing a substantial knowledge base in curriculum, instruction, and evaluation; providing vision and direction for the school; promoting positive teaching and learning environments; establishing patterns of effective communication and motivation; and maintaining high expectations for self, staff and students”. (p. 15)
Marks and Printy (2003) described the shortfall of instructional leadership as putting too much emphasis on the principal to be the educational expert. Blase and Blase (2000) defined instructional leadership as a set of principal behaviors including: making suggestions; giving feedback; modeling effective instruction; soliciting opinions; supporting collaboration; providing professional development opportunities; giving praise for effective teaching.

Graczewski et al. (2009) studied the relationship between instructional leadership by principals and the professional learning opportunities for teachers that have proven effective. A survey was used to measure teachers’ perceptions of their principal as an instructional leader. These aspects of instructional leadership included:

- Coherent school-wide vision for instructional improvement,
- Focus on student learning and achievement,
- Follow-up/implementation support, and
- Leadership engagement in instructional improvement

The study focused on instructional leadership as it relates to professional development with teachers, a key aspect of instructional leadership. Findings indicated that instructional leadership directly impacts professional development and classroom instruction. Instructional leadership defined by the principal participants of this research, was about building teacher capacity and involvement in professional learning activities. Graczewski et al. (2009) found the strongest correlation to the leadership scale measuring teachers’ perceptions of the coherence of the school’s vision ($r = .5989, n = 263$). While all four of the leadership scales had a positive relationship with coherent and relevant
professional development, the coherent school-wide vision scale was the strongest predictor and the only one of the four that was statistically significant ($b = .47$, $p < .001$).

Witziers et al. (2003) reported a similar finding from their meta-analysis. “Defining and communicating mission” was found to be the most important leadership behavior related to student achievement outcomes. This leadership behavior was found to have the largest effect size (Cohen’s $d$) ranging from .30 to .38. Following this behavior, three others had significant and positive relationships with student achievement. These leadership behaviors were: supervision and evaluation, monitoring and visibility.

Supovitz (2010) noted three factors that play a role in principals making a positive difference in student achievement. The first was related to mission and goals of the school. The second factor was how the principal encourages collaboration and trust among faculty. The third was related to the ways principals actively support improvement of teaching and learning in their buildings.

O’Donnell et al. (2005) used Hallinger’s Principal Instructional Management Rating Scale (PIMRS) to study the impact of instructional leadership on student achievement, as perceived by teachers. The PIMRS instrument identifies 50 behaviors of principals related to student achievement. Teacher ratings of promoting the school-learning climate had the largest correlation to math and reading scores. The PIMRS instrument has been used by other researchers to analyze educational leadership within schools (Witziers et al., 2003; O’Donnell & White, 2005). Dinham (2005) found that principals of highly successful schools concentrated on educational leadership while
“They constantly remind students, staff and the community that the core purpose of the school is teaching and learning” (p. 354).

Even though there is an increased emphasis in educational administration for principals to be instructional leaders, few concessions have been made to alleviate the other responsibilities of the building principal. Walker (2009) described a project called the Alternative School Administration Study, started in Louisville, Kentucky. The aim of the project was to redirect non-instructional duties to the School Administration Manager (SAM), allowing the principal to work more effectively and proportionately on instructional tasks. The SAM took on managerial responsibilities, allowing the principal greater time to devote to instructional leadership responsibilities. Walker (2009) studied the impact of the SAM project on principals in Iowa. Consistent with the Kentucky schools, the data indicated an increase in the amount of time that principals spent on instruction with the introduction of the SAM. The focus on principals as instructional leaders continues to shape the landscape of leadership today.

**Distributed Leadership**

Engaging teachers in the work of leadership is an extension of instructional leadership. Graczewski et al. (2009) advocated building teacher capacity as leaders by distributing instructional leadership among qualified teachers. The effect of distributing leadership in this way has the potential to alleviate principal workload and create sustainable conditions for improving classroom instruction. Walker (2009) found distributing leadership responsibilities to be a key factor for principals being able to devote more time to instructional leadership tasks and student achievement outcomes.
O’Donnell and White (2009) wrote, “Principals who do not enable others to engage in leadership will quickly learn that there is not enough time for one person in a school to carry out the myriad leadership tasks related to the principalship” (p. 64).

Dinham (2005) found distributed leadership to be an important factor in determining outstanding academic outcomes for schools. Delegation and collaboration among other leaders in the school served to move the focus from ‘leader’ to ‘leadership’.

Leithwood et al. (2008) found that schools with the highest levels of student achievement attributed this to high levels of distributed leadership among staff.

Leithwood and Mascall (2008) wrote,

Distributed leadership also enhances opportunities for the organization to benefit from the capacities of more of its members; it permits members to capitalize on the range of their individual strengths; and it develops among organizational members a fuller appreciation of interdependence and how one’s behavior effects the organization as a whole. (p. 520)

They describe how distributed leadership can develop leadership among teachers and others, thereby alleviating some of the administrative duties of the principal. The study found significant relationships between leadership and teacher capacity and concluded that collective leadership does connect to student achievement levels.

Shared decision-making and collaboration are activities that are often considered under the umbrella of distributed leadership, but do not necessarily define distributed leadership (Leithwood, 2006). According to Leithwood,

Leadership is all about organizational improvement; more specifically, it is all about establishing widely agreed upon and worthwhile directions for the organization and doing whatever it takes to prod and support people to move in those directions…. Improvement is the goal of leadership. (p. 180)
By focusing a staff on improvement, leadership has the potential to transform a school while engaging others in the process.

**Transformational Leadership**

Transformational leadership has shown that effective leadership involves working with individuals and teams in schools to “transform” teaching and learning (Dinham, 2004). Marks and Printy (2003) explained, “Transformational leadership builds organizational capacity whereas instructional leadership builds individual and collective competence” (p. 377). These researchers found that an integrated approach to leadership, one that included aspects of instructional and transformative leadership resulted in teachers who functioned as instructional leaders within their schools.

Witziers et al. (2003) describe Leithwood’s concept of transformational leadership as “an elaboration of the concept of educational leadership” (p. 403). Within this framework, principals are seen as change agents and focus their work to empower teachers and focus on continuous improvement. Hallinger and Heck (1998) found transformational leadership as a hallmark of effective school leaders, particularly when faced with complex situations.

Transformational leadership has been positively related to student achievement (Cotton, 2003). The practices of transformational leadership (establishing vision and setting goals, supporting staff, engaging others in decision making and providing support to staff) run parallel to the practices of effective leadership.

Successful leadership was found to indicate higher levels of extraversion and emotional stability (Brennikmeyer & Spillane, 2008). However, the study suggested that
principal expertise couldn’t be clearly linked to personality traits alone. The models of leadership described above outline some of the types of leadership found to impact student achievement outcomes.

**Strong Leadership, Strong Schools**

An essential element of strong schools is strong leadership. Leithwood et al. (2008) wrote, “Leadership acts as a catalyst without which other good things are quite unlikely to happen” (p. 28). Dinham (2005) identified a set of principal leadership attributes and practices that contributed to outstanding educational outcomes. These were: external awareness and engagement; a bias toward innovation and action; personal qualities and relationships; vision; expectations and a culture of success; teacher learning; responsibility and trust; student support; common purpose and collaboration; and a focus on students, learning and teaching.

Nettles and Herrington (2007) offered several identifiers commonly held as being factors of effective leadership. These factors included: safe and orderly environment; mission and vision; stakeholder involvement; monitoring school progress; instructional focus; high expectations for student performance; professional development.

Day, Leithwood and Sammons (2008) found evidence of effective heads of schools. Alignment was noted to be a key strategy, including “vision” and “direction”. They explained,

In effect, they repositioned their schools internally through changing expectations, aspirations, structures and cultures so that they were able to build and sustain performance. They increased effectiveness through a sustained focus upon raising the quality of teaching and learning whilst at the same time raising the levels of individual and collective efficacy and involvement of staff. (p. 84)
Similarly, Marks and Printy (2003) asserted that strong school performance depends on an integrated leadership approach focused on high-quality teaching and learning. The integrated approach to leadership resulted in high-quality pedagogy and students performing at higher levels. Similarly, Gurr, Drysdale and Mulford (2006) found as a result of their case study research of Tasmanian principals “that successful school principalship is an interactive, reciprocal and evolving process involving many players, which is influenced by and in turn influences the context in which it occurs” (p. 379).

Zigarelli (1996) found that strong principal leadership and involvement led to effective schools. Specifically the ability to hire and fire personnel led to principals being more effective. More autonomy over personnel decisions correlated to greater student performance.

**Balanced leadership.** In 2003, McREL identified specific leadership practices correlated with student achievement (Marzano, Waters, & McNulty, 2005; Waters & Grubb, 2004). Researchers at McREL reviewed over 5,000 studies between 1970 and 2001 that examined the connection between school leadership and student achievement. Through meta-analysis, Marzano et al. (2005) identified 21 leadership “responsibilities”. This framework is known as “McREL’s Balanced Leadership Framework”. The researchers calculated the average correlations between each of these and student achievement results. The authors concluded that there would be a ten-percentile point increase in student test scores if a principal were to improve his or her abilities in all twenty-one areas. The leadership responsibilities included; affirmation, change agent, contingent rewards, communication, culture, discipline, flexibility, focus, ideals/beliefs,
input, intellectual stimulation, involvement in curriculum, instruction, and assessment, knowledge of curriculum, instruction, and assessment, monitoring/evaluating, optimizer, order, outreach, relationships, resources, situational awareness and visibility (p. 42-43). Attention to all twenty-one areas results in a balanced approach to leadership. Within each of the twenty-one areas, there are several different leadership practices, having implications for levels of change in the school. Practices can have characteristics of first order change or second order change. Second order changes are greater magnitude in nature and transform the organizational culture (Waters, T., Marzano, R. J., McNulty, B., 2003).

The core four. Leithwood (2006) identified four categories of leadership practices that every leaders should be able to do. The four categories he calls the “core” include setting directions, developing people, redesigning the organization, and managing the instructional program. Within each of these ‘buckets’ of leadership practices fall many of the research based best practices. For example, within “Setting Directions” building a shared vision, setting group goals and holding high expectations for performance are included. Within “Developing People”, professional development and modeling desired behaviors is found. “Redesigning the Organization” includes a focus on collaboration, structures and relationships with parents and the community. Finally, “Managing the Instructional Program” includes actions that can be described as instructional leadership, including providing instructional support, creating a safe environment and buffering staff from distractions to their work. Managing the Instructional Program was found to have the least effect upon student achievement.
Leithwood’s framework synthesizes many of the more complex sets of leadership practices into four straightforward groups of actions. Leithwood’s framework holds more adaptive guidance as opposed to technical fixes for leadership. This framework aligns more to transformative leadership and second-order change within balanced leadership.

The researcher found alignment with other leadership models and Leithwood’s framework as outlined in the tables below.

