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Perceptions of the Developmentally Responsive Leadership Practices of Principals that Contribute to Achieving Adequate Yearly Progress in High and Low Achieving, High Poverty Middle Schools

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PERCEPTIONS OF THE DEVELOPMENTALLY RESPONSIVE LEADERSHIP PRACTICES OF PRINCIPALS THAT CONTRIBUTE TO ACHIEVING ADEQUATE YEARLY PROGRESS IN HIGH AND LOW ACHIEVING, HIGH POVERTY MIDDLE SCHOOLS

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Title: Perceptions of the Developmentally Responsive Leadership Practices of Principals that Contribute to Achieving Adequate Yearly Progress in High and Low Achieving, High Poverty Middle Schools

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ABSTRACT

The purpose of this study was to examine how teachers perceive the developmentally responsive leadership practices of selected Pennsylvania public middle school principals in schools with populations of high poverty students. A high poverty designation was determined by a student population of 30% or more receiving free or reduced lunch. Comparisons of teacher's perceptions of developmental responsiveness of building principals in high and low-performing schools with high poverty student populations were made. In addition, this study compares the principal's perceptions of their developmentally responsive leadership practices with those of the faculty. Schools were selected based upon their designation as having achieved or failing to achieve adequate yearly progress for two consecutive years.

The Anfara (2006) developmentally responsive leadership framework attempts to gain insight into the behaviors of middle school principals in three primary areas: responsiveness to the developmental needs of young adolescents, responsiveness to the

needs of the faculty to work in a supportive organization that promotes a strong sense of community, and responsiveness to the needs of a middle school to have organizational structures such as grade level teaming, an advisory program and interdisciplinary curriculum.

Teachers from low performing schools tended to rate their principal more favorably in all three subsections of the MLLQ than did teachers from high performing schools. Principals who completed the MLLQ tended to rate themselves more favorably than teachers in high or low achieving, high poverty schools. Teacher perceptions of the principal's leadership behavior, on average, fell within the *Fairly often* to *Sometimes* range. This is exactly opposite of the results that were anticipated at the beginning of the study. The data seem to indicate that teachers value certain distinct activities and behaviors of their principals. But it appears teachers in higher performing schools did not perceive certain principal behaviors as acutely as teachers in lower performing schools. According to teachers' perceptions, their principals all exhibit leadership behaviors that tend to characterize a middle school. What is not clear is the impact of these leadership behaviors on overall school achievement.

ACKNOWLEDGMENTS

The completion of this research project represents the completion of a lifelong goal. When I began this project five years ago I did not appreciate the amount of time and energy this task would require. So my thoughts as presented here can in no way express what I feel. I have felt the sting of poverty as a child and certainly did not have the advantages of a stable home life as a teenager. All indications would have pointed towards not going to college much less completing high school. What I have lacked in innate ability I have compensated with hard work and effort.

I did not arrive here on my own though. I have had the support of my family along the way and I am deeply grateful for their support. If I feel any sadness at this time it is for the sacrifices I have asked my family to make along the way. Additionally, I have to give praise to the Lord for what He has allowed me to do and given me the grace to complete.

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CHAPTER I

INTRODUCTION

In an era of high accountability for all public schools, the leadership role of principals is increasingly a topic of speculation and debate. Repeatedly, educational reform studies conclude effective school leadership is a key ingredient in attaining excellence in education (Crawford, 1998). While several leadership models are used to examine the various aspects of principal leadership, there are those who suggest that to be effective, school administrators must understand how the larger environment shapes organizational and individual interactions (McAndrews & Anderson, 2002; Sergiovanni, 1996). The argument is that there is a direct correlation between school leadership practices and overall school success (Heck, 1992). Some suggest school administration cannot be understood in isolation; rather, it must be understood as a distributed practice involving students, teachers, and community members interacting in both social and situational context (Spillane, Halverson, & Diamond, 2001).

Statement of Problem

The No Child Left Behind (NLCB) Act of 2001 appears to place a significant portion of responsibility for school achievement on the shoulders of school administrators (Mizell, 2003). In many cases, it is the middle school principal who becomes the target of criticism due to the NLCB mandate that all students in grades 5 through 8 be tested to determine a school's Adequate Yearly Progress (AYP) status. As a result of these demands, the role of the middle level principal has changed significantly (Louis & Murphy, 1994). With changing demands comes a renewed emphasis on the context in which these principals exercise leadership**.** Environmental issues, such as poverty, impact

not only the student, but the teachers who work with these students. Principal leadership, therefore, cannot be separated from, and must be understood within the developmental characteristics of the students they educate. (Anfara, Roney, Smarkola, DuCette, & Gross, 2006). Practicing developmentally responsive leadership will help middle level leaders looking to make adequate yearly progress focus their efforts on these contextual variables in a systematic and thoughtful manner.

Purpose of Study

The purpose of this study was to examine how teachers perceived the developmentally responsive leadership practices of selected Pennsylvania public middle school principals in schools with populations of high poverty students. A high poverty designation was determined by a student population of 30% or more receiving free or reduced lunch. Comparisons of teacher's perceptions of developmental responsiveness of building principals in high and low-performing schools with high poverty student populations were made. In addition, this study compared the principal's perceptions with those of the faculty. Schools were selected based upon their designation as having achieved or failing to achieve adequate yearly progress for two consecutive years.

Background of Study

There are several leadership models that can be applied to the activities of school principals. Some models focus on identifying specific traits or behaviors while others focus on the relationship between leaders and their subordinates. In some instances these interactions are transactional, in others, transformational in nature. Each model sheds light upon our overall understanding of educational practices that contribute to overall

school achievement. However, none of the above mentioned models draws specific attention to the developmental needs and characteristics of the students and teachers.

A school administrator does not operate in isolation, nor can administrative tasks be examined apart from the rich social context in which these activities occur. Several studies suggest contextual factors having a significant impact upon the overall principal's leadership style (Firestone & Herriott, 1982; Hallinger & Murphy, 1987; Herriott & Firestone, 1984; Sizer, 1992). Effective principals must be aware of contextual variables, such as poverty, poor health care and inadequate nutrition that can impact negatively upon a student's ability to perform well in school.

Instructional leadership is often the focus of studies designed to determine the relationship between student achievement and effective schools. Heck (1992) suggests that "principal instructional leadership has been problematic as a basis for accurately modeling the relationship between a school's environmental and social contexts and the dimensions of instructional leadership associated with higher or lower school academic performance" (p.22). Other researchers have gone so far as to argue there exists little direct link between a principal's instructional leadership and the academic success of students (Boyen, 1988; Heck, Larsen, & Marcoulides, 1990).

Another important consideration is the extent to which new principals may or may not be able to make changes leading to school improvement – especially in poorly performing schools. According to Ogawa (1991), this is due to the tendency of an incoming principal to adopt the norms of the new organization and the propensity of organizations to limit changes through formal and informal social mechanisms.

Due to the unique nature of middle-level learners, principals hoping to achieve organizational goals aimed at preparing students for the 21st century must develop strategies that enhance student learning in an environment that is both academically rigorous and emotionally secure. The model put forward by Anfara et al. (2006) provides a conceptual framework through which administrative practices in high poverty middle schools can be studied and interpreted. This study seeks to determine if there is a relationship, as perceived by teachers, between the developmentally responsive leadership practices of middle school principals and the academic achievement of students in high poverty middle schools.

Research Questions

The research questions addressed in this quantitative study are:

1. As perceived by teachers, is there a difference in the extent to which Pennsylvania public middle school principals in a high or low performing school with high poverty populations exercise developmentally responsive practices in relation to:

   A. The developmental needs of young adolescents?

   B. The developmental needs of faculty?

   C. The needs of a middle school to have organizational structures such as grade level teaming, an advisory program and interdisciplinary curriculum?

2. Is there any correlation between the perceptions of the teachers and the perceptions of their principals concerning the degree to which the principal exercises developmentally responsive leadership?

Definition of Terms

(1) High Poverty – Any school with 30% or more of students receiving or qualifying for state reimbursed free and/or reduced lunch.

(2) Developmentally Responsive Leadership – Leadership characterized by practices and behaviors centered and focused on the developmental needs of students, teachers, and overall school culture.

(3)High Performing – Schools that are identified by the Pennsylvania Department of Education as receiving a 2008 Keystone Achievement Award for Academic Excellence.

(4) Low Performing – Schools that fail to achieve adequate Yearly Progress for two or more consecutive years.

(4) Adequate Yearly Progress (AYP) – An individual state's measure of yearly progress toward achieving state academic standards. The term refers to the minimum level school districts and individual schools must achieve.

(5) Middle School – Any school that includes either a configuration of grades 5 though 8 or grades 6 through 8 or has the term "middle school" in the school name. This period has been identified as pre-adolescence.

(6) Keystone Achievement Award – In Pennsylvania, any school achieving AYP for two or more consecutive years receives this award.

Theoretical Framework

The framework for this study is based on Anfara's et al. (2006) model for the developmentally responsive middle level principal. In this three tiered developmental responsiveness model, the needs of young adolescents, the needs of the faculty, and needs of the school are the focus of the principal's administrative practices.

Theoretically supported in part by Spillane's et al. (2001) *distributed perspective of leadership practice,* developmentally responsive leadership occurs within a school unit rather than in isolation. When observed from a distributed viewpoint, "leadership practice (both thinking and activity) emerges in and through the interaction of leaders, followers, and the situation" (Spillane et al., 2001, p.27). Rather than viewing leadership practice as being "stretched over" several others who fulfill leadership capacities, as in a distributed leadership model, the developmentally responsive leader's thoughts and activities are stretched over the developmental needs of students, teachers, and the unique characteristics of the school itself (Rogoff, 1990). This is significant since middle level principals are distinctive in that they work with adolescents during a transitional period characterized by cognitive change and social/emotional upheaval.

Due to the uniqueness of this developmental period in the lives of students, leadership practices must be grounded in and spring from a strong ethic of care that permeates the entire organization. Noddings's (2005) argument that schools cannot accomplish their academic goals without first attending to the fundamental needs of students to be cared for lends itself to and supports developmentally responsive leadership.

Accordingly, the three-dimensional model of developmentally responsive leadership focuses on three primary areas: responsiveness to the developmental needs of young adolescents, responsiveness to the needs of the faculty to work in a supportive organization that promotes a strong sense of community, and responsiveness to the needs of a middle school to have organizational structures such as grade level teaming, an

advisory program and interdisciplinary curriculum. Each area provides a contextual focus for leadership practices that are distinct, yet layered and overlapping.

