A STUDY OF PRINCIPALS’ SELF-PERCEPTION OF LEADERSHIP STYLE AND PEER RANKING ON NEW JERSEY SCHOOL PERFORMANCE REPORTS IN PUBLIC ELEMENTARY SCHOOLS IN NEW JERSEY

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Submitted in Partial Fulfillment
Of the Requirements for the Ed.D. Degree
Doctor of Education in Educational Leadership

Saint Peter’s University

2015
SAINT PETER'S UNIVERSITY
OFFICE OF ED.D. PROGRAMS

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ABSTRACT

PRINCIPALS’ SELF-PERCEPTION OF LEADERSHIP STYLE AND PEER RANKING ON THE NEW JERSEY SCHOOL PERFORMANCE REPORTS IN PUBLIC ELEMENTARY SCHOOLS IN NEW JERSEY

The purpose of this study was to examine the influence of principal’s self-perceptions of their leadership styles on academic achievement using the peer school ranking of their elementary school. The researcher measured the four leadership styles: telling, selling, delegating, and participating, identified within the Situational Leadership ® theory by Blanchard et al. (1993), among 196 New Jersey elementary school principals using Hersey and Blanchard’s (1985) Leader Effectiveness and Adaptability Description (LEAD) instrument. Comparing the principals’ self-perceptions of their leadership styles with peer group rankings in the areas of Academic Achievement, College and Career Readiness, Student Growth, and School Status on the 2013-2014 New Jersey School Performance Reports provided a method to understand the influence between leadership style and academic achievement. The researcher subsequently conducted Pearson Correlation tests and Simple Regression tests on the data obtained from the LEAD instrument and NJ School Performance Reports. The study results indicated that the most prevalent leadership styles among NJ elementary principals were selling and participating with 81.6% of the respondents reporting these styles. When the leadership style in each area of the NJ School Performance Report (Academic Achievement, College and Career Readiness, Student Growth, and School Status) were compared, there was no statistically significant correlation. An emphasis placed on leadership style, specifically within Situational Leadership ® theory, was not a predictor of peer school ranking on the NJ School Performance Report in any of the areas.
Principal leadership style was not a contributing factor in the principal’s peer school ranking on the NJ School Performance Report.
ACKNOWLEDGEMENTS

There are many special people I must thank, for without their efforts, my goal of completing this dissertation would never have been realized.

First, I would like to thank the members of my dissertation committee, Dr. Stephen Wisniewski, Dr. Ross Kasun, Dr. Pete Righi, and Dr. Charles Ford. They each, in their own way, supplied me with the grit that enabled me to push through the dissertation process and pursue new understandings in the area of school leadership.

I would also like to thank all of my fellow members of my Monmouth County Cohort for your friendship and partnership over the course of our years together. Within the insanity of a professional career, weekend classes, and navigating the doctorate program we have come to know each other in the most supportive way possible.

I would also like to thank my Team Mountz family for providing me with support through this process. You encouraging words, simple inquiries, and dedication to our profession kept me focused on the desire to complete this dissertation. A special thanks to my resident editor, Pamela Mannion, one of the few who read this dissertation from cover to cover.

Finally, my deepest gratitude and dedication goes to my family for your belief in me. To my mom, I thank you for providing me with encouragement by always telling me that I was doing so well. To my dad I thank you for providing me with encouragement by telling me I could do so much better. Although you are no longer with us, I have carried that encouragement with me in everything I do. Finally, to David, I thank you for providing me with encouragement by reminding me to look back at what I identified I could do better to see that I was now doing it so well. It is in those moments I was not sure I could push forward that you have reminded me
what I have already accomplished. That has made all the difference in the completion of this dissertation and so many other things in my life.
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CHAPTER 1: STATEMENT OF THE PROBLEM

Introduction

With the publication of the Coleman report in 1966, school effectiveness, as measured through student achievement on standardized state testing, had become a focus of educational reform. This report introduced the conclusion that student achievement was impacted more significantly by family socioeconomic factors than by school-based decisions (Lezotte, 2012). Since then, educational researchers (Averch, Carroll, Donaldson, Kiesling, & Pincus, 1971; Hauser, 1971) have recognized that while the influence of socioeconomic and demographic factors on student achievement is significant, school-based factors and decision-making, also significant factors in student performance, had been inadequately measured. Averch (1971) claimed that the earlier studies, including the Coleman report, did not include adequate measures of factors related to the social and psychological climate of the school, nor to school/classroom processes, and therefore underestimated the effect school-based factors had on student performance. As a result, the examination of effective schools began to focus on the educational factors schools could control; ie, instructional strategies, school leadership, access to resources, etc. This refocus initiated the development of a body of research supporting the premise that all children can learn and that schools could control the factors necessary for that learning (Lezotte, 2012). Further studies acknowledged the impact of family background on student achievement and added a focus on school-based processes. In these studies schools that were doing an exceptional job of educating students from very poor socio-economic backgrounds were examined and the processes the schools used were described (Teddlie & Reynolds, 2000). In addition to achievement on standardized tests, these studies included attitudinal and behavioral
indicators of student achievement and included the processes and resources that were being used as inputs into student achievement (Teddle & Reynolds, 2000).

The reauthorization of the Elementary and Secondary Education Act in 2001 through No Child Left Behind, ushered in school accountability measures demanding that the most effective reform efforts were introduced in schools. The need to tease out the impact of school-based decisions from the impact of socioeconomic factors and local demographics became essential in ensuring Adequate Yearly Progress in all of America’s schools and for all students.

In 2012, the New Jersey Department of Education (NJDOE) was granted an Elementary and Secondary Education Act (ESEA) waiver. This waiver required the state to adopt, among other measures, a differentiated system of school recognition and accountability (NJDOE, 2014a). NJ responded to this requirement by transitioning their student performance data comparisons from comparisons between socioeconomically similar districts, called District Factor Groups, to comparisons between socioeconomically similar schools, called School Peer Groups (NJDOE, 2013c). The NJ Department of Education groups schools from across the state as peers based on similar grade level configurations and demographic characteristics as measured by the percentage of students enrolled in free/reduced lunch programs, enrolled as limited English proficient, and enrolled as special education students (NJDOE, 2013a). The practice of comparing student achievement within peer school groups better represents the attribution of outcomes between student achievement and school-based factors such as principal leadership.

Therefore, in this study, to determine the correlation between principal leadership and student performance, principals’ perceptions of their own leadership styles will be compared to the peer school rankings of the principals’ respective school in the areas of academic achievement, college and career readiness, and student growth. Peer school rankings on the
New Jersey School Performance Report will be used to form the comparison of schools within the same demographic groups in order to better assign peer school rankings to the principal’s leadership style.

This study will examine the correlation between elementary principals’ perceptions of their own leadership styles, as measured by the Leader Behavior Analysis Self Instrument (LEAD) and defined by Situational Leadership ® theory, and peer ranking in academic achievement, college and career readiness, student growth, overall performance as reported in the New Jersey School Performance Reports. In addition, this study will examine the correlation between elementary principals’ perceptions of their own leadership style and identification of a school as a focus, priority, or reward school within peer groups. To help control for the impact of student demographics and socioeconomics, comparisons will be made between schools within the same peer school groups established by the New Jersey Department of Education on the New Jersey School Performance Report.

Principal Leadership

In *How the World’s Best-Performing School Systems Come Out on Top*, McKinsey and Company (2007) report that “There is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership. Similarly, we did not find a single school system which had been turned around that did not possess sustained, committed, and talented leadership.” While the interplay of student demographics and school-based practices makes schools’ efforts to reform practices and improve student achievement difficult to measure, researchers (Cotton, 1995; Levine & Lezotte, 1990; Purkey & Smith 1983; Sammons, Hillman, & Mortimore, 1995; Scheerens, 1992) began to identify school-based factors that did have an impact on student performance and school effectiveness. Of
these, strong school leadership appeared frequently. Edmonds (1983) included principal leadership in his Correlates of Effective Schools and Teddlie and Roberts (1993) concluded, in surveys of noted educational authors, that the role of school leaders is among those factors greatly impacting student achievement. The importance of school leadership on student performance was later highlighted by Marzano and Waters (2009). Their research on district-level leadership presented the conclusion that when district leaders are carrying out their leadership responsibilities effectively, student achievement in the district is positively affected (Marzano & Waters, 2009). They defined effective district leadership as one where collaborative goal-setting is ensured, nonnegotiable goals for achievement and instruction are established, board of educational support of district goals exist, student achievement is monitored, and resources are allocated to support goals for achievement (Marzano & Waters, 2009). Within this framework, principals’ involvement strengthens the impact on student achievement because principals ensure the implementation of goals and processes within the classrooms (Marzano & Waters, 2009).

In their meta-analysis of studies on leadership and student achievement, Marzano and Waters (2009) identify school leadership to be positively correlated to student performance. From this meta-analysis Marzano and Waters generated a list of twenty-one school level responsibilities that leaders can follow to positively impact student achievement. When the connection between district and school goals is established within this framework, principals can be given the autonomy to manage and vary the processes according to the needs and abilities of the teachers and students (Marzano, Waters, & McNulty, 2005).

Due to the correlation between principal leadership and student achievement outlined by educational researchers, the school principal has been selected as the focus of this study. The
elementary level principal has been chosen due to the fact that it is the environment in which students are first exposed to the concept of academic achievement from which student growth, a NJ Performance Report peer school comparison area, is measured. In addition, at the elementary level, the principal is often the sole administrator that directly impacts what is happening in the classroom and therefore is significant in school-based decision-making, an area educational researchers have reported as having a significant correlation to student achievement.

**Situational Leadership ® Theory**

Among the traits Marzano et al. (2005) include in their list of school leader responsibilities correlated with student academic achievement (Table 1.2), flexibility and situational awareness have the highest correlation to student achievement. These traits are also descriptors of Situational Leadership ® Theory developed by Hersey and Blanchard (1985).

Flexibility is the ability of the leader to adapt his or her leadership behavior to meet the needs of the situation. Situational awareness is a leader’s awareness of what is going on in the school and the use of that information to address current and potential issues. These high-value correlates describe the foundations of Situational Leadership ® and center around the ability of a leader to adapt his or her own leadership style to the readiness of the members of the organization and the willingness of those members to perform the required tasks the situation demands (Blanchard & Hersey, 1996). The LEAD Self instrument developed by Hersey and Blanchard and authorized for use by the Center for Leadership Studies was used to connect principals’ perception to the specific Situational Leadership ® styles they utilize most. The four Situational Leadership ® styles include directing/telling, coaching/selling, participating/supporting, and delegating. Directing/Telling includes leadership behaviors such as providing specific instructions and close supervision of performance. Coaching/Selling involves
leaders in explaining decisions and providing opportunities for clarification. The Participating/Supporting leadership behavior includes sharing ideas and facilitating the involvement of followers in those ideas. The final leadership behavior, delegating, involves leaders turning over responsibility for decisions and implementation to followers (Blanchard et al., 1993). The efficacy of the leadership depends on how well the leader knows the readiness and willingness of his followers and how well he matches the leadership style to the situation at hand (Lin, 1999).

As a result of the significant correlation between flexibility and situational awareness, descriptors of Situational Leadership®, and student achievement, this study will focus on examining the correlation between principals’ perception of their own leadership style, as qualified through elementary principals’ completion of the LEAD Self® instrument, and student achievement as portrayed in the peer rankings of the principals’ schools in the areas of Academic Achievement, College and Career Readiness, Student Growth and overall performance on the New Jersey School Performance Report. In addition, the correlation between the principals’ perception of their own leadership styles and their schools’ identification as a focus, priority, or reward school will be examined. In a study conducted by Hersey, Arrigo, and Characushansky (1980), it was found that students taught by a teacher who practiced Situational Leadership® theory showed higher performance. Blanchard and Hersey (1996) also suggested that a delegating style of leadership would be the prevalent style for school leaders but cautioned that other styles may become more dominant during various situations in which teachers were not as experienced or were expected to encounter change.
Peer Schools

The New Jersey Department of Education made efforts to create comparisons between districts with similar demographics by establishing District Factor Groups in 1975. These groupings were intended to create an opportunity to benchmark school performance among districts with the same socioeconomic factors but varying student performance results (NJDOE, 2004). In 2012 the NJDOE recognized that while this benchmarking reflected accurate comparisons of districts, it missed vital differences among schools within those districts and focused more on the demographics of the adults in communities than the demographics of the students in the schools (NJDOE, 2013c). As a result, under the ESEA Waiver, the requirement to create school performance reports that compared “like schools” spurred the NJDOE to transition to peer school grouping. Peer school grouping allows for the comparison of schools with similar student demographics. Schools are grouped into peer groups based on the fact that they have similar grade levels, a similar percentage of students who qualify for free/reduced lunch, a similar percentage of students who are Limited English proficient, and a similar percentage of students who receive special education services. A statistical technique called propensity score matching is used to develop the peer groups. Propensity score matching combines the various factors listed above together into one score. Schools with like scores are grouped together. Due to propensity score matching, a peer school’s peer group is unique to that school. This means that one school could have another school in its group, but that school, in turn, might not have the other in its group (NJDOE, 2013c).

These peer groups are reported on the New Jersey School Performance Reports, and percentile rankings are established within each peer group. This percentile ranking in the areas of Academic Achievement, College and Career Readiness, Student Growth, and overall
performance provides an opportunity to compare the impact of school-based decision-making on student performance within demographically similar schools. Academic Achievement peer percentiles are based on language arts literacy and mathematics NJASK scores. Peer percentiles in the area of College and Career Readiness are based on the number of students taking Algebra I and/or chronic absenteeism rates. The final area, Student Growth, is based on the growth of students from one year to the next on the NJASK in language arts literacy and mathematics. Overall performance rankings are made through a combined score from all three areas (NJDOE, 2013b).

Because NJ School Performance Reports focus on schools rather than districts, in this study all student achievement areas directly influenced by the school-level leadership of principals will be examined. These include those factors the NJ Department of Education has identified as being the standards of a school’s performance: Academic Achievement, College and Career Readiness, Student Growth, overall performance, and identification as a focus, priority, or reward school. This study examines the correlation between elementary school principals’ perceptions of their own leadership styles and rankings within peer groups on the aforementioned factors in the NJ School Performance Reports.

**Reward, Focus, Priority Schools**

In addition to ranking within peer groups, designation as a Priority, Focus, or Reward School under New Jersey’s No Child Left Behind flexibility waiver is another method of measuring school effectiveness. Categorization within one of these designations indicates the level of academic proficiency and/or growth the students have demonstrated in a school. The NJDOE makes these designations based on student achievement in reading/language arts and mathematics utilizing the New Jersey Assessment of Skills and Knowledge (NJASK) at the
elementary level. It also utilizes school growth over time as measured by changes in student performance on the NJASK (NJDOE, 2014a).

Designation as a reward school indicates that the performance of students within each subgroup within the school falls within 10% of that subgroups’ performance across the state and that the overall proficiency on the NJASK Language Arts as well as proficiency on the NJASK Mathematics is 90% or higher. Within the Reward School designation, schools can be identified based on absolute scores or based on growth in closing achievement gaps between subgroups (NJDOE, 2014a). Schools designated as focus schools comprise about 10% of schools with the overall lowest subgroup performance, a graduation rate below 75% and the widest gaps in achievement between different subgroups of students. Focus Schools receive targeted and tailored solutions to meet the school's unique needs (NJDOE, 2014a). Priority schools are schools that have been identified as among the lowest-performing five percent of Title I schools in the state over the past three years, or any non-Title I school that would otherwise have met the same criteria (NJDOE, 2014a).

Because designation as a Reward, Focus, or Priority school centers on the practices of the school rather than the district, all student achievement areas being measured for this designation are directly influenced by the school-level leadership of principals. The factors for designation include school-wide proficiency on the NJASK and growth on the NJASK, both direct results of the average of student achievement in these areas. Since designation of a school as Reward, Focus, or Priority creates a platform for examining the relationship between building level leadership decisions and student achievement outcomes, the correlation between elementary school principals’ perceptions of their own leadership styles and student achievement, as measured through designation as a Reward, Focus, or Priority School, is examined in this study.
Significance and Purpose of the Study

In their New Jersey School Performance Report- Interpretive Guide, the NJDOE (2013a) states that the purpose of the New Jersey School Performance Report is to provide information to educators and stakeholders about the performance of schools and to spur conversations around school performance based on the needs of students in that school. Regarding the inclusion of peer school comparisons, the NJDOE suggests they are to be used to provide information on how schools with similar demographics and grade levels are performing so they can make school-based decisions on how to grow and develop. The final suggestion made by the NJDOE is to use peer school comparisons to have “meaningful conversations” around goal setting (NJDOE, 2013a). This goal setting can be encouraged from within by school leaders looking at their schools’ areas of strength and weakness, as reported on the performance reports. It can be initiated by district leaders in order to encourage the sharing of best practices between schools within a district but with different peer groups and rankings. Similar dialogue can also be held between schools within the same peer group but with different rankings to learn from similar schools who are performing at higher peer percentile levels in specific areas of academic achievement.

Propensity score matching by the New Jersey Department of Education to create groups of peer schools adjusted for socioeconomic factors, allows comparison and conclusions about the correlation between principals’ perceptions of their leadership styles and student achievement within those peer groups. With various studies reporting on the high correlation between school-level leadership and student achievement within the school they lead, the information from this study will help principals identify leadership styles being used in schools with greater peer percentiles in various areas of student achievement and apply precepts of those leadership styles
to their own school leadership. The use of Situational Leadership ® theory is relevant considering Marzano and Waters (2009) found the highest correlation between student achievement and the traits of flexibility and situational awareness, both descriptors of Situational Leadership (Hersey & Blanchard, 1982).

The determination of whether principals’ perceptions of leadership style are correlated to student performance is of importance to the educational community, as a statistically significant correlation will help to inform superintendents and Boards of Education as they hire principals and other school-based leaders. Consideration can be based on those who possess and demonstrate the ability to execute principles of situational leadership proven to be successful in other schools with similar demographics.

With the findings of a statistically significant correlation between principal leadership and student performance presented by Marzano et al. (2005), the finding of no statistically significant correlation between principals’ perceptions of their leadership style and student performance in this study would suggest that other facets of principal leadership be explored to understand the positive relationship. Marzano et al. reported that the studies that were conducted demonstrated a relationship between principal leadership and student performance but did not suggest how principals’ leadership contributed to student achievement.

As a system, the goal would be the sharing of effective leadership practices from those schools performing at high peer percentile levels in the variety of performance areas: Academic Achievement on state assessments, College and Career Readiness in the areas of Algebra I instruction and student absenteeism, and Student Growth on state assessments.