Table 1

*Alignment of Leithwood’s Framework with Literature—Building Vision and Setting Direction*

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaczeweski, Knudson &amp; Holtzman (2009)</td>
<td>Coherent school-wide vision for instructional improvement</td>
</tr>
<tr>
<td>Witziers, Bosker &amp; Kruger (2003)</td>
<td>Defining and communicating mission strongest predictor of student achievement outcomes</td>
</tr>
<tr>
<td>Harris (2002)</td>
<td>Creating/maintaining shared values/Vision</td>
</tr>
<tr>
<td>21 Leadership Responsibilities (Waters, Marzano, McNulty, 2003) Balanced Leadership</td>
<td>Optimizer (inspires and leads new challenges)</td>
</tr>
<tr>
<td></td>
<td>Focus (establishes clear goals…)</td>
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<td></td>
<td>Change Agent (actively challenges the status quo)</td>
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</table>
### Table 2

**Developing People**

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blase &amp; Blasé (2000)</td>
<td>Providing professional development opportunities</td>
</tr>
<tr>
<td></td>
<td>Giving praise for effective teaching</td>
</tr>
<tr>
<td>Walker (2009):</td>
<td>Developing teacher leaders allows principals to devote time to</td>
</tr>
<tr>
<td></td>
<td>instructional leadership</td>
</tr>
<tr>
<td>Dinham (2005)</td>
<td>Move focus from ‘leader’ to ‘leadership’</td>
</tr>
<tr>
<td>Nettles &amp; Herrington (2007)</td>
<td>Professional Development</td>
</tr>
<tr>
<td>Harris (2002)</td>
<td>• Distributed leadership</td>
</tr>
<tr>
<td></td>
<td>• Staff development</td>
</tr>
<tr>
<td></td>
<td>• Building &amp; Sustaining relationships</td>
</tr>
<tr>
<td><strong>21 Leadership Responsibilities</strong></td>
<td><strong>Findings</strong></td>
</tr>
<tr>
<td><em>(Waters, Marzano, McNulty, 2003)</em></td>
<td>Intellectual stimulation</td>
</tr>
<tr>
<td></td>
<td>Contingent rewards Affirmation (recognizes &amp; celebrates…)</td>
</tr>
<tr>
<td></td>
<td>Relationships (awareness of personal aspects of staff…)</td>
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<tr>
<td></td>
<td>Visibility (quality interactions with teachers and students)</td>
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</table>

### Table 3

**Redesigning the Organization**

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blase &amp; Blase (2000)</td>
<td>Supporting collaboration</td>
</tr>
<tr>
<td>Supovitz (2009)</td>
<td>Collaboration &amp; Trust among Faculty</td>
</tr>
<tr>
<td>Leithwood &amp; Jantzi (2008):</td>
<td>Schools with highest levels of student achievement have high levels of</td>
</tr>
<tr>
<td></td>
<td>distributed leadership</td>
</tr>
<tr>
<td>Marks &amp; Printy (2003):</td>
<td>Build organizational capacity</td>
</tr>
<tr>
<td>Cotton (2003)</td>
<td>Principal as change agent with focus on empowering teachers and</td>
</tr>
<tr>
<td></td>
<td>continuous improvement Positively linked to student achievement</td>
</tr>
<tr>
<td>Nettles &amp; Herrington (2007)</td>
<td>Safe &amp; orderly environment</td>
</tr>
<tr>
<td><strong>21 Leadership Responsibilities</strong></td>
<td><strong>Findings</strong></td>
</tr>
<tr>
<td><em>(Waters, Marzano, McNulty, 2003)</em></td>
<td>Culture (fosters shared beliefs, sense of community, cooperation)</td>
</tr>
<tr>
<td></td>
<td>Input (involves Ts in decision making)</td>
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<tr>
<td></td>
<td>Outreach (advocate &amp; spokesperson for school)</td>
</tr>
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</table>
Table 4

Managing the Instructional Program

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>O’Donnell &amp; White (2009)</td>
<td>Primary role of principal is to facilitate effective teaching and learning</td>
</tr>
<tr>
<td>Gaczeweski, Knudson &amp; Holtzman (2009)</td>
<td>Focus on student learning and achievement</td>
</tr>
<tr>
<td></td>
<td>Follow-up/Implementation support</td>
</tr>
<tr>
<td></td>
<td>Leadership engagement in instructional improvement</td>
</tr>
<tr>
<td>Witziers, Bosker &amp; Kruger (2003)</td>
<td>Supervision and evaluation</td>
</tr>
<tr>
<td></td>
<td>Monitoring</td>
</tr>
<tr>
<td>Supovitz (2009)</td>
<td>Active support of teaching and learning</td>
</tr>
<tr>
<td></td>
<td>Instructional Focus</td>
</tr>
<tr>
<td></td>
<td>High expectations for student performance</td>
</tr>
<tr>
<td>Harris (2002)</td>
<td>Building a Professional Learning Community</td>
</tr>
<tr>
<td>21 Leadership Responsibilities</td>
<td>Order, Resources, Curriculum, instruction and assessment</td>
</tr>
<tr>
<td>(Waters, Marzano, McNulty, 2003)</td>
<td>Monitors/evaluates</td>
</tr>
<tr>
<td></td>
<td>Discipline</td>
</tr>
</tbody>
</table>

Leadership in High-Poverty Schools

Leadership practices specific to high-poverty schools have been given less attention in the research. Harris (2002) stated,

While there is a great deal of contemporary interest in schools in difficulty, few research studies have focused exclusively upon leadership practices and approaches. Although issues of leadership inevitably feature there still remains a lack of empirical evidence concerning leadership practices in schools in difficulty. (p. 16)
While many agree that the context of leadership plays an important role (Harris, 2002; Huff, May & Camburn, 2008; Ylimaki, et al., 2007; O’Donnell & White, 2005; Goldring, Huff, May & Camburn, 2007; Portin, 2004), studies that are context specific are found less frequently in the research, particularly of a large-scale nature. Studies that do focus on context specific leadership tend to be mostly case studies or limited in the number of participants they study.

The challenges specific to high-poverty schools would suggest that a certain type of leadership might be best suited for the context. A study by Portin, Shen and Williams (1998), reported 89 percent of principals felt the complexity of their responsibilities had increased as a result of increased diversity of their school population. Ylimaki et al. (2007) wrote, “Aspiring leaders need to understand the extent to which these essential skills are mediated by context, especially in schools confronting the greatest challenges” (p. 379). O’Donnell and White (2005) recommend principals reflect on the context variables within their schools in order to ensure they are spending their time in the most effective way. They concluded that further study into the relationship between school SES, student achievement and leadership will help to clarify which leadership behaviors are essential to increasing student achievement. Muijs, Harris, Chapman, Stoll and Russ (2004) found in a review of research evidence of school improvement in disadvantaged areas, that the strategies proven to be effective in schools with lower SES populations are not exclusive to these schools. Focus on teaching and learning and collaborative models of leadership were cited as two of these strategies. Goldring et al. (2007) found that principals prioritize their actions when faced with more challenging school conditions.
Some states are focusing on preparing principals specifically for the task of turning around high-poverty, low-performing skills. An effort coordinated by the Virginia Department of Education and the University of Virginia focuses on training principals to be “turnaround specialists” (Duke & Salmonowicz, 2010). This new direction of focus suggests that preparing principals to serve in high-poverty schools is an educational policy interest. Liethwood and Strauss (2009) explain that leadership is at the center of any school turnaround initiative.

Challenges in high-poverty schools include recruitment and retention of staff (West, Ainscow & Sanford, 2005; Ingersoll, 2002; Ingersoll & Rossi, 1995; Muijs, Harris, Chapman Stoll & Russ, 2004). Mulford et al. (2008) described challenges facing schools in poverty including:

Being under the scrutiny from policy makers and school systems, suffering from increasing school marketization, needing to have close connections with other public services such as health and welfare, difficulty in attracting and retaining well qualified and experienced staff, and often being involved in multiple projects which steer what they do. (p. 465)

 Principals in high-poverty schools were identified as having significantly less experience than principals in higher SES schools. Furthermore, schools located in disadvantaged areas contend with high levels of parents who are unemployed, mental health issues, migration of the highest achieving students and most publicly, low educational achievement (Gore & Smith, 2001). Compounding these problems is challenging pupil behavior and poor physical environments. Schools and principals in these areas “have to work harder to improve and stay effective, find it harder to improve, and are more likely
to suffer steep declines in pupil achievement levels if a successful equilibrium is disturbed” (Muijs et al., 2004).

Despite the challenges mentioned, a number of schools in disadvantaged communities have demonstrated that it is possible to achieve at the same level as higher SES schools. In order to achieve success, these schools must exceed what other schools do. Harris (2007) found

The results suggest that of the more than 60,000 schools considered, low-poverty schools are 22 times more likely to reach consistently high academic achievement compared with high-poverty schools. Schools serving student populations that are both low poverty and low minority are 89 times more likely to be consistently high performing compared with high-poverty, high-minority schools. (p. 367)

This study found that in fact, only about 1 percent of high-poverty schools consistently rank in the state’s top third in academic achievement and earn the label “high flyers”.

While these schools are the exception rather than the rule, they do present an opportunity to study the factors at play, leadership being among them. Mulford et al. (2007) indicated that a common characteristic of high-performance schools in high-poverty communities was a successful principal.

West et al. (2005) conducted a study to analyze the practice of schools in England identified as having increasing and sustaining student achievement over time, despite challenging circumstances. The aim of the study was to find out from the perspective of the heads of schools the factors that led to success. A common identifier among these principals was the commitment to the belief that all students can achieve. Four strategies were identified as being the most successful to raise student achievement. These were:
changing the culture of the school; focusing on teaching and learning; reviewing the school day; and the purposeful use of data.

Harris (2002) found leadership to be of primary importance in a study of ten schools facing challenging circumstances, yet demonstrating improvement. Analyzing interview data from the principals, common themes emerged among the principals. Findings “reflected a form of leadership that is democratic and centrally concerned with giving others the responsibility to lead” (p. 18). Themes of importance were: creating and maintaining a set of shared values and vision; distributing leadership; investing in staff development; building and sustaining relationships; and building a professional learning community.