Responsiveness to the needs of young adolescents includes recognition of the role of curriculum, instruction, and assessment within the context of the fundamental needs of students to be in a nurturing and caring environment. The middle school is not a holding ground between elementary and high school; rather it is a short lived learning opportunity that needs to be addressed in a way that acknowledges the social, emotional, and cognitive proclivities of adolescent development.

Such tendencies are not necessarily positive. Developmentally responsive leadership practices also recognize and plan for the at-risk behaviors unique to middle level students (Carnegie Council on Adolescent Development, 1986). Because of the unique nature of these potential pitfalls, developmentally responsive leaders will help teachers, parents, and the communities at large understand the contextual variables, both positive and negative, that impact middle level students.

Responsiveness to the needs of faculty is also evident in developmentally responsive leaders. This includes the practice of hiring and training teachers who know the developmental characteristics of young adolescents and are able to implement a curriculum that is developmentally appropriate. This is all accomplished within a contextual environment that maximizes the tensions inherent between academic achievement and social/community needs (Anfara et al., 2006).

This responsiveness to the needs of the faculty is not simply intended to focus the attention of professional staff on the developmental needs of students. The faculty themselves are also at various stages of life span development (Lemme, 2002). The

recognition that development is a life long process allows leaders to plan for the life changes in staff that impact students and overall culture of the school. This includes creating a strong sense of community among the professional staff through advocacy of middle level structures such as grade level teaming.

The third tier in the developmentally responsive leadership model concerns itself with the leader's responsiveness to the needs of the school. Seen as an ongoing process, school growth includes understanding local and state politics as well as the unique structures that have been identified with effective middle schools. These include grade level teaming, advisory groups, interdisciplinary curriculum, and exploratory courses such as art and technology education.

Such an environment requires leadership that is both technical and adaptive. In many instances, a principal exercises technical know how in solving the problems associated with school leadership. A technical fix requires a clear definition of the problem which lends itself to a textbook remedy. But not all problems lend themselves to such prescribed solutions. In these cases, leadership takes on more adaptive characteristics which require learning by all parties to both define the problem and implement solutions (Heifetz, 2000).

Significance of Study

Principals in schools with high student poverty populations are faced with a variety of difficulties not experienced by school leaders in low poverty schools. Since poverty is more than a measure of income, principals working in high poverty schools encounter students who lack health insurance, have poor nutrition and come from single parent families. In addition, these students are likely to place a low value on education in

general and operate from a different set of class "rules" than the teachers and administrators in the school (Payne, 2003). These conditions constitute special challenges for Pennsylvania's school leaders as well as having a significant impact on overall assessment measures used in determining adequate yearly progress.

According to the 2004 Standard and Poor's Report on the Condition of U.S. Public Schools (2004), Pennsylvania has 1,821,146 public school students. Of the total, 28.1% of these students are classified as economically disadvantaged compared to the national average of 36.7%. Overall, Standard and Poor's indicates that Pennsylvania students classified as economically disadvantaged did not make adequate yearly progress in reading and were classified as making adequate yearly progress in math through the application of a confidence interval for these same students.

The Pennsylvania State Department's Annual Public School Report Card (2003), states that of the 127,024 economically disadvantaged third through eighth grade students taking the math PSSA, 64% were either rated as basic or below basic. The PSSA reading assessment showed similar results. Of the 127,356 low income students taking the annual test, 66% were rated either basic or below basic. These percentages are very similar to the scores for students in the grade 5 and grade 8 cohorts, typically associated with grade configurations found in middle schools.

Poverty means more than income; it includes lack of health insurance, inadequate education, and poor nutrition. The U.S. Census Bureau calculates annual poverty thresholds based on a 1960's model that estimates the cost of minimally adequate food budgets for families. For example, for a family of three, the poverty threshold is $15,219.00 a year. A family of four is estimated at $19,157.00 a year. The problem with

this model, according to the Children's Defense Fund (2006), is that changes to the original model have been based upon increases in the Consumer Price Index and do not adequately address increases in areas such as housing, child care, health care, clothing and transportation. The Defense Fund estimates that for a family of three, $30,000.00 is closer to the actual amount needed to cover basic needs. This constitutes nearly a $15,000.00 difference between the U.S. Census Bureau's poverty threshold and the Children's Defense Funds recommendations.

Educational leadership exercised in a context of high poverty populations is significant when the children's health and education risk factors are considered. Children in low income families are 1.6 times as likely to die in infancy and 2.7 times as likely to have no regular source of health care. These same children are 8 times as likely to experience times when there is too little food available. When children are struggling to have basic needs met, it is little wonder that they are 2 times as likely to repeat a grade and 3.4 times as likely to be expelled from school. This translates into high dropout rates and for those who do make it to college; these students are about half as likely to finish a four year college (Sherman, 1997).

The Anfara et al. (2006) developmentally responsive leadership framework attempts to gain insight into the developmentally responsive practices of middle school principals, but there is little in the way of empirical research showing a connection between these practices and student achievement. This is especially significant when poverty is part of the context in which a principal exercises any type of leadership. This study will seek to identify the developmental responsive practices of middle school principals and to determine if there exists any relationship between these practices and

student achievement as measured by the Pennsylvania System of School Assessment (PSSA).

Summary

Public schools have been made out to be both the scapegoat for society's ills and the salvation for future national prosperity and security. As a result, educators are faced with the task of meeting expectations from a variety of, oftentimes, competing interests. Whether from political, societal, cultural, or business interest, as a public institution, schools must respond to each set of expectations. Therefore, the role of an educator is to prepare students to meet and exceed these expectations.

No one else feels the pressure to perform as acutely as the building principal. The NCLB Act singles out the principal specifically in cases of failing schools. Some would like to think that educational policy at the national, state, and local levels finds its origin in motives that are free from self interest or self aggrandizement. Although it may be arguable that maintaining a quality educational system is of national importance, the very definition of 'quality' is open for debate; does it mean quality for the sake of quality or quality for the sake of advancing someone's or some group's agenda. For the last half of the 20th century, public education has been a political football. The players have included national, state, and local politicians, teachers' unions, private foundations, school administrators, business leaders, the courts, and special interest groups (Spring, 2005).

Despite outside influences, what happens in a school is determined primarily by teachers and administrators. In examining the role of the building principal, effective schools' research has focused on several aspects of principal leadership. Receiving more than its fair share of attention, instructional leadership has been closely associated with

enabling high poverty failing schools to achieve at levels consistent with their well-to-do neighbors in the suburbs. This study seeks to extend current research to include developmentally responsive leadership practices which may or may not play a role in enhancing student achievement.

CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of this quantitative study was to determine if there was a relationship between the developmentally responsive leadership practices of selected principals and student achievement in high and low achieving middle schools. All schools chosen for this study had high impoverished student populations. By examining teacher perceptions of their principal's behaviors, this study sought to determine if there exist connections between student achievement and the actions and behaviors of school leaders in three target areas: the needs of young adolescents, the needs of the teaching staff, and the needs of the overall organization. In this three tiered developmental responsiveness model, these areas are the focus of the principal's administrative practices.

Specifically, the review of literature in this chapter focused on the historical development of leadership theory, the evolution of the principalship, the role of the principal, and the principals' impact on student achievement and school culture. In addition, the characteristics and impact of poverty, effective schools research, and student achievement were examined.

Leadership Definitions

An authoritative definition of leadership has proven to be elusive to those so inclined to attach a description to such a vague term. In many instances, it is much easier to give examples of leadership rather than define it. While there are a multitude of definitions for leadership, the definitions put forth tend to have three common elements. First, leadership involves the influence of others to attain a common goal(s). Secondly, the exercise of leadership has an impact on followers. Thirdly, leadership takes place and

is impacted by the context in which it happens. Rost (1991) combines these common elements to define leadership as the development of a relationship between followers and leaders "wherein they influence one another as well as the organization and society" (Wren, 1995, p. 192). Howard (2003) defines leadership as "the process of communication (verbal & non-verbal) that involves coaching, motivating/inspiring, directing/guiding, and supporting others" (p. 385). Gardner and Laskin (1995) define leadership as a process and successful leaders as those individuals who are more advanced in skills and effectiveness than their peers. Within this definition, Gardner asserts that four factors are crucial to the practice of effective leadership. First, there is a relationship to the community that is "ongoing, active and dynamic" (p. 36), and this relationship involves interaction between leader and followers. Secondly, effective leaders are highly reflective, reserving time to distance themselves from daily demands placed upon them either by circumstances or individuals. Thirdly, effective leaders are able to maintain a close alignment between their message and their actions. Lastly, their definition differentiates between autocratic leaders, like Stalin, and authentic leaders, by virtue of the ability of followers to exercise some sort of choice as to whether or not they follow the individual. They explain that "only in such instances of 'leadership through choice' does it make sense to think of stories being told, virtues being embodied, or opinions being changed through example or persuasion (p.38).

Behavioral theories of leadership have focused on the extent to which a leader is task versus relationship oriented. Hersey and Blanchard (1996), working from a situational leadership perspective, would argue that leadership style is framed and impacted by the situation in which it is exercised. Therefore, leadership style does not

exist on a continuum, rather task and relationship styles are measured in degrees and can be plotted on two separate axes and that there is no 'best' leadership style. Their research suggests as situations change, so must leadership styles. Situations, in this case, are framed by the willingness and ability of followers. The degree to which a leader, in any given situation, exercises high or low task and relational behaviors is greatly impacted by the readiness levels of followers.

Contemporary Leadership Theory

Trait Theory

Beginning in the early 20th century and extending well into the 1940's, leadership studies focused on identifying personality characteristics associated with individuals identified and accepted as leaders. Traits such as ambition, charisma, intelligence, and creativity were seen as qualities that separated a leader from a follower. Mann's (1959) study on leadership suggested that leaders possessed traits such as intelligence and dominance, not found in followers. Researchers looking to identify leadership potential relied upon an assortment of personality tests to help identify these traits. In many instances, research attempted to measure the degree of difference in various traits, such as dominance and physical appearance, between leaders and subordinates. Leaning towards a trait oriented definition of leadership, Kirkpatrick and Locke (1995) identified several traits exhibited by leaders. These included: drive, leadership, motivation, honesty and integrity, self-confidence, cognitive ability, technical knowledge, and to a lesser extent, charisma, creativity and flexibility. But traits only endow people with leadership potential. Other variables, such as context, certainly came into play when the concept of

leadership was considered. What was certain is that “leaders are not like other people” (p. 60).