Regarding the identification of the style of leadership a principal perceives himself as using in a Reward School can benefit the Focus and Priority Schools within that same peer
group. The benefit comes from the application of leadership styles principals from Reward Schools perceive themselves as having. Principals from schools without the Reward School designation can identify and apply axioms of those Reward school principals’ leadership styles to their own school leadership in order to impact student achievement.

**Research Questions and Hypothesis**

**Hypothesis:** Principals perceived leadership styles within Situational Leadership ® theory does affect the peer group percentile of Academic Achievement, College and Career Readiness, Student Growth, and overall performance on the New Jersey School Performance Report and designation as a New Jersey Reward, Focus, or Priority School.

**Null Hypothesis:** There is no statistically significant correlation between the style of leadership within Situational Leadership ® theory, as perceived by principals of themselves, and peer group ranking on the NJ School Performance Report or designation as a New Jersey Reward, Focus, or Priority School.

**Research Questions**

1. Which is the dominant leadership style, as perceived by principals of themselves, within Situational Leadership ® theory?

2. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of Academic Achievement within peer groups on the New Jersey School Performance Report?

3. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of College and Career Readiness within peer groups on the New Jersey School Performance Reports?
4. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of Student Growth within peer groups on the New Jersey School Performance Report?

5. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with designation as a New Jersey Reward, Focus, or Priority School within peer groups?

**Limitations**

This study used a survey tool, Leadership Effectiveness and Adaptability Description (LEAD) Self ® , to collect data on principals’ perception of their own situational leadership style: coaching, delegating, participating, or telling. The Center for Leadership Studies (2014) gave permission to use this survey for this particular research. Some of the limitations given on LEAD Self outlined by Blanchard, Zigarmi, and Forsyth (1991) applied to this study. Blanchard et al. reports that respondents to the LEAD Self may give themselves the benefit of the doubt and score themselves more positively than others perceive them. This may occur as a result of their tendency to respond based on intent rather than accurate perceptions of their own behavior. The study was limited, therefore, in terms of the degree of precision and the honesty of the participants’ responses to the survey.

The NJDOE (2013c) reports, in their Peer School Methodology Paper, that the propensity score matching methodology is utilized each school year and may result in the changing of peer schools within a given group from one year to the next. In addition, the peer group of a school is unique, resulting in one school having another school in its peer group but not vice versa. This lack of stability in peer schools would make it difficult for school principals to use the best practices and data from a school that is no longer in its peer group. Furthermore, the principals
surveyed with the instrument for this study may not have been present at the school to impact student learning prior to the data presented in the 2013-2014 School Performance Report. Where possible, this would be determined and those principals would be removed from the study.

**Definition of Terms**

**Academic Achievement.** The Academic Achievement portion of the School Performance Report presents data from the statewide assessment programs, including the outcomes of the New Jersey Assessment of Skills and Knowledge (NJ ASK).

**Adequate Yearly Progress (AYP).** This is a measurement defined by the United States federal No Child Left Behind Act that allows the U.S. Department of Education to determine how every public school and school district in the country is performing academically.

**Algebra I.** In the NJ School Performance Report, Algebra I course-taking is highlighted as an indicator of college and career readiness because it remains one of the most significant early predictors that a student is capable of rigorous coursework and is on track to graduate from high school and attend post-secondary education.

**Chronic Absenteeism.** For the purpose of the NJ School Performance Report, a chronically absent student is defined as a student who is not present for 10% of the school year, for any reason. These data are drawn from the end-of-year NJSMART State submission.

**College and Career Readiness.** This includes the qualities and achievements that students need to complete in order to be ready to enroll, persist, and succeed in college, postsecondary training opportunities, and gain entry into meaningful careers. For the purpose of the NJ School Performance Report, college and career readiness at the K-8 level is defined by the percentage of students chronically absent and the percent of students that graduate eighth grade having taken Algebra I.
Effective Schools. Schools proven to have a significant positive impact on their students’ achievement regardless of other circumstances (Lezotte, 2012).

Focus School. This refers to those 10% of schools in New Jersey with the overall lowest subgroup performance, a graduation rate below 75% and the widest gaps in achievement between different subgroups of students. Focus Schools receive targeted and tailored solutions to meet the school’s unique needs.

Distributed Leadership. A leadership approach in which collaborative working is undertaken between individuals who trust and respect each other’s contribution.

District Factor Group (DFG). These groupings of New Jersey school districts were first developed in 1975 in for the purpose of comparing students’ performance on statewide assessments across demographically similar school districts. The categories were updated every ten years when the Census Bureau releases the latest Decennial Census data. The DFGs were calculated using the following six variables: 1) Percent of adults with no high school diploma, 2) Percent of adults with some college education, 3) Occupational status, 4) Unemployment rate, 5) Percent of individuals in poverty, 6) Median family income.

Multicollinearity. This statistical phenomenon involves two or more predictor variables in a multiple regression model that are highly correlated, meaning that one can be linearly predicted from the others with a non-trivial degree of accuracy.

New Jersey Assessment of Skills and Knowledge (NJASK). This standardized assessment was administered to students in grades three through eight by the New Jersey Department of Education as part of a battery of tests used to assess student performance in New Jersey’s public schools.
New Jersey School Performance Report. These reports are released by the New Jersey Department of Education as required in New Jersey’s NCLB flexibility waiver that includes metrics at all grade levels to identify the extent to which students are demonstrating skills and behaviors indicative of college and career readiness. The Department has set statewide performance targets for these metrics and includes a peer school comparison for each school in the state, comparing schools with similar grade configurations and that are educating students with similar demographic characteristics such as free/reduced lunch eligibility, limited English proficiency or special education program participation.

No Child Left Behind (NCLB). This is the 2001 reauthorization of the Elementary and Secondary Act, which supports standards-based education reform and accountability measures, such as AYP, based on the premise that setting high standards and establishing measurable goals can improve individual outcomes in education.

No Child Left Behind (NCLB) flexibility waiver. This is an invitation extended to all states by the U.S. Department of Education to request flexibility regarding specific requirements of the No Child Left Behind Act of 2001 (NCLB) in exchange for rigorous and comprehensive State-developed plans designed to improve educational outcomes for all students, close achievement gaps, increase equity, and improve the quality of instruction.

Principal Components Analysis (PCA). This statistical technique is designed to combine information from several variables into one new highly correlated variable. For example, calculating a new single variable (called a principal component) that captures the information of various socioeconomic factors.

Peer School. Each school that receives a performance report with valid student outcome data will be grouped with approximately 30 other similar schools into a peer school comparison
group. Peer schools are schools that have similar grade configurations and are educating (or held accountable for) students with similar demographic characteristics. These characteristics include: Percent of students that are economically disadvantaged, i.e., free or reduced price lunch eligible, Percent of students that are limited English proficient, Percent of students that are in special education, Grade span of the school (elementary, middle, high).

Priority School. These New Jersey schools have been identified as among the lowest-performing five percent of Title I schools in the state over the past three years, or any non-Title I school that would otherwise have met the same criteria.

Propensity Score Matching. This established statistical technique helps to construct comparison groups from data observed outside of an experiment. This method identifies the best available comparison group for each eligible school. In the case of the NJ School Performance Reports, propensity score matching will identify up to 30 peer schools.

Reward School. These New Jersey school have achieved high proficiency levels or high levels of growth, including progress toward closing the achievement gap. This allows for a range of schools from across the state to attain Reward status, regardless of their absolute starting point.

Situational Leadership. This leadership theory developed by Paul Hersey and Ken Blanchard theorizes that effective leadership is task-relevant, and the most successful leaders are those who adapt their leadership style to the willingness and ability of members to take responsibility for the tasks that are given.

Student Growth. In the NJ School Performance Report, this measures student progress year over year by comparing a student’s achievement outcomes in English Language Arts and Mathematics to a group of students who had similar achievement in the prior year(s).
Transformational Leadership. A style of leadership where the leader is charged with identifying the needed change and creating a vision to guide the change with the support of the committed members of a group.
CHAPTER 2: REVIEW OF THE LITERATURE

Overview

This chapter will present an overview of the relevant literature as well as current research with an emphasis on the influence of principal leadership on student achievement found in the literature. Current research will also be provided outlining the accountability procedures used to measure student achievement in New Jersey. Since the leadership style of a principal influences the principal’s leadership of a school, leadership theory will also be addressed in this chapter.

School Effectiveness Studies

The corner-stone for school effectiveness studies was laid with the publication of the Coleman report in 1966 (Scheerens, 2004). The Coleman report concluded that differences in student achievement were more strongly associated with family socio-economic factors than with the school-based resources available (Lezotte, 2012). The outcomes of this report were criticized by educationalists due to the narrow choice of school inputs examined in the study. The inputs that were examined for impact on student achievement on standardized tests were school resources variables, per pupil expenditure, school facilities, number of books in the library; student background characteristics; and student socioeconomic status (Teddlie & Reynolds, 2000). That student performances was measured only by achievement on standardized tests was highly criticized (Teddlie & Reynolds, 2000). In addition, the correlation between the resource factors and student performance were only measured at a 5-9% variance and were therefore deemed weak indicators of student performance (Teddlie & Reynolds, 2000). The multicollinearity caused by the effect of socioeconomic factors on student performance made it difficulty for other educationalists to dispute the claims made by Coleman et al. (1966) and Jencks et al. (1972) that school-based factors have little influence on a student’s achievement
that is independent of his family socioeconomic background. Despite this difficulty, researchers such as Averch (1971) and Hauser (1971, 1976) believed there to be a greater influence by school-based factors than was being measured. Averch (1971) claimed that the earlier studies done by Coleman and Jencks did not include adequate measures of schools’ social and psychological climate, nor of school/classroom process variables and therefore underestimated the magnitude of effect school-based factors had on student performance.

The response to the report stimulated an effort to dispute the results and prompted further research into effective schools. From there, the examination of effective schools focused on the factors schools could control in a child’s education and began to develop a body of research that supported the premise that all children can learn and that schools could control the factors necessary for that learning (Lezotte, 2012). While these studies did not discount the important impact of family background on student achievement, they did focus on examining schools that were doing an exceptional job of educating students from very poor socio-economic backgrounds and looked to describe the processes these schools used (Teddlie & Reynolds, 2000). In addition to achievement on standardized tests, these studies included attitudinal and behavioral indicators of student achievement, as well as the processes resources were using as inputs into student achievement rather than the resources themselves (Teddlie & Reynolds, 2000). For example, rather than including the number of library books available, the input included how those books were being used by students. The attitudinal and behavioral indicators of student achievement were measured through use of social and psychological scales to quantify school processes (Teddlie & Reynolds, 2000). As a result of these changes, student level variance in gain scores were revealing a greater effect by school-controlled factors. Bidwell and Kasarda (1980) examined inputs of specific teachers with their students and found a 25% level of
variance in student gain scores. Summers and Wolfe (1977) found that certain characteristics of classroom teachers were significantly related to the achievement of their students. They did not, however, report the cumulative effect for school factors as opposed to student socioeconomic status (Teddlie & Reynolds, 2000). Murnane (1975) reported that classroom and school assignments increased the amount of predicted variance in student achievement by 15% when student background and prior achievement were entered into the regression model first.

Murnane also found that principals’ evaluations of teachers were significant predictors of student achievement. Hanushek (1981) reported that teacher variables tied to school expenditures (e.g., teacher-student ratio, teacher education, physical resources) demonstrated no positive effect on student achievement, yet a significant relationship existed between human resource qualities (e.g., student sense of control of his environment, principal evaluation of teachers, quality of teacher education, high expectations for students, and association with peer groups beyond students’ socio-economic status background) and student achievement. Primary resources consistently related to student achievement are concluded to be teachers and other students while other resources’ impact on student achievement appear through their effect on the attitude and behavior of those teachers and students (Murnane, 1981).

The development of social psychological scales in the mid to late seventies allowed for more effective measurement of the impact of educational factors on student achievement (Murnane, 1975). Instruments used in earlier studies could not effectively measure this impact, a deficiency that resulted in an overstatement of the impact of family background on student achievement and a misunderstanding of the multicollinearity between school and family factors (Brookover & Lezotte, 1979). In addition, the choice of assessments used to measure student achievement was studied in the late seventies, leading to conclusions that the use of standardized
achievement tests over curriculum specific tests caused the impact of school factors on student achievement to be understated (Madaus, Kellaghan, Rakow, & King, 1979). Because student achievement tests measure incidental skills rather than specific skills, Madaus (1979) suggested that schools should not rely on evidence related to incidental skills to measure the impact of school factors on student achievement.

Since the late seventies, numerous studies on school effectiveness have been published that focused on describing and developing effective schools (Teddlie & Reynolds, 2000). These studies came about as a consequence of the criticism earlier studies faced from the bias they created in their conclusions (Cuban, 1983). This bias was generated since school factors had been ignored and all studies focused on low socioeconomic schools (Wimpelberg et al., 1989). New studies explored the difference in school factors on student achievement across schools of different socioeconomic statuses. The focus shifted from creating better schools for the urban poor as a means of equity to producing better schools for all students as a means of efficiency (Teddlie & Reynolds, 2000). In addition to a focus on school factors across school contexts, the use of newly developed and computer-based multi-level math models allowed for the assessment of the effects of various school and family background factors on student achievement (Bursetin, 1980). These studies included Purkey and Smith (1983), Scheerens (1992, 2004), Levine and Lezotte (1990), Sammons et al. (1995), and Cotton (1995). The resulting consensus on the main school factors that are seen as impacting student achievement are included in Table 2.1 below.

According to Scheerens (2004) the greatest consensus in school-controlled factors impacting student achievement include high level of expectation, cooperation, educational leadership, frequent monitoring, time, opportunity to learn, and structure.
Table 2.1

School Factors That Are Seen as Impacting Student Achievement

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Achievement-oriented policy; cooperative atmosphere, orderly climate</td>
<td>Productive climate and culture</td>
<td>Pressure to achieve, consensus, cooperative planning, orderly atmosphere</td>
<td>Planning and learning goals, curriculum planning and development</td>
<td>Shared vision and goals, a learning environment, positive reinforcement</td>
</tr>
<tr>
<td>Clear goals on basic skills</td>
<td>Focus on central learning skills</td>
<td>Planning and learning goals, school-wide emphasis on learning</td>
<td>Concentration on teaching and learning</td>
<td></td>
</tr>
<tr>
<td>Frequent evaluation</td>
<td>Appropriate monitoring</td>
<td>Evaluative potential of the school, monitoring of pupil’s progress</td>
<td>Assessment (district, school, classroom level)</td>
<td>Monitoring progress</td>
</tr>
<tr>
<td>In-service training/staff development</td>
<td>Practice-oriented staff development</td>
<td>Professional development, collegial learning</td>
<td>A learning organization</td>
<td></td>
</tr>
<tr>
<td>Strong leadership</td>
<td>Outstanding leadership</td>
<td>Educational leadership</td>
<td>School management and organization, leadership and school improvement, leadership and planning</td>
<td>Professional leadership</td>
</tr>
</tbody>
</table>

(table continues)
<table>
<thead>
<tr>
<th>Time on task, reinforcement, streaming</th>
<th>Effective instructional arrangements</th>
<th>Structured teaching, effective learning time, opportunity to learn</th>
<th>Classroom management and organization, instruction</th>
<th>Purposeful teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>High expectations</td>
<td>High expectations</td>
<td>Teacher-student interactions</td>
<td>High expectations</td>
<td>Pupil rights and responsibilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Distinct school interactions, equity, special programs</td>
</tr>
</tbody>
</table>

Another study that was prompted by the interest in the impact of school-controlled factors on student achievement was conducted by Ron Edmonds in 1982. Edmonds (1982) concluded that both school factors and family background impact student achievement; the former allowed students to function adequately in school while the latter allowed students to flourish in school. Edmonds went on to identify Correlates of Effective Schools: including principal leadership focused on the quality of instruction, an instructional focus understood by the organization, an orderly and safe climate for teaching and learning, an expectation by all teachers that all students could obtain at least minimum mastery, and the use of student achievement as a basis for program evaluation. While Edmonds’ research focused on the elementary school level, Rutter et al published similar conclusions about the secondary level after carrying out studies in the United Kingdom (Lezotte, 2012).

Teddlie and Roberts reported out on a study in 1993 that revealed, after two rounds of surveys of noted authors in the field of school effectiveness research, that the top areas of impact on student achievement are school change, teacher-school interactions, curriculum, role of school leaders, context of the school, and district-state effects on schools. In the first round of the survey, the role of the principal appeared as the third most influential factor; in the survey’s second round, the role of leadership appeared as the fourth most influential factor (Teddlie & Reynolds, 2000).

**School Leadership**

In a summary of meta-analyses done by Scheerens and Bosker (1997), among school organizational factors inclusive of those listed in Table 2.1 as having the greatest consensus in school-controlled factors, educational leadership had the greatest effect on student learning. While these effects are not as large as those for aspects of structured teaching; cooperative
learning, feedback, reinforcement, differentiation; they are greater than resource input factors; student-teacher ratio, teacher training, teacher experience, and teacher salary; or instructional conditions; time on task and monitoring at the classroom level (Scheerens & Bosker, 1997).

Lezotte (2012) shared that schools qualify as complex organizations and therefore require strong leadership that discerns and applies the characteristics of instructional effectiveness to the management of the instructional program. Edmonds (1982) added that the principal as a strong instructional leader is a necessary but not sufficient component of an effective school. Of the characteristics school leaders must possess to be effective, Scheerens (2004) identifies the following as the most productive: school leaders as information provider, orchestrator or participative decision making, school leader as coordinator, meta-controller of classroom processes, time educational/administrative leadership, counsellor and quality controller of classroom teachers, initiator and facilitator of staff professionalization. Fullan (2005) reported that effective school leaders are the key to sustained educational reform, especially through an ability to understand and improve relationships.

Marzano and Waters (2009) posed the research question, “What is the strength of relationship between district-level administrative actions and average student achievement?” In their analysis of fourteen studies in 1,210 school districts, they computed a correlation between district leadership and student achievement of .24, and was statistically significant at the .05 level. These findings suggest that a district leader at the 50th percentile in terms of his leadership skills working within a district where an average student achievement is also at the 50th percentile can bring about a 9.5 percentile increase in student achievement with an increase in his leaderships abilities by one standard deviation (Marzano & Waters, 2009). Ultimately,
these findings suggest that when district leaders are carrying out their leadership responsibilities effectively, student achievement in the district is positively affected (Marzano & Waters, 2009).