Ylimaki et al. (2007) studied the impact of principals in challenging, high-poverty schools in the USA, England, and Australia, who were able to make a difference in the performance of students. The study used Liethwood and Riehl’s concept of leadership. Effective leaders under this construct exhibited four core practices:

1. Setting directions,
2. Developing people,
3. Redesigning the organization, and
4. Managing the instructional program.

The authors found these practices to be key factors for principals in high-poverty schools making a difference. Leithwood (2006) contended that these four leadership practices are necessary, regardless of the context the leader serves within. He contends,

In sum, the leadership required for especially challenging schools calls liberally on the core leadership practices that we have been examining. Some
circumstances may demand more of leaders, so more than the basics may turn out to be necessary for success, but not less. (p. 197)

Furthermore, Leithwood and Strauss (2009) found these leadership practices to be especially relevant to schools facing turnaround conditions. In order to turn around a schools’ trajectory of improvement, the “core” leadership practices are necessary. Fredericks (1992) agreed that characteristics of successful urban principals are also relevant for all other principals. Of note however, were the challenges specific to urban principals including:

a. Effectively dealing with the issues of reform and restructuring through the process of group development and consensus,
b. Meeting the social and educational needs of the students,
c. Implementing meaningful systems of staff development and empowerment,
d. Facilitating the identification and implementation of meaningful school goals, and
e. Evaluating progress to make appropriate midcourse adjustments. (p. 63)

Day et al. (2010) found the direct influence of the leader is greater in disadvantaged school contexts, where challenges are often greater. They noted greater emphasis was placed on strategies to improve teaching and learning and the use of data in more disadvantaged schools. This finding was consistent with the West et al. (2005) study.

Masumoto and Brown-Welty (2009) conducted case study findings of educational leadership practices in high-poverty rural schools and found distributed leadership to be a common theme. They also noted a strong emphasis on instruction. Their case study analysis found a direct relationship between effective leadership practices and student achievement. Cotton (2003) in a review of research focused on principals in high-poverty
schools and found that instructional leadership was necessary to increase student achievement.

Scheurich (1998) studied highly successful elementary schools populated by low-socioeconomic-status students of color and found principals who led with a set of common core beliefs in mind. These core beliefs were:

1. All Children Can Succeed at High Academic Levels - No Exceptions Allowed
2. Child-or Learner-Centered Schools
3. All Children Must be Treated with Love, Appreciation, Care, and Respect - No Exceptions Allowed
4. The Racial Culture, Including the First Language, of the Child is Always Highly Valued - No Exceptions Allowed
5. The School Exists for and Serves the Community - There is Little Separation

Personal traits are often cited as important to leaders of high-poverty schools. Leithwood et al. (2010) reviewed studies of leaders’ efforts to improve low-performing schools. The evidence from this review suggested the most successful of these school leaders are open-minded, open to learning, flexible with their thinking, persistent, resilient and optimistic. Ylimaki et al. (2007) stated, “the evidence suggests that principals who make a difference in high-poverty schools exhibited similar traits of persistence, empathy, passion, and flexible, creative thinking” (p. 378). Lyman and Villani (2004) asserted that principals in high-poverty schools must take a look at their own hidden biases about poverty and fight against a tendency towards deficit thinking.
Mulford et al. (2007) compared successful principals in high poverty communities to unsuccessful ones. They found successful principals to have a greater sense of purpose and able to manage tensions between problem solving and strategic planning. Successful principals also had higher levels of awareness and self-confidence and were “more likely to persistently work for high student achievement and establish structures and a culture for teaching across the school” (p. 475). In addition, Parkes and Thomas (2005) found a principals’ willingness to be interrupted was a factor connected to effectiveness.

**Teacher Perceptions of Leadership**

“Principals can play key roles in providing the conditions where teachers can operate effectively and students can learn” (Dinham, 2004, p. 355). Day et al. (2010) found that school staff perceived the leadership to be “the major driving force which underpins their schools’ increased or sustained effectiveness and improvement” (p. 84). In addition, the leaders were perceived by their staff to focus on the following: high expectations for themselves and others, distributing responsibilities, nurturing care and trust, improving relationships, and connecting student behavior to outcomes.

Leithwood et al. (2010) found that school leaders had “strong and positive influences on staff members’ motivations, commitments and beliefs concerning the supportiveness of their working conditions” (p. 32). Zigarelli (1996) confirmed that teacher morale and satisfaction contribute to greater student performance. Supovitz et al. (2010) studied teacher perceptions of principal leadership and peer influence. They found an indirect relationship between principal actions and student outcomes. They explain that teachers’ opinions of their principal are potentially more accurate than a self-
reporting of leadership behaviors. By using teacher perception survey data, Supovitz et al. were able to capture “the variation with which principals influence teachers” (p. 47).

O’Donnell and White (2005) found teacher ratings of principals to have significant positive relationships with both mathematics and reading achievement. “These findings indicate that higher teacher perceptions of principal instructional leadership behaviors relate to higher student achievement and vice versa” (p. 61). Specifically, teacher’s perceptions of their principal’s efforts to promote the school-learning climate were the greatest predictor of student achievement. The findings from this study suggested that principal actions and staff perceptions of those have the potential to improve student achievement and influence test scores.

Gurr et al. (2006) conducted a study in Australia to determine effectiveness of principals by interviewing of a variety of stakeholders. The interviews focused on perceptions of the principal’s contribution to the success of the school. The researchers noted this was a departure from typical research, which tends to focus on principals’ perceptions of success, or more precisely, self-reflections.

Leithwood and Jantzi (2000) wrote, “This means that much of what is known from empirical research about school leadership practices is, more accurately, knowledge about (primarily) teachers’ perceptions of such practices” (p. 417). Egley and Jones (2005) found a correlation between leadership behaviors and student achievement. Specifically, they found a positive relationship between elementary teachers’ perceptions of their principal’s inviting leadership behaviors and their satisfaction of their job, school climate and the accountability rating of the school. All of these studies call out the
importance of teacher’s perceptions of their leadership as it relates to student achievement. Based upon the research, one could say that teacher’s perceptions of leadership may in fact predict student achievement outcomes.
Chapter Three: Method

Introduction

The primary focus of this study was to compare and contrast teacher perceptions of the practices of principals within Centers of Excellence Schools to a set of high-poverty schools in Colorado that are among the lowest growth in the state, as measured by average median growth percentiles. Center of Excellence Schools are defined as campuses in the state of Colorado with a high percentage of high-poverty students while at the same time being high-growth. High-poverty, for the purpose of this study, is defined as those schools having school-wide Title I status (with at least 62% of students receiving free or reduced lunch). The Colorado Department of Education website explains:

Forty-five schools were also recognized as ‘Centers of Excellence.’ That designation, also established by the Colorado State Legislature, recognizes schools that demonstrate the highest sustained rates of student growth as measured by the Colorado Growth Model.

This study utilized results from the *Teaching, Empowerment, Leading and Learning (TELL) Colorado Survey* (2009 TELL Colorado Survey). This is a survey of all public educators in Colorado, measuring their perceptions of their school environments, including leadership.
Research Design

The methodology included a survey analysis within the larger context of survey research. The TELL (Teaching, Empowering, Learning and Leading) Colorado Survey was administered to all Colorado licensed educators for the first time in 2009. Analyses of the survey responses to the construct of Leadership were conducted to examine relationships between teacher’s perceptions of leadership and student growth, as measured by CSAP.

A comparative design was utilized to explore the relationship between perceptions of leadership in Centers of Excellence schools and schools designated high-poverty, low-growth. According to Gliner and Morgan (2000), the comparative research approach is appropriate when a research project attempts to make comparisons between at least two groups. Since the aim of this study was to identify teacher’s perceptions of leadership that have a correlation with student growth in high-poverty schools, a comparative approach was used as a design.

Participants

The research participants were teachers in schools in the state of Colorado identified as high poverty, both low-growth and high-growth. For the purpose of this study, high-poverty schools were those designated with school-wide Title I status and at least 62% free and reduced lunch. A total of 1,070 respondents were included in the analysis.

The number of respondents included in the analysis differed between the two groups of schools. Of these respondents, seventy-nine percent were from non-Centers of
Excellence schools (high-poverty, low-growth schools), with twenty-one percent of respondents who worked in identified Centers of Excellence (high-poverty, high-growth schools). Centers of Excellence schools included two hundred and twenty-two respondents, while the low-growth schools included eight hundred and forty-eight respondents, all of who were teachers in the schools.

Table 5

<table>
<thead>
<tr>
<th>Centers of Excellence and High-Poverty, Low-Growth</th>
<th>Freq</th>
<th>Percent</th>
<th>Cum</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Poverty Low-Growth</td>
<td>848</td>
<td>79.3</td>
<td>79.3</td>
</tr>
<tr>
<td>Centers of Excellence</td>
<td>222</td>
<td>20.7</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>1070</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

848 respondents were from high-poverty, low-growth schools, while 222 responses were included from Centers of Excellence (high-poverty, high-growth schools).

Figure 1. Number of Respondents Included from Groups of Schools
Schools Included

The researcher selected schools identified as high-poverty in the state of Colorado by the Colorado Department of Education as those with Title I school wide programs. The study utilized secondary data analysis to determine schools identified as high-poverty. In order for schools to be included and have survey data publicly available on the CDE website, they also needed at least 51% return rate. Two strata of schools were delineated: high-poverty, high-growth schools or Centers of Excellence and high-poverty, low-growth. Fifty-four schools identified as high-poverty in Colorado had a return rate of 51% or greater and were included in this study, either as Centers of Excellence (n=11) or low-growth (n=43). Other high-poverty schools had survey data available but did not have the 51% or more return rate, therefore, were not included in the analysis.

As one might expect, the Centers of Excellence is a distinction reserved for the top performing high-poverty schools within the state and therefore fewer schools were found with data. Centers of Excellence, or high growth schools are those who have demonstrated success according to their median growth percentiles in Reading, Writing and Mathematics for at least three consecutive years. Schools considered high growth for the purpose of this study were those with the highest rate of student growth over three consecutive years. Average median growth percentiles for the schools in this stratum for each tested content area are outlined in figure 1.

Conversely, schools were placed into the low-growth group because they had average median growth percentiles in the lowest growth of high poverty schools in the
state. These schools demonstrated the lowest rates of growth over time, as measured by CSAP and detailed in figure 3.5.

![High versus Low Growth Campuses](image)

**Figure 2. Number of High Poverty Schools Included in Each Group**

While all schools in this study were classified as high-poverty as a result of having a school-wide Title I program and at least sixty-two percent of their students eligible for free or reduced lunch, the groups differed slightly in their compositions as illustrated in the figures below.
Figure 3. Low Growth Schools by Percentage Free and Reduced Lunch

Figure 4. Centers of Excellence by Percentage Free and Reduced Lunch

Instrument

The TELL (Teaching, Empowering, Leading and Learning) survey was administered to Colorado educators between April 13 and May 11, 2009. The survey was
an online and anonymous survey of public school educators. Anonymity of survey participants was ensured by the use of a randomly assigned security code, which served to identify the school rather than the individual respondent.

Results of the survey are available online at http://tellcolorado.org/. The survey was designed to measure educator perceptions of their school environment. The survey was designed with two sections of questions, one for educators only and one for principals. “TELL Colorado is being conducted by the Colorado Department of Education in partnership with a coalition of education organizations, all of whom believe that it is critically important to listen to educators’ views when shaping school improvement strategies” (retrieved from http://tellcolorado.org/faq May 13, 2010). The survey results are not used as a part of the state or federal accountability system. The results are intended to be used for schools and not be evaluative.