By the late 1940’s, the idea of traits being the sole determining factor in leader status or effectiveness began to give way to an acceptance of the need to integrate personal and situational characteristics as well. Stogill’s (1948) survey of leadership studies extended the notion of trait theory to include contextual variables as well. Leadership must be understood as more than a situation where an individual exhibiting dominant traits takes charge, but rather the “interaction of variables which are in constant flux and change**”** (p. 130). Researchers began to conclude that leadership was a “working relationship among members of a group, in which the leader acquires status through active participation and demonstration of his capacity for carrying cooperative tasks through to completion” (p. 131).

Behavioral Theory

Between World War Two and the late 1960’s, research focused on the behavioral aspects of leadership. Studies focused not only on the acts or behaviors that evoked change within a group, but also sought to distinguish between effective and ineffective behaviors (Lunenburg & Ornstein, 1991). Lewin, Lippitt and White (1939) conducted a classic study wherein they identified three leadership behaviors: autocratic, democratic, and laissez-faire. The autocratic style, according to their study, is characterized by tight control of group activities and independent decisions by leaders. Leaders exhibiting democratic tendencies seek group participation and group involvement in decision making, while laissez-faire leaders give little or no direction to the group and allow subordinates to make decisions. The dominant style exhibited by any leader is

characterized by the degree of group involvement in decision making. Building on the concept of leadership behaviors, Stogill and Coons (1957) identified two clusters of behavioral actions believed to be attributes of effective leadership. Effective leaders, according to their study, were seen as having high measures of consideration behaviors such as interpersonal warmth and initiation of structure, such as directness and task related feedback.

Current Theories

Contingency Approaches

Building on the work of Stogill and Coons (1957), Fiedler (1964) proposed a contingency model of leader effectiveness, which measured the relationship of leadership style to group performance and morale. In later studies, Fiedler (1967) suggests leadership style based upon personality and contextual variables has a significant impact on a leader's effectiveness.

A primary component of contingency theory seeks to determine the degree of task, versus relational motivated behavior. Further development of the contingency model integrated situational parameters having impact on leader effectiveness. A leader's effectiveness in any given situation is significantly impacted by the degree of certainty, predictability, and control exercised by the decision maker.

Vroom and Yetton (1973) identified a series of normative decision making styles ranging from autocratic, where the leader makes decisions without consulting subordinates, to consultative and group style, which included in varying degrees, the input of subordinates. Building on the work of Vroom and Yetton, other models, such as

path goal theory, sought to determine the effects of specific leader behavior on subordinate motivation and satisfaction (House, 1971).

House contends that a leader motivates subordinates by making a connection between the subordinate's own needs and the goals of the organization. The leader then defines the avenue subordinates need to take to achieve their own needs, as well as the needs of the organization.

In his research, House identified four types of leadership: Directive, Supportive, Participative, and Achievement-oriented. In all four types there is heavy emphasis on leader responsibility (House & Mitchell, 1974). A directive style requires that the leader give specific guidance to subordinates, while a supportive style finds the leader friendly and showing concern for subordinates. A participative approach lends itself to subordinate involvement through the consideration of the subordinate's suggestions. Lending itself to a more charismatic model of leadership, achievement-oriented leadership requires the expectation of high performance levels from subordinates to attain lofty organizational goals (House, 1996).

Transactional and Transformational Approaches

Arguing in favor of a symbiotic relationship between leaders and followers, Burns (1978) defined leadership as the ability of leaders to influence followers in achieving goals that represent the interests and values of both leaders and followers. The essence of this relationship "is the interaction of persons with different levels of motivations and of power potential…in pursuit of a common…purpose" (Burns, as cited by Wren, 1995, p. 100). Interactions within this type of relationship can take two forms: transactional or transformational.

Transactional leadership can be described as a person initiating contact with subordinates for the purpose of exchanging valued items, often in an effort to advance organizational goals. At a very basic level, this form of leadership involves an exchange of services for some type of reward (Burns, 1978).

Bass and Avolio (1990) identified two components of transactional leadership: contingent reward and management-by-exception. Contingent Reward, defined as "active involvement and exchange of the leader towards the followers through positive and negative reinforcement and recognition" (Stone, 1992, p.4) hinges upon satisfactory performance by subordinates. Management-by-Exception requires involvement by the leader only when additional resources are needed to meet pre-determined levels of performance. This is usually in the form of feedback or punishment when tasks are not completed, but does not provide for recognition of achievements or completed tasks. Other researchers, while acknowledging the efficiency of transactional leadership, suggest that something additional is needed to assist "an organization to strive for and achieve higher purposes" (Sagor, 1991, p.1-2).

Burns (1978) suggests what is needed is a leadership style wherein "one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (p. 20). In transformational leadership, Burns argues that both leaders and followers are changed.

Building on the significance of transformational leadership in attaining total quality organizations, Leithwood and Steinback (1993) suggest the importance of a transformational style in promoting an organization characterized by continuous improvement and team problem solving. Other researchers have noted increased

professionalism, employee satisfaction, shared decision making, as well as shared ownership of problems and solutions in organizations operated in a transformational style (Sagor, 1991; Stone, 1992). According to Burns (1978) there is a potential for transformational leadership to become moral in that it "raises the level of human conduct and ethical aspirations of both leader and led" (Wren, 1995, p.101).

One of the primary differences between transactional and transformational leadership is the degree of relationship that transpires as a result of interaction between leaders and followers. While transactional relationships further organizational goals, leaving both leader and follower unchanged, transformational relationships produce change not only within the organization but in the key participants as well.

School Leadership

Theoretical Influences

Sergiovanni (1996) identified three broad theoretical constructs impacting our understanding of school leadership: *the pyramid theory*, *the railroad theory*, and *the high performance theory*. All three influence how schools are currently structured and operate, but all three share characteristics that make them inappropriate in their application to school governance. Issues such as fragmentation of work, isolationism, and coercion, all issues arising from these models, have the negative impact of creating artificial connections between people and their work. Nonetheless, these three have had significant influence upon current school operations and structures.

Based upon a hierarchical system consisting of varied layers of management, the *pyramid theory* relies upon rules and regulations to govern actions and processes. Managers working within this theoretical framework, operate from a needs based

perspective of human motivation best defined by Maslow (1999). According to Maslow's needs based theory, leaders must meet employee's needs thereby creating employee motivation and satisfaction. The satisfying of employee needs enables them to work towards the attainment of organizational goals. Sergiovanni (1996) argues when the *pyramid theory* is applied to schools, "the work of principals and teachers becomes increasingly simplified and standardized" (p.10).

The *railroad theory* refers to the standardization of work processes. Rather than being characterized by direct supervision, leadership is evidenced by the anticipation of possible questions and problems, and the subsequent implementation of protocols, to address these contingencies. Once processes are in place, subordinates are trained to follow procedural protocols. Supervisors monitor and confirm that employees are following procedures. These procedural protocols are put into place, and are calculated to achieve organizational goals and objectives in the most efficient manner possible.

When applied to schools, the *railroad theory* would be characterized by the standardization of both curriculum and instruction. Teachers are supervised and evaluated to ensure the approved curriculum and specific method of teaching is being followed. Principals, teachers, and students are rewarded for following the script rather than solving problems. Sergiovanni (1996) argues that "scripting the work, scripts the worker as well" (p.11).

In both theories, it is important to create comfortable environments for workers. In the school setting, principals are expected to juggle the dual responsibilities of meeting established performance criteria while keeping staff morale high.

Current school reform efforts borrow heavily from the lessons learned from top U.S. companies (Peters & Waterman, 2004). The *high performance theory* espouses de-centralization and employee empowerment. Decision making power is closer to the worker, either by individual or shared decision making. Leadership is found not in ensuring adherence to rules or procedures, as in the earlier two models, but in connecting workers with the end goals. Subordinates are held accountable for achieving defined outcomes.

Sergiovanni (1996) sees application of the *high performance theory* in the current use of standardized learning outcomes. Achievement is measured by attainment of these outcomes with broad decision making power granted to the local school. How schools attain these learning outcomes is often decided by the local administration and teaching staff. According to this theory, empowered teachers are more motivated, since they control the means to achieve predefined ends, or in this case, learning outcomes. Teacher empowerment creates a climate whereby students can achieve at higher levels.

Variations of these three management theories are found in today's schools. It is in this environment that principals are expected to lead schools. In many instances new rules, programs, and expectations are placed on school leaders without the benefit of thoughtful consideration of changes that need to happen in order to effectively implement them. As a result, the role of the principal has changed dramatically over the past few decades.

Theoretical Perspectives

The principal of the 1960's and 1970's was largely cast in the role of compliance monitor (McGeown, 1975) and conflict mediator (Wolcott, 1973). Expectations ranged

from ensuring organizational adherence to state and local directives, to preventing and resolving conflicts. There was little anticipation that the principal make any meaningful contribution to successful educational process (Bridges, 1965; Goodlad, 1975; Lorzeau, 1977). Low expectations may have been due, in part, to the substantial impact of Coleman's (1966) report, suggesting educational achievement had little to do with the schooling a child received, rather, other variables, such as socio-economic status, had a greater and more significant impact on student achievement.

Later studies substantiated Coleman's (1966) findings, concluding that increasing per pupil spending had little impact on student achievement (Jencks, 1972). By the early 1970's, researchers began to grapple with the impact of poverty on student achievement, with general support for the premise that schools cannot make a difference for low income students.

Not all research confirmed conclusions supporting a school's impotence in educating all students, regardless of extenuating variables such as socio-economic status. Studies began to identify the significance of a strong, experienced principal who participates in the classroom, and maintains, among other things, high expectations for teacher and student performance (Klitgaard & Hall, 1973).

The concept of the principal as instructional leader was still ill defined in the literature, as evidenced in a five year study of southern Californian schools. While not clearly identifying the role of principal as instructional leader, the significance of Goodlad's (1975) study was in lending to an understanding of schools as natural, rather than mechanical systems, needing cultivation if expected to thrive. As a natural organization, schools could not be understood by examining their isolated parts; instead,

functions needed to be seen and understood as interrelated. For this to happen, the role of the principal had to change in such a way as to challenge the organization, rather then assimilate into the existing culture.

By the mid-70's researchers began to focus their attention on practices of effective principals. Chief among effective practices was a tendency to put a high priority on the achievement and happiness of students. Effective principals helped students set both long and short range goals, and spent considerable time on problem solving (Leithwood & Montgomery, 1986).

Other research identified characteristics of effective schools for urban poor and noted the significant role principals and teachers had in making a difference in student achievement (Edmonds, 1979). In many instances, the vision of the principal was paramount for school success. In one study (Powell, 2004) teachers identified several significant instructional strategies of principals. Strategies such as protecting teachers' instructional time, providing programs to address individual students' differences, knowing the curriculum and recognizing effective classroom instruction were deemed as making significant contributions to the overall success of selected at-risk schools. Lorzeau(1977) noted the importance in maintaining a balance between various responsibilities such as administrative tasks and instructional leadership functions.