Marzano and Waters (2009) specify effective district leadership as one in which district leaders ensure collaborative goal-setting, establish nonnegotiable goals for achievement and instruction, create board-aligned with and board-supported district goals, monitor achievement and instruction goals, and allocate resources to support the goals for achievement and instruction. The positive impact of district leadership on student achievement can happen through the involvement of principals. Fullan, Bertani, and Quinn (2004) reported that district leaders require the on-going leadership of a school-level leader to facilitate progress and change. Principals as building-level administrators need to be explicitly and implicitly involved in the goal-setting and monitoring of goals since they are the individuals who will ensure the implementation of the goals within the schools (Marzano & Waters, 2009).

In their study, Marzano and Waters (2009) found that an increase in the autonomy of principals within their buildings is associated with an increase in students’ achievement. However, they also found that an increase in site-based management in those buildings is associated with a decrease in students achievement. This autonomy, however, must be defined by boundaries set by the district goals. The reason site-based management is negatively correlated with student achievement is because this management style tends to provide total autonomy at the school level. This total autonomy creates a loosely coupled system that breeds a divergence from the district goals (Marzano & Waters, 2009). In a loosely coupled system, goals are tailored to local circumstances and tend to lose the original intent (Weick, 1982). Marzano and Waters (2009) argues that schools within a district should have the autonomy to deal with daily functioning. However, he goes on to argue that this autonomy cannot extend to
renegotiating or ignoring goals that were established at the district level regarding student achievement (Marzano & Waters, 2009).

As opposed to loosely coupled organizations, tight coupling leads to high reliability, and in high-reliability organizations, clear goals are established at the district level and are constantly monitored by principals within each school (Bellamy, Crawford, Marshall, & Coulter, 2005). The principals can act in an autonomous manner because they understand their school environment and the necessary conditions under which these goals can be met. They can also act to impose immediate corrective actions when goals are not being met (Marzano & Waters, 2009). In this system, it takes district leadership to ensure the development of non-negotiable goals for instruction and student achievement, and school-level leadership to ensure the effective implementation, monitoring, and remediation of those goals within the school. Marzano and Waters (2009) summarizes that effective leadership behavior at the district and school levels can have a positive impact on student achievement when it changes what happens in classrooms and impacts student learning. In a mathematical model presented by Marzano and Waters in District Leadership that Works, the predicted reading achievement gain for a 50th percentile student increases by 7 points when the district and school leader move to the 84th percentile, and 13 points when the district and school leader move to the the 98th percentile (Marzano & Waters, 2009). For mathematics the gains are 9 points and 17 points respectively (Marzano & Waters, 2009). In How the World’s Best-Performing School Systems Come Out on Top, McKinsey and Company (2007) report that “There is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership. Similarly, we did not find a single school system which had been turned around that did not possess sustained, committed, and talented leadership”.

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Leadership at the principal level must be confined within the goals established at the district level to ensure high reliability within the organization (Marzano & Waters, 2009). Understanding goals is among the most powerful actions principals can take to ensure effective teaching and learning practices and positive impact on student achievement (Marzano & Waters, 2009). Elmore (2003) contends that focusing on the right matter is the key problem in school improvement, and that focus needs to be inherent to the district organization to ensure it is the right work. This concept is supported by a meta-analysis conducted by Robinson (2007), in which statistically significant correlation was found between school-level behaviors associated with a common district focus and student achievement.

Such correlations between school-level leadership and student achievement did not appear on the educational scene until recent years, as leadership has been closely linked to the effective functioning of complex organizations, such as schools, for centuries (Marzano et al., 2005). In fact, as early 1977, the importance of school-level leadership had been highlighted by the federal government. In the U.S. Senate Committee Report on Equal Education Opportunity, the principal was identified as the most influential person in the school due to:

- his/her responsibility for all activities that occur at the building level,
- his/her influence in setting the tone of the school and the climate for teaching,
- his/her influence in establishing the level of professionalism and morale of the teachers,
- the degree of concern he/she can elicit in student performance,
- and his/her role as the main link between the community and the school (U.S. Senate Committee on Equal Educational Opportunity, 1970).
In 1979, Brookover and Lezotte conducted research that correlated principal leadership with the climate of the school, with individual classrooms, and with the classroom practices teachers used. A study conducted by Purkey and Smith (1983) reported a correlation between principal leadership and the attitude of teachers, while a 1989 study by Oakes reported the existence of a correlation with curriculum and instruction. Additionally, in 1991, Duke and Canady reported a relationship between principal leadership and students’ opportunity to learn.

Despite the findings of a relationship between principal leadership and student achievement, Hallinger and Heck (1996) reported that little research had been conducted on the importance of that relationship. In fact, they were only able to identify 40 studies prior to 1996 that focused on this relationship (Hallinger & Heck, 1996). Marzano et al. (2005) also found of the 5,000 studies on principal leadership, only 69 of them quantitatively addressed the relationship of principal leadership to student achievement. The studies that were conducted demonstrated a relationship but did not suggest how principals’ leadership contributed to student achievement (Marzano et al., 2005). Cotton (2003) reported that in a review of post-1985 studies related to principal behaviors and student outcomes, it was found that principals of higher-performing schools exhibited behaviors that influenced student achievement. From this study Cotton found that the effects of principal leadership on student learning, while indirect, are significant and positive. In 2003, Witziers, Bosker, and Kruger added to this argument, reporting that in his study, small direct effects of principal leadership on student achievement were also seen. Leithwood and Riehl (2003) and Leithwood, Seashore Louis, Anderson, & Wahlstrom (2004) reported that school leadership was second only to classroom instruction in the degree of impact on student learning, and that effective school leaders have a demonstrable effect on student learning.
In *School Leadership that Works* (2005) Marzano et al. (2005) report on the meta-analysis they conducted over 69 studies, in 2,802 schools, with 1.4 million students, and 14,000 principals. In this study they found that the correlation between leadership behavior of a principal and the average achievement of students in the schools was .25. This average correlation suggests that an average principal (at the 50th percentile in leadership abilities) working in an average school (at the 50th percentile in student academic achievement) would produce no change in student achievement over time (Marzano et al., 2005). If that principal’s leadership ability increased by one standard deviation (through professional training, influence of superintendent, etc.) students’ performance would increase to the 87th percentile (Marzano et al., 2005). This translates to the idea that student achievement can be influenced by growth in a principal's building level leadership abilities and behaviors. To put this concept into perspective, Marzano et al. suggest that, on the same assessment, students in schools with principals who are within the top half of an effectiveness rating (when rank ordered creating a bell curve) will complete the assessment at a rate of 62.5%, while students in schools with principals who are within the bottom half of the effectiveness rating will finish the assessment at a rate of 37.5%. This again suggests a correlation between principal leadership abilities and student achievement.

While other studies exist, such as Witziers et al. (2003), that suggest this correlation is much lower (.02), Marzano et al. (2005) point out that there are impacting factors not taken into consideration in these studies. They point out that the Witziers et al. study conducted in 2003 includes schools from various countries, includes outliers in their calculation of the correlation, and does not attenuate for the low reliability of the leader ability surveys utilized.

Given that the school level work is the appropriate work as defined at the district level, and given the autonomy to enact that work within the school-level environment appropriately,
Marzano and Waters (2009) contend that the twenty-one school level responsibilities they outline in *School Leadership that Works* (2005) can be carried out in a fashion that positively impacts student achievement while promoting high reliability within the district. The responsibilities that school-level leadership needs to carry out to ensure an impact on student achievement are listed in Table 2.2. These responsibilities are a result of the meta-analysis of the 69 studies Marzano et al. (2005) included in their determination of the .25 correlation between principal leadership and student achievement. They are also an answer to the call made by Wimpleberg, Teddlie, and Stringfield (1989) who declared that the effectiveness of principal leadership on student achievement was a result of specific actions those principals take towards impacting student achievement, not general characteristics of leadership.

The responsibilities listed in Table 2.2 are not new to the effective schools and leadership literature; but the quantification of the correlation between student achievement and each responsibility is the first in leadership research in the United States (Marzano et al., 2005). It is important to note that these correlations are reported at a 95% confidence interval rating and therefore each shows a significant correlation at the .05 level (Marzano et al., 2005). It is also important to note the small range of variation between the responsibilities, with the majority of the responsibilities having a correlation within .28 and .18. While a change in leadership of one standard deviation can evoke a change in the percentile ranking on student achievement for an average school district between 11 percentile points and 7 percentile points respectively, it is clear that the change in each leadership responsibility is impactful (Marzano et al., 2005). Situational awareness (.33) and flexibility (.28), both top this list with the highest correlation between leadership responsibility and student achievement.
Table 2.2

*School Leader Responsibilities and Their Correlation (r) With Student Academic Achievement*

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>The extent to which the principal...</th>
<th>Average r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Affirmation</td>
<td>Recognizes and celebrates accomplishments and acknowledges failures</td>
<td>.19</td>
</tr>
<tr>
<td>2. Change Agent</td>
<td>Is willing to challenge and actively challenges the status quo</td>
<td>.25</td>
</tr>
<tr>
<td>3. Contingent Rewards</td>
<td>Recognizes and rewards individual accomplishments</td>
<td>.24</td>
</tr>
<tr>
<td>4. Communication</td>
<td>Establishes strong lines of communication with and among teachers and students</td>
<td>.23</td>
</tr>
<tr>
<td>5. Culture</td>
<td>Fosters shared beliefs and a sense of community and cooperation</td>
<td>.25</td>
</tr>
<tr>
<td>6. Discipline</td>
<td>Protects teachers from issues and influences that would detract from their teaching time or focus</td>
<td>.27</td>
</tr>
<tr>
<td>7. Flexibility</td>
<td>Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent</td>
<td>.28</td>
</tr>
<tr>
<td>8. Focus</td>
<td>Establishes clear goals and keeps those goals in the forefront of the school’s attention</td>
<td>.24</td>
</tr>
<tr>
<td>9. Ideals/Beliefs</td>
<td>Communicates and operates from strong ideals and beliefs about schooling</td>
<td>.22</td>
</tr>
<tr>
<td>10. Input</td>
<td>Involves teachers in the design and implementation of important decisions and policies</td>
<td>.25</td>
</tr>
<tr>
<td>11. Intellectual Stimulation</td>
<td>Ensures the faculty and staff are aware of the most current theories and practices and makes the discussion of these regular aspects of the school’s culture</td>
<td>.24</td>
</tr>
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</table>

*(table continues)*
<table>
<thead>
<tr>
<th>Responsibility</th>
<th>The extent to which the principal...</th>
<th>Average r</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Involvement in Curriculum, Instruction, and Assessment</td>
<td>Is directly involved in the design and implementation of the curriculum, instruction, and assessment practices</td>
<td>.20</td>
</tr>
<tr>
<td>13. Knowledge of Curriculum, Instruction, and Assessment</td>
<td>Is knowledgeable about current curriculum, instruction, and assessment practices</td>
<td>.25</td>
</tr>
<tr>
<td>14. Monitoring/Evaluating</td>
<td>Monitors the effectiveness of school practices and their impact on students learning</td>
<td>.27</td>
</tr>
<tr>
<td>15. Optimizer</td>
<td>Inspires and leads new and challenging innovations</td>
<td>.20</td>
</tr>
<tr>
<td>16. Order</td>
<td>Establishes a set of standard operating procedures and routines</td>
<td>.25</td>
</tr>
<tr>
<td>17. Outreach</td>
<td>Is an advocate and spokesperson for the school to all stakeholders</td>
<td>.27</td>
</tr>
<tr>
<td>18. Relationships</td>
<td>Demonstrates an awareness of the personal aspects of teachers and staff</td>
<td>.18</td>
</tr>
<tr>
<td>19. Resources</td>
<td>Provides teachers with materials and professional development necessary for the successful execution of their jobs</td>
<td>.25</td>
</tr>
<tr>
<td>20. Situational Awareness</td>
<td>Is aware of the details and undercurrents in the running of the school and uses this information to address current and potential problems</td>
<td>.33</td>
</tr>
<tr>
<td>21. Visibility</td>
<td>Has quality contact and interactions with teachers and students</td>
<td>.20</td>
</tr>
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</table>

Leadership Theory

Since James Burns, the founder of modern leadership theory, drafted a robust definition of leadership in the 1978, many theories of leadership have been influential in guiding school leaders (Marzano et al., 2005). Burns (1978) described leadership as:

“...leaders inducing followers to act for certain goals that represent the values and the motivation- the wants and the needs, the aspirations and expectations- of both leaders and followers. And the genius of leadership lies in the manner in which leaders see and act on their own and their followers’ values and motivations.” (p. 19)

The leadership theories that have emerged over the years have become key to the thinking of many leaders. Each style is rooted in the ideas of prominent theorists who have established principles by which the behavior of leaders is guided. In a review of leadership theory, numerous leadership styles were found to be strongly rooted in school leadership. As Marzano and Waters (2009) found situational awareness and flexibility to be leadership characteristics highly correlated to student achievement, it would be expected that a leadership style that focuses on these areas would lead to effective schools.

Transactional leadership is a style that was presented by Bass and Avolio in 1994; it is characterized by the trading of one thing for another. The transactional leadership style often involves the reaction of leaders to problems to maintain set standards by changing out features of the system (Bass & Avolio, 1994). One example is exchanging rewards and recognition for accomplishments so followers will manage adjustments in light of a problem in order to ensure the set standards are met and recognition is received for maintaining those standards. Transactional leadership can be conducted in several ways. Management-by-exception-passive involves establishing standards and enacting leadership behaviors only when the established
standards are threatened. Management-by-exception-active follows the same pattern but is less likely to take risks that might lead to problems that challenge the established standards. Finally, the constructive transactional leadership style invites followers into the management process so that they may focus on and achieve the management of the established standards (Marzano et al., 2000).

Transformational leadership, as defined by Burns (1978), is focused on changing the way in which followers think about problems so they may find the best solutions. This leadership style is characterized by the consideration of what followers need in order to meet high expectations, while inspiring them to think of new ways to reach those expectations (Marzano et al., 2000). There are four key components to transformational leadership behaviors. The first, individual consideration, is when leaders give personal attention to the needs of the members of the organization. The second, intellectual stimulation, is when leadership helps staff to think of old problems in new ways to find solutions. Inspirational motivation, the third component, is the communication of high expectations to staff members. The final component, idealized influence, involves the leader in modeling the expected behavior of the members of the organization (Leithwood, 1994).

In the 1970s Robert Greenleaf introduced the idea of servant leadership. This style of leadership was based on the belief that leadership emerges from a desire to help others. It positions the leader at the center of the organization with connections to all aspects of the organization (Greenleaf, 1977). The importance of these connections is to understand the personal needs of the members of the organization, help resolve conflicts within the organization, serve as a steward of resources within the organization, and develop the skills of the members of the organization (Greenleaf, 1977). This leadership style is often incorporated
into more comprehensive theories of leadership, rather than serving as a stand-alone leadership style (Marzano et al., 2000).

The principles forming the basis of Situational Leadership® center around the ability of a leader to adapt his or her own leadership style to the readiness of the members of the organization with the willingness and ability to perform given tasks (Blanchard & Hersey, 1996). “Readiness” is defined by Bolman and Deal (2008) as the subordinates’ commitment and competence in a specific task. For tasks where members are unable or unwilling to perform, the leader directs or tells the members what to do without concern for personal relationships. This type of situational leadership is called “high task-low relationship” or “directing/telling” (Blanchard, Zigarmi, & Zigarmi, 1985). “High task-high relationship”, or “participating/supporting”, is the type of situational leadership used when members are unable but willing to perform the task and need to be coached on what to do (Blanchard et al., 1985). When members are able to do the work but are unwilling to complete the task, the situational leader needs to support the participative process and exhibits a “low task-low relationship” focus, otherwise known as the “selling/coaching” style (Blanchard et al., 1985). The final Situational Leadership® style is used when members are able and willing to perform the task and can therefore complete the task on their own; it is called the “low task-high relationship” focus or the “delegating” style (Blanchard et al., 1985). In order for leaders to be effective as situational leaders, they need to be skilled in all four styles, and they must know the ability level and willingness of the members of the organization with each task assigned (Marzano et al., 2000). Bolman and Deal (2008) explain that this form of leadership occurs in schools because it takes a different kind of leader to carry out certain responsibilities. They give the example that while it
may take one approach when growing or adding staff, another approach might be employed cutting a budget and laying people off.

One of the most popular yet least defined leadership styles discussed in literature since the early nineties is instructional leadership (Leithwood, Jantzi, & Steinbach, 1999). Smith and Andrews (1989) define instructional leadership using four dimensions: resource provider, instructional resource, communicator, and visible presence. Through these dimensions, the instructional leader ensures that teachers have the resources they need to effectively perform their duties, models desired behaviors of teachers, participates in professional development opportunities with the teachers, prioritizes instructional concerns, articulates clear goals for teachers, visits classrooms regularly, and is highly accessible to faculty. Elmore (2000) promotes instructional leadership as paramount to school effectiveness but warns that the base of knowledge a leader must possess in order to effectively guide teachers in curriculum, instruction, and assessment is extensive. As a result, it is recommended that instructional leadership is distributed to other members of the organization to ensure coverage of the expanse of knowledge needed is covered (Elmore, 2000).

The distribution of tasks and the changing of roles within an organization is defined by James Spillane as distributed leadership (Spillane & Sherer, 2004). Distributed leadership is described as an exchange of roles and responsibilities between leaders of an organization based on the demands of a situation (Marzano et al., 2000). This distribution of roles over various members of an organization can involve a collaborative distribution where the actions of one leader become the basis for the actions of another leader in his/her role. It can also involve collective distribution when leaders carry out actions separately, but still stay focused on a
shared goal or coordinated distribution when sequential tasks are led by different leaders (Spillane & Sherer, 2004).

**Situational Leadership ®**

Of all the leadership styles presented, Marzano et al. (2000) suggested that transformational leadership, distributed leadership, and situational leadership are the ones with the greatest impact on student achievement, since these leadership styles focus on the need for flexibility and situational awareness, areas with a high correlation to student achievement. Of the twenty-one responsibilities and day-to-day management of a school Marzano et al. (2000) include a focus on flexibility and situational awareness. These include inviting and honoring opinions regarding the management of the school, adapting one’s leadership style to the current situation, being aware of the dynamics of the daily functioning of the school, and predicting potential problems.

Flexibility is the extent to which leadership adapts decision-making to the needs of the current situation (Marzano et al., 2000). This requires the employment of different strategies based on insight into the situation at hand, and characteristics of transformational, distributed, and situational leadership (Fullan, 2007). To effectively lead with flexibility, Marzano et al. (2000) emphasizes that the actions of leadership must include continually adjusting plans in response to progress and tension, using procedures to gain input on progress and tension without creating endless discussion, and using situational leadership to continue with the progress and address the tension. Lashway (2001) explains that in collecting diverse opinions varying points of view can be considered by the leader and responses by leaders can vary to meet the needs recognized in those points of view. This would include adapting leadership styles to specific situations, being directive or nondirective as warranted by the situation, encouraging people to
share their varying points of view, and making the necessary major changes in how practices are carried out (Marzano et al., 2000). Heifetz and Laurie (2001) describe the ability of leaders to take in the scope of considerations in a situation with this analogy: “get off the dance floor and onto the balcony.” This method helps leaders to assess what is happening from a wider perspective and is especially important in the core of the situation.