Results are available to district personnel and school professional staff through a password-protected process. Results are encouraged by the state to be used for data-driven discussions and school improvement planning. Similar surveys have been administered in nine states and one large district: North Carolina, Kansas, Maine, Alabama, West Virginia, Massachusetts, Illinois, and Fairfax County. Maryland and Vermont also conducted surveys in 2009. Surveys of teacher perception of school leadership are becoming more widely used to make policy changes in education and to determine practices in leadership development and school restructuring.

The TELL survey provides teacher’s perceptions of the schools in which they work. “These survey data are unique in that they represent the perceptions of those who
understand Colorado teaching, learning and leading conditions best—the educators who experience them every day” (Hirsch, Sioberg & Germuth, 2009, p. 2). Results of the survey are available for schools with at least a fifty-one percent return rate. The survey consisted of multiple-choice questions using a five-point Likert scale (“strongly disagree” to “strongly agree” that the statement was true for their school). The survey items were related to seven constructs: Time, Resources, Community Engagement, Decision Making, School Leadership, Professional Development, and Student Learning. The instrument was developed by the New Teacher Center with direction from a subcommittee. The TELL has been given for the past two years (2009 and 2010). The data analyzed for this study were from the 2009 survey, the first year the survey was given.

The Colorado TELL survey was modeled after the North Carolina Teacher Working Conditions Survey. The content validity of the instrument came from an analysis of state and national survey data from the National Center for Education Statistics School and Staffing Survey. The content of the survey assesses teaching, leading and learning conditions. The unit of analysis for the survey was the school. The instrument was found to have content validity (Hirsch, et al., 2009). Content validity, according to Bobko (2001) occurs when the measure accurately reflects the construct you are trying to identify.

Factor analyses of each of the survey sections conducted at the state level, confirmed that the sections had construct validity. Each section of the survey represents a measurable construct: Time, Resources, Community Engagement, Leadership, Decision
Making, Professional Development, and Student Learning. Reliability of the survey was assessed for subscales within the survey and on both of the seven survey constructs. Chronbach’s Alpha was run to measure internal consistency. The Leadership construct indicated an alpha coefficient of .945. This is a high coefficient, indicating a high level of instrument consistency.

For the purpose of this study, only the Leadership section of the survey was utilized, with specific questions organized into the Research Question constructs and explored by factor analysis as described below.

**Procedure**

Items from the Leadership section of the survey were analyzed by the researcher based upon studying Leithwood’s framework. Initial groupings were based on the researcher’s interpretation of Leithwood’s framework and later tested using factor analysis. Based upon the exploratory factor analysis, the survey items were regrouped according to their alignment with one another.

The 17 items included in Q6_1 and Q6_2 were analyzed in order to assess the dimensionality of the data and whether factors of items existed that possessed high connection among those items but low correlations with items of other factors. However, this was not the case with this analysis.

The initial factor analysis revealed that there was much more variation across respondents than across items among respondents. Respondents rated items virtually the same, regardless of which strata they belong to. This can occur in surveys where respondents may have low incentive to give careful thought and therefore, finely
differentiate their responses for each item independently. It can also be a result of respondents viewing the items as nearly identical.

A simple assessment of so-called “straight lining” supports these notions, as 9% and 20% of respondents gave the exact same response to all of the items of Q6_1 and Q6_2 respectively. This indicates that in general, little distinction was provided across the items. A cursory examination of the meaning of the items in Q6_1 and Q6_2 would suggest that it might be reasonable to expect factors among the items.

However, the only factors suggested by the factor analysis, after extracting two factors (via two having eigenvalues greater than 1) and then rotating via the varimax method, were that all items of Q6_1 formed a factor and all the items of Q6_2 formed a second factor. However, this may have been a result of the slightly different forms of the two questions or that the items are within the same section of the survey (Leadership).

Below are tables of each of the proposed factor loadings for the two-factor solution, with loadings less than .4 blanked out to aid in uncovering the underlying pattern.

Table 6

<table>
<thead>
<tr>
<th>Construct of Setting Direction</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Q6_1b clear expectations</td>
<td>.760</td>
</tr>
<tr>
<td>Q6_1c communicates with faculty</td>
<td>.773</td>
</tr>
<tr>
<td>Q6_1d shared vision</td>
<td>.715</td>
</tr>
<tr>
<td>Q6_2a Leadership issues</td>
<td>.518</td>
</tr>
<tr>
<td>Q6_2f Community involvement</td>
<td></td>
</tr>
</tbody>
</table>
Table 7

*Constructs of Developing People*

<table>
<thead>
<tr>
<th>Component</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q6_1g Teachers receive feedback</td>
<td>.690</td>
</tr>
<tr>
<td>Q6_1h Teachers performance evaluations are fair</td>
<td>.701</td>
</tr>
<tr>
<td>Q6_2e Empowering teachers</td>
<td>.518</td>
</tr>
<tr>
<td>Q6_2h New teacher support</td>
<td>.419</td>
</tr>
</tbody>
</table>

Table 8

*Construct of Redesigning the Organization*

<table>
<thead>
<tr>
<th>Component</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q6_1a Trust and mutual respect</td>
<td>.769</td>
</tr>
<tr>
<td>Q6_1e Comfortable raising issues</td>
<td>.745</td>
</tr>
<tr>
<td>Q6_2b Facilities and resources</td>
<td>.777</td>
</tr>
<tr>
<td>Q6_2c Use of time</td>
<td>.760</td>
</tr>
</tbody>
</table>

Table 9

*Construct of Managing the Instructional Program*

<table>
<thead>
<tr>
<th>Component</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q6_1f Student conduct</td>
<td>.679</td>
</tr>
<tr>
<td>Q6_1i Minimize disruptions</td>
<td>.605</td>
</tr>
<tr>
<td>Q6_2d Professional development</td>
<td>.783</td>
</tr>
<tr>
<td>Q6_2g Student learning</td>
<td>.438</td>
</tr>
</tbody>
</table>

In order for items within a factor analysis to be considered confirming, loadings should be .7 or higher. However, factor loadings should be interpreted in light of theory rather than any specific cut-off levels. With the above guidelines in mind, the factor analysis confirmed that there were correlations among several survey questions as
originally thought. However, based upon the exploratory factor analysis, certain items were regrouped to have stronger alignment with Leithwood’s framework for leadership.

A factor analysis was conducted to determine if there was a relationship between survey items and if the constructs of leadership originally aligned to Leithwood’s framework as conjectured by the researcher. Factors were grouped together by the researcher based on the literature review of Leithwood’s framework and analysis of the survey items. The new groupings for survey items aligned more closely with each other and supported the use of Leithwood’s framework to analyze the TELL data.

Table 10

<table>
<thead>
<tr>
<th>Reconfigured Construct of Setting Direction</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Q6_1b clear expectations</td>
<td>.760</td>
</tr>
<tr>
<td>Q6_1c communicates with faculty</td>
<td>.773</td>
</tr>
<tr>
<td>Q6_1d shared vision</td>
<td>.715</td>
</tr>
<tr>
<td>Q6_2a Leadership issues</td>
<td>.518</td>
</tr>
<tr>
<td>Q6_1f Student conduct</td>
<td>.679</td>
</tr>
<tr>
<td>Q6_1i Minimize disruptions</td>
<td>.605</td>
</tr>
</tbody>
</table>
Table 11

*Reconfigured Construct of Developing People*

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q6_1a Atmosphere of trust and mutual respect within the school</td>
<td>.769</td>
<td></td>
</tr>
<tr>
<td>Q6_1e Teachers feel comfortable raising issues and concerns that are important to them.</td>
<td>.745</td>
<td></td>
</tr>
<tr>
<td>Q6_1g Teachers receive feedback</td>
<td>.690</td>
<td></td>
</tr>
<tr>
<td>Q6_1h Teachers performance evaluations are fair</td>
<td>.701</td>
<td></td>
</tr>
<tr>
<td>Q6_2e Empowering teachers</td>
<td>.518</td>
<td></td>
</tr>
</tbody>
</table>

Table 12

*Reconfigured Construct of Redesigning the Organization*

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q6_2h New Teacher Support</td>
<td>.662</td>
<td></td>
</tr>
<tr>
<td>Q6_2f Community Involvement</td>
<td>.712</td>
<td></td>
</tr>
<tr>
<td>Q6_2b Facilities and resources</td>
<td>.777</td>
<td></td>
</tr>
<tr>
<td>Q6_2c Use of time</td>
<td>.760</td>
<td></td>
</tr>
</tbody>
</table>

Table 13

*Reconfigured Construct of Managing the Instructional Program*

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q6_2d Professional development</td>
<td>.783</td>
<td></td>
</tr>
<tr>
<td>Q6_2g Student learning</td>
<td>.438</td>
<td>.685</td>
</tr>
</tbody>
</table>

Consistent with the a priori factor from Leithwood, professional development loads with *Managing the Instructional Program*. While it may seem that professional development would fall under Developing People, the fact that it relates more to Managing the Instructional Program indicates the way teachers perceive how schools
approach professional development may be more about management than human
development.

The revised tables above indicated that with a few adjustments, the survey items
aligned with each of Leithwood’s constructs of leadership. The items grouped together in
such a way to confirm the importance of leadership in each of the domains. The
connections drawn from the factor analysis led to further inferential statistics being
conducted.

Items from the factor analysis with values greater than .7 were aligned to each of
the Leithwood constructs, since these items had the most weight.

Table 14

<table>
<thead>
<tr>
<th>constructs from Leithwood Aligned to the Variables Found in the TELL Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Setting Direction</strong></td>
</tr>
<tr>
<td>Clear expectations</td>
</tr>
<tr>
<td>Communication with faculty</td>
</tr>
<tr>
<td>Shared Vision</td>
</tr>
</tbody>
</table>

The dependent variables were student growth over three years (2008-2010).

Results from two strata of schools (high-poverty, high-growth and high-poverty, low-
growth) were distilled and analyzed.

**Procedure**

Schools were selected who met the group criteria of high-poverty, high-growth
and high-poverty, low-growth. Results from the TELL survey were requested from
Colorado Department of Education through the researcher’s dissertation advisor. The survey section specific to Leadership was analyzed for the following independent variable constructs:

- Setting direction,
- Developing people,
- Redesigning the organization, and
- Managing the instructional program

These research constructs were first tested using an exploratory factor analysis of the survey items. Performing a confirmatory factor analysis of the survey items further assessed construct validity, as the researcher aligned each of the survey items to each of the core Leithwood’s leadership constructs. Based on studying the leadership framework and an exploratory analysis of the survey items, the following connections were initially drawn. Results of the factor analyses will be given in chapter four.

Setting Direction was classified by the researcher as measured by the following survey items:

6.1b: The school leadership communicates clear expectations to students and parents.

6.1c: The school leadership communicates with the faculty adequately.

6.1d: The faculty and staff have a shared vision.