An exploratory study of school district adaption found that effective principals create a culture conducive to risk taking, parental involvement and decentralized, shared decision making (Berman & McGlaughlin, 1979). Other studies also noted the significance of shared decision making on student achievement (McGeown, 1979). Participatory decision making was also noted as being significant during times of school

wide improvement. Effective principals were found to encourage staff input and shared decision making throughout periods of school improvement (Emerick, 1977). While shared decision making was found to be statistically significant to school improvement efforts, a major study involving over 300 school districts, found that efforts having active support of the principal were most likely to succeed (Berman & McLaughlin, 1978).

The perceptions of a school often become part of a school's overall culture. As a result, Schein (1985) contends that school leaders must shape effective school culture. This is accomplished, in part, by being aware of and working to influence, teacher perceptions. When school leaders create a positive culture, the environment becomes stable allowing people to move in a common direction. School leaders must never underestimate the significance of a positive culture. Deal and Kennedy (1982) suggest that a positive culture gives both meaning to work and aides in achieving desired organizational outcomes such as collegiality, trust, integrity, as well as mutual support.

As school reform efforts sparked new studies focused on effective schools, researchers began to define an image of the principal as instructional leader (Edmonds, 1982; Edmonds & Frederiksen, 1978; Fullan, 1992). This role was further defined by studies of successful program innovations (Berman & McLaughlin, 1978; Hall & Hord, 1987; Huberman & Kane, 1981). These studies began to solidify connections between instructional leadership and student achievement.

Miller (2007) showed a strong connection between a principal's support of the attitudes, policies, practices utilized in their schools and student achievement. This support was evidenced in their actions and contributed to their school making AYP benchmarks for poor students. This study found the highest rated principal action dealt

with holding high expectations for all students, teachers, and parents. High expectations by the principal were characterized as a fundamental philosophy rooted in the school's culture.

There existed little consensus as to whether the role of the principal was uni-dimensional (Leithwood, Begley, & Cousens, 1992) or multi-dimensional (Sergiovanni, 1984). Goodlad's (1975) concept of multifunctional, interrelated school organizations, lent itself to the multi-dimensional role of the principal. These roles ranged from that of management functions, personnel support, instructional intervention, modeling important goals and behaviors, and fostering a school culture conducive to achieving agreed upon goals(Sergiovanni, 1984).

Increased accountability has converted the role of principal from an instructional leader to that of being primarily responsible for the way teaching and learning occurs. Variables such as teacher working conditions and nurturing interschool and community relations fall under the auspice of the principal who is now held accountable for school success. In effect, the principal is responsible for transforming and improving the entire school organization.

Examining the principal's role as a facilitator of change, Christensen (1995) studied five elementary principals whose schools were part of the Accelerated Schools Project developed by Levin and Hopfenbeerg (1991). Results indicated that principals considered their task of shared decision making essential to changing the overall culture of the school. One study of Alabama principals found general agreement that participative and team leadership models were the most effective for administering public

schools (Prince, 2006). Shared decision making helped principals to convey high expectations, and to accept responsibility of the success of the school.

Effective Principals and Student Achievement

Effective leadership, argue Kouzes and Posner (2003), is a set of skills and practices. These can be learned, but must be put into practice with integrity and savvy in order to inspire others to support the leader's vision (Evans, 1996). According to Whitaker (2002), effective principals know what to do and put this knowledge into practice, while ineffective principals fail to act upon what they know. Research on effective principal leadership, therefore, is not concerned with traits, as much as with what principals actually do (McEwan, 1998).

Some research points to the significance of the principal-teacher relationship on overall school quality (Barth, 1990). Taking this point one step further, Bolman and Deal (1993) contend that quality of leadership within a school, depends on principal-teacher relationships. In such relationships, issues of trust form the foundation for effective communications. Trust often takes different forms in different contexts. Sometimes trust is viewed as providing support, and in other contexts it is perceived as consistency of expectations. In many schools, trust is evident in a culture that encourages experimentation with instructional strategies. (Valentine, Clark, Hackmann,& Petzko, 2004). Trust is also evident when teachers know that the principal will monitor their performance and take corrective action when needed. In the National Study of Leadership in Middle Level Schools (Valentine et al., 2004), principals commented about some teachers needing "a pat on the back, some need a kick in the pants" (p. 97).

Another principal put it this way:

> There is a group of teachers that really struggles, and a group that are superstars, and probably most teachers fall somewhere in between. I have to make sure I support those who are struggling and kind of push the ones who are doing OK and want to do good. And it is my job to make sure the ones that don't want to improve are not here. (p. 97)

After analyzing five research studies examining effective principals (Fiore, 1999; Roeschlein, 2002; Turner, 2002; Whitaker, 1993; Whitaker, 1997), Whitaker (2002) identified several things that great principals do differently than ineffective principals. Effective principals focus on people not programs. They understand that school improvement is a matter of getting the right people on the bus and the wrong people off the bus (Collins, 2001). School improvement means improved student achievement. This begins with a simple principle: get better teachers and improve the teachers you have (Whitaker, 2002). Effective principals understand the needs of their organization and strive to hire only the best teachers. Once hired, relevant and meaningful professional development is a key to supporting and maintaining student achievement.

Effective principals treat everyone with respect and understand the concept that perception becomes reality. Whether you like someone or not is irrelevant, "if you don't act as if you like them, then it doesn't matter how much you like them" (p.23). Treating people with respect has the additional benefit of creating a positive atmosphere. Likewise, effective principals understand the power of praise and continually take a positive approach.

Effective principals focus on students by focusing on teachers. They do not let managerial and administrative tasks keep them out of teachers' classrooms. Classroom visitation demonstrates a principal's support of classroom activities and promotes a sense that what is going on in the classroom is important.

Developmentally Responsive Leadership

The purpose of this study is to determine if there is a relationship, as perceived by teachers, between the developmentally responsive leadership practices of selected principals and student achievement in high and low achieving middle schools. All schools in this study have high populations of students from impoverished families. The framework for this study is based on Anfara et al.'s (2006) model for the developmentally responsive middle level principal. In this three tiered developmental responsiveness model, the needs of young adolescents, the needs of the faculty, and the needs of the school are the focus of the principal's administrative practices. The following is a review of the literature relevant to each tier of this middle level model.

Adolescent Development Theory

The number of middle schools in America has increased from 2,080 in 1970 to nearly 12,000 in 2001-2002 (National Association of Elementary School Principals, 2004). The foundation of the middle school movement is the recognition that students between 11 to 15 years of age are going through puberty. During this time of biological instability, young adolescents are experiencing radical cognitive, social, and emotional changes. The biological preparation for reproduction, with millions of years of evolutionary conditioning, requires, according to Armstrong (2006)

> Consideration of their mood swings, their impulsivity, and their other troubles – we must always keep in the back of our minds the knowledge that the hormonal, neurological, and physical changes that give rise to these "problems" in puberty takes place because the body, emotions, and mind are being prepared biologically for this incredibly complex, delicate, and all important evolutionary task. (p.115)

Fundamental to the middle school philosophy is a thorough understanding of the cognitive, emotional, and social development of young adolescents. There are several influential theorists, whose work has influenced our understanding of adolescent development.

Erikson

Erik Erikson's (1902-1994) *theory of identity development* helped popularize the concept of "identity". His theory places a greater emphasis on the social context of development than his predecessors. Erikson contended that a true sense of identity requires meaningful recognition for achievements and accomplishments at certain stages of social, emotional, and physical development. Normal development, according to Erikson, requires a "succession of potentials for significant interaction" (Muus, 1996, p.61). Of particular significance is the need for successful navigation from one developmental stage to the next.

Erikson identified eight stages of identity development. The first stage is Trust versus Mistrust, which includes becoming trustful of others as well as becoming trustworthy. Erikson contends that the experience necessary in the development of trust is maternal love and care. The second stage, Autonomy versus Shame and Doubt, usually develops between the ages of 18 months and 3.5 years. During this time, children

experience the autonomy of free choice, and the recognition they are different from their father and mother. During this time, children develop a sense of pride, control, self-assurance, and self-certainty.

Between the ages of 3.5 to 6 years, the developmental stage of Initiative versus Guilt gives rise to conflict between activity, curiosity and immobilization by fear and guilt. The fourth stage, Industry versus Inferiority, is characterized by a period of learning and mastering basic societal skills. Children in this stage of identity formation are in the process of *becoming*, through task identification and a willingness to learn.

Of particular importance to middle school culture and pedagogy is Erikson's fifth stage of identity development: Identity versus Identity Confusion. During this time, children must establish a sense of personal identity. Children also asses their strengths and weaknesses in an effort to establish a meaningful self concept while avoiding the dangers of role diffusion and identity confusion. Identity is not biological function, nor is it conferred by society; rather it must be acquired through individual effort.

For young adolescents, the older generation does not provide a role model in their search for identity. This is due to the pace of change within society. Rather, peer groups help adolescents answer the question, "Who am I?" through social feedback mechanisms. It is therefore not unusual for adolescents to go through a period of compulsive peer group involvement. This period is also characterized by frequent episodes of falling in love, since this is an "attempt to project and test one's own diffused and still undifferentiated ego through the eyes of the beloved" (p. 53). This stage is also characterized by a desire to establish a vocational identity.

The middle school is structured to help young adolescents navigate Erikson's fifth stage in several ways. Middle schools utilize Advisory Programs, for example, to help students develop a sense of connectedness to their peer group and a significant adult, who at times, serves as a role model and point to connection to the school organization. The curriculum at the middle level is exploratory in nature, offering an assortment of courses designed to expose students to a variety of career paths (National Association of Secondary School Principals, 2006).

Piaget

Jean Piaget's (1896-1980) *cognitive theory of adolescence* focused on the cognitive reasoning characteristics of adolescence (Inhelder & Piaget, 1958). He theorized that cognitive development was the result of interaction between individuals and their environment. Piaget's constructionist views were evident in his theory that children actively participate in the construction of their knowledge. Much of his research focused on underlying cognitive processes in an effort to understand why a person acted or responded as she/he did.

Central to his theory is the concept of cognitive structure. Cognitive structures are patterns of physical or mental action that are unique to specific acts of intelligence and correspond to four developmental stages: Sensorimotor, Pre-Operations, Concrete Operations, and Formal Operations.

The Sensorimotor stage of development (from birth to age 2) is subdivided into six developmental phases and primarily involves the exercise of inborn reflexes, such as sucking. The primary circular reactions phase is characterized by involuntary movements. Between 4 to 8 months, infants begin to track objects with their eyes or for example,

while in their crib, pull a cord that makes a bell jingle. The fourth phase, coordination of secondary schemata, is characterized by means-ends relationships. The fifth phase is evidenced by the concept of object permanence. And in the last phase, between eighteen and twenty-four months of age, children begin to use foresight in solving sensorimotor problems.