Situational awareness, as described by Marzano et al. (2000), is the leader’s awareness of the present state of affairs in the school and his or her use of that information to address current problems and potential problems. This comes from a servant leadership perspective and enables the leader to discern what is happening and honestly appraise the state of the organization in the situation; it requires the leader to separate his ego from the events that are occurring (Marzano et al., 2000). With heightened awareness, the situational leader can determine what style of leadership is necessary to address the ability and willingness level of the staff within the current situation. This would enable the leader to accurately predict what could go wrong, create an awareness of the relationships occurring among the staff, and make the staff aware of the issues that may not yet have surfaced (Marzano et al., 2000).

Marzano et al. (2000), demonstrated the high correlation between flexibility and situational awareness and student achievement and emphasize, the need to focus on leadership styles where attention to flexibility and situational awareness are prevalent. The Situational Leadership ® theory developed by Hersey and Blanchard (1982) contains four different leadership behaviors that can serve flexibility and situational awareness well. These four styles of leadership are based on two aspects of behavior displayed by the leader’s followers—task behavior and relationship behavior (Bolman & Deal, 2008). Task behavior is the extent to which the leader spells out the duties, and relationship behavior is the extent to which the leader
engages in communication (Bolman & Deal, 2008). The followers’ maturity or readiness level is the parameter used in determining the situational leader style used (Hersey & Blanchard, 1982). In 1969, Hersey and Blanchard developed the Tri-Dimensional Leader Effectiveness Model of Leadership and highlighted the importance of the followers’ maturity level in a given situation to accomplish a task. At first the theory was called the Life Cycle Theory of Leadership because it was thought that leadership style would change based on the development stages of the followers (Hersey & Blanchard, 1969). The theory is also contingent on the task being carried out within the development stage and was therefore renamed Situational Leadership ® theory (Blanchard & Hersey, 1996).

Situational Leadership ® theory is based on the belief that there is no best influential style that is suitable for all situations. Therefore, to influence the activities of an individual or a group in a given situation, both the situation and the readiness levels of the individuals or group must be considered (Hersey & Blanchard, 1982). An effective leader is able to choose an appropriate leadership style as determined by the situation and his knowledge of the readiness levels or his followers (Hersey & Blanchard, 1982). How effective the the leadership is depends on how well the leader matches the style to the situation and followers’ maturity at the time and not the actual behavior of the leader (Lin, 1999). Therefore, the ability of the leader to analyze his environment and adapt his style is key to effective leadership (Hersey & Blanchard, 1989).

The use of Situational Leadership ® theory in education has been documented in a study of the relationships between teachers and students (Blanchard & Hersey, 1996). In a study conducted by Hersey et al. (1980), student performance on content exams, student enthusiasm, and student absenteeism were compared between two classes-- one in which the teacher practiced Situational Leadership ® theory and one in which the teacher did not. In the classroom
in which Situational Leadership ® theory was practiced by the teacher, students showed higher performance on the content exams, were observed to have a higher level of enthusiasm, and had lower rates of tardiness or absenteeism.

For administration working with experienced teachers, Blanchard and Hersey (1996) suggested that a delegating style of leadership would be the prevalent style. They stated that because schools are characterized by a decentralized organizational structure, delegation of responsibilities is appropriate, and therefore teachers do not need or desire much structure. While this may be the dominant leadership style expected from school administrators, deviations may occur in various situations-- during the early part of the school year, during a curriculum change, or with a new staff member (Blanchard & Hersey, 1996).

**Telling, Selling, Participating, and Delegating Leadership Styles**

In the Situational Leadership ® theory, maturity levels of followers move from low to moderate to developed, resulting in coordinating leadership styles that include directing/telling, coaching/selling, supporting/participating, and delegating (Blanchard et al., 1991). The four leadership styles shown in Figure 2.1 describe the leadership behaviors that occur as coordinated with the maturity levels of the followers (Blanchard et al., 1991). Directing or Telling (S1) requires high direction and low supportive behavior on the part of the leader, because the followers’ maturity level is low to moderate. In this style, it is necessary to provide specific instructions and close supervision of performance (Blanchard et al., 1991). This style is appropriate when the followers need direction because their ability and willingness is low. A leader with this style is seen as one who tells his followers what to do, where to do it, and how to do it. He will often define roles for his followers and provide incremental instructions on what
needs to be done. Communication within this relationship predominantly flows in one direction, from the leader to the follower (Blanchard & Hersey, 1996).

The next leadership style, Coaching or Selling (S2), requires high direction and high support for followers, because the followers are low moderate maturity or readiness level. Followers under this leadership style are those who are willing and confident but are still unable to carry out the task. This establishes the need for leaders to explain decisions and provide opportunity for clarification (Blanchard et al., 1991). Because the followers are trying, it is important for selling leaders to be supportive of the followers’ motivation and commitment. This style of leadership is similar to the telling style because it requires leaders to provide information on what to do, where to do it, and how to do it. The critical difference between the telling and selling styles is that the selling style also requires leaders to provide information on why followers are being asked to carry out a task. While there is two-way dialogue here, the leader is still providing the information, but the followers typically ask questions for clarification (Blanchard & Hersey, 1996).

With the Participating or Supporting (S3) leadership style, leadership behavior requires low direction and high support of high moderate maturity or readiness levels. These leadership behaviors include sharing ideas with followers and facilitating their involvement in making decisions (Blanchard et al., 1991). Followers who respond to this style of leadership are those who are able to carry out a task but may need an opportunity to gain confidence in doing it on their own. Sometimes followers require a leader to use the participating style because their motivation is slipping. The major role of a participating leader is to provide encouragement and to communicate by asking for input, actively listening, allowing followers to make some
decisions, supporting risk-taking, and complementing the efforts of the followers (Blanchard & Hersey, 1996).

The final leadership style, Delegating (S4), includes both low direction and support and involves leaders turning over responsibility for decisions and implementation to followers. Followers under this leadership style have a high maturity or readiness level and are fully developed (Blanchard et al., 1993). They are characterized as being able, willing, and confident. As a result, they feel comfortable without the leader providing direction. Leaders with this leadership style tend to look at the big picture and delegate the specific tasks to the followers. They entrust followers with making decisions but then they monitor activities of the followers, reinforce the desired results, and make themselves accessible (Blanchard & Hersey, 1996).

Hersey and Blanchard (1982) explain that because human resource is the most valuable resource to an organization, it is crucial for leaders to identify the maturity level of the followers in the organization to support and develop their readiness, willingness, and commitment to the task at hand. They also explain that there is no “best way” to influence followers without first knowing the readiness, willingness, and commitment of the organization’s followers.

In Management of Organizational Behavior (1996), Blanchard and Hersey outline the decisions that need to be made in order to utilize the most appropriate of the four leadership styles:

1. Decide on what area of the followers’ activities you would like to influence.
2. Diagnose the readiness of the followers to accomplish the activity.
3. Decide which of the four leadership styles would be most appropriate to use with the followers.
4. Assess the outcomes to determine if the results matched the expectations.
5. Follow-up as needed.

Based on the situational leadership theory, Hersey and Blanchard (1982) developed the Leader Effectiveness and Adaptability Description (LEAD). This instrument measures dominant style of leadership of an individual. To identify leader behavior, the LEAD instrument examines leader behavior from the leader’s own perspective and from the perspective of the leader’s followers (Blanchard et al., 2013). LEAD Self instrument is used to measure the leadership behavior one portrays when he or she is engaged in attempts to influence the actions and attitudes of other individuals. This instrument measures the self-perceptions of how an individual behaves as a leader (Blanchard et al., 2013).

The LEAD instrument has been used widely by many Fortune 500 companies, such as Bank of America, Caterpillar, IBM, Mobil Oil, Union 76, and Xerox (Blanchard et al., 2013). The strongest of these studies was in 1974 with Xerox Corporation. Wang and Knight (1991) discussed that the 1974 study revealed that highly effective managers knew more about the situational leadership theory and used it more than less effective managers. It also showed that there was a strong correlation between job satisfaction and job performance and the appropriate use of a leadership style (Wang & Knight, 1991). Several researchers concluded that this finding could be applied to educational research producing conclusions that a flexible and balanced use of task and relationship behaviors was associated with higher school productivity and teachers’ job satisfaction (McMurray & Bentley, 1987; Miller, 1983). In 1980, Wyant found that the adoption of appropriate leadership styles for accurately diagnosed situations was a characteristic of successful principals (McMurray & Bentley, 1987). Through another study, McMurray and Bentley (1986) found that principals with high effectiveness and flexibility scores were more capable of taking teachers’ level of maturing into consideration when assigning teachers to jobs.
Accountability for School Performance

The measurement of effectiveness in schools has been carried out through the use of state assessments, and accountability for that effectiveness was established by the Elementary and Secondary Education Act (ESEA) of 1965 (U.S. DOE, 2013). The intent of the ESEA is to provide equal access to quality education for all children in the United States and has been reauthorized by Congress seven times (U.S. DOE, 2013). In 2001, it was reauthorized through the No Child Left Behind (NCLB) Act (U.S. DOE, 2013). NCLB continued the intent to provide equal opportunity to all children and focused on achievement gaps impacting low income students, English Language Learners, students with disabilities, and minority students (U.S. DOE, 2013). It highlighted that high expectations should be held for all students and held schools accountable for achievement results (U.S. DOE, 2013).

In The opportunity of ESEA flexibility: Protecting students and supporting local education solutions (U.S. DOE, 2013), the United States Department of Education states that NCLB over-identified schools as failing even when they showed growth. This overstatement hindered school reform and innovation, demoralized educators, and confused the public’s understanding of what defined a quality school (U.S. DOE, 2013). In recognition of this, the US Department of Education created ESEA flexibility. ESEA flexibility plans have been implemented since 2012-2013 in forty-three states, the District of Columbia, and Puerto Rico (U.S. DOE, 2013). The ESEA flexibility requires that states adopt college and career readiness standards, develop differentiated systems of school recognition and accountability, support schools in their areas of need, and establish effectiveness ratings, support systems, and evaluation methods for teachers and principals while allowing districts and states to develop local solutions to these requirements (U.S. DOE, 2013).
In states with ESEA flexibility, school and student accountability are based on growth and progress rather than absolute performance on state tests. This growth data is then used to make performance distinctions among schools in terms of how well they are meeting college and career readiness standards (U.S. DOE, 2013). In the analysis of this growth data, achievement gaps between groups of students within the same school and district are determined and improvement strategies are implemented based on the severity of those achievement gaps (U.S. DOE, 2013). Action is required where subgroups continue to fall short of performance targets for all students in order to ameliorate our nation’s lowest performing schools.

**New Jersey School Performance Reports**

On February 9, 2012, the State of New Jersey was granted ESEA flexibility through a No Child Left Behind Waiver. In New Jersey, the performance targets required under ESEA flexibility are measured by an annual New Jersey Performance Report that determines state, district, school, and subgroup targets, and whether or not they were met (NJDOE, 2012a). Targets were established in the areas of Academic Achievement, College and Career Readiness, and Student Growth. Figure 2.2, shows the percent of targets met, comparison to peer schools, and comparison to the state as a whole for each area.

Academic Achievement includes a measurement of students’ performance in language arts literacy and in math. For elementary and middle schools, this includes measures of the school’s proficiency rate on both the Language Arts Literacy and Math sections of the New Jersey Assessment of Skills and Knowledge (NJASK). A proficiency rate is calculated by summing the count of students who scored either proficient or advanced proficient on the assessment and dividing by the count of valid test scores. The proficiency rate is measured for the entire school in language arts literacy and mathematics and included as Schoolwide
Performance. That rate is then compared to the rates in peer schools and to then to the rates in the state as a whole as shown in Figure 2.3. Finally, the rate is compared against the New Jersey Department of Education targets listed in the NCLB Waiver (NJDOE, 2013b).

<table>
<thead>
<tr>
<th>Performance Areas</th>
<th>Peer Percentile</th>
<th>Statewide Percentile</th>
<th>Percent of Targets Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Achievement</td>
<td>49</td>
<td>13</td>
<td>8%</td>
</tr>
<tr>
<td>College and Career Readiness</td>
<td>29</td>
<td>8</td>
<td>0%</td>
</tr>
<tr>
<td>Student Growth</td>
<td>68</td>
<td>51</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Figure 2.2.** NJ performance report: Performance areas. Reprinted from *New Jersey School Performance Report*, by NJDOE, 2013, retrieved from http://www.state.nj.us/education/pr/1213/01/011310038.pdf. Copyright 2013 by NJDOE. Reprinted with permission.

<table>
<thead>
<tr>
<th>Academic Achievement Indicators</th>
<th>Schoolwide Performance</th>
<th>Peer Percentile</th>
<th>Statewide Percentile</th>
<th>Percent of Targets Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJASK Language Arts Proficiency and above</td>
<td>46%</td>
<td>55</td>
<td>14</td>
<td>0%</td>
</tr>
<tr>
<td>NJASK Math Proficiency and above</td>
<td>64%</td>
<td>42</td>
<td>12</td>
<td>17%</td>
</tr>
<tr>
<td>SUMMARY - Academic Achievement</td>
<td></td>
<td>49</td>
<td>13</td>
<td>8%</td>
</tr>
</tbody>
</table>

**Figure 2.3.** NJ performance report: Academic achievement. Reprinted from *New Jersey School Performance Report*, by NJDOE, 2013, retrieved from http://www.state.nj.us/education/pr/1213/01/011310038.pdf. Copyright 2013 by NJDOE. Reprinted with permission.
The NCLB Waiver sets targets in one of two ways. The first method is to set targets in annual equal increments so that within six years the percentage of non-proficient is reduced by half. For example, if the non-proficient students have a proficiency rate of 30 percent, subtracting 30 from 100 would indicate a 70 point gap. That gap is then divided in half to determine the target for the sixth year. In this case it would required a gain of 35 percentage points \((70 / 2 = 35)\) (NJDOE, 2012a). As performance approaches 100 percent in the highest performing schools and subgroups, performance targets arranged in increments will be hard to meet; therefore those schools could meet expectations by either reaching their increments toward the performance targets or a proficiency rate of 90 percent. This rate will be increased to 95 percent in 2015 (NJDOE, 2012a).

In the area of College and Career Readiness, the degree to which students are demonstrating behaviors that are indicative of future attendance and/or success in college and careers is measured. For all elementary and middle schools, this includes a measurement of how many students are chronically absent (NJDOE, 2012a). A chronically absent student is a student who was not present for any reason, other than observation of a religious holiday, the visiting of colleges for the purposes of applications, and Take Your Child to Work Day, for more than 10% of the total days possible for that individual student (NJDOE, 2013b). For schools with middle school grades, it also includes a measurement of how many students take Algebra I.

As shown in Figure 2.4, schoolwide performance represents the percentage of students in the school who met the College and Career Readiness indicator. Peer percentile and statewide percentile are determined through a comparison to the school performance rates in peer schools and the state respectively. In NJ the statewide target for Algebra I is 20 percent, and the statewide target for chronic absenteeism is 6 percent (NJDOE, 2013b).
The final area, Student Growth, measures the performance of students from one year to the next on the NJASK in Language Arts Literacy and Math when compared to students with a similar history of performance on NJASK. This area of the performance report utilizes the Student Growth Percentile (SGP). SGP is a measure of how students progressed in grades 4 through 8 in NJ ASK Language Arts Literacy and Math when compared to other students with a similar NJ ASK test score history. As shown in Figure 1.5, the school’s median growth score in either Language Arts Literacy or Math for all students in the school is represented under Schoolwide Performance. The Peer Percentile score indicates how the school’s growth performance compares to its group of peer schools, while the Statewide Percentile indicates how a school compares to the state as a whole. Whether the school met the Student Growth Indicator targets is determined by comparing the Schoolwide Performance to the Statewide Target of 35. This target is established under the New Jersey NCLB Waiver for ESEA flexibility (NJDOE, 2013b).

**New Jersey Peer School Groups**

In a review of any of the factors in the New Jersey School Performance Report, the effectiveness of schools is reported through percentages of students meeting performance targets.
established by The State of New Jersey and through a comparison of those percentages to peer schools. The NJ Department of Education groups schools from across the state as peers based on whether they have similar grade level configurations and on whether they have similar demographic characteristics, as measured by the percentage of students enrolled in free/reduced lunch programs, limited English proficiency or special education programs (NJDOE, 2013b). The purpose of establishing peer groups is to use data-driven decision-making to improve student performance in the state. Based on the data and decisions associated with that data, school performance is benchmarked by comparing student performance on state assessments (NJDOE, 2013c). The use of peer schools began in 2012 and transitioned student performance data comparisons from the District Factor Group (DFG) comparisons formerly used. According to the NJDOE Peer School Methodology White Paper (2013c), the transition to comparisons based on school peer groups came as a result of the disadvantages seen in District Factor grouping.

District Factor Groups were developed in 1975 to compare student performance on state assessments in demographically similar school districts across the state. The demographic data used to determine school district’s DFG was based on:
- percent of adults with no high school diploma in the district,
- percent of adults with some college education in the district,
- the occupational status of adults in the district,
- the unemployment rate in the district,
- the percent of district individuals in poverty, and
- the median family income within the district (NJDOE, 2004).

NJDOE reports that the DFG methodology is an accurate reflection of the community within the district as it is based on decennial census data; however, it does have some disadvantages. The DFG of a district does not reflect the student population in the school district since it relies on data collected regarding the adults living in the district, including adults who do not have children in the district’s schools. It is also based on the broad district community rather than the community of the local school and misses the significant differences that exist among schools within the same district (NJDOE, 2013c).

As a result of these disadvantages, the NJDOE, under the NCLB Waiver transitioned comparison data to peer school groups. Peer school groups are established through a statistical method called propensity score matching. This statistical analysis allows researchers to develop comparison groups by comparing various factors within a school to the same factors in other. This method assures that the data being reported within a school is a result of the school’s proceedings and not influenced by demographic data such as the percent of free/reduced lunch, percent of Limited English proficiency, and percent of special education students within the district (NJDOE, 2013c). This leads to the establishment of peer comparison groups of up to thirty eligible schools. Eligibility is based on whether a school produces comparative data through state assessments like the NJASK or the High School Proficiency Assessment (HSPA)
Based on data from the NJDOE School Directory Download: Public Schools, of the 2,527 schools in New Jersey, 2,195 schools are eligible for propensity score matching (November, 2012).