Developing People was classified by the researcher as measured by the following survey items:

6.1g: Teachers receive feedback that can help them improve teaching.

6.1h: Teacher performance evaluations are fair in my school.
Redesigning the Organization classified by the researcher as measured by the following survey items:

6.1a: There is an atmosphere of trust and mutual respect within the school.

6.1e: Teachers feel comfortable raising issues and concerns that are important to them.

Managing the Instructional Program was classified by the researcher to be measured by the following survey items:

6.1f: The school leadership consistently enforces rules for student conduct.

6.1i: The school leadership works to minimize disruptions, allowing teachers to focus on educating students.

In addition to the above survey items, descriptive statistics were run for responses to the following statement, linked to the above constructs of leadership:

“The school leadership makes a sustained effort to address teacher concerns about”:
- Leadership issues (Setting Direction)
- Facilities and resources (Redesigning the Organization)
- The use of time in my school (Redesigning the Organization)
- Professional development (Managing the Instructional Program)
- Empowering teachers (Developing People)
- Community involvement (Setting Direction)
- Student Learning (Managing the Instructional Program)
- New Teacher Support (Developing People)

Finally, survey responses to the following statement were analyzed for overall perception of leadership effectiveness, based upon the following question: “Overall, the school leadership in my school is effective”.

55
**Research Design**

The research design was a secondary data collection and analysis of the TELL Colorado teacher survey data. The constructs of the research were:

- Setting direction
- Developing people
- Redesigning the organization, and
- Managing the instructional program

The researcher chose to analyze the data in the TELL because it represents an accessible and state-wide group of educators, rather than limited to only one district or type of school (urban versus rural). Use of this database allowed the researcher access to a much larger dataset than would be likely to result from a researcher-administered new survey, and the larger dataset was generated by an existing tool that had internal reliability and validity (TELL) as well as alignment with many other states that are conducting similar workplace conditions surveys. With these factors in mind, the TELL was the best data source available for the state of Colorado.

Potential limitation of the data collection procedure include the fact that the schools selected for the quantitative data analysis are only schools that had at least fifty-one percent of their teachers respond to the survey. This limited the number of schools available for the data analysis and therefore, does not represent all high-poverty schools in the state of Colorado.

**Student Growth for Two Strata of Schools**

One set of survey response data was for sites identified as Centers of Excellence.
The second set of survey response data was grouped for sites with the lowest rates of student growth with the highest rates of poverty in the state of Colorado. The figure below compares the average growth percentiles for the two sets of schools for each tested subject area. A growth percentile of fifty is considered adequate yearly growth by the state of Colorado. High growth is defined by the Colorado Department of Education, “As defined by Colorado State Board of Education rule, a student growth percentile for a single child that is above the 65th percentile reflects High Growth. For example, a student growth percentile of 80 indicates that 20% of similar students made higher gains than this student” (retrieved from http://www.cde.state.co.us/searchresults.asp April 20, 2011).

Since the schools included in this study are high-poverty, they are required to exceed this minimum growth expectation in order to close the achievement gap and meet state and federal targets. Colorado Department of Education defines low growth, “As defined by Colorado State Board of Education rule, a student growth percentile for a single child that falls below the 35th percentile reflects low growth. For example, a student growth percentile of 20 indicates that 80% of similar students made higher gains than this student” (retrieved from http://www.cde.state.co.us/searchresults.asp April 20, 2011).
Figure 5. Comparisons of Median Student Growth Percentiles Between Groups

Inferential, non-parametric statistics were used to investigate the existence of relational patterns between TELL Colorado Survey and student academic growth within each of the two groups.

Leithwood’s four core leadership practices were utilized as a framework for categorizing leadership actions. This framework was chosen since it has been utilized with high-poverty schools and it encompasses many of the more complex frameworks into four straightforward actions. These actions were:

1. Setting direction,
2. Developing people,
3. Redesigning the organization, and
4. Managing the instructional program.

Each of the above constructs was used as a framework for understanding the potential leadership impact within each of the two groups.
Data Analysis

Leadership as a factor was analyzed by running descriptive statistics of the survey items related to it. SPSS was used to aggregate responses by school and calculate means, standard deviations for all of the scales measuring the variables. Results were examined related to specific questions and descriptive statistics provided on each aspect of school leadership. Finally, t-tests were conducted to test for differences between groups.

Summary

This study compared teacher’s perceptions of school leadership in high poverty schools and student academic growth in high-growth (Centers of Excellence) versus low-growth schools.
Chapter Four: Results

Introduction

This chapter presents the results of this quantitative, secondary data analysis designed to compare teachers’ perceptions of leadership in high-poverty, high-growth schools and high-poverty, low-growth schools. The survey, descriptive data, and response rates are briefly reviewed and the results are presented. Findings for the factor analysis of the constructs of leadership outlined in chapter three; setting direction, developing people, redesigning the organization, and managing the instructional program, are presented. Next, cross-tabulation results including factors, domains, and demographics are explained. Finally, the data of both the Centers of Excellence and the non-Center of Excellence schools are presented. A review of the survey data concludes the chapter.

This study analyzed results of the TELL Colorado survey instrument. The survey was sent electronically to teachers in all Colorado public schools. The survey contained 11 sections: Introduction (demographics), Time, Facilities and Resources, Community Engagement, Empowerment, School Leadership, Professional Development, Student Learning, Overall, New Teacher Support, and Mentor. Each section of the survey contained between five and nine questions. For the scope of this study, only section 6; School Leadership was analyzed.
Data were analyzed for questionnaire items related to perceived leadership at the school where each respondent was employed. The majorities of the questionnaire items were of a 1-5; agree scale, coded as follows:

1=Strongly disagree
2=somewhat disagree
3=neither disagree nor agree
4=somewhat agree
5=Strongly agree

These 1-5 agree ratings scores were analyzed as interval level data. As such, the data was appropriate for computing and testing means. Two of the items were of the categorical (nominal) type of the “choose one” style from a list of options. All data was from teachers working in schools classified as high poverty in the state of Colorado. Two separate data sets were analyzed: High growth (Centers of Excellence) and Low growth schools.

**Significance Testing and Descriptive Statistics by Performance Level**

Pearson chi-square test was applied for the q9_5 and q9_7, since they were categorical items. Fink (2009) explains, “The chi-square test is used with categorical data. It tests the hypothesis that survey data expressed as proportions are equal” (p. 86). This tested whether the responses were dependent on performance. In other words, it tested whether the relative frequencies for each response category differed across the two performance groups; Low and High.

While student learning was the most important aspect given as to what affects a teacher’s desire to continue teaching at their school, leadership was second. Of interest is the fact that more respondents in low-performing, high-poverty schools indicated student
learning as the MOST important factor to continue working at their school, for high-performing schools, “leadership” prevailed. The table indicates that “leadership” is 29% for Low vs. 39% for High. It is also possible that student learning, or lack of, influences teachers to leave, while leadership has a greater influence over if teachers remain in their schools. Interpreting the same questions on a survey from two different contexts makes it difficult to accurately assess the meaning of responses to this item. In other words, teachers who indicate Leadership as the most important factor to their staying in their schools may see a ‘top down’ approach to leadership as desirable. Without further study, it is difficult to determine exactly what is meant when teachers indicate Leadership as the most critical factor impacting their choice to stay in their current school. The same is true for student learning. This factor can be interpreted that teachers’ willingness to keep teaching is impacted by student achievement, but we can’t know the direction of this relationship—for example, both teachers whose willingness to stay is negatively impacted by low achievement and teachers whose willingness to stay is positively impacted by student achievement progress would be likely to answer the same way on the item. A response of Student Achievement can be interpreted several ways and is one of the limitations of this type of research and design. This will be discussed further in chapter 5.

Additionally, binary variables can be created from these for the special response category of interest (e.g. “School leadership”).

Q9_5 Which aspect of your teaching conditions MOST affects your willingness to keep teaching at your school? (Select one).
Table 15

*Cross Tabs for Q9.5*

<table>
<thead>
<tr>
<th></th>
<th>prformance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 low growth</td>
<td>2 high growth</td>
</tr>
<tr>
<td><strong>1 Time during the work day to plan and collaborate</strong></td>
<td><strong>Count</strong></td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>% within prformance</td>
<td>11.8%</td>
</tr>
<tr>
<td><strong>2 Facilities and resources</strong></td>
<td><strong>Count</strong></td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>% within prformance</td>
<td>5.8%</td>
</tr>
<tr>
<td><strong>3 School leadership</strong></td>
<td><strong>Count</strong></td>
<td>219</td>
</tr>
<tr>
<td></td>
<td>% within prformance</td>
<td>29.7%</td>
</tr>
<tr>
<td><strong>4 Empowerment</strong></td>
<td><strong>Count</strong></td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>% within prformance</td>
<td>10.0%</td>
</tr>
<tr>
<td><strong>5 Professional development</strong></td>
<td><strong>Count</strong></td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>% within prformance</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>6 Community engagement</strong></td>
<td><strong>Count</strong></td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>% within prformance</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>7 Student learning</strong></td>
<td><strong>Count</strong></td>
<td>282</td>
</tr>
<tr>
<td></td>
<td>% within prformance</td>
<td>38.3%</td>
</tr>
<tr>
<td></td>
<td><strong>Count</strong></td>
<td>737</td>
</tr>
<tr>
<td></td>
<td>% within prformance</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Figure 6. Crosstabs of Conditions MOST Affects Willingness to Keep Teaching at School

The data above suggests that the teaching condition perceived to be most important for teachers considering to continue working at their campus was student learning. Second to student learning was the condition of school leadership. The other aspects of teaching were found to be less important to teachers considering whether or not to remain in their current schools.

A news release regarding the TELL Survey Results from CDE (April 15, 2010), indicated that leadership was the most important condition affecting teachers’ willingness to continue teaching in their current school. However, when narrowing the results down to the selected schools within this study, student learning was indicated as most important. This may be because student learning is a critical part of improvement for high-poverty schools and teachers in these environments recognize this as central to their
work, followed by the importance of leadership. In other words, leadership only matters if there is an overall focus and sustained effort to improve student learning.

Teachers cited reasons for leaving their schools as better opportunities in a new assignment, dissatisfaction with administrator or dissatisfaction with workplace conditions. Research has linked teachers’ negative perceptions of working conditions with the reasons they leave their schools (Hanushek & Rivkin, 2007). Working conditions, including leadership, were found to be more important than financial incentives when teachers decided to remain in their current assignments or to take on positions in hard-to-staff schools.

Table 16

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>8.251</td>
<td>6</td>
<td>0.220</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>8.186</td>
<td>6</td>
<td>0.225</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1.946</td>
<td>1</td>
<td>0.163</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>934</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 2 cells (14.3%) have expected count less than 5. The minimum expected count is 4.22.

The Pearson chi-square statistic associated with the above cross tabulation table equals 8.251. Given degrees of freedom equal to 6 and an alpha cutoff level of .05, this is not found to be significant (p=0.057). Therefore, category responses do not differ by performance group.