The Pre-Operational stage, between ages 2 to 7 years, is characterized by the beginning of conceptual thought and the exhibition of basic social behaviors. During this phase, a child's language skills develop rapidly and they are completely dependent on their sensory impressions. While still intuitive and subjective, pre-operational children play and manipulate toys, express thoughts and ask questions.

The Concrete Operational stage lasts approximately until the onset of puberty. According to Piaget, there are four elements of this stage: the logic of class, the logic of relations, the principle of conservation, and the reversibility of thought processes. In this stage, children begin to think logically and language becomes sociocentric with children demonstrating sincere efforts to understand and be understood.

Formal Operations is the final stage of cognitive development and emerges during adolescence. Thought and reasoning become increasingly abstract, complex, logical, and flexible. Meta-cognition is also evident during this stage. Also of significance is the ability to reverse the direction of thought. The adolescent mind can now think in terms of reality and possibility (Muuss, 1996).

The educational implications of Piaget's work is in the theoretical framework it provides wherein educators can write and develop age appropriate curricula while realizing that children seem incapable of moving beyond the limits of their cognitive

structure. Kamii, Clark, and Dominick (1994) propose the legitimate goal of education should be the development of autonomy. In the child's quest to become self governing, Piaget's theory helps educators to devise instructional strategies that promote both the acquisition of knowledge from within and support the adolescent's cognitive level.

Kohlberg

Both Piaget and Kohlberg were interested in the development of moral judgment. Moral judgment, according to Piaget, means the ability to evaluate the rightness or wrongness of a course of action. He observed a stark change in moral reasoning in children as they moved from preoperational to operational thinking and from operational to concrete operational thinking.

Piaget contended that at the preoperational stage, children exhibited what he called moral realism; which he described as blind obedience to authority. Preoperational children do not have the intellectual structures to consider alternatives. With the move to operational reasoning, children are able to view alternative points of view other than their own, and can now consider the intent or motivation behind a certain act.

Using Piaget as a springboard, Kohlberg first sought a working definition of morality. Looking to Kant's categorical imperative, Plato's notion of justice, and Dewey's concept of moral development through education, Kohlberg defined morality as "neither the internalization of established cultural values, nor the unfolding of spontaneous impulses and emotions; it is justice, the reciprocity between the individual and others in the social environment" (Kohlberg & Mayer, 1981, p. 54-55).

From Piaget's theoretical framework of distinct cognitive stages of moral development, Kohlberg identified three levels of moral development: preconvention,

conventional, and postconventional. Each level was further subdivided into two sub stages, each having "a distinct moral philosophy that has implications for education, social and political organization, and can serve as a typology of moral orientation" (Muuss, 1996, p.181).

At the preconventional or premoral level of moral reasoning, the individual is concerned with external consequences to the self. The main motivation for obedience is to avoid punishment. Moral behavior is motivated by a desire to act in ways that satisfy one's own personal needs or wants. The conventional or moral level finds the individual acting in ways that express a need for meeting external social expectations. As the individual moves into the conventional stage, the golden rule of 'do unto others as you would have them do unto you' is the guiding principle for decisions. During this stage peer influence is greatly magnified and becomes the basis for right and wrong. These ties to the peer social group may cause the individual to break the rules of the larger society in an effort to meet the expectations of the peer group.

At level two, stage four, there is a strong belief in law and order. Moral behavior becomes anything that avoids the legal penalties. The individual also begins to recognize that others have legitimate rights as well. Guilt and fear become motivators for moral behavior. At the postconventional or autonomous level, the individual operates in a realm of self-chosen moral principles. Moral behavior is motivated by internal controls based upon universal principles such as, equality, human dignity, and contractual agreements. There is now a concern for the larger community and the individual sees that laws, having no inherent rightness or wrongness, can be changed. In fact, laws are meant to serve the larger good. At the highest level of moral reasoning, there is a strong belief that

laws that violate ethical principles must be either changed or broken(p. 184). Writers such as Henry David Thoreau would refer to actions at this level as “civil disobedience” (Thoreau, 2005).

There is much discussion concerning the role schools should play in the teaching of morality. Parents fear what values are taught in schools, due to sincerely held religious, political, or philosophical views. Other parents are increasingly demanding that values be taught in schools. This may be due to their own confusion as to what is right or their own inability to teach values to their own children.

Kohlberg contends that schools cannot be value free and suggests that public schools have an obligation to extend and define the idea of justice and that strategies can be used that help develop the moral reasoning of students. Activities that cause students to work through moral conflict help students in the development of their moral reasoning. Role playing and “what if” scenarios allow students to experience cognitive disequilibrium. When students are allowed to discuss and make judgments their own sense of right and wrong is extended (Muuss, p. 1996).

Adult Life Stage Theory

The principal who exercises developmentally responsive leadership recognizes that due to the nature of the adolescent learner, middle schools require a certain kind of teacher (Anfara, 2006). These teachers must be able to empathize with the complexity of middle school students while delivering a curriculum that is interactive and demanding. This takes place within an environment that recognizes the individual needs of the staff to be part of a secure community; a community that encourages team building and collegiality. To create this environment, the developmentally responsive leader must take

into consideration the social, emotional, and professional needs of teachers at various stages in their life cycle (p. 23).

There are six key perspectives on life-span development. First, development is a lifelong process with the potential for change at any age. Second, development includes both gains and losses, for example, the birth of a child or the death of a parent. Third, development is characterized by cognitive, physical, and emotional changes. These changes can occur at different times, at different rates, can be caused by different factors and come from a variety of directions. Development is plastic and embedded in historical, cultural, and social contexts. And lastly, life span development is a multidisciplinary field (Baltes, 1987).

Levinson (1978) describes the life cycle as a series or sequence of eras, each lasting approximately 25 years and having defining biological, emotional, and social characteristics. Each era ends and begins with a transition period lasting approximately 5 years. The early adult transition occurs between 17 to 22 years. The midlife transition occurs between 40 to 45 years and the late adult transition between the ages of 60 to 65 years. It is during these transition periods individuals reflect upon the choices they have made and make decisions concerning future goals.

If there are adult life stages, then they should be reflected in one's career. From a career perspective, individuals enter the job market with a Dream. This Dream is about what they want to accomplish, what they want to be, and what they want to earn. Some of the goals in the Dream are usually attainable and some are not. The Dream begins when one first enters the job market and begins to evolve into goal oriented behaviors (Neufeldt, 1985).

There then follows a time of relative stability, often characterized by beginning a family. During this time of stability, family size reaches a maximum leading to financial pressures and increasing dissatisfaction with income. Yet job satisfaction is usually high at this time.

The next stage, called the mid-life or mid-career transition is characterized by increasing reflection on what has been accomplished up to this point. Sometimes portrayed as a mid-life crisis (Jung, 1933), the mid-career transition sometimes requires adjustment of the Dream and can result in career changes. In the final phase of life stage and career development theory there is an acceptance of reality, and is often characterized as a time when family becomes more important than career (Neufeldt, 1985).

Havighurst's (1953) model of developmental tasks examines life stages from the perspective of major accomplishments required of an individual at a certain time in life. Early adulthood, between ages 18 to 35 years, is when individuals select mates and learn to live with their spouse. Families are started and children are raised. For many, this is the time when careers are started and individuals begin to participate in social and civic groups.

Between ages 35 to 60, middle age, individuals are actively involved both socially and civically. Maintenance of career and the family's standard of living is a major area of focus. During this time children are taking on more adult responsibilities and leaving the home. This leaves time for leisure activities. It is during this time that many couples have to learn to relate to one another again, apart from the children. In addition, there may be the added responsibilities of caring for aging parents.

The final stage in the adult developmental task model occurs after age 60. It is during this time that individuals prepare for retirement, adjust to decreasing physical strength, and possibly adjust to the death of one's spouse. Each task has its own significance and often overlaps into and impacts other areas of the individual's life.

Poverty and Schools

According to Lapkoff and Li (2007) there are five demographic trends of significance to educators: (a) fluctuations in enrollment, (b) immigration and diversity, (c) a varied home front, (d) an aging population, and (e) obesity. In their discussion of family characteristics it is noted that children living in homes with two parents are much less likely to live in poverty than children in one parent homes. In 2004, 9 percent of children living in two parent homes lived below the poverty threshold compared to 42 percent living in single parent homes. On a national level, 17 percent of children under age 18 live in families where the yearly income is below the poverty live. While this number has declined since the 1990's, it still presents serious obstacles for these students and educators (Federal Interagency Forum on Child and Family Statistics, 2006).

Achievement Strategies

There were 6.8 million families living in poverty in the United States in 2001. This rate is two to three times higher than that of most other industrialized countries. In this context, the key to helping students from impoverished backgrounds is to build relationships. Relationships are the most significant motivator for these students and are built one at a time, one teacher or other significant adult to one student. In answer to the question "how do schools build relationships?" Payne(2003) would answer "through support systems, through caring about students, by promoting student achievement, by

being role models, by insisting upon successful behaviors for school. Support systems are simply networks of relationships" (p.145).

Several studies, using two level hierarchical linear models, have found positive correlations between teacher performance and student achievement (Milanowski, 2004; Milanowski & Kimball, 2005; Milanowski, Kimball, & Odden, 2005). These studies based teacher performance on a standards' based evaluation system. Other studies support the importance of teachers in influencing academic achievement in students (Ferguson, 1998; Goldhaber, 2002; Sanders, 2000).

When asked to rate attitudes, policies, and practices that promote achievement for economically disadvantaged students, principals' perceptions support the research connecting teacher performance and expectations to student achievement. Principals gave the highest rating to "principals perceive curriculum, instruction, and assessment as an integrated system united by a common focus on student learning" (Miller, 2007, p.54). When asked about policies that affect student learning among economically disadvantaged students, 100% of the respondents rated, "High expectations are a core ideology and are embedded in the schools' culture and a shared school-wide mission for teaching and learning" as being highly or somewhat effective (p. 57).

Miller's (2007) research found it to be the perception of effective principals that when teachers focus on academic content and student learning, as well as setting high expectations for them and their students, economically disadvantaged students are more successful. Her findings also support the perception among principals that there needs to be cooperation between administrators and teachers in their efforts to learn what works best to help improve their students success.

Duke, Tucker, Salmonowicz, and Levy (2007) focused on conditions that contribute to inadequate student achievement. Principals in 19 low performing elementary and middle schools were surveyed to determine their perceptions of conditions in five categories: (a)student achievement and behavior, (b)school progress and organization, (c)staffing, (d)school system concerns, and (e)parents and community.