A school’s peer group is unique for every school. This means that school A may have school B in its peer group but school B may not have school A in its peer group. It also means that both school A and B could have school C in their peer groups, but school C may not have either of them in its peer group. Ultimately, this means that the peer groups are not stable, like DFGs, and may change from year to year as factors within a school change (NJDOE, 2013c).

**New Jersey Reward, Focus, and Priority Schools**

To receive flexibility from provisions of the Elementary and Secondary Education Act (ESEA), the New Jersey Department of Education developed and implemented a state system of differentiated recognition, accountability, and support for all Title I schools in the state. Those systems must use data for all students and disaggregate these data for all ESEA subgroups (i.e., race/ethnicity, special education students, English language learners, students eligible for free/reduced lunch, etc.) to measure

1. student achievement in reading/language arts and mathematics;
2. graduation rates; and
3. school performance and progress over time (NJDOE, 2014a).

The New Jersey Department of Education’s system of differentiated recognition, accountability, and support created incentives for high performing schools and included differentiated interventions and support to improve student achievement and graduation rates, and to close achievement gaps for all subgroups. This system resulted in three categories of schools in New Jersey: Priority Schools, Focus Schools, and Reward Schools. Categorization as
one of these types of schools was determined by first ranking the Title I schools and establishing cut-offs. Non-Title I schools were categorized based on similarities to the Title I schools in each of the groupings. As a result of changes to Title I schools in each of the three designations, the characteristics of the group might change and therefore result in re-categorization of the non-Title I schools. (NJDOE, 2014a).

Priority Schools are those schools that have been identified as among the lowest performing five percent of Title I schools in New Jersey over the past three years. They also include any non-Title I school that has met that same criteria. Schools that have been designated as Priority Schools are schools with proficiency rates in language arts and mathematics of 31.6% or lower over three years. This category comprises the schools with the lowest school-wide proficiency in New Jersey. Schools that are part of the School Improvement Grant program are also considered Priority Schools. There are 75 Priority Schools in New Jersey (NJDOE, 2014a).

Schools that are categorized as Focus Schools include schools that have high school graduation rates that were lower than 75% as of 2011. Focus schools are also those schools with the largest within-school proficiency gaps between their highest performing subgroup and the combined proficiency of the two lowest performing subgroups. The proficiency gap between these subgroups is 43.5 percentage points or higher. Schools deemed as Focus Schools may also be schools whose two lowest performing subgroups have an overall proficiency rating of 29.9% or lower. There are 183 focus schools in New Jersey (NJDOE, 2014a).

Reward schools are those schools with outstanding student achievement or growth over the past three years. The 112 Focus Schools in New Jersey are the schools with the highest school-wide proficiency, subgroup proficiency, and graduation rates in the state. Reward schools are defined as schools in which each eligible subgroup ranks in the top 10% of that
subgroups’ performance across the state. They are also defined as having an overall school proficiency level greater than 90%, and they have high levels of student growth as measured by their median Student Growth Percentiles (SGP) (NJDOE, 2014a).

The proficiency rates used to measure whether a school is a priority, focus, or reward school are based on three-year averages of state assessment data. The average for each school is determined using the performance of every student tested on the NJASK, HSPA, or Alternate Proficiency Assessment (APA). In addition to these proficiency rates, designation as a Reward, Focus or Priority School takes into account that schools can exhibit high rates of growth. At the elementary and middle school level, this growth is determined based on each school’s and subgroups’ Student Growth Percentile (SGP) over the past three years taking the assessment (NJDOE, 2014a).

**Summary**

School effectiveness research has emerged from almost non-existence to a central station in the educational discourse that is taking place across the nation. From the position fifty years ago as concluded by the Coleman et al. (1966) and Jencks et al. (1972) studies, that the fate of student achievement lay mainly in the elements of a student’s home, there is now a widespread belief that schools can have a major effect on children’s academic achievement, that there are identifiable factors in schools that can positively influence student learning, and that the task of educational policies is to improve all schools in general. This belief has become so firmly held that severe accountability measures, such as those outlined within the NCLB Act, have been installed to ensure that those school-based factors are being maximized to bring about the greatest impact on student achievement. In New Jersey, these accountability measures, student achievement as measured on standardized tests, college and career readiness as measured
through course work and attendance rates, and student growth as measured by improvements on standardized tests, are reported out to the public in each school’s New Jersey School Performance Report.

Among the factors that appear as having the greatest impact on student achievement, principal leadership is reported, in educational research, as having a positive and significant effect. This, coupled with the movement of student performance results being reported on the district level to the school level, indicates that principal leadership is an area of focus when it comes to the academic achievement of students. The focus on principal leadership in an era of educational accountability is, ultimately, the reason for this study. With such accountability placed on the principal to influence the achievement of students at the school level, it is important to examine the characteristics, namely the leadership style, of principals who are meeting those accountability measures. With an understanding of the prevalent leadership styles that characterize principals in the highest performing schools within similar socioeconomic peer groups, hiring practices of principals and school leadership training can be informed with the intent of positively influencing student achievement.
CHAPTER 3: METHODOLOGY

Introduction

This study was concerned with principals’ perceptions of their own leadership style as it relates to the performance of students as reported on the New Jersey School Performance Report. Included in this section is detailed information about the setting for the study, the population from whom the data were collected, the instruments used, and the processes by which data were collected and analyzed. It is designed to add to the body of research in this area and provide principals and other district leaders with the data necessary to make recommendations for policy, practice, and future research.

The chapter is organized into the following subsections: Rationale for the Study, Subjects, Design Overview, Data Sampling Methods, Data Collection Methods, Data Analysis Methods, and Summary.

Rationale for the Study

The focus of this study was to describe and evaluate how principals’ perceptions of their leadership styles relate to various indicators of school effectiveness described in Chapter II of this study: peer school rankings in Academic Achievement, College and Career Readiness, Student Growth and identification as a reward, focus, or priority school. The study examined principals’ perceptions of their own leadership behaviors within the Situational Leadership ® theory as measured through the use of the Leader Effectiveness and Adaptability Description (LEAD) Self survey. The study also utilized measurements of school effectiveness as reported in the 2013-2014 New Jersey School Performance Reports for each principal’s respective school.

Since the 1970s school-level leadership has been highlighted by the federal government as an important aspect of the effectiveness of a school (U.S. Senate Committee on Equal
Numerous studies have supported this notion and presented school-level leadership as a critical factor in the academic achievement of students. In 1979, Bookover and Lezotte correlated principal leadership with effective classroom practices. In 1983, Purkey and Smith reported a correlation between principal leadership and teacher practice. Duke and Canaday (1991) reported a similar correlation between principal leadership and students’ opportunity to learn. The 2005 study conducted by Marzano et al. reported a .25 correlation between principal leadership behavior and student achievement. Marzano et al. (2005) also reported in 2005 that of the 5,000 studies done on principal leadership, only 69 of them quantitatively addressed the relationship between principal leadership and student achievement. As a result of the consistent reporting on the correlation between principal leadership and student achievement, the principal is a focus of this study.

In addition, an examination of the factors outlined in the correlation between principal leadership and student achievement describe the behaviors carried out by the school principal, as opposed to other educational leaders. The U.S. Senate Committee Report on Equal Education Opportunity (1970) described the most influential person in the school as the one who is responsible for all activities that occur at the building level, has an influence in setting the tone of the school and climate for teaching, has an influence on the level of professionalism and morale of the teachers, holds a high degree of say in the level of concern stakeholders have in student performance, and serves as the main link between the community and the school. In 2005, Marzano et al. quantified, as outline in Table 2.2, the correlation between the responsibilities of the principal and student achievement, showing the degree of impact principals can have on student achievement through those responsibilities. Again, due to the high degree of correlation
between behaviors that describe a principal and student achievement, principals are the focus of this study.

The elementary school is an additional focus of this study since it is the environment in which students are first exposed to the concept of the academic achievement from which student growth is measured. The New Jersey School Performance Report defines the parameters of school effectiveness by outlining those measures schools are held accountable for under the ESEA flexibility waiver to the No Child Left Behind Law (NJDOE, 2012a). Targets are established in the areas of Academic Achievement, College and Career Readiness, and Student Growth. All of these measures begin in grade three and continue through grade eight.

With accountability measures and standards of performance being established at the elementary level and extrapolated from there into the middle and high school grades, the elementary principal can serve as a powerful agent of change. In elementary schools, principals are frequently the only administrators who work directly with teachers and students on a regular basis. At the middle school and high school levels, a variety of other school-level leaders may be involved in the decision-making process, directly influencing academic achievement and school effectiveness. These can include supervisors, vice principals, deans, and guidance counselors. With a known correlation between principal leadership and student achievement and high degrees of accountability beginning at the elementary school level, this study focuses on principal leadership at the elementary level.

Subjects

The subjects of this study are principals of eligible general education elementary schools in New Jersey. As defined by the NJDOE (2013c) Peer School Methodology White Paper, an elementary school is defined by the grade spans included in the school. Figure 3.1 lists and
defines the grade levels that must be included in a school for it to be labeled an elementary school.

An eligible school is one that produces comparative data through state assessments like the NJASK or HSPA (NJDOE, 2013c). The grade spans that were excluded as ineligible for the elementary school category were those schools that were ungraded, had no students reported, or contained some combination of only Pre-Kindergarten through grade 2 (NJDOE, 2013c). The
New Jersey Department of Education reports 1,112 eligible elementary schools in New Jersey (NJDOE, 2013c). The schools will represent all DFG groupings as characterized by the New Jersey Department of Education to account for socioeconomic differences, and the schools will cover all 21 counties to help account for geographical location.

**Design Overview**

The research was a descriptive non-experimental (Johnson & Christensen, 2012) quantitative and qualitative study (survey) to investigate the principals’ perceptions of their own leadership behavior within one of the four behaviors described by the Situational Leadership ® theory. A web-based survey instrument, entitled Leader Effectiveness and Adaptability Description (LEAD) Self, was obtained with permission from The Center for Leadership Studies. Permission was granted via e-mail contact with Brandy Archambeault, Contract Manager for The Center for Leadership Studies, and the submission of an Academic Request for Copyright Permission. The survey was developed by Hersey and Blanchard (1985) to measure the four leadership styles: Delegating, Supporting, Coaching, and Directing. The survey presented twelve scenarios from which participants would select from four leadership decisions. The LEAD Self instrument was re-validated by The Center for Leadership Studies through the services of an independent research firm, Advantis Research & Consulting (Center for Leadership Studies, 2014).

The intent of this research is to provide an analysis of principals’ perceptions of their own leadership styles compared to the performance of their school, as reported in the NJ School Performance Report. Performance will be measured by peer rankings in Academic Achievement, College and Career Readiness, Student Growth and by identification as a reward, focus, or priority school. The results will evaluate correlation between the four styles of
leadership within the Situational Leadership ® theory and the principals’ school rankings within their peer groups and to their school’s status as reward, focus, or priority schools. The results will provide additional data for researchers to evaluate how leadership style affects school effectiveness and lead to suggestions and sound reasoning for conducting a controlled experiment.

**Data Sampling Methods**

The researcher identified principals of eligible general education elementary schools in New Jersey. As defined by the NJDOE (2013c) *Peer School Methodology White Paper*, an elementary school is defined by the grade spans included in the school. Figure 3.1 lists and defines the grade levels that must be included in a school for it to be labeled an elementary school. The study took place in New Jersey where there are 1,112 eligible elementary schools (NJDOE, 2013c). In selecting the sample size, Gay (1996) suggests the following:

For small populations (N<100), there is little point in sampling. The entire population should be surveyed.

If the population is about 500, 50% of the population should be sampled.

If the population size is around 1,500, 20% should be sampled.

Beyond a certain point (N=5,000 or more), the population size is almost irrelevant, and a sample size of about 400 will be adequate.

The researcher obtained a listing of all eligible elementary schools from the New Jersey Department of Education, and sorted this group alphabetically first by county and then alphabetically by district. The researcher then eliminated each school whose principal was not leading the school for the full school year prior to and the school year of the 2013-2014 NJ School Performance Report. Principals who were not leading the school in the 2012-2013 and
2013-2104 school year were eliminated from the list prior to sampling to ensure a relationship between the peer rankings of the school on the NJ School Performance Report and the leadership style could be made. The determination of which schools to leave on the list was made by referencing the names of the principals in each school on the NJ School Directory for 2012-2013 and 2013-2014. Of the original 1,112 eligible schools 953 schools had a principal in place for 2012-2013 and 2013-2014. The researcher contacted all 953 elementary school principals via e-mail. The email contained an implied consent for online surveys and a link to the LEAD Self instrument.

Data Collection Methods

Data for this study was collected through surveys returned by eligible elementary principals across New Jersey. Participation in the on-line survey was completely voluntary. The on-line survey, entitled LEAD Self, was a survey developed by Hersey and Blanchard in 1985 and updated and re-validated by Advantis Research and Consulting in 2014. A measurement model was performed to test the validity and reliability of the LEAD scale. Based on its construct, the LEAD Self does not allow for standard testing of validity and reliability (Setley, Dion, & Miller, 2013). In 2001, the Center for Promising Ideas, USA, accumulated and analyzed LEAD data gathered from more than 20,000 studies to determine the reliability of the model (Setley et al., 2013). An analysis of the instrument revealed a composite construct reliability score of .896. According to Setley et al. (2013), an instrument reliability score above Chronbach’s Alpha of .60 is considered reliable.

A link to the on-line survey was sent to the principals of eligible elementary schools in New Jersey, along with the implied consent for online surveys. The email containing the on-line survey and implied consent letter was sent to the principals on January 5, 2015 and the
participants were asked to complete the survey by January 30, 2015. A second email was sent as a reminder to the participants two weeks after the initial mailing to ensure as many participants as possible. Because the correlation between each principal’s leadership style and his school’s NJ School Performance Report needed to be determined, the survey was not conducted anonymously. Once the survey results were received, the researcher coded the results with a number to match the coded number of the school. The coding of the schools was completed randomly; as each school’s name was drawn from a pool, it was assigned a number which was recorded. The number assignments were maintained on a spreadsheet and kept separate from the other research files on a password protected computer. The researcher had sole access to the number assignments. All representations of principals and schools presented in the study were completed through the use of these numeric codes.

Data on peer rankings for Academic Achievement, College and Career Readiness, Student Growth, Overall Peer Ranking, and status as a reward, focus, or priority school will be collected from NJ School Performance Reports posted on New Jersey Department of Education website. These data will be coded to match the eligible elementary school and principal.

**Data Analysis Methods**

The study was a nonexperimental research with a cross-sectional explanatory design (Johnson & Christensen, 2012). Therefore, the principals whose data was being compared were not manipulated or affected in any way by the study. Upon receipt of the completed surveys, the data analysis was performed using a variety of statistical procedures through the Statistical Package for the Social Sciences (SPSS Advanced Statistics).
The data was obtained from the principals’ responses to the on-line survey and from the New Jersey School Performance Reports available on the New Jersey Department of Education website. The data was disaggregated into groups to address each research questions individually:

1. Which is the dominant leadership style, as perceived by principals of themselves, within Situational Leadership ® theory?

2. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of Academic Achievement within peer groups on the New Jersey School Performance Report?

3. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of College and Career Readiness within peer groups on the New Jersey School Performance Reports?

4. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of Student Growth within peer groups on the New Jersey School Performance Report?

5. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with designation as a New Jersey Reward, Focus, or Priority School within peer groups?

All data was evaluated and used to determine if the following null hypothesis for this study should be accepted or not accepted: There is no statistically significant correlation between the style of leadership within Situational Leadership ® theory, as perceived by principals of themselves, and peer group ranking on the NJ School Performance Report or designation as a New Jersey Reward, Focus, or Priority School.
To answer Research Question 1, description of sample and descriptive statistics, including frequency, were used to examine the dominant style of leadership reported by elementary school principals.

To answer Research Question 2, description of sample, descriptive statistics including frequency, a Pearson correlation analysis, and a simple regression analysis were used to examine to what degree elementary principals’ perceptions of their leadership styles correlate with and are predictors of peer ranking in Academic Achievement on the NJ School Performance Report. The researcher used $p \leq .05$ as the level of significance for rejecting the null hypothesis.

To answer Research Question 3, description of sample, descriptive statistics including frequency, a Pearson correlation analysis, and a simple regression analysis were used to examine to what degree elementary principals’ perceptions of their leadership style correlate with and are a predictor of peer ranking in in College and Career Readiness on the NJ School Performance Report. The researcher used $p \leq .05$ as the level of significance for rejecting the null hypothesis.

To answer Research Question 4, description of sample, descriptive statistics including frequency, a Pearson correlation analysis, and a simple regression analysis were used to examine to what degree elementary principals’ perceptions of their leadership styles correlate with and are predictors of peer ranking Student Growth on the NJ School Performance Report. The researcher used $p \leq .05$ as the level of significance for rejecting the null hypothesis.

To answer Research Question 5, description of sample, descriptive statistics including frequency, a Pearson correlation analysis, and a simple regression analysis were used to examine to what degree elementary principals’ perceptions of their leadership styles correlate with and are predictors of identification as a reward, focus, or priority school on the NJ School Performance Report. The researcher used $p \leq .05$ as the level of significance for rejecting the null hypothesis.
Summary

In Chapter III, the researcher described the design and methods of the study by discussing the rationale for the study, the subjects, design overview, the data sampling methods, the data collection methods, and the data analysis methods. Chapter IV will present the collected data along with an analysis of the data through the use of descriptions of the sample, descriptive statistics, frequency distributions, and Chi-square analysis. These analyses will determine the correlation between principals’ perceptions of their leadership styles and peer rankings on the NJ School Performance Report.
CHAPTER 4: PRESENTATION ANALYSIS OF FINDINGS

Introduction

The purpose of this study was to identify the relationship between principals’ perception of their own leadership style within the Situational Leadership ® theory and the effectiveness of the school they lead, as measured by peer rankings and status on the New Jersey School Performance Report. Although many different factors can contribute to the performance of students within a school, this study will focus on the impact of principal leadership, a significant factor in student achievement (Marzano et al., 2005), on the effectiveness of the school. The dependent variables were peer school rankings on the NJ School Performance Report, in the areas of Academic Achievement, College and Career Readiness, Student Growth and identification as a reward, focus, or priority school. The independent variables were the perceptions of principals of their own leadership style within the Situational Leadership ® theory.

The following null hypothesis was tested in this study: There is no statistically significant correlation between the style of leadership within Situational Leadership ® theory, as perceived by principals of themselves, and peer group ranking on the NJ School Performance Report or designation as a New Jersey Reward, Focus, or Priority School.