Q9_7 Which aspect of your work environment is MOST important to you in promoting student learning? (Select one).
Table 17

Cross Tabs for Q9_7

<table>
<thead>
<tr>
<th></th>
<th>1 low performing</th>
<th>2 high performing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% within prfrmnce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Time during the work day</td>
<td>396</td>
<td>97</td>
<td>493</td>
</tr>
<tr>
<td>to plan and collaborate</td>
<td>47.3%</td>
<td>44.1%</td>
<td>46.6%</td>
</tr>
<tr>
<td>2 Facilities and resources</td>
<td>101</td>
<td>32</td>
<td>133</td>
</tr>
<tr>
<td>% within prfrmnce</td>
<td>12.1%</td>
<td>14.5%</td>
<td>12.6%</td>
</tr>
<tr>
<td>3 School leadership</td>
<td>111</td>
<td>21</td>
<td>132</td>
</tr>
<tr>
<td>% within prfrmnce</td>
<td>13.3%</td>
<td>9.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>4 Empowerment</td>
<td>100</td>
<td>36</td>
<td>136</td>
</tr>
<tr>
<td>% within prfrmnce</td>
<td>11.9%</td>
<td>16.4%</td>
<td>12.9%</td>
</tr>
<tr>
<td>5 Professional development</td>
<td>77</td>
<td>22</td>
<td>99</td>
</tr>
<tr>
<td>% within prfrmnce</td>
<td>9.2%</td>
<td>10.0%</td>
<td>9.4%</td>
</tr>
<tr>
<td>6 Community engagement</td>
<td>52</td>
<td>12</td>
<td>64</td>
</tr>
<tr>
<td>% within prfrmnce</td>
<td>6.2%</td>
<td>5.5%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Count</td>
<td>837</td>
<td>220</td>
<td>1057</td>
</tr>
<tr>
<td>% within prfrmnce</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The cross tabulation above indicates that for teachers in low-performing schools, school leadership is perceived to have more importance than in high-performing schools. However, time during the workday to plan and collaborate was indicated to be the most important factor in promoting student learning.
The table above indicates that time to plan and collaborate was rated to me most important by both sets of schools. Empowerment was mentioned as the next most important factor, but more significant with the low performing schools. This may be a result of the schools having more directives to follow and less autonomy if they are demonstrating low growth.

Figure 7 indicates the most important factor perceived by teachers to promote student learning is time during the workday to plan and collaborate. Next important was empowerment, followed closely by facilities and resources and school leadership, and finally professional development. School leadership was perceived to be more important in schools with low-growth. Perceived to be least important for both groups was the aspect of community engagement.
Table 18

**Chi-Square Tests for Q9_7**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>6.090a</td>
<td>5</td>
<td>.298</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>6.042</td>
<td>5</td>
<td>.302</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.379</td>
<td>1</td>
<td>.538</td>
</tr>
</tbody>
</table>

N of Valid Cases: 1057

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.32.

The Pearson chi-square statistic associated with the above crosstabulation table equals 6.090. Given degrees of freedom equal to 5 and an alpha cutoff level of .05, the difference is again, not significant (p= .298). Category responses did not differ by performance group.

**New Binary Variable**

In addition to the Chi-Square tests, a test was conducted of the category #3 part of q9_5 and q9_7 by creating a new binary variable. The descriptive statistics and t-tests for those are shown below.

Q9_5 Which aspect of your teaching conditions MOST affects your willingness to keep teaching at your school? (Select one.)
Table 19

*Independent sample for Q9.5_3*

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>16.481</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
</tr>
</tbody>
</table>

Table 20

*T-test Q 9.5_3*

<table>
<thead>
<tr>
<th>prfmrnce</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 low performing</td>
<td>737</td>
<td>.2972</td>
<td>.45731</td>
<td>.01685</td>
</tr>
<tr>
<td>2 high performing</td>
<td>197</td>
<td>.3858</td>
<td>.48802</td>
<td>.03477</td>
</tr>
<tr>
<td>1 low performing</td>
<td>837</td>
<td>.1326</td>
<td>.33936</td>
<td>.01173</td>
</tr>
<tr>
<td>2 high performing</td>
<td>220</td>
<td>.0955</td>
<td>.29451</td>
<td>.01986</td>
</tr>
</tbody>
</table>

It is worth noting, that when the new binary variable was created, the direction of the hypotheses were reversed for the q9_7__3 variable. This was anticipated, since one would expect the *importance* of leadership to have an inverse relationship with the perceived level of quality of leadership. In other words, the less leadership present, the more important it becomes to have it. Through this analysis, the research hypothesis was again supported: there is statistical evidence that among high-poverty schools Leadership quality is higher in High growth schools, or Centers of Excellence than low-growth schools.

**Evaluation of Hypotheses**

All inferential tests were conducted at the alpha=.05 level of significance. The basic set of hypotheses being tested for the Q6 items were as follows:
H₀ (null hypothesis): Among high-poverty schools, the mean perceived quality of leadership of high-performing schools (Centers for Excellence) is equal to or lower than that of low-performing schools.

Hₐ (alternative hypothesis): Among high-poverty schools, the mean perceived quality of leadership of high-performing schools (Centers of Excellence) is higher than that of low-performing schools.

The statistical inference test used for the Q6 items was the independent groups t-test. Fink (2009) explains, “The t test is also used to test for differences. It allows you to compare the means of two groups to determine the probability that any differences between them are real and not due to chance” (p. 87). The degrees of freedom change slightly for each of these tests, given slight differences in the number of valid scores (n) for each Q6 item. In all cases of these Q6 t-tests, the null hypothesis was rejected. In other words, it was found that high-growth schools do have a higher perceived quality of leadership. Below are both the descriptive statistics and the inferential t-test information for each of the Q6 t-tests.
Figure 8. Descriptive Statistics for Setting Direction Items Comparing Means

Figure 8 indicates the two most important perceived aspects of Setting Direction were; “The faculty and staff have a shared vision” and “the school leadership works to minimize disruptions, allowing teachers to focus on educating students” While these two items dominated the construct of “Setting Direction” for all respondents, they presented stronger in the schools designated as high-growth.
Figure 9 reflects the two most important items related to the construct of Developing People. The two items are: Teacher performance evaluations are fair in my school” and “Teachers receive feedback that can help them improve teaching”. While the trend is the same for both high and low growth schools, there is a higher mean in the higher performing schools in these areas.
Figure 10. Descriptive Statistics for Redesigning the Organization Items Comparing Means

Figure 10 illustrates the importance of “Community Involvement” and “New Teacher Support”. These two items rose to the surface for the construct of “Redesigning the Organization”, again with stronger means in the high performing schools. The distinction was not as great here as with the prior constructs.

Figure 11. Descriptive statistics for managing the Instructional Program Items Comparing Means
The strongest mean related to “Managing the Instructional Program” was “Student learning”. This survey item showed stronger means in both groups (high and low performing), but presented stronger in the high performing schools.

Table 21

<table>
<thead>
<tr>
<th>Setting Direction</th>
<th>Performance</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Err.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicates clear expectations</td>
<td>Low</td>
<td>843</td>
<td>3.15</td>
<td>1.303</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>219</td>
<td>3.92</td>
<td>1.070</td>
<td>.072</td>
</tr>
<tr>
<td>Communicates with the faculty adequately</td>
<td>Low</td>
<td>838</td>
<td>3.14</td>
<td>1.359</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>220</td>
<td>3.83</td>
<td>1.130</td>
<td>.076</td>
</tr>
<tr>
<td>Shared Vision</td>
<td>Low</td>
<td>842</td>
<td>3.29</td>
<td>1.298</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>220</td>
<td>3.91</td>
<td>1.037</td>
<td>.070</td>
</tr>
<tr>
<td>Leadership Issues</td>
<td>Low</td>
<td>843</td>
<td>3.01</td>
<td>1.313</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>222</td>
<td>3.44</td>
<td>1.186</td>
<td>.080</td>
</tr>
<tr>
<td>Consistently enforces rules for student conduct</td>
<td>Low</td>
<td>841</td>
<td>2.97</td>
<td>1.388</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>220</td>
<td>3.58</td>
<td>1.245</td>
<td>.084</td>
</tr>
<tr>
<td>Minimize disruptions</td>
<td>Low</td>
<td>844</td>
<td>3.27</td>
<td>1.333</td>
<td>.046</td>
</tr>
<tr>
<td></td>
<td></td>
<td>221</td>
<td>3.89</td>
<td>1.156</td>
<td>.078</td>
</tr>
</tbody>
</table>

From the descriptive statistics provided, for the n=843, the low-growth sample, the sample mean and standard deviation were 3.15 and 1.303, respectively. For the smaller n=221, high-growth sample, the sample mean equaled 3.92 and the sample standard deviation equaled 1.07.
Table 22

Descriptive Statistics for High versus Low Performing Developing People

<table>
<thead>
<tr>
<th>Developing People</th>
<th>Performance</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Err.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmosphere of trust and mutual respect</td>
<td>Low</td>
<td>845</td>
<td>2.98</td>
<td>1.354</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>219</td>
<td>3.59</td>
<td>1.198</td>
<td>.081</td>
</tr>
<tr>
<td>Teachers feel comfortable raising issues and concerns</td>
<td>Low</td>
<td>841</td>
<td>2.95</td>
<td>1.405</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>221</td>
<td>3.3</td>
<td>1.270</td>
<td>.085</td>
</tr>
<tr>
<td>Teachers receive feedback to improve teaching</td>
<td>Low</td>
<td>839</td>
<td>3.28</td>
<td>1.310</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>221</td>
<td>3.90</td>
<td>.995</td>
<td>.067</td>
</tr>
<tr>
<td>Teacher performance evaluations are fair</td>
<td>Low</td>
<td>837</td>
<td>3.56</td>
<td>1.245</td>
<td>.043</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>219</td>
<td>4.00</td>
<td>1.073</td>
<td>.073</td>
</tr>
<tr>
<td>Empowering teachers</td>
<td>Low</td>
<td>846</td>
<td>3.03</td>
<td>1.370</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>221</td>
<td>3.49</td>
<td>1.245</td>
<td>.084</td>
</tr>
</tbody>
</table>

All means were higher for all dimensions in the Centers of Excellence schools.