All 19 schools reported problems associated with reading and literacy. Principals recognized their schools could not make adequate yearly progress (AYP) under NLCB if these primary problems were not addressed. Five schools reported attendance as an issue, while ten schools recognized that student discipline was a chief contributor to their inability to make AYP. The principals agreed that low academic ability contributed to poor attendance and disciplinary problems. On the other hand, they agreed that students who were absent from school due to poor attendance or disciplinary consequences were more likely to miss opportunities that would lessen the likelihood of academic failure.

The second category perceived to undermine school effectiveness, school programs and organization, included areas such as lack of programmatic focus, ineffective staff development, and inadequate instruction. Lack of teamwork, inadequate infrastructure and facilities, a culture of low expectations, teacher incompetence, and low parental involvement were other areas noted as being problematic for school effectiveness (Duke et al., 2007).

Five high poverty school districts that achieved dramatic turnarounds were part of a study by the Learning First Alliance. Each district varied in size, region, urbanicity, and ethnicity. The study revealed a similar set of strategies in each district. Top leaders took responsibility for low student achievement and actively sought solutions. In each district

there was a marked increase in the time and resources devoted to improving instruction. District leaders established a clear vision, set outcome goals, created district wide curricula, and improved professional development strategies to support better instruction. In each district, there was a redefinition of leadership roles, especially for principals who, being primarily building managers, were trained to be instructional leaders (Togneri and Anderson, 2003).

Archibald (2006) contends that educational resources, applied in areas such as instruction and operations and maintenance, are positively related to student achievement. Her study, using data from elementary schools in the Washoe County, Nevada, school system, focused on per pupil expenditures disaggregated into four categories: instruction, instructional support, leadership, and operations and maintenance.

One question the study sought to answer was "is there a positive relationship between per-pupil spending (at the school level) and student achievement" (p.27)? In the context of a three-level model controlling for student-teacher, and school-level characteristics, the results showed per-pupil spending was positively related to achievement in math and reading. Findings also suggest that, after accounting for socioeconomic and prior achievement indicators at the student level, and controlling for teacher background, other factors, such as school-level poverty, have a statistically significant negative effect on students' opportunities to learn (Archibald, 2006).

Summary

The role of a public school principal has changed based upon evolving definitions of leadership and the application of these definitions in a school setting. Increased accountability for student learning has forced the principal out of the role of compliance

monitor (McGeown, 1975) and conflict mediator (Wilcott, 1973) into that of an instructional leader who is primarily responsible for the way teaching and learning occurs. Variables such as teacher working conditions and nurturing interschool and community relations fall under the auspice of the principal who is now held accountable for school success. In effect, the principal is responsible for transforming and improving the entire school organization.

Developmentally responsive leadership is a three- tiered model focusing on the activities of the building principal in relation to the needs of young adolescents, the needs of the faculty, and the needs of the overall school organization. The first tier recognizes that fundamental to the middle school philosophy is a thorough understanding of the cognitive, emotional, and social development of young adolescents. The second and third tier of the leadership model centers the concept that due to the nature of the adolescent learner, middle schools require a certain kind of teacher working in an environment that includes programs such as grade level teaming and student advisory programs (Anfara, 2006). These teachers must be able to empathize with the complexity of middle school students while delivering a curriculum that is interactive and demanding. This takes place within an environment that recognizes the individual needs of the staff to be part of a secure community; a community that encourages team building and collegiality. To create this environment, the developmentally responsive leader must take into consideration the social, emotional, and professional needs of teachers at various stages in their life cycle (p. 23).

Principals in schools with high student poverty populations are faced with a variety of difficulties not experienced by school leaders in low poverty schools. Since

poverty is more than a measure of income, principals working in high poverty schools encounter students who lack health insurance, have poor nutrition and come from single parent families. In addition, these students are likely to place a low value on education in general and operate from a different set of class "rules" than the teachers and administrators in the school (Payne, 2003).

The Anfara et al. (2006) developmentally responsive leadership framework attempts to gain insight into the developmentally responsive practices of middle school principals, but there is little in the way of empirical research showing a connection between these practices and student achievement. This is especially significant when poverty is part of the context in which a principal exercises any type of leadership.

This study sought to identify the developmentally responsive practices of middle school principals and to determine if there exists any relationship between these practices and student achievement as measured by the Pennsylvania System of School Assessment (PSSA).

CHAPTER III

METHODOLOGY

Chapter Three presents the design and methodology for investigating the developmentally responsive leadership practices of principals in high and low achieving middle schools with high poverty student populations. This study sought to determine if there was a relationship, as perceived by teachers, between the developmentally responsive leadership behaviors of principals and the overall academic achievement of students in these types of schools. Specifically, this study sought to answer the following questions:

1. As perceived by teachers, is there a difference in the extent to which Pennsylvania public middle school principals in high or low performing schools with high poverty populations' exercises developmentally responsive practices in relation to:

   A. The developmental needs of young adolescents?

   B. The developmental needs of faculty?

   C. The needs of a middle school to have organizational structures such as grade level teaming, an advisory program and interdisciplinary curriculum?

2. Is there any correlation between the perceptions of the teachers and the perceptions of their principals concerning the degree to which the principal exercises developmentally responsive leadership?

The first section describes the research design. Section two describes the procedures used to identify participating schools and the characteristics of each type of school. Section three describes the survey instrument and procedures used to gather data.

The results of the pilot study will also be discussed in section three. Data analysis is described in the final section.

Research Design

The purpose of this quantitative study was to determine if there was a relationship, as perceived by teachers, between the academic achievement of high poverty students and the developmentally responsive leadership practices of middle level principals. These leadership practices included such behaviors as promoting the development of caring relationships, providing transition programs, grouping students in small learning communities, and encouraging active discovery learning. Additionally, was there any correlation between the perceptions of the participating principals with those of their staff? The quantitative method of research was chosen because it allowed the researcher to collect and analyze data in a way that minimizes bias. Furthermore, the quantitative method greatly increased the likelihood that results would be presented in an impersonal and objective manner (Bauer, 2000).

Due to the researchers' experience as a middle school principal, the use of a survey instrument allowed for collection of data in an objective manner, free from researcher bias. It would be difficult, based upon the researcher's prior experience, to remain objective using the informational gathering methods found in qualitative research. In addition, the quantitative method allowed for a broader sampling of populations. This provided a greater likelihood of accurately using data to explain phenomena.

Sample

This study was conducted at the individual building level. The schools were selected from all high poverty middle schools throughout Pennsylvania. The high poverty

student population schools selected to participate in this study included middle schools with grade structures of 5-8, 6-8 or 7-8. These grade configurations represent the generally accepted ranges associated with adolescent learners (Carnegie Council on Adolescent Development, et al., 1986).

All schools selected for this study had at least 30 percent of their students coming from disadvantaged backgrounds. The 30 percent level is recognized by the Pennsylvania Department of Education as the minimum threshold to qualify a school as high poverty. The schools identified as high achieving were recognized with a 2008 Keystone Achievement Award. The 2008 award signifies sustained academic progress in the 2006-07 and 2007-08 school years. There were a total of 46 high achieving middle schools asked to participate in this study. Four of these schools have poverty populations of 60% or greater, while the remainder of schools recognized with a Keystone Achievement Award have a 30% or greater poverty population.

The No Child Left Behind guidelines require that all students attain proficiency in reading and mathematics by year 2014. The AYP measure is the method used by federal and state governments to determine if schools are making progress toward this goal. The state academic thresholds for the 2007 -2008 school year require that 56% of students are at or above proficiency in mathematics and 63% of students are at or above proficiency in reading. Pennsylvania schools can also make AYP through Safe Harbor and/or the Confidence Interval, which are statistical calculations that allow for variations in student population from year to year. Safe Harbor is a measure of improvement in test performance whereby there is a 10% reduction in the percentage of students scoring below proficiency than the previous year. The Confidence Interval takes into account the

fact student populations vary from year to year. This is controlled by 'passing' schools or subgroups whose performance percentages are not statistically significant. While a 96% C.I. can be used to meet state targets, a 75% C.I. can be used for meeting the Safe Harbor target.

For this study, the schools identified as having low achievement missed making AYP for two consecutive years. This means they failed to make AYP after their first year in warning status. Each successive year a school fails to make AYP they face increasingly stiffer sanctions. Ultimately, if a school fails to improve PSSA scores they can be taken over by the State Department of Education.

Instrumentation

This quantitative study examined if there is a relationship between developmentally responsive leadership practices of selected middle school principals, as perceived by teachers, and the academic achievement of students in high poverty middle schools. The instrument used to collect data was the Middle Level Leadership Questionnaire (MLLQ). The MLLQ included questions such as does the principal "design and implement policies and procedures that reflect the needs of young adolescents" and does the principal "organize the curriculum around real life concepts." (See Appendix A for complete survey questions) The instrument is in two forms; one for the principal and the other for teachers. The MLLQ uses a Likert scale format. The 5-scale responses include: 1 (*Frequently, if not always*); 2 (*Fairly often*); 3 (*Sometimes*); 4 (*Once in a while*); and 5 (*Not at all*). The MLLQ is divided into three parts: demographic information, the questionnaire, and an inventory of middle school practices.

Original content validity for the MLLQ was established using a 65-item instrument administered to a pilot group consisting of 45 middle level professionals. After results were coded and entered into SPSS, researchers were able to eliminate 32 questions, leaving a 33 item survey instrument. This adjusted instrument was then administered to over 250 teachers and administrators from 9 schools. A principle axis factoring analysis and scale reliability test were used to determine construct validity. This process rendered five constructs: (1) developmentally appropriate learning environment/support of teachers, (2) best practices, (3) developmentally appropriate learning environment/support of student needs, (4) promote student self-confidence and competence, and (5) responsiveness to student needs/support of teachers. These factors fit the original three-part model of principal responsiveness to the needs of students, faculty and school needs (Anfara, et al., 2006).

Researchers established reliability by determining the internal consistency (alpha coefficient) of items within each factor. Factor one = .93, Factor two = .89, Factor three = .81, Factor four = .76, Factor five = .72. Overall, the reliability scores ranged from moderate to high (Nunnally, 1978).