In addition to testing the null hypothesis, the researcher’s goal is to answer the following research questions:

1. Which is the dominant leadership style, as perceived by principals of themselves, within Situational Leadership ® theory?
2. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of Academic Achievement within peer groups on the New Jersey School Performance Report?

3. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of College and Career Readiness within peer groups on the New Jersey School Performance Reports?

4. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of Student Growth within peer groups on the New Jersey School Performance Report?

5. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with designation as a New Jersey Reward, Focus, or Priority School within peer groups?

These research questions will be answered through the analysis of the data collected from surveys given to a sample of elementary school principals. This chapter first presents a description of the sample and then a summary analysis of the data addressing each of the research questions.

**Description of the Sample**

Of the 953 surveys sent to principals of elementary schools throughout New Jersey, 196 (20.6%) responded, and of this total, 54.6% were females and 45.4% were males. This compares favorably to the actual gender breakdown of elementary principals in New Jersey, as 46.2% are female and 53.8% are male, presented in Table 4.1. A Chi-square test was performed to determine whether the respondents in this study differed in a statistically significant way from
the population of eligible New Jersey Elementary Principals with respect to gender. Results of the Chi-square test indicates that there is no significant difference between the respondents in this study and total population, as gender had a Chi-square value of 2.000, df = 1, and p value of $\leq .157$.

Table 4.1

**Gender of Responding Principals**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Respondents</th>
<th>New Jersey population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>Female</td>
<td>107</td>
<td>54.6</td>
</tr>
<tr>
<td>Male</td>
<td>89</td>
<td>45.4</td>
</tr>
<tr>
<td>All</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As shown in Table 4.2, with regards to the District Factor Group (DFG) of the responding principals, 11 (5.6%) of the principals work in a school with a DFG ranking of A, 23 (11.7%) of the principals work in a DFG ranking of B, 22 (11.2%) of the principals worked in a DFG ranking of CD, 16 (8.2%) of the principals worked in DFG ranking of DE, 37 (18.9%) of the principals worked in DFG ranking of FG, 44 (22.4%) of the principals worked in a DFG ranking of GH, 36 (18.4%) of the principals worked in a DFG ranking of I, and 7 (3.6%) of the principals worked in a DFG ranking of J. This compares favorably to the distribution of District Factor Groups reported by the New Jersey Department of Education (2009), as the NJDOE reports 35 (6.1%) of the school district in New Jersey with a DFG of A, 78 (13.4%) of the school districts in New Jersey with a DFG of B, 75 (13.2%) of the school districts in New Jersey with a DFG of CD, 100 (17.5%) of the school district in New Jersey with a DFG of DE, 88 (15.4%) of
Table 4.2  
*School District Factor Group (DFG) of Responding Principals*

<table>
<thead>
<tr>
<th>DFG</th>
<th>N</th>
<th>Percent</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>11</td>
<td>5.6</td>
<td>35</td>
<td>6.1</td>
</tr>
<tr>
<td>B</td>
<td>23</td>
<td>11.7</td>
<td>78</td>
<td>13.7</td>
</tr>
<tr>
<td>CD</td>
<td>22</td>
<td>11.2</td>
<td>75</td>
<td>13.2</td>
</tr>
<tr>
<td>DE</td>
<td>16</td>
<td>8.2</td>
<td>100</td>
<td>17.5</td>
</tr>
<tr>
<td>FG</td>
<td>37</td>
<td>18.9</td>
<td>88</td>
<td>15.4</td>
</tr>
<tr>
<td>GH</td>
<td>44</td>
<td>22.4</td>
<td>75</td>
<td>13.2</td>
</tr>
<tr>
<td>I</td>
<td>36</td>
<td>18.4</td>
<td>104</td>
<td>18.2</td>
</tr>
<tr>
<td>J</td>
<td>7</td>
<td>3.6</td>
<td>15</td>
<td>2.6</td>
</tr>
<tr>
<td>All</td>
<td>196</td>
<td>100.0</td>
<td>570</td>
<td>99.9</td>
</tr>
</tbody>
</table>

the school districts in New Jersey with a DFG of GH, 104 (18.2%) of the school districts in New Jersey with a DFG of I, and 15 (2.6%) of the school districts with a DFG of J.

A Chi-square test was performed to determine whether the respondents in this study differed in a statistically significant way from the population of New Jersey Elementary Principals with respect to District Factor Group (DFG). Results of the Chi-square test indicates that there is no significant differences between the respondents in this study and the total population, as DFG has a Chi-square value of 56.000, df=49, and p value of ≤ .229.

In summary, 20.6% of eligible principals responded to the LEAD self instrument from January 6, 2015, through January 30, 2015. The principal respondents were those who have been leading the school from which the 2013-2014 New Jersey School Performance Reports
were obtained, during, at least, the 2012-2013 and 2013-2014 school year. The principal respondents also resembled the larger population of elementary principals in New Jersey in terms of District Factor Group and gender, as neither of these response groups were found to be statistically different from the total population in New Jersey. Therefore, it is reasonable to conclude that there is no obvious respondent bias, and the sample is largely representative of the population.

**Findings for Research Question 1**

The first research question examined which leadership style within the Situational Leadership © theory, as perceived by principals of themselves, is the dominant style, among NJ elementary principals. In order to assess principals’ perception of their own leadership style each principal’s individual profile from the LEAD Self instrument was used to identify their primary style. The principals’ responses to the twelve scenarios presented in the LEAD Self instrument provided a profile describing the primary perceived leadership of the individual. The possible styles included participating, selling, delegating, and telling. The results, as reported in Table 4.3, show that 46.9% of elementary principals perceive their own leadership style to be the selling style, 34.7% perceived their style to be the participating style, 14.8% perceived their style to be a combination of participating and selling, and 3.6% perceived their style to be a combination of selling and telling.

**Findings for Research Question 2**

The second research question examined the degree to which the style of leadership, as perceived by principals of themselves, within Situational Leadership © theory correlates with the percentile of Academic Achievement within peer groups on the 2013-2014 New Jersey School Performance Report. This research question provides the study with data on one of the
Table 4.3

*Frequency of Leadership Style Perceived by NJ Elementary Principals*

<table>
<thead>
<tr>
<th>Leadership Style</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating</td>
<td>68</td>
<td>34.7</td>
</tr>
<tr>
<td>Selling</td>
<td>92</td>
<td>46.9</td>
</tr>
<tr>
<td>Selling and Telling</td>
<td>7</td>
<td>3.6</td>
</tr>
<tr>
<td>Participating and Selling</td>
<td>29</td>
<td>14.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

dependent variables in the study, the peer ranking of schools on the Academic Achievement portion of the 2013-2014 NJ School Performance Report. Academic Achievement is inclusive of the number of students in grades 3 or higher who obtained proficiency or higher on the 2014 New Jersey Assessment of Skills and Knowledge (NJASK) (NJDOE, 2014a).

In order to assess principals’ perceptions of their own leadership style, each principal’s individual profile from the LEAD Self instrument was used to identify his/her primary style. The principals’ responses to the twelve scenarios presented in the LEAD Self instrument provided a profile describing the primary perceived leadership of the individual. The possible styles included participating, selling, delegating, and telling. These leadership styles were compared to the peer rankings on the 2013-2014 NJ School Performance Reports obtained from the NJ DOE website on February 10, 2015. About one third (34.7%) of the elementary principals’ leadership style profiles showed that they perceive themselves to have a “participating” leadership style. Of these, 4 (65.8%) led schools that were within the 90th percentile in Academic Achievement on the 2013-2014 NJ School Performance Report, 29 (42.7%) of them were within the 50-89th percentile, and 33 (48.5%) were within the 20-49%
percentile, 2 (2.9%) were within the 0-19th percentile. About half (46.9%) of the elementary principals’ leadership style profiles showed that they perceive themselves to have a “selling” leadership style. Of these, 7 (7.6%) led schools that were within the 90th percentile in Academic Achievement on the 2013-2014 NJ School Performance Report, 28 (30.4%) of them were within the 50-89th percentile, 45 (48.9%) of them were within the 20-49th percentile, and 12 (13.0%) of them were within the 0-19th percentile. None of the principal leadership styles indicated the “delegating” or “telling” leadership style. The remaining elementary principal profiles showed a combination of primary leadership styles: 14.8 % with the “participating-selling” leadership style and 3.6% with the “selling-telling” leadership style. Of the “participating-selling” leadership style, 3 (10.3%) led schools that were within the 90th percentile in Academic Achievement on the 2013-2014 NJ School Performance Report, 10 (34.5%) of them were within the 50-89th percentile, 15 (51.7%) of them were within the 20-49th percentile, and 1 (3.4%) of them was within the 0-19th percentile. For the “selling-telling” leadership style, 0 led schools that were within the 90th percentile in Academic Achievement on the 2013-2014 NJ School Performance Report, 1 (14.3%) of them were within the 50-89th percentile, 2 (28.6%) of them were within the 20-49th percentile, and 4 (57.1%) of them were within the 0-19th percentile. Table 4.4 reports the percentage of each type of leadership style found within each percentile group for Academic Achievement on the 2013-2014 NJ Performance Reports.

The results, as reported in Table 4.3, show that 46.9% of elementary principals perceived their own leadership style to be the selling style, 34.7% perceived their style to be the participating style, 14.8% perceived their style to be a combination of participating and selling, and 3.6% perceive their style to be a combination of selling and telling.
Table 4.4

Comparison of Principals’ Perceived Leadership Style to Peer Ranking in Academic Achievement on the 2013-2014 NJ School Performance Report

<table>
<thead>
<tr>
<th>Percentile Ranking</th>
<th>Participating</th>
<th>Selling</th>
<th>Participating/Selling</th>
<th>Selling/Telling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>90-100%</td>
<td>4</td>
<td>5.8</td>
<td>7</td>
<td>7.6</td>
</tr>
<tr>
<td>50-89%</td>
<td>29</td>
<td>42.7</td>
<td>28</td>
<td>30.4</td>
</tr>
<tr>
<td>20-49%</td>
<td>33</td>
<td>48.5</td>
<td>45</td>
<td>48.9</td>
</tr>
<tr>
<td>0-19%</td>
<td>2</td>
<td>2.9</td>
<td>12</td>
<td>13.0</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>99.9</td>
<td>92</td>
<td>99.9</td>
</tr>
</tbody>
</table>

Note. Zero (0) results were reported for Telling, Delegating, Delegating/Participating, Delegating/Selling, Participating/Telling.

The results also show, as reported in Table 4.5, that 48.5% of the principals who responded led schools that were in the 20-49th percentile for Academic Achievement on the 2013-2014 NJ School Performance Report, 35.2% were in the 50-89th percentile, 9.2% were in the 0-19th percentile, and 7.1% were in the 90-100th percentile.

In this study a Pearson correlation test was run to determine whether there was a significant correlation between the leadership style and the percentile ranking in Academic Achievement on the NJ Performance Report. A Pearson Correlation analysis is descriptive and will not prove cause and effect. Rather, it will provide evidence of the strength of the relationship between Situational Leadership ® style and peer group ranking in Academic Achievement on the NJ School Performance Report. In this situation, the researcher focused on
Table 4.5

Frequency of Peer Group Percentile Rankings in Academic Achievement on the 2013-2014 School Performance Report

<table>
<thead>
<tr>
<th>Peer Group Percentile Ranking</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>18</td>
<td>9.2</td>
</tr>
<tr>
<td>20-49</td>
<td>95</td>
<td>48.5</td>
</tr>
<tr>
<td>50-89</td>
<td>69</td>
<td>35.2</td>
</tr>
<tr>
<td>90-100</td>
<td>14</td>
<td>7.1</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>

the SPSS printout that provides a Pearson Correlation or r value for the relationship between leadership style and peer ranking in Academic Achievement.

A positive r value suggests a relationship between two variables, which means that as the value of one increases, so does the other, conversely, as the value of one decreases, so does the other. A negative r value suggests that as one value increases, the other decreases. The Rule of Thumb Table of Hinkle, Wiersma, and Jurs (2003) indicates that these values are expressed in a range from 0 to a +/- 1, with values approaching zero to indicate a weak relationship and values approaching +/- 1 indicating a strong relationship.

In the correlation between school leadership style as defined by Situational Leadership ® style, and peer ranking in Academic Achievement on the NJ School Performance Report, a negative r value of -.057 represents little, if any, correlation between the two variables. An interpretation of the level of significance (p), p= .431, would state that about 43 out of 1000 times the results would flip, and because this is greater than the .05 required (p ≤ .05) for social science, it is not statistically significant. A coefficient of determination of $r^2$ of .0032 means that
there is a .3% chance that as one variable changes the other variable would also change. The Pearson coefficient analysis reveals that there is a weak, not statistically significant relationship between leadership style and peer group ranking on Academic Achievement.

In this study a simple regression model was also used to examine the effect of the predictor variable of Situational Leadership ® style on the outcome variable of peer school ranking in Academic Achievement on the NJ School Performance Report.

It was determined that approximately .5% of the variance in peer school ranking in Academic Achievement can be explained by the predictor variable of leadership style. The results of the regression model are not statistically significant with a p value of .154, an F value of 1.947, and a df of 1, 194.

An examination of the standardized coefficients will allow us to determine the relative impact of the predictor. The predictor variable of leadership style is negative and not significant with a p value of .164, a t value of -1.395, and a B value of -.100. The data indicates that a principal’s leadership style -- selling, telling, participating, or delegating -- is not a predictor of a school’s peer group ranking in the area of Academic Achievement on the NJ School Performance Report.

Given the findings cited above, the researcher can offer the following recommendations to the school. Since the style of leadership perceived by the principal does not hold a statistically significant correlation to peer school ranking in Academic Achievement and is not a statistically significant predictor of peer school ranking in Academic Achievement, it should not be a focus for influencing student achievement. In light of the research on the statistically significant correlation between principal leadership and student achievement (Marzano & Waters, 2009), the recommendation would be to examine other characteristics of principal leadership.
Findings for Research Question 3

The third research question examined the degree to which the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlates with the percentile of College and Career Readiness within peer groups on the 2013-2014 New Jersey School Performance Report. This research question provides the study with data on one of the dependent variables in the study, the peer ranking of schools on the College and Career Readiness portion of the 2013-2014 NJ School Performance Report. At the elementary level, College and Career Readiness is inclusive of the chronic absenteeism rate of students in grades 3 or higher that (NJDOE, 2014a).

In order to assess principals’ perception of their own leadership style, each principal’s individual profile from the LEAD Self instrument was used to identify his/her primary style. The principals’ responses to the twelve scenarios presented in the LEAD Self instrument provided a profile describing the primary perceived leadership of the individual. The possible styles included Participating, Selling, Delegating, and Telling. These leadership styles were compared to the peer rankings on the 2013-2014 NJ School Performance Reports obtained from the NJ DOE website on February 10, 2015. About one third (34.7%) of the elementary principals’ leadership style profiles showed that they perceived themselves to have a “participating” leadership style. Of these, 8 (11.8%) led schools that were within the 90th percentile in College and Career Readiness on the 2013-2014 NJ School Performance Report, 29 (42.6%) of them were within the 50-89th percentile, and 22 (32.4%) were within the 20-49% percentile, and 9 (13.2%) were within the 0-19th percentile. About half (46.9%) of the elementary principals’ leadership style profiles showed that they perceived themselves to have a “selling” leadership style. Of these, 10 (10.9%) led schools that were within the 90th percentile
in College and Career Readiness on the 2013-2014 NJ School Performance Report, 40 (43.5%) of them were within the 50-89th percentile, 26 (28.4%) of them were within the 20-49th percentile, and 16 (17.3%) of them were within the 0-19th percentile. None of the principal leadership styles indicated the “delegating” or “telling” leadership style. The remaining elementary principal profiles showed a combination of primary leadership styles: 14.8% with the “participating-selling” leadership style and 3.6% with the “selling-telling” leadership style.

Of the “participating-selling” leadership style, 7 (24.1%) led schools that were within the 90th percentile in College and Career Readiness on the 2013-2014 NJ School Performance Report, 8 (27.7%) of them were within the 50-89th percentile, 7 (24.1%) of them were within the 20-49th percentile, and 7 (24.1%) of them was within the 0-19th percentile. For the “selling-telling” leadership style, zero led schools that were within the 90th percentile in College and Career Readiness on the 2013-2014 NJ School Performance Report, 3 (42.9%) of them were within the 50-89th percentile, 3 (42.0%) of them were within the 20-49th percentile, and 1 (14.2%) of them were within the 0-19th percentile. Table 4.6 reports the percentage of each type of leadership style found within each percentile group for College and Career Readiness on the 2013-2014 NJ Performance Reports.

The results, as reported in Table 4.3, show that 46.9% of elementary principals perceived their own leadership style to be the selling style, 34.7% perceived their style to be the participating style, 14.8% perceived their style to be a combination of participating and selling, and 3.6% perceived their style to be a combination of selling and telling.

The results also show, as reported in Table 4.7, that 41.3% of the principals who responded led schools that were in the 50-89th percentile for College and Career Readiness on
### Table 4.6

*Comparison of Principals’ Perceived Leadership Style to Peer Ranking in College and Career Readiness on the 2013-2014 NJ School Performance Report*

<table>
<thead>
<tr>
<th>Percentile Ranking</th>
<th>Participating</th>
<th>Selling</th>
<th>Participating/Selling</th>
<th>Selling/Telling</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
<td>N</td>
</tr>
<tr>
<td>90-100%</td>
<td>8</td>
<td>10</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>50-89%</td>
<td>29</td>
<td>40</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>20-49%</td>
<td>22</td>
<td>26</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>0-19%</td>
<td>9</td>
<td>16</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>68</strong></td>
<td><strong>92</strong></td>
<td><strong>29</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

*Note.* Zero (0) results were reported for Telling, Delegating, Delegating/Participating, Delegating/Selling, Participating/Telling

### Table 4.7

*Frequency of Peer Group Percentile Rankings in College and Career Readiness on the 2013-2014 School Performance Report*

<table>
<thead>
<tr>
<th>Peer Group Percentile Ranking</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>32</td>
<td>16.3</td>
</tr>
<tr>
<td>20-49</td>
<td>58</td>
<td>29.6</td>
</tr>
<tr>
<td>50-89</td>
<td>81</td>
<td>41.3</td>
</tr>
<tr>
<td>90-100</td>
<td>25</td>
<td>12.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>196</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
the 2013-2014 NJ School Performance Report, 29.6% were in the 20-49th percentile, 16.3% were in the 0-19th percentile, and 12.8% were in the 90-100th percentile.

In this study a Pearson correlation test was run to determine whether there was a significant correlation between the leadership style and the percentile ranking in Academic Achievement on the NJ Performance Report. A Pearson Correlation analysis is descriptive and will not prove cause and effect. Rather, it will provide evidence of the strength of the relationship between Situational Leadership ® style and peer group ranking in College and Career Readiness on the NJ School Performance Report. In this situation, the researcher focused on the SPSS printout that provides a Pearson Correlation or r value for the relationship between leadership style and peer ranking in College and Career Readiness.