Of particular note is the distinction between means of the item “Teacher performance evaluations are fair” (4.0 for high versus 3.56 for low). This item may indicate a need for leaders to look more carefully at processes for teacher evaluations, particularly since the literature indicates that teachers have the greatest direct effect upon student achievement.
Table 23

Descriptive Statistics for High versus Low Performing Redesigning the Organization

<table>
<thead>
<tr>
<th>Redesigning the Organization</th>
<th>Performance</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Err.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities and Resources</td>
<td>Low</td>
<td>842</td>
<td>3.25</td>
<td>1.244</td>
<td>.043</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>221</td>
<td>3.70</td>
<td>1.032</td>
<td>.069</td>
</tr>
<tr>
<td>Use of time</td>
<td>Low</td>
<td>845</td>
<td>3.08</td>
<td>1.317</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>221</td>
<td>3.61</td>
<td>1.113</td>
<td>.075</td>
</tr>
<tr>
<td>New teacher support</td>
<td>Low</td>
<td>841</td>
<td>3.11</td>
<td>1.245</td>
<td>.043</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>220</td>
<td>3.58</td>
<td>1.118</td>
<td>.075</td>
</tr>
<tr>
<td>Community Involvement</td>
<td>Low</td>
<td>842</td>
<td>3.27</td>
<td>1.191</td>
<td>.041</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>222</td>
<td>3.70</td>
<td>1.034</td>
<td>.069</td>
</tr>
</tbody>
</table>

Again, all means are stronger for survey items within this construct for Centers of Excellence schools. The largest differences were found in Facilities and Resources and Community Involvement.

Table 24

Descriptive Statistics for High versus Low Performing Managing the Instructional Program

<table>
<thead>
<tr>
<th>Managing the Instructional Program</th>
<th>Performance</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Err.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional development</td>
<td>Low</td>
<td>845</td>
<td>3.12</td>
<td>1.339</td>
<td>.046</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>222</td>
<td>3.58</td>
<td>1.207</td>
<td>.081</td>
</tr>
<tr>
<td>Student learning</td>
<td>Low</td>
<td>845</td>
<td>3.69</td>
<td>1.205</td>
<td>.041</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>222</td>
<td>4.11</td>
<td>.978</td>
<td>.066</td>
</tr>
</tbody>
</table>

Means were higher for the Centers of Excellence schools on both measures, with the greatest difference was found in teacher’s perceptions of leadership making an effort to address issues related to student learning.
Table 25

*Descriptive Statistics for High versus Low Performing “Overall”*

<table>
<thead>
<tr>
<th>Overall Performance</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Err.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall effective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>845</td>
<td>3.03</td>
<td>1.433</td>
<td>.049</td>
</tr>
<tr>
<td>High</td>
<td>221</td>
<td>3.71</td>
<td>1.275</td>
<td>.086</td>
</tr>
</tbody>
</table>

Consistent with the prior tests, the overall perception of leadership was much stronger in Centers of Excellence than in low-growth schools (3.71 compared to 3.03).

**T-tests**

T-tests were conducted using SPSS. The first independent samples test, tested the assumption that the standard deviations of the two groups (Low and High) were equal. The second row provided information given that the two standard deviations were not equal. Results indicated that the standard deviations were not equal. The table below displays results for the T-tests where equal variances were not assumed.

For q6_1a, Lavene’s test was conducted and found via an F statistic that the null hypothesis of equal variances (equal standard deviations) was not supported (at a P value of .05), and so it was assumed that the standard deviations were not equal and the t-test information from the second row was used. The second row t value equals -5.06 and has an associated p value (in the “Sig (2-tailed)” column) that was divided by 2 (because it was a 1-tailed test) was less than .05 and since we know from the descriptive statistics that the direction is in favor of the alternative hypothesis (High having a higher sample mean leadership quality score than Low), the null hypothesis was rejected in favor of the alternative and it was concluded that High has a higher mean for “Q6_1a There is an atmosphere of trust and mutual respect within the school” than Low. The interpretation
of the remaining Q6 items, including the Q6_4 “overall” item were similar and all reject the null hypothesis in favor of High having higher quality leadership than Low.

Table 26

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Q6_1b The school leadership communicates clear expectations to students and parents.</td>
<td>Equal variances assumed</td>
<td>44.351</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Q6_1c The school leadership communicates with the faculty adequately.</td>
<td>Equal variances assumed</td>
<td>44.313</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Q6_1d The faculty and staff have a shared vision.</td>
<td>Equal variances assumed</td>
<td>56.135</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Q6_2a Leadership issues</td>
<td>Equal variances assumed</td>
<td>3.760</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Q6_1f The school leadership consistently enforces rules for student conduct.</td>
<td>Equal variances assumed</td>
<td>10.526</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Q6_1i The school leadership works to minimize disruptions, allowing teachers to focus on educating students.</td>
<td>Equal variances assumed</td>
<td>36.428</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
</tbody>
</table>
Table 27

*T-test results for Developing People*

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Q6_1a</td>
<td>There is an atmosphere of trust and mutual respect within the school.</td>
<td>Equal variances assumed</td>
<td>16.104</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal variances not assumed</td>
<td>16.104</td>
</tr>
<tr>
<td>Q6_1e</td>
<td>Teachers feel comfortable raising issues and concerns that are important to them.</td>
<td>Equal variances assumed</td>
<td>9.839</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal variances not assumed</td>
<td>9.839</td>
</tr>
<tr>
<td>Q6_1g</td>
<td>Teachers receive feedback that can help them improve teaching.</td>
<td>Equal variances assumed</td>
<td>73.635</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal variances not assumed</td>
<td>73.635</td>
</tr>
<tr>
<td>Q6_1h</td>
<td>Teacher performance evaluations are fair in my school.</td>
<td>Equal variances assumed</td>
<td>22.798</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal variances not assumed</td>
<td>22.798</td>
</tr>
<tr>
<td>Q6_2e</td>
<td>Empowering teachers</td>
<td>Equal variances assumed</td>
<td>6.614</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal variances not assumed</td>
<td>6.614</td>
</tr>
</tbody>
</table>
### Table 28

T-test results for redesigning the Organization

<table>
<thead>
<tr>
<th>Q6_2h New teacher support</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>4.541</td>
<td>.033</td>
</tr>
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<td>Equal variances not assumed</td>
<td>-5.406</td>
<td>374.03</td>
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<table>
<thead>
<tr>
<th>Q6_2f Community involvement</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>20.053</td>
<td>.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-5.400</td>
<td>390.03</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Q6_2b Facilities and resources</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>26.426</td>
<td>.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-5.524</td>
<td>404.53</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q6_2c The use of time in my school</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>22.730</td>
<td>.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-6.048</td>
<td>396.62</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q6_2c The use of time in my school</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>22.730</td>
<td>.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-6.048</td>
<td>396.62</td>
</tr>
</tbody>
</table>

### Table 29

T-test for managing the Instructional Program

<table>
<thead>
<tr>
<th>Q6_2d Professional development</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>10.093</td>
<td>.002</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-4.927</td>
<td>376.579</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Q6_2g Student learning</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>20.376</td>
<td>.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-5.325</td>
<td>415.079</td>
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</tbody>
</table>

80
Descriptive Statistics

Descriptive statistics for the questions analyzed on the Leadership dimension of the survey are presented in the following tables. Data presented are for all high poverty schools, both high and low achieving. Of particular notice is that means are higher for all survey items in Centers of Excellence schools than in high-poverty, low-achieving schools.
## Table 30

**Descriptive Statistics of Survey Items for All Respondents**

| Q6_1a There is an atmosphere of trust and mutual respect within the school. | N    | Minimum | Maximum | Mean  | Std. Deviation |
| Q6_1b The school leadership communicates clear expectations to students and parents. | 1064 | 1       | 5       | 3.11  | 1.346          |
| Q6_1c The school leadership communicates with the faculty adequately. | 1058 | 1       | 5       | 3.28  | 1.344          |
| Q6_1d The faculty and staff have a shared vision. | 1062 | 1       | 5       | 3.42  | 1.273          |
| Q6_1e Teachers feel comfortable raising issues and concerns that are important to them. | 1062 | 1       | 5       | 3.02  | 1.385          |
| Q6_1f The school leadership consistently enforces rules for student conduct. | 1061 | 1       | 5       | 3.10  | 1.381          |
| Q6_1g Teachers receive feedback that can help them improve teaching. | 1060 | 1       | 5       | 3.41  | 1.276          |
| Q6_1h Teacher performance evaluations are fair in my school. | 1056 | 1       | 5       | 3.65  | 1.224          |
| Q6_1i The school leadership works to minimize disruptions, allowing teachers to focus on educating students. | 1065 | 1       | 5       | 3.40  | 1.322          |
| Q6_2a Leadership issues | 1065 | 1       | 5       | 3.10  | 1.299          |
| Q6_2b Facilities and resources | 1063 | 1       | 5       | 3.34  | 1.217          |
| Q6_2c The use of time in my school | 1066 | 1       | 5       | 3.19  | 1.295          |
| Q6_2d Professional development | 1067 | 1       | 5       | 3.22  | 1.325          |
| Q6_2e Empowering teachers | 1067 | 1       | 5       | 3.13  | 1.358          |
| Q6_2f Community involvement | 1064 | 1       | 5       | 3.36  | 1.173          |
| Q6_2g Student learning | 1067 | 1       | 5       | 3.78  | 1.173          |
| Q6_2h New teacher support | 1061 | 1       | 5       | 3.21  | 1.234          |
| Q6_4 Overall, the school leadership in my school is effective. | 1066 | 1       | 5       | 3.17  | 1.428          |

Valid N (listwise) 999
Chapter Five: Discussion

Introduction

Leadership has prevailed as the second most important factor only to the quality of the teacher in literature. Studies indicate the need for support of principal professional development. Since leaders in high poverty schools are faced with increased demands on their time and a sense of urgency to get results, it follows that educational research needs to look closely at best practices for leaders in high-poverty schools. This study confirmed that leadership actions does make a difference, particularly in schools designated as high-poverty. Rather than any one technical fix of a leader, the data analyzed support the idea that transformative leadership is what is needed, comprised of a blend of actions and values. Of note, was the perception of leadership in high-performing, high-poverty schools (Centers of Excellence) within the state of Colorado was overall rated as higher than the high-poverty, low-growth schools.

Summary of Results

The purpose of this study was to test the general research hypothesis that among high poverty schools, teachers of high growth schools have higher (better) perceptions of leadership at their schools than do teachers of low growth schools. The hypotheses proposed that a positive relationship would be found between teacher’s perceptions of leadership in high-poverty, high-performing schools. This study utilized publicly available results from the TELL Colorado survey of educators in high-poverty schools to
analyze teacher perceptions of leadership within their schools. Results from the survey were analyzed through use of Leithwood’s framework for leadership. The interpretation of the survey responses indicated that high-growth schools, “Centers of Excellence” had a higher sample mean leadership quality than low. From the data analysis presented in chapter four, the research hypothesis was supported statistical evidence was found that among high-poverty schools, perception of leadership was higher in the Centers of Excellence.

**Theoretical Implications of Results**

Theoretically the results indicate that leadership matters. Teachers’ perception of good leadership is correlated with high performing schools. Schools that serve students in poverty need the very best assets to serve the students they do. Just as a health clinic in a high-poverty area needs the very best doctors and nurses, a school in a high poverty community needs the very best leaders and teachers. The scope of this research addressed the skills necessary to lead a high-poverty school with successful student achievement results. Confirmed with this analysis was that Leithwood’s framework was found to be of theoretical and practical use to leaders in high-poverty schools, as evidenced below.