Statistical Method

Selected middle schools met the criteria of having significant populations of high poverty students. The poverty threshold was determined by the percentage of students receiving free and/or reduced lunches. Teachers and principals from high and low achieving middle schools were surveyed to determine their perceptions of the principal's developmentally responsive leadership practices. Schools identified as having high achievement were determined by their classification as having achieved AYP for two

consecutive years. Schools identified as low achieving failed to make AYP for two consecutive years. All faculty members from each participating school were invited to participate in the survey using the MLLQ teacher's form. The building principals were also invited to complete the MLLQ principal's form**.** The actions and behaviors of middle level principals in areas related to the five constructs were measured by the MLLQ and are the dependent variables. Schools were coded as either high or low achieving and are the independent variables in the study.

Data sets of raw scores were tabulated for each item on the MLLQ for each school. In order to determine, from the teacher's perspective, if there was a difference in the developmentally responsive leadership practices of principals in high and low achieving middle schools, a Univariate Analysis of Variance (ANOVA) statistical technique was used. To address the research questions in this study, the information gathered from the MLLQ were coded and entered into SPSS version 17.0.1, to run the ANOVA.

The MLLQ was sent electronically, using Qualtrics, to qualifying schools once permission is given by either the building principal or superintendent. Specific directions for survey completion and deadlines for return of the MLLQ were clearly explained. No tangible reward was offered as an incentive to complete the survey, however, all participating schools were offered a copy of the individual school results and the overall study findings.

Pilot

Once pilot IRB approval was gained, the researcher asked 15 middle school teachers to match each question on the MLLQ with the research question the item best

addressed. Participating teachers were given an explanation of the research study and that the purpose for the pilot was to determine if there was a correlation between the research questions and the survey instrument. Table 1 indicates the research question the participating teachers felt best matched MLLQ survey question.

Table 1

Teacher Response to How Survey Questions Match Research Questions 1a, 1b, 1c.

Survey Questions	Research Question #1a	Research Question #1b	Research Question #1c
1	13 responses		2 responses
2	3 responses		12 responses
3	14 responses		1 response
4	14 responses		1 response
5	8 responses	7 responses	
6	3 responses		12 responses
7		8 responses	7 responses
8	4 responses	5 responses	6 responses
9	9 responses	6 responses	
10	4 responses	4 responses	7 responses
11	11 responses		4 responses
12	15 responses		
13	15 responses		
14	15 responses		
15	9 responses		6 responses
16	7 responses		8 responses
17	3 responses		12 responses
18	9 responses		6 responses
19	7 responses		8 responses
20	15 responses		
21	8 responses		7 responses
22	10 responses		5 responses
23	4 responses	11 responses	
24		9 responses	6 responses
25		10 responses	5 responses
26	7 responses	8 responses	
27	6 responses	9 responses	
28	14 responses		1 response
29	4 responses	4 responses	7 responses
30	3 responses	12 responses	
31	4 responses	8 responses	3 responses
32		13 responses	2 responses
33	6 responses	4 responses	5 responses

The total possible number of responses that could have been given is 495. Research question number one received 242 or 48.9% of the total possible responses. Research question two received 118 or 23.8% of the total possible responses. Research question three received 134 or 27% of the total possible responses.

Limitations

Factors that cannot be controlled in this study include the number of teachers who choose to respond to the survey, the number of schools that choose to participate in the study and the overall survey results.

Summary

The purpose of this quantitative study was to determine if there was a relationship, as perceived by teachers, between the academic achievement of high poverty students and the developmentally responsive leadership practices of middle level principals? Additionally, was there any correlation between the perceptions of the participating principals with those of their staff?

All schools selected for this study had at least 30 percent of their students coming from disadvantaged backgrounds. Schools identified as having high achievement were able to achieve AYP for two consecutive years. Schools identified as low achieving failed to make AYP for two consecutive years.

All faculty members, including the principal, from each participating school were invited to participate in this study by completing the MLLQ survey instrument. In order to determine if there was a difference in the developmentally responsive leadership practices of principals in high and low achieving middle schools, a Univariate Analysis of Variance (ANOVA) statistical technique was used. To address the research questions in

this study, the information gathered from the MLLQ were coded and entered into SPSS version 17.0.1, to run the ANOVA. Chapter IV will present the results of teacher and administrator surveys.

CHAPTER IV

PRESENTATION OF RESULTS

Presented in this chapter is an analysis of the data as it correlates to the research questions that frame this study. Data were gathered in order to determine teachers' perceptions of the developmentally responsive leadership practices of principals in high and low achieving middle schools with high poverty student populations. This study sought to determine if there is a difference in the extent to which Pennsylvania public middle school principals exercise developmentally responsive leadership behaviors in high and low achieving, high poverty schools as measured by teacher perceptions. The research hypothesis is that principals in high achieving schools would be more inclined to address the needs of adolescents and faculty, while supporting organizational structures, such as grade level teaming, advisory programs and interdisciplinary curriculum than would principals in low achieving schools.

There were 143 middle schools in Pennsylvania meeting the criteria of having 30% or more of their student population receiving free or reduced lunches, thus qualifying as a high poverty school. Of this total, 21 district superintendents agreed to have their middle level teachers and administrators participate in the survey. There were a total of 956 teacher and 30 administrative surveys distributed electronically using Qualtrics. A total of 19 schools had teachers respond to the survey. Two of the superintendents who gave permission to conduct the survey failed to have any teachers or administrators respond. Of the 120 teachers who responded, there were 76 teachers from 11 low performing schools and 44 teachers from 10 high performing schools. One teacher began the survey but aborted shortly thereafter. There were eight administrators who

responded to the principal's version of the survey. Of these eight, four were from low performing schools and four were from high performing schools. For statistical purposes, two of these were averaged together because the same teachers were rating them.

Statistical Analysis

Cronbach's Alpha coefficient of reliability was used to determine internal consistency of the Middle Level Leadership Questionnaire (Anfara et al., 2006), Cronbach's Alpha is an instrument that aides us in determining whether seemingly similar questions, intending to measure for example, the principal's leadership as it pertains to the needs of adolescents, are related and belong grouped together. The MLLQ consisted of three sections: demographics, the questionnaire and inventory of middle school practices. The questionnaire section consisted of 33 items, with each item addressing principal activity in one or more of the three scales. Based upon pilot study results, the researcher grouped survey items according to teachers' perceptions of which item fit best into which scale. For example, item 5 "organize the curriculum around real-life concepts" and item 15 "spend time each day with students" would be found in the scale addressing the extent to which a principal addressed the needs of adolescents. Table 2 represents the case processing summary and reliability of each of the scales: needs of adolescents, needs of faculty and needs of school to have specific organizational structures.

Table 2

Case Processing Summary and Reliability

	Cases	*N*	*%*	Cronbach's Alpha	*N*
Adolescent Needs	Valid	*107*	88.4	.959	18
	Excluded	*14*	11.6		
	Total	*121*	100.0		
Faculty Needs	Valid	*110*	90.9	.919	8
	Excluded	*11*	9.1		
	Total	*121*	100.0		
Organizational Needs	Valid	*109*	90.1	.928	7
	Excluded	*12*	9.9		
	Total	*121*	100.0		

The reliability of each of the scales (needs of adolescents, needs of faculty, and organizational structures) all presented high *Cro*nbach's Alpha values. A widely accepted Cronbach's Alpha coefficient is 0.6 - 0.7, and 0.8 or higher indicates good reliability (Pallant, 2007). Based on subscale agreement, the MLLQ survey instrument demonstrated a high degree of internal consistency between the scales: the needs of adolescents (α = .959), needs of faculty (α = .919) and needs of school to have specific organizational structures (α= .928) and the individual survey questions. For purposes of further statistical analysis, the researcher could, to a high degree of certainty, conclude that survey items were grouped to accurately target teachers' perceptions in each scale.

Research Question 1

As perceived by teachers, is there a difference in the extent to which Pennsylvania public middle school principals in a high or low performing school with high poverty populations exercise developmentally responsive practices in relation to:

A. The developmental needs of young adolescents?

B. The developmental needs of faculty?

C. The needs of a middle school to have organizational structures such as grade level teaming, an advisory program and interdisciplinary curriculum?

Each survey item in the questionnaire portion of the MLLQ uses a Likert scale format for individual responses. The 5-scale responses include: 1 (*Frequently, if not always*); 2 (*Fairly often*); 3 (*Sometimes*); 4 (*Once in a while*); and 5 (*Not at all*). Using this Likert scale, a score of 1 would indicate a favorable response. A score of 5 would be the least favorable in terms of teachers' perceptions of principal behavior.

Table 3 presents the mean and standard deviation for each school in the low and high specification. In school number seven and school number 15 there were no survey responses. Schools with more teachers responding to the survey generally presented better means and lower standard deviations.

Table 3

Descriptive Statistics for Dependent Variable - Teachers

		Adol_ Needs		Fac_ Needs		Org_ Needs		N
Specification	SchoolID	M	SD	M	SD	M	SD	
Low	1	3.6389	.51069	3.1875	.08839	3.7381	.84179	2
	2	1.6968	.48676	1.6111	.47781	1.4259	.38804	9
	3	2.7778		2.1250		2.2857		1
	4	3.0278	1.53206	2.8125	.61872	2.5714	1.21218	2
	5	1.2944	.30208	1.2875	.44507	1.1857	.35667	10
	6	1.5556	.32665	1.7188	.52504	1.4643	.37213	8
	8	1.6075	.48061	1.6000	.63410	1.4143	.46875	10
	9	2.5556	.31427	2.3125	.44194	2.4881	.48824	2
	10	2.6061	.75908	2.5936	.78732	2.6589	.99883	11
	11	1.7754	.53166	1.5553	.46111	1.6735	.63751	21
	Average	1.8935	.74418	1.8035	.71472	1.7739	.82885	76
High	12	1.9185	.83673	1.6940	.84069	1.6381	.70373	15
	13	2.9352	.91450	2.8542	1.27332	3.0810	.93029	6
	14	1.8095	.65723	1.8036	.72477	1.5102	.61088	7
	16	3.7407	.47898	3.5417	.19094	4.0952	.41239	3
	17	2.7222		2.4286		3.0000		1
	18	1.6353	.11048	1.9063	.50389	1.3571	.18443	4
	19	1.9074	.27962	1.2500	.12500	1.7619	.29738	3
	20	1.8611	.66782	2.0625	.61872	1.9762	.97648	2
	21	4.3900	.26864	4.1250	.33072	4.3333	.45922	3
	Average	2.3217	1.03662	2.1838	1.07592	2.1950	1.14935	44
Total		2.0505	.88333	1.9430	.87984	1.9283	.97562	120

In school number two, for example, nine teachers participated in the survey, while school number four had two teachers respond to the survey. The mean for teachers in school two, when asked to rate the principals' meeting the needs of adolescents, was 1.6968 (SD = .48676). This would indicate an average response for these teachers between 1 (*Frequently, if not always)* and 2 (Fairly *often).* The two teachers in school number four rated their principal at M = 3.0278 (SD = 1.53206). This would indicate an average response of between 3 (*Sometimes)* and 4 (*Once in a while).*

In the high specification schools, the same pattern is evident. School number 12 had 15 teachers respond while school number 16 had three teachers respond. When asked to rate the principals' response to questions measuring teachers' perceptions of how the principal meet the needs of the faculty, teachers in school number 12 had an average response of 2 (*Fairly often)* (M = 1.9185, SD = .83673). School number 16 (N = 3), had an average response closer to 4 (*Once in a while).*

In comparison, teachers in the lower performing schools tended to rate their principal more favorably than teachers in the high specification schools across all three subscales. In the low performing schools, perceptions averaged between 1 (*Frequently, if not always)* and 2 (*Fairly often),* across all three subscales. In the high performing schools, the total for the subscale adolescent needs was M = 2.3217, M = 2.1838 for faculty needs and M = 2.1950 for organizational needs. These responses averaged between 2 (*Fairly often)* and 3 (*Sometimes).*

Table 4 represents the mean and standard deviation for teachers' perceptions of their principals' behavior concerning meeting the needs of adolescents.