A positive r value suggests a relationship between two variables, which means that as the value of one increases, so does the other, or that as the value of one decreases so does the other. A negative r value suggests that as one value increases the other decreases. The Rule of Thumb Table of Hinkle et al. (2003) indicates that these values are expressed in a range from 0 to a +/-1, with values approaching zero indicating a weak relationship and values approaching +/-1 indicating a strong relationship.

In the correlation between school leadership style, as defined by Situational Leadership ® style, and peer ranking in College and Career Readiness on the NJ School Performance Report, a negative r value of -.037 represents little, if any correlation between the two variables. An interpretation of the level of significance (p), p= .602, would state that about 60 out of 1000 times the results would flip, and because this is greater than the .05 needed (p < .05) for social science, it is not statistically significant. A coefficient of determination of r² of .0014 means that there is a .1% chance that as one variable changes the other variable would also change. The
Pearson coefficient analysis reveals that there is a weak, not statistically significant relationship between leadership style and peer group ranking on College and Career Readiness.

In this study a simple regression model was also used to examine the effect of the predictor variable of Situational Leadership® style on the outcome variable of peer school ranking in College and Career Readiness on the NJ School Performance Report.

It was determined that approximately .4% of the variance in peer school ranking in College and Career Readiness can be explained by the predictor variable of leadership style. The results of the regression model are not statistically significant with a p value of .593, an F value of .286, and a df of 1, 194.

An examination of the standardized coefficients will allow us to determine the relative impact of the predictor. The predictor variable of leadership style is negative and not significant with a p value of .593, a t value of -.535, and a B value of -.038. The data indicates that a principal’s leadership style -- selling, telling, participating, or delegating -- is not a predictor of a school’s peer group ranking in the area of College and Career Readiness on the NJ School Performance Report.

Given the findings cited above, the researcher can offer the following recommendations to the school. Since the style of leadership perceived by the principal does not hold a statistically significant correlation to peer school ranking in College and Career Readiness and is not a statistically significant predictor of peer school ranking in College and Career Readiness, it should not be a focus for influencing the college and career readiness of students. In light of the research on the statistically significant correlation between principal leadership and student achievement (Marzano & Waters, 2009), the recommendation would be to examine other characteristics of principal leadership.
Findings for Research Question 4

The fourth research question examined the degree to which the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlates with the percentile of Student Growth within peer groups on the 2013-2014 New Jersey School Performance Report. This research question provides the study with data on one of the dependent variables in the study, the peer ranking of schools on the Student Growth portion of the 2013-2014 NJ School Performance Report. Student Growth is a measurement of the growth of students, as compared to their peers, from one year of NJASK testing to the next year of NJASK testing (NJDOE, 2014a).

In order to assess principals’ perceptions of their own leadership style, each principal’s individual profile from the LEAD Self instrument was used to identify his/her primary style. The principals’ responses to the twelve scenarios presented in the LEAD Self instrument provided a profile describing the primary perceived leadership of the individual. The possible styles included Participating, Selling, Delegating, and Telling. These leadership styles were compared to the peer rankings on the 2013-2014 NJ School Performance Reports obtained from the NJ DOE website on February 10, 2015. About one third (34.7%) of the elementary principals’ leadership style profiles showed that they perceived themselves to have a “participating” leadership style. Of these, 2 (2.9%) led schools that were within the 90th percentile in Student Growth on the 2013-2014 NJ School Performance Report, 33 (48.5%) of them were within the 50-89th percentile, 28 (41.2%) were within the 20-4th percentile, and 5 (7.4%) were within the 0-19th percentile. About half (46.9%) of the elementary principals’ leadership style profiles showed that they perceived themselves to have a “selling” leadership style. Of these, 2 (2.2%) led schools that were within the 90th percentile in Student Growth on
the 2013-2014 NJ School Performance Report, 47 (51.0%) of them were within the 50-89th percentile, 35 (38.0%) of them were within the 20-49th percentile, and 8 (8.7%) of them were within the 0-19th percentile. None of the principal leadership styles indicated the “delegating” or “telling” leadership style. The remaining elementary principal profiles showed a combination of primary leadership styles: 14.8 % with the “participating-selling” leadership style and 3.6% with the “selling-telling” leadership style. Of the “participating-selling” leadership style 1 (3.4%) led a school that was within the 90th percentile in Student Growth on the 2013-2014 NJ School Performance Report, 12 (41.3%) of them were within the 50-89th percentile, 14 (48.3%) of them were within the 20-49th percentile, and 2 (6.9%) of them were within the 0-19th percentile. For the “selling-telling” leadership style, 0 led schools that were within the 90th percentile in Student Growth on the 2013-2014 NJ School Performance Report, 4 (57.1%) of them were within the 50-89th percentile, 2 (28.6%) of them were within the 20-49th percentile, and 1 (14.3%) of them was within the 0-19th percentile. Table 4.8 reports the percentage of each type of leadership style found within each percentile group for Student Growth on the 2013-2014 NJ Performance Reports.

The results, as reported in Table 4.3, show that 46.9% of elementary principals perceived their own leadership style to be the selling style, 34.7% perceived their style to be the participating style, 14.8% perceive their style to be a combination of participating and selling, and 3.6% perceived their style to be a combination of selling and telling.

The results also show, as reported in Table 4.9, that 48.9% of the principals who responded led schools that were in the 50-89th percentile for Student Growth on the 2013-2014 NJ School Performance Report, 40.3% were in the 20-49th percentile, 8.2% were in the 0-19th percentile, and 2.6% were in the 90-100th percentile.
Table 4.8

*Comparison of Principal’s Perceived Leadership Style to Peer Ranking in Student Growth on the 2013-2014 NJ School Performance Report*

<table>
<thead>
<tr>
<th>Percentile Ranking</th>
<th>Participating</th>
<th>Selling</th>
<th>Participating/Selling</th>
<th>Selling/Telling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>90-100%</td>
<td>2</td>
<td>2.9</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>50-89%</td>
<td>33</td>
<td>48.5</td>
<td>47</td>
<td>51.0</td>
</tr>
<tr>
<td>20-49%</td>
<td>28</td>
<td>41.2</td>
<td>35</td>
<td>38.0</td>
</tr>
<tr>
<td>0-19%</td>
<td>5</td>
<td>7.4</td>
<td>8</td>
<td>8.7</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>100.0</td>
<td>92</td>
<td>99.9</td>
</tr>
</tbody>
</table>

*Note.* Zero (0) results were reported for Telling, Delegating, Delegating/Participating, Delegating/Selling, Participating/Telling

Table 4.9

*Frequency of Peer Group Percentile Rankings in Academic Achievement on the 2013-2014 School Performance Report*

<table>
<thead>
<tr>
<th>Peer Group Percentile Ranking</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>16</td>
<td>8.2</td>
</tr>
<tr>
<td>20-49</td>
<td>79</td>
<td>40.3</td>
</tr>
<tr>
<td>50-89</td>
<td>96</td>
<td>48.9</td>
</tr>
<tr>
<td>90-100</td>
<td>5</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>196</td>
<td>100.0</td>
</tr>
</tbody>
</table>
In this study a Pearson correlation test was run to determine whether there was a significant correlation between the leadership style and the percentile ranking in Student Growth on the NJ Performance Report. A Pearson Correlation analysis is descriptive and will not prove cause and effect. Rather, it will provide evidence of the strength of the relationship between Situational Leadership ® style and peer group ranking in Student Growth on the NJ School Performance Report. In this situation, the researcher focused on the SPSS printout that provides a Pearson Correlation or r value for the relationship between leadership style and peer ranking in Student Growth.

A positive r value suggests a relationship between two variables, which means that as the value of one increases so does the other, or that as the value of one decreases so does the other. A negative r value suggests that as one value increases the other decreases. The Rule of Thumb Table of Hinkle et al. (2003) indicates that these values are expressed in a range from 0 to a +/- 1, with values approaching zero indicating a weak relationship and values approaching +/- 1 indicating a strong relationship.

In the correlation between school leadership style as defined by Situational Leadership ® style, and peer ranking in Student Growth on the NJ School Performance Report, a positive r value of .006 represents little, if any correlation between the two variables. An interpretation of the level of significance (p), p= .9371, would state that about 93 out of 1000 times the results would flip, and because this is greater than the .05 needed (p ≤ .05) for social science, it is not statistically significant. A coefficient of determination of r² of .000036 means that there is a .004% chance that as one variable changes the other variable would also change. The Pearson coefficient analysis reveals that there is a weak, not statistically significant relationship between leadership style and peer group ranking on Academic Achievement.
In this study a simple regression model was also used to examine the effect of the predictor variable of Situational Leadership ® style on the outcome variable of peer school ranking in Student Growth on the NJ School Performance Report.

It was determined that approximately .5% of the variance in peer school ranking in Student Growth can be explained by the predictor variable of leadership style. The results of the regression model are not statistically significant with a p value of .943, an F value of .005, and a df of 1, 194.

An examination of the standardized coefficients will allow us to determine the relative impact of the predictor. The predictor variable of leadership style is negative and not significant with a p value of .943, a t value of -0.072, and a B value of -.005. The data indicates that a principal’s leadership style -- selling, telling, participating, or delegating -- is not a predictor of a school’s peer group ranking in the area of Student Growth on the NJ School Performance Report.

Given the findings cited above, the researcher can offer the following recommendations to the school. Since the style of leadership perceived by the principal does not hold a statistically significant correlation to peer school ranking in Student Growth and is not a statistically significant predictor of peer school ranking in Student Growth, it should not be a focus for influencing student growth. In light of the research on the statistically significant correlation between principal leadership and student achievement (Marzano & Waters, 2009), the recommendation would be to examine other characteristics of principal leadership.

**Findings for Research Question 5**

The fifth research question examined the degree to which the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with designation as a New Jersey Reward, Focus, or Priority School within peer groups.
This research question provides the study with data on one of the dependent variables in the study, designation as a reward, focus, or priority school on the 2013-2014 NJ School Performance Report.

In order to assess principals’ perceptions of their own leadership style, each principal’s individual profile from the LEAD Self instrument was used to identify his/her primary style. The principals’ responses to the twelve scenarios presented in the LEAD Self instrument provided a profile describing the primary perceived leadership of the individual. The possible styles included participating, selling, delegating, and telling. These leadership styles were compared to the status as a reward, focus, or priority school on the 2013-2014 NJ School Performance Reports obtained from the NJ DOE website on February 10, 2015. About one third (34.7%) of the elementary principals’ leadership style profiles showed that they perceived themselves to have a “participating” leadership style. Of these, 4.4% of the schools were designated as Reward Schools, 0.0% as Focus Schools, and 0.0% as Priority Schools. The remainder of the 68 schools were not designated as one of the three types of status. About half (46.9%) of the elementary principals’ leadership style profiles showed that they perceived themselves to have a “selling” leadership style. Of these, 1.1% were designated Reward Schools, 1.1% were designated as Focus Schools, and 0.0% were designated as priority schools. The remainder of the 92 schools were not designated as one of the three types of status. None of the principal leadership styles indicated the “delegating” or “telling” leadership style. The remaining elementary principal profiles showed a combination of primary leadership styles: 14.8% with the “participating-selling” leadership style and 3.6% with the “selling-telling” leadership style. Of the “participating-selling” leadership style 3.4% were designated as Reward Schools, 0.0% as Focus Schools, and 0.0% as Priority Schools. The remainder of the 29 schools were not
given as status designation. For the “selling-telling” leadership style, 0.0% of the schools were designated as Reward, Focus, or Priority schools. None of the schools in this category were given a status designation. Table 4.10 reports the percentage of each type of leadership style found for each type of school status designation on the 2013-2014 NJ Performance Reports.

Table 4.10

Comparison of Principal’s Perceived Leadership Style to Status as a Reward, Focus, or Priority School on the 2013-2014 NJ School Performance Report

<table>
<thead>
<tr>
<th>Status</th>
<th>Participating</th>
<th>Selling</th>
<th>Participating/Selling</th>
<th>Selling/Telling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>Reward</td>
<td>3</td>
<td>4.4</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Focus</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Priority</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>65</td>
<td>96.6</td>
<td>90</td>
<td>97.8</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>100.0</td>
<td>92</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Zero (0) results were reported for Telling, Delegating, Delegating/Participating, Delegating/Selling, Participating/Telling

In this study a Pearson correlation test was run to determine whether there was a significant correlation between the leadership style and designation as a Reward, Focus, or Priority School on the NJ Performance Report. A Pearson Correlation analysis is descriptive and will not prove cause and effect. Rather, it will provide evidence of the strength of the relationship between Situational Leadership ® style and school status on the NJ School
Performance Report. In this situation, the researcher focused on the SPSS printout that provides a Pearson Correlation or r value for the relationship between leadership style and school status.

A positive r value suggests a relationship between two variables, which means that as the value of one increases so does the other, or that as the value of one decreases so does the other. A negative r value suggests that as one value Increases the other decreases. The Rule of Thumb Table of Hinkle et al. (2003) indicates that these values are expressed in a range from 0 to a +/- 1, with values approaching zero indicating a weak relationship and values approaching +/- 1 indicating a strong relationship.

In the correlation between school leadership style as defined by Situational Leadership ® style, and school status on the NJ School Performance Report, a negative r value of -.017 represents little, if any correlation between the two variables. An interpretation of the level of significance (p), p= .811, would state that about 81 out of 1000 times the results would flip, and because this is greater than the .05 needed (p ≤ .05) for social science, it is not statistically significant. A coefficient of determination of $r^2$ of .0003 means that there is a .03% chance that as one variable changes the other variable would also change. The Pearson coefficient analysis reveals that there is a weak, not statistically significant relationship between leadership style and school status.

In this study a simple regression model was also used to examine the effect of the predictor variable of Situational Leadership ® style on the outcome variable of a school’s identification as a Reward, Priority, or Focus School on the NJ School Performance Report.

It was determined that approximately .1% of the variance in identification as a Reward, Focus, or Priority school can be explained by the predictor variable of leadership style. The
results of the regression model are not statistically significant with a p value of .276, an F value of 1.191, and a df of 1, 194.

An examination of the standardized coefficients will allow us to determine the relative impact of the predictor. The predictor variable of leadership style is positive and not significant with a p value of .276, a t value of 1.092, and a B value of .078. The data indicates that a principal’s leadership style --selling, telling, participating, or delegating--is not a predictor of a school’s identification as a Reward, Focus, or Priority School on the NJ School Performance Report.

Given the findings cited above, the researcher can offer the following recommendations to the school. Since the style of leadership perceived by the principal does not hold a statistically significant correlation to identification as a Reward, Focus, or Priority School and is not a statistically significant predictor of identification as a Reward, Focus, or Priority School, it should not be a focus for influencing student achievement. In light of the research on the statistically significant correlation between principal leadership and student achievement (Marzano & Waters, 2009), the recommendation would be to examine other characteristics of principal leadership.

**Summary**

In Chapter 4, the researcher used several methods such as a description of the sample, descriptive statistics, Chi-square, and Pearson correlation to answer the Research Questions 1-5. The results show that the dominant leadership styles within the Situational Leadership © theory, that elementary principals in NJ perceive themselves to have are the “Selling” style (46.9%) and the “Participating” style (34.7%); however there is a weak, not significant correlation between the leadership style and peer school ranking in the areas of Academic Achievement, College and
Career Readiness, Student Growth, and identification as a Reward, Focus, or Priority School on the 2013-2014 NJ School Performance Report. In addition, principals’ perceptions of their leadership styles are not statistically significant predictors of peer school ranking in the areas of Academic Achievement, College and Career Readiness, Students Growth, nor identification as a Reward, Focus, or Priority School on the 2013-2014 NJ School Performance Report.

Chapter 5 will include an introduction, and overview of the study, the research design, summary of results, discussion and implication, and recommendations for future research.
CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This study has examined the most dominant Situational Leadership ® style elementary principals in New Jersey perceive of themselves and the correlation between the style of leadership and the peer school rankings of the principals’ schools on the NJ School Performance Report. Chapter 5 will present an overview of the study, a design review, a summary of the principal findings, a discussion of the findings and their implications for practice, as well as recommendations for future research.

Overview of the Study

The purpose of this study was to identify principals’ perceptions of their own leadership style and the influence of that leadership style on student achievement, as measured by peer school rankings on the NJ School Performance Report. Because many different factors can contribute to student achievement, this study focused on the influence of principal leadership style on students’ academic achievement. Marzano et al. (2005) found of the 5,000 studies done on principal leadership, only 69 of them quantitatively addressed the relationship of principal leadership to student achievement. Marzano et al. (2005) reported that, through a meta-analysis of these studies, it was found that student achievement can be influenced by a principal’s building-level leadership abilities and behaviors. Situational Leadership ® theory was selected as the set of leadership styles being surveyed because, of all the leadership styles presented, Marzano et al. (2000) suggests situational leadership is one of the theories most impactful on student achievement since it focuses on the need for flexibility and situational awareness, areas with a high correlation to student achievement. Of the twenty-one responsibilities and day-to-day
management of a school, Marzano et al. (2000) include a focus on flexibility and situational awareness, characteristics of Situational Leadership.

The research was a single descriptive non-experimental (Johnson & Christensen, 2012) quantitative study (survey) to investigate principals’ perceptions of their leadership styles within the Situational Leadership ® theory and to examine the correlation between the perceived leadership style and peer group rankings on the NJ School Performance Report in the areas of Academic Achievement, College and Career Readiness, and Student Growth. The correlation between the leadership style and identification as a Reward, Focus, or Priority school was also examined. In addition, the principal’s leadership style as a predictor of student achievement in each of these areas was examined. The dependent variables for this study were the principals’ perceptions of their own leadership styles as “participating”, “selling”, “delegating”, and/or “telling,” and the independent variables were the factors of student achievement measured on the NJ School Performance Report, peer group ranking in Academic Achievement, College and Career Readings, and Student Growth. One additional independent variable was the school’s identification of as a Reward, Focus, or Priority school.

The null hypothesis in this study was: There is no statistically significant correlation between the style of leadership within Situational Leadership ® theory, as perceived by principals of themselves, and peer group ranking on the NJ School Performance Report or designation as a New Jersey Reward, Focus, or Priority School. This null hypothesis led to the formation of five research questions:

1. Which is the dominant leadership style, as perceived by principals of themselves, within Situational Leadership ® theory?
2. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of Academic Achievement within peer groups on the New Jersey School Performance Report?

3. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of College and Career Readiness within peer groups on the New Jersey School Performance Reports?

4. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with the percentile of Student Growth within peer groups on the New Jersey School Performance Report?

5. To what degree does the style of leadership, as perceived by principals of themselves, within Situational Leadership ® theory correlate with designation as a New Jersey Reward, Focus, or Priority School within peer groups?

The researcher reported that 20.6% principals responded to the LEAD Self survey from January 6, 2015 through January 30, 2015. The principal respondents were those that have been leading the school from which the 2013-2014 New Jersey School Performance Reports were obtained, during, at least, the 2012-2013 and 2013-2014 school year. The principal respondents also resembled the larger population of elementary principals in New Jersey in terms of District Factor Group and gender, as neither of these response groups were found to be statistically different from the total population in New Jersey. Therefore, it is reasonable to conclude that there is no obvious respondent bias and the sample is largely representative of the population.
Discussion and Implications

With the introduction of the No Child Left Behind (NCLB) in 2012, considerations for how to measure student achievement have dominated the educational landscape, changing the way policymakers and educators talk about education, view educational performance, and think about educational challenges (Hess, 2005). As a result, dialogue about the factors that influence student achievement has taken a central place in educational discourse, and the widespread research (Purkey & Smith, 1983; Scheerens, 1992; Levine and Lezotte, 1990; Sammons et al., 1995; Cotton, 1995; Scheerens, 2004; Marzano et al., 2005) that demonstrates schools can have a major effect on children’s academic achievement has resulted in the outlining of school accountability measures. This belief has become so firmly held that severe accountability measures, such as those outlined within the No Child Left Behind Act, have been put in place to ensure that those school-based factors are being maximized to bring about the greatest impact on student achievement. In New Jersey, accountability measures, such as student achievement as measured on standardized tests, college and career readiness as measured through course work and attendance rates, and student growth as measured by improvements on standardized tests, are reported out to the public in each school’s New Jersey School Performance Report.

Among the factors that appear to have the greatest impact on student achievement, principal leadership is reported in educational research (Scheerens & Bosker, 1997; Fullan, 2005; Marzano & Waters, 2009; and Lezotte, 2012) as having a positive and significant effect on student achievement. This, coupled with the movement of student performance results being reported on the district level to the school level (NJDOE, 2014a), indicates that principal leadership is an area of focus when it comes to the academic achievement of students. The focus on principal leadership in an era of educational accountability is, ultimately, the reason for
this study. With such accountability placed on the principal to influence the achievement of students at the school level, it is important to examine the characteristics of principals who are and are not meeting those accountability measures. Such correlations between school-level leadership and student achievement did not appear on the educational scenes in recent years as leadership has been closely linked to the effective functioning of complex organizations such as schools throughout previous centuries (Marzano et. al., 2005). Despite the findings of a relationship between principal leadership and student achievement, Hallinger and Heck (1996) report that little research has been done on the importance of that relationship. In fact, they were only able to identify 40 studies prior to 1996 that focused on this relationship (Hallinger & Heck, 1996). Marzano et al. (2005) also found of the 5,000 studies conducted on principal leadership, only 69 of them quantitatively addressed the relationship of principal leadership to student achievement. The studies that were conducted often demonstrate a relationship but did not suggest how principals’ leadership contributes to student achievement (Marzano et al., 2005).

The research questions for this study were designed to shed light on how a principal’s leadership contributes to student achievement by seeking to determine the degree to which particular leadership styles as defined by the Situational Leadership ® theory correlated with peer school ranking, New Jersey’s answer to school accountability, on the NJ School Performance Report. The accountability measures used were Academic Achievement peer group ranking, College and Career Readiness peer group ranking, Student Growth peer group ranking, and identification as a Reward, Focus, or Priority school. Results showed that while some leadership styles are more prevalent among New Jersey elementary school principals, there was a weak and not a statistically significant correlation between any of the leadership styles and peer school rankings.
In the area of Academic Achievement as measured by the number of students in a school who are proficient or higher on the English Language Arts and Mathematics New Jersey Assessment of Skills and Knowledge (NJASK), the Pearson correlation reported a negative \( r \) value of \(-.057\) and a level of significance (\( p \)) of \(.431\). This reveals a weak and not a significant correlation between the leadership style and peer school ranking in the area of Academic Achievement. In addition, the coefficient of determination or \( r^2 \) of \(.0032\) means that there is a .3\% chance that as leadership style changes peer school ranking would change.

A simple regression model was also used to examine the effect of the predictor variable of Situational Leadership ® style on the outcome variable of peer school ranking in Academic Achievement on the NJ School Performance Report. It was determined that approximately .5\% of the variance in peer school ranking in Academic Achievement can be explained by the predictor variable of leadership style. The results of the regression model are not statistically significant with a \( p \) value of \(.154\), an \( F \) value of 1.947, and a df of 1, 194. The data indicates that principals’ leadership style; selling, telling, participating, or delegating; is not a predictor of a school’s peer group ranking in the area of Academic Achievement on the NJ School Performance Report.

In the area of College and Career Readiness, as measured by the chronic absenteeism rate of the school, the Pearson correlation reported a negative \( r \) value of \(-.037\) and a level of significance (\( p \)) of \(.602\). This reveals a weak and not a significant correlation between the leadership style and peer school ranking in the area of College and Career Readiness. In addition, the coefficient of determination or \( r^2 \) of \(.0014\) means that there is a .1\% chance that as leadership style changes peer school ranking would change.
A simple regression model was also used to examine the effect of the predictor variable of Situational Leadership ® style on the outcome variable of peer school ranking in College and Career Readiness on the NJ School Performance Report. It was determined that approximately .4% of the variance in peer school ranking in College and Career Readiness can be explained by the predictor variable of leadership style. The results of the regression model are not statistically significant with a p value of .593, an F value of .286, and a df of 1, 194. The data indicates that principals’ leadership style; selling, telling, participating, or delegating; is not a predictor of a school’s peer group ranking in the area of College and Career Readiness on the NJ School Performance Report.

In the area of Student Growth as measured by change in performance of students from one year to the next on the NJASK, the Pearson correlation reported a positive r value of .006 and a level of significance (p) of .000036. This reveals a weak and not a significant correlation between the leadership style and peer school ranking in the area of Student Growth. In addition, the coefficient of determination or $r^2$ of .000036 means that there is a .004% chance that as leadership style changes peer school ranking would change.

A simple regression model was also used to examine the effect of the predictor variable of Situational Leadership ® style on the outcome variable of peer school ranking in Student Growth on the NJ School Performance Report. It was determined that approximately .5% of the variance in peer school ranking in Student Growth can be explained by the predictor variable of leadership style. The results of the regression model are not statistically significant with a p value of .943, an F value of .005, and a df of 1, 194. The data indicates that principals’ leadership style; selling, telling, participating, or delegating; is not a predictor of a school’s peer group ranking in the area of Student Growth on the NJ School Performance Report.
In the area of school status as measured by identification as a Reward, Focus, or Priority school, the Pearson correlation reported a negative r value of -.017 and a level of significance (p) of .811. This reveals a weak and not a significant correlation between the leadership style and school identification as a Reward, Focus, or Priority school. In addition, the coefficient of determination or $r^2$ of .0003 means that there is a .03% chance that as leadership style changes school status would change. A simple regression model was also used to examine the effect of the predictor variable of Situational Leadership ® style on the outcome variable of a school’s identification as a Reward, Priority, or Focus School on the NJ School Performance Report. It was determined that approximately .1% of the variance in identification as a Reward, Focus, or Priority school can be explained by the predictor variable of leadership style. The results of the regression model are not statistically significant with a p value of .276, an F value of 1.191, and a df of 1, 194. The data indicates that principals’ leadership style; selling, telling, participating, or delegating; is not a predictor of a school’s identification as a Reward, Focus, or Priority School on the NJ School Performance Report.

This study showed a weak and not a statistically significant correlation between any of the leadership styles within the Situational Leadership ® theory, and peer school rankings and school status. This researcher suggests two possible conclusions. First, because research conducted by Marzano and Waters (2009) has documented a correlation of .25 between principal leadership behavior and student achievement other characteristics of principal leadership behavior should be examined. Marzano et al. (2005) reported that the studies that were conducted demonstrated a relationship but did not suggest how principals’ leadership contributes to student achievement.
Second, since situational awareness, as described by Marzano et al. (2000), is the leader's awareness of what is going on in the school and his or her use of that information to address current problems and potential problems this researcher suggests that New Jersey elementary principals employ situational awareness and flexibility by calling upon one or more of a variety of leadership styles within Situational Leadership ® theory; selling, telling, delegating, participating; based on the needs of the staff and the situation. Research question 1 of this study determined that 46.9% of elementary principals perceive their own leadership style to be the selling style, 34.7% perceived their style to be the participating style, 14.8% perceive their style to be a combination of participating and selling, and 3.6% perceive their style to be a combination of selling and telling. 0.0% of the respondents perceived their leadership style to be “telling”, “delegating”, or any other combination of the four styles. The variety of styles revealed by this study align with Situational Leadership ® theory since is based on the belief there is no best influential style that is suitable for all situations and therefore, to influence the activities of an individual or a group in a given situation both the situation and the readiness levels of the individuals or group must be considered (Hersey & Blanchard, 1982). An effective leader is able to choose an appropriate leadership style as determined by the situation and his knowledge of the readiness levels or his followers (Hersey & Blanchard, 1982). How effective the leadership is dependent on how well the leader matches the style to the situation and followers’ maturity at the time and not the actual behavior of the leader (Lin, 1999).

A third key point is based on the preponderance of the selling/coaching and participating/supporting leadership styles (81.6%) among NJ elementary school principals. This suggests that the majority of principals provide a high level of support to their teachers. This includes explaining decisions, providing opportunity for clarification, sharing ideas, and
facilitating teachers’ involvement in making decisions. The lack of the leadership styles delegating and directing/telling indicates that elementary principal leadership in NJ is not characterized by turning over responsibility for decisions to teachers or providing specific instruction and supervision to teachers. It is interesting to note that Blanchard and Hersey (1996) suggested that a delegating style of leadership would be the prevalent style among school leaders. They stated that because schools are characterized by a decentralized organizational structure, it is appropriate that an experienced staff does not need or desire much structure.

The deviation from the expected leadership style noted in the 1996 Blanchard and Hersey study may also be isolated to elementary level principal leadership. A 2015 Wallace Foundation study suggested that there are significant differences in the delegation of instructional decisions between the elementary school level and the secondary school level. At the secondary level several layers of leadership exist. These may include principals, assistant principals, department chairs and supervisors. In the Wallace Foundation (2015) study principals pointed out that they frequently delegated instructional decisions to department chairs. At the elementary level principals work directly with teachers in the classroom, facilitating instructional guidance and providing feedback to teachers (Wallace Foundation, 2015). In secondary schools the decentralized organizational structure Blanchard and Hersey describes is more evident and the likelihood of the delegating leadership style is greater. As a result, this researcher suggests that this study be replicated in Middle Schools and High Schools. The researcher focused on elementary schools as this was the researcher’s area of expertise. Principals at different levels of schools may have different dominant styles of leadership and, therefore, their correlation with school effectiveness measures may vary in significance.
Blanchard and Hersey (1996) also noted that while delegating may be the dominant leadership style expected from school administrators, deviations may occur in various situations. For example, a school leader working with a staff during early stages of a school year or during the initiation of a new initiative would warrant a greater degree of support and direction, descriptors of the coaching/selling style found to be the dominant style (46.9%) in this study. Another deviation from the delegating style that might exist would occur with new, inexperienced teachers. These would need more direction and support until they gain experience in the classroom (Blanchard & Hersey, 1996).

A lack of the delegating leadership style, expected by Blanchard and Hersey (1996) may be explained by the state of affairs in education today. Much of education is in flux with new accountability measures being reported in the NJ School Performance Reports, and school leaders have taken a more extensive role in guiding and supporting teachers through these changes. It is possible that his transition could have moved school leaders from the actions of a delegating style, where they can turn over decisions to the staff, to a selling/coaching and participating/supporting leadership style, characterized by the need to explain decisions, provide opportunity for clarification, share ideas with followers, and facilitate teachers’ involvement (Blanchard et al., 1991). In recognizing the need for greater support during a high accountability age in education, this researcher suggests several proactive approaches be established to support teachers and school leaders. It is suggested that the 2014 updates to the New Jersey Department of Education novice teacher mentoring regulations be implemented with fidelity within a school to ensure appropriate levels of support and direction (NJDOE, 2014b). These include the pairing of novice teachers with high performing, experienced teachers and the establishment of regular meetings between the novice and mentor teacher throughout the year. With a strong, supportive
mentoring program in place the delegation of coaching and supporting novice teachers to mentor teachers within the school would support principal leadership.

Similarly, greater support for principals and other school leaders during their residency would need to include effective, experienced school leaders who have been through change events supporting and guiding less experienced school leaders. In addition, supporting teachers and school leaders during college preparation programs would need to include skills in situational awareness and flexibility. This focus would build principals’ ability to adapt his leadership style based on the analysis of the situation and assessment of the readiness and maturity of the staff. In the 1970’s Situational Leadership ® theory became the cornerstone of Xerox’s managerial preparation program. In a study of sixty-five managers several conclusions were drawn. Those managers rated as highly effective had a greater knowledge and use of Situational Leadership ® than less effective managers. All managers in the study reported using Situational Leadership ® at least some of the time and felt that it had a positive impact. Managers that used the Situational Leadership ® model correctly rated their followers’ job performance at a higher level (Gumpert & Hambleton, 1979).

This researcher recommends further study in comparing the perceived leadership style of principals examined during the implementation of new accountability measures with perceptions during periods of time when approaches to these new accountability measures are established. Further study on the individual aspects of selling/coaching and participating/supporting leadership styles during periods of change in education would also be beneficial, because these are the dominant styles of leadership currently being perceived by elementary principals in NJ, and a greater understanding would enable further development of the skills within those styles to support a greater impact on the effectiveness of a school.
This study revealed that leadership style, as defined by the Situational Leadership ® theory does not hold a statistically significant correlation to student achievement. Because Situational Leadership ® theory is based on the belief there is no best influential style that is suitable for all situations (Hersey & Blanchard, 1982) a variety of styles can be expected, as found in this study, among the top schools in each peer group. An effective leader is able to choose an appropriate leadership style as determined by the situation and his knowledge of the readiness levels or his followers (Hersey & Blanchard, 1982). As a fourth key finding, this researcher suggests that the lack of a statistically significant correlation between the perception of leadership styles and student performance may indicate appropriate levels of situational awareness and flexibility among NJ elementary principals. In relation to this, this researcher suggests further study in the area of lower performing schools in each peer group to determine if the principals’ have aligned their leadership style to meet the needs and readiness of the teachers they are leading. Wang and Knight (1991) discussed that the 1974 study revealed that highly effective managers knew more about the situational leadership theory and used it more than less effective managers. It also showed that there was a strong correlation between job satisfaction and job performance and the appropriate use of a leadership style (Wang & Knight, 1991). Several researchers concluded that this finding could be applied to educational research producing conclusions that a flexible use of relationship behaviors was associated with higher school productivity and teachers’ job satisfaction (McMurray & Bentley, 1987; Miller, 1983). In 1980, Wyant found that the adoption of appropriate leadership styles for accurately diagnosed situations was a characteristic of successful principals (McMurray & Bentley, 1987). Through another study McMurray and Bentley (1986) found that principals with high effectiveness and
flexibility scores were more capable of taking teachers’ level of maturing into consideration when assigning teachers to jobs.

In their New Jersey School Performance Report Interpretive Guide, the NJDOE (2013a) states that the purpose of the New Jersey School Performance Report is to provide information to educators and stakeholders about the performance of schools and to spur conversations around student achievement based on the needs of students in those schools. With various studies reporting on the high correlation between school-level leadership and student achievement, the findings from this study help one to understand that the specific leadership style of a principal does not influence student achievement in a statistically significant way. This should prompt researchers in examining other characteristics of principals, and in probing further into the importance of a principal’s ability in choosing appropriate leadership styles as determined by the situation and his knowledge of the readiness levels of his followers. The use of Situational Leadership ® theory is relevant considering Marzano et al. (2005) found the highest correlation between student achievement and the traits of flexibility and situational awareness, both descriptors of Situational Leadership (Hersey & Blanchard, 1982). As a system, the ultimate goal would be the sharing of flexible leadership practices among school leaders.

**Recommendations for Future Research**

Based on the valid conclusion drawn from this study, there are recommendations for future research. The results of this study do allow for replication, and these recommendations will add to the reliability of study findings in the future.

1. This study should be replicated in Middle Schools and High Schools. The researcher focused on elementary schools as this was the researcher’s area of expertise.

   Principals at different levels of schools may have different dominant styles of
leadership and, therefore, their correlation with school effectiveness measures may vary in significance.

2. This study should be replicated outside the State of New Jersey. If this study were extended to other states, varying factors in school accountability measures could produce additional results.

3. This study should be replicated with a larger sample size. If sample sizes were increased, the reliability of the findings would certainly increase as well.

4. This study should be replicated with other leadership theories. The correlation between principal leadership and student achievement has been shown and more research is needed in understanding the characteristics of principal leadership that are influencing that correlation.

5. The researcher recommends a closer examination of the individual characteristics of the selling/coaching and participating/supporting leadership styles within Situational Leadership ® theory. Since these are the dominant styles of leadership in elementary principals in New Jersey, it would serve to support principals’ in developing the areas of those leadership styles that could have the most influence on student achievement.

6. The study revealed that two leadership styles-- telling and delegating-- were not characteristic of NJ elementary principals. The researcher recommends an examination of why these leadership styles are not found among NJ elementary principals.

7. The researcher recommends a comparison of principals’ perceptions of their leadership styles before, during, and after change events in education. Since Situational Leadership ® theory is based on the ability of leaders to adjust their styles
to match the needs of their followers, it would serve educational leaders to understand their situational awareness and flexibility during change.

8. The survey instrument, LEAD Self, measured principals’ perceptions of their own leadership styles; however it did not measure their leadership styles from the perspective of those they lead. The study would have benefited from the use of the LEAD Others instrument to compare teachers’ perception of a principal’s leadership style to the accountability measures of the NJ School Performance Report.

9. This study obtained data from a survey instrument, LEAD Self. This study should be replicated using qualitative data from those schools that were at the lowest performance in each peer group to determine if the leader was matching his leadership style to the maturity and readiness level of the teachers. If this could be done, the study could more accurately identify whether flexibility and situational awareness were critical attributes of principal leadership in schools performing at the top of their peer school group.

10. The individual profiles from the LEAD Self instrument also provided a Leadership Style Adaptability score. This study would have benefited from the use of this score to compare principals’ leadership style adaptability to the accountability measures of the NJ School Performance Report.
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