**Practical Implications of Results**

Faced with lock-down drills for safety and multiple discipline referrals, where is a leader of a high-poverty school to turn? If one were to turn to the literature, a leader might find Balanced Leadership’s twenty-one leadership actions or more upon which to focus. Rather than a handbook of so many priorities, a leader is better equipped to grasp
Leithwood’s framework, or “core” of leadership. Leaders in high-poverty schools are faced with too many priorities and tasks. While it may be tempting to look for a silver bullet to close the achievement gap, the reality is much more complex. Leaders can turn to Leithwood’s Core as a way to focus their efforts on fewer, but deeper and more impactful change. This kind of second order change and transformative leadership is what is needed in order to turn around low-growth schools. The TELL Colorado survey results suggested that in relationship to teacher’s perceptions of leadership, the following four variables indicated a successful combination:

1. Setting Direction
2. Developing People
3. Redesigning the Organization
4. Managing the Instructional Program

While each of these broad categories can be expanded and defined, the general sense that a leader needs to grasp only four broad categories is refreshing and simple. This simplicity serves as an entryway into a more complex set of structures necessary or lasting change. Leaders in high-poverty schools have enough demands of their time and energy, that to focus on a fantastic four is manageable!

Furthermore, within each of these four, certain practices were found to be most connected to student growth outcomes in high-poverty schools. This study found the following variables within each of Leithwood’s constructs to have the highest yield on student growth outcomes:

(1) **Setting Direction**
6_1b. The school leadership *communicates clear expectations* to students and parents.
6.1d. The faculty and staff have a *shared vision*.
6.1i. The school leadership works to *minimize disruptions*, allowing teachers to focus on education students.

(2) **Developing People**
6.1h. Teacher *performance evaluations* are fair in my school.
6.1g. Teachers *receive feedback* that can help them improve teaching.

(3) **Redesigning the Organization**
6.2f. The school leadership makes a sustained effort to address teacher concerns about: *Community involvement*.
6.2b. The school leadership makes a sustained effort to address teacher concerns about: *Facilities and resources*.

(4) **Managing the Instructional Program**
6.2g. The school leadership makes a sustained effort to address teacher concerns about:

*Student learning*. To summarize, the ‘core’ of leadership in high-poverty, high-growth schools can be narrowed down to the following priorities. The following survey items were found to have the greatest correlations to student achievement in the Centers of Excellence schools. These items can be thought of as “high yield practices” for high-poverty principals who are looking to maximize their student achievement results.

Table 31

<table>
<thead>
<tr>
<th>High Yield Practices for High-Poverty Principals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Setting Direction</strong></td>
</tr>
<tr>
<td>Communicates clear expectations to students and parents</td>
</tr>
<tr>
<td>Shared vision</td>
</tr>
<tr>
<td>Minimize disruptions</td>
</tr>
</tbody>
</table>
Suggestions for Future Research

Since this study analyzed results from the 2009 TELL, the first year it was administered, future research might replicate this analysis in a few more years. This would allow the chance for the TELL instrument to be refined based on educator feedback and allow more participants and schools to be included in the analysis. The longer the TELL is publicized and utilized, the more potential participants will be a part of the data set.

Future research needs to focus on leaders who have sustained and demonstrated success with schools in high-poverty communities. The research presented in this study builds upon prior research in the field and confirms that leadership does have an impact on student achievement in high-poverty schools. To take this a step further, future research might do case studies of one of each of the schools in the strata from the study (Centers of Excellence and Low-Growth). Determining difference of means tells us that there is a difference between the groups, but to go deeper into this difference and analyze the specific dimensions observable in the school sites would take this study to a deeper level.

More research needs to focus on public schools beating the odds. Similar to having a great teacher at every grade level, there exists a great high-poverty school in every district, with a great principal at the helm. Rather than holding these schools on pedestals, it is incumbent upon the educational community to uncover the practices, both of their teachers and leaders that make a difference. For those leaders in high-poverty schools beating the odds, open your doors to those who inquire. For only together will we
begin to close the achievement gap and make a difference in the lives of students from poverty.

**Strategies for Leaders of High-Poverty Schools**

Leadership is lonely business. Leaders of all schools need to collaborate with one another about best practices. There are several frameworks and guidelines out there for leaders who are looking for “power standards”. However, I have found through this study and research that Leithwood’s framework is the most useful and straightforward. Focus on the strategies found within the framework. Post them on your wall. Flash your eyes upon them a few times a day and keep in your consciousness the purpose of becoming an excellent leader: to create excellent students. Students from poverty are no less capable of achieving exceptional academic and societal pursuits. I am living proof of this. Leaders of high-poverty schools have an obligation to ensure their schools are the best they can be, better than the schools that serve students of privilege. If you as a leader are not up to this challenge, step aside so that someone who is ready for it can rise to the forefront and take on the challenge. This is not work for the faint of heart.

**Conclusion**

While there is no exact formula, the path to effective leadership is clear. The results from the TELL Colorado survey confirm that leadership is important, most significantly in high-poverty schools. While the significance of the survey items individually is not great, what may be quite significant significance is the overall pattern of differences found between the Centers of Excellence and Low-Growth schools. Leithwood’s framework confirms the importance of four leadership actions; Setting
Direction, Developing People, Redesigning the Organization and Managing the Instructional Program. Since leadership is found to be only second to teacher effectiveness in terms of student outcomes, this study contributed to the body of evidence in the field of education. While teacher effectiveness is primary, principal effectiveness needs to be more fully understood in order to get the results necessary to close the achievement gap.

It is the sincere hope of the researcher that this piece of writing contributes to the field of Educational Leadership and encourages others to delve into what it means to be an effective leader in a high-poverty school. For it is only with excellent teachers and principals that our children of poverty will find their way to a better future.
References


Darling-Hammond, L. (2000). *Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child*. National Commission on Teaching & America's Future, Kutztown Distribution Center, P.O. Box 326, Kutztown, PA 19530-0326 ($8). Tel: 888-492-1241 (Toll Free).


Meyers, J., Teacher tenure issue sizzles anew - A controversial bill would change how teachers are evaluated and rewarded.(2010, *Denver Post, the (CO)*, pp. A-01.


Appendix A

TELL Colorado Survey
School Leadership Section

School Leadership

All items rated on Likert scale: strongly disagree, somewhat disagree, neither disagree nor agree, somewhat agree, strongly agree

Q6.1 Please rate how strongly you agree or disagree with statements about leadership in your school.

a. There is an atmosphere of trust and mutual respect within the school.
b. The school leadership* communicates clear expectations to students and parents.
c. The school leadership communicates with the faculty adequately.
d. The faculty and staff have a shared vision. e. Teachers** feel comfortable raising issues and concerns that are important to them.
f. The school leadership consistently enforces rules for student conduct.
g. Teachers receive feedback that can help them improve teaching.
h. Teacher performance evaluations are fair in my school.
i. The school leadership works to minimize disruptions, allowing teachers to focus on educating students.

*School leadership is an individual, group of individuals or team within the school that focuses on managing a complex operation. This may include scheduling; ensuring a safe school environment; reporting on students’ academic, social and behavioral performance; using resources to provide the textbooks and instructional materials necessary for teaching and learning; overseeing the care and maintenance of the physical plant; or developing and implementing the school budget.

**Teachers means a majority of teachers in your school.

Q6.2 The school leadership makes a sustained effort to address teacher concerns about:

a. Leadership issues.
b. Facilities and resources.
c. The use of time in my school.
d. Professional development.
e. Empowering teachers.
f. Community involvement.
g. Student learning.
h. New teacher support.
Q6.4 Overall, the school leadership in my school is effective.

Strongly disagree
Somewhat disagree
Neither disagree nor agree
Somewhat agree
Strongly agree
Appendix B

2009 Colorado Centers of Excellence Awards
Archuleta Elementary School, Denver Public Schools
Aurora West College Preparatory Academy, Adams-Arapahoe 28J
Beach Court Elementary School, Denver Public Schools
Bryant Webster K-8 School, Denver Public Schools
Bruce Randolph School, Denver Public Schools
Carlile Elementary School, Pueblo City 60
Center High School, Center 26 JT
Deane Elementary School, Jefferson County R-1
Edison Elementary School, Colorado Springs 11
Fred N Thomas Career Education Center, Denver Public Schools
Greenwood Elementary School, Denver Public Schools
Kearney Middle School, Adams County 14
Kenton Elementary School, Adams-Arapahoe 28J
KIPP Sunshine Peak Academy, Denver Public Schools
Martin Luther King Middle College, Denver Public Schools
Martinez Elementary School, Greeley 6
Mc Meen Elementary School, Denver Public Schools
Montview Elementary School, Adams-Arapahoe 28J
Nikola Tesla Education Opportunity Center, Colorado Springs 11
Olathe Elementary School, Montrose County RE-1J
Roosevelt Edison Charter School, Colorado Springs 11
Silverton Middle School, Silverton 1
Skyline Vista Elementary School, Westminster 50
Stedman Elementary School, Denver Public Schools
Stein Elementary School, Jefferson County R-1
Stratmoor Hills Elementary School, Harrison 2
Tollgate Elementary School, Adams-Arapahoe 28J
West Denver Prep: Federal Campus, Denver Public Schools
Westpark Elementary School, Lake County R-1
Whittier K-8 School, Denver Public Schools
Wyatt-Edison Charter Elementary School, Denver Public Schools
Yale Elementary School, Adams-Arapahoe 28J
2010 Recipients:
Adventure Elementary, Mapleton 1
Atlas Preparatory School, Harrison 2
Beach Court Elementary School, Denver Public Schools
Boston K-8 School, Adams-Arapahoe 28J
Bryant Webster K-8 School, Denver Public Schools
Bruce Randolph School, Denver Public Schools
Centennial Elementary School, Harrison 2
Centennial High School, Centennial R-1
Center High School, Center 26 JT
Cole Arts and Science Academy, Denver Public Schools
Cowell Elementary School, Denver Public Schools
Edison Elementary School, Colorado Springs 11
Fletcher Interm. Science & Technology School, Adams-Arapahoe 28J
Force Elementary School, Denver Public Schools
Greenwood Elementary School, Denver Public Schools
KIPP Sunshine Peak Academy, Denver Public Schools
Martin Luther King Middle College, Denver Public Schools
Mc Meen Elementary School, Denver Public Schools
Montview Elementary School, Adams-Arapahoe 28J
Moore K-8 School, Denver Public Schools
Nikola Tesla Education Opportunity Center, Colorado Springs 11
Nisley Elementary School, Mesa County Valley 51
Stedman Elementary School, Denver Public Schools
Stein Elementary School, Jefferson County R-1
Stratmoor Hills Elementary School, Harrison 2