Table 4

Teacher Ratings for Adolescent Needs

		N	Mean	Std. Deviation
Q1 - Policies and Procedures	Low	76	1.49	.774
	High	44	2.11	1.224
Q3 – School Culture	Low	75	2.56	1.265
	High	44	2.84	1.346
Q4 – Transition Programs	Low	75	2.19	1.205
	High	42	2.26	1.191
Q5 - Curriculum	Low	76	2.37	1.198
	High	43	2.77	1.306
Q7 – Daily Schedule	Low	76	1.55	1.112
	High	44	2.20	1.440
Q9 – Learning Communities	Low	75	2.13	1.201
	High	44	2.73	1.387
Q11 - Curriculum	Low	76	2.01	1.101
	High	44	2.39	1.298
Q12 – Counseling / Advisory	Low	76	1.88	.952
	High	44	2.27	1.188
Q13 – Adolescent Characteristics	Low	76	1.51	.808
	High	44	1.93	1.246
Q14 – Adolescent Characteristics	Low	76	1.64	.890
	High	44	2.16	1.328
Q15 – Student Interaction	Low	75	1.87	1.004
	High	44	2.07	1.129
Q16 – Varied Curriculum	Low	76	2.14	1.104
	High	44	2.48	1.229
Q18 – Age Appropriate Activities	Low	75	1.63	.767
	High	44	2.07	1.065
Q20 – School Culture	Low	72	1.71	.863
	High	44	2.41	1.335
Q21 – Student Involvement	Low	76	2.30	1.108
	High	44	2.75	1.383
Q22 – Decision Making	Low	76	1.74	.929
	High	44	2.16	1.363
Q28 – Discovery Learning	Low	75	1.71	.955
	High	44	1.95	1.056
Q33 – Differentiated Instruction	Low	75	1.59	.840
	High	44	2.16	1.077
	Total	119	1.80	.971

There are a total of 18 questions in Table 4 designed to measure teachers' perceptions of their principal's behavior in the area of meeting the needs of adolescents ($\alpha = .959$). (Refer to Appendix A for a complete listing of survey questions.) There are a total of 76 teachers from low performing schools and 44 teachers in high performing schools. Not all questions were answered by all teachers though. For example, questions 18 and 33 had 75 teachers respond rather than 76.

These questions focused on behaviors designed to address the needs of adolescents. Question 12 for example asks if principals "provide adequate counseling/advisory opportunities for students". The teachers in low achieving schools average response was between 1 *(Frequently, if not always)* and 2 (*Fairly often) (M = 1.88)* while teachers in the high achieving schools responded on average between 2 (*Fairly often)* and 3 (*Sometimes)* (M = 2.27). Other questions, such as number 22 asked for perceptions such as "make decisions based on young adolescent development and effective middle level practices". Low specification teachers responded on average between 1 (*Frequently, if not always)* and 2 (*Fairly often).* In the low performing schools, perceptions averaged between 1 (*Frequently, if not always)* and 2 (*Fairly often),* across all three subscales.

Table 5 represents the mean and standard deviation for teachers' perceptions of their principals' behavior concerning meeting the needs of faculty. There are a total of 8 questions in Table 5 designed to measure teachers' perceptions of their principal's behavior in the area of meeting the needs of the faculty ($\alpha = .919$).

Table 5

Teacher Ratings for Faculty Needs

		N	Mean	Std. Deviation
Q23 – Decision Making	Low	73	1.89	1.035
	High	44	2.27	1.436
Q24 – Teacher Collaboration	Low	76	1.95	1.070
	High	44	2.27	1.370
Q25 – Decision Making	Low	76	1.91	1.157
	High	44	2.36	1.432
Q26 – Teacher Interaction	Low	75	1.47	.811
	High	44	1.84	1.160
Q27 – Instructional Strategies	Low	76	1.46	.738
	High	43	1.70	1.059
Q30 – Professional Development	Low	74	1.95	1.005
	High	44	2.43	1.301
Q31 – Resource Allocation	Low	73	2.08	1.051
	High	43	2.33	1.267
Q32 – Cross Curricular Development	Low	76	1.72	.903
	High	43	2.26	1.217
	Total	119	1.92	1.054

These questions focused on behaviors designed to address the needs of building faculty. Question 27, for example, asks if the principal "encourages teachers in their use of a wide variety of instructional approaches and materials". The teachers from low performing schools average response was between 1 (*Frequently, if not always)* and 2 (*Fairly often) (M = 1.88)* and teachers in the high specification responded on average within the 2 (*Fairly often)* to 3 (*Sometimes)* range (M = 2.27). Within this subscale, there were three questions where, on average, teachers from low and high performing schools responded within the same range of 1 (*Frequently, if not always)* and 2 (*Fairly often)*: question 26, 27 and 30. All three questions were related in that they referred to encouraging/planning varied instructional practices geared to the adolescent learner, such

as active learning and differentiation of instruction, rather than teacher lecture. Other questions, such as number 24, asked for perceptions such as, "provide time for general education teachers to collaborate with special education teachers in order to meet the diverse needs of young adolescents". Low specification teachers responded on average between the 1 (*Frequently, if not always)* to 2 (*Fairly often)* range (M = 1.95) while teachers in high performing schools were in the 2 (*Fairly often)* to 3 (*Sometimes range)* (M = 2.27). Table 6 represents the mean and standard deviation for teachers' perceptions of their principals' behavior concerning meeting organizational needs.

Table 6

Teacher Ratings for Organizational Needs

		N	Mean	Std. Deviation
Q2 – School Culture	Low	75	2.05	1.384
	High	43	2.49	1.564
Q6 – Middle School Concept	Low	75	1.64	.981
	High	44	2.05	1.462
Q8 – Best Practices	Low	76	1.49	.841
	High	43	1.88	1.258
Q10 – Vision Casting	Low	75	1.57	.961
	High	44	2.20	1.456
Q17 – Family Involvement	Low	74	1.88	.936
	High	44	2.30	1.153
Q19 – School Culture	Low	75	1.67	.844
	High	42	2.12	1.131
Q29 – Discovery Learning	Low	74	2.00	1.147
	High	43	2.33	1.210
	Total	117	2.12	1.176

There are a total of 7 questions in Table 6 designed to measure teachers' perceptions of their principal's behavior in the area of meeting the needs of the organization to have structures such as grade level teaming, an advisory program and

interdisciplinary curriculum (α = .928). These questions focused on behaviors designed to address the needs of the school to be a distinct organization designed to address the needs of middle level learners. Question 10, for example, asks if the principal has "a vision of what an exemplary middle school is and strives to bring that vision to life". The teachers in the low specification average response was between 1 (*Frequently, if not always)* and *2 (Fairly often) (M = 1.57)* while teachers in the high specification responded on average between 2 (*Fairly often)* and 3 (*Sometimes)* (M = 2.20). Other questions, such as number 19 asked for perceptions of whether the principal provides "students with opportunities to explore, make mistakes, and grow in a safe, caring environment". Low specification teachers responded on average between 1 (*Frequently, if not always)* and 2 (*Fairly often)* (M = 1.67) while teachers in high performing schools were in the 2 (*Fairly often)* to 2 (*Sometimes)* range (M = 2.12).

The mean of teachers' perceptions of principal leadership behaviors in relation to meeting the needs of adolescents, meeting faculty needs, and meeting needs of the school to have specific organizational structures were more favorable in the low performing schools than in the higher performing schools. The mean of low schools in the adolescent scale was 1.8935 (*SD* = .74418, *N* = 76). The mean of low schools in the faculty scale was 1.8035 (*SD* = 1.8035, *N* = 76). The mean of low schools in the organizational scale was 1.7739 (*SD* = .82885, *N* = 76).

The mean scores for each type of school, either low performing or high performing, in each subscale is presented in Table 7. This is the mean of the respective questions that relate to each of the three needs. A lower mean would indicate a more favorable rating for the principal.

Table 7

Group Statistics

	Specification	N	Mean	SD	SE
Adolescent Needs	Low	76	1.8935	.74418	.08536
	High	44	2.3217	1.03662	.15628
Faculty Needs	Low	76	1.8035	.71472	.08198
	High	44	2.1838	1.07592	.16220
Organizational Needs	Low	76	1.7739	.82885	.09508
	High	44	2.1950	1.14935	.17327

Overall, teachers from the lower performing schools tended to hold a more favorable perception that their principal encouraged teachers to use a wide variety of instructional approaches and materials for example, than did teachers from high performing schools. When answering questions intending to measure their perception of behaviors targeted at providing transition programs and promoting the development of caring relationships between teachers, staff, and students, teachers from the higher performing schools tended to rate their principal less favorably than teachers from schools that failed to make AYP.

The mean score for low performing schools in each scale was more favorable than the mean for high performing schools. For adolescent needs, teachers in high performing schools had a mean that was .4282 higher than those from low schools on average. For faculty needs, teachers in high performing schools had a mean that was .3803 higher than

those from low schools on average. Teachers in high performing schools had a mean that was .4211 higher than the mean of those from low schools when rating their principals' responsiveness to the needs of the organization to have programs characteristic of middle schools.

To determine whether there existed any significance between the specifications of a school being designated as either high or low performing in each scale, a one-way Analysis of Variance (ANOVA) was used. This statistical analysis enabled the researcher to test the mean across three single dependent variables: the needs of adolescents, the needs of faculty and the need of the organization to have programs geared at promoting the middle school philosophy. A general linear model also provided the best statistical analysis due to the nested design of the data. For the ANOVA, the null hypothesis would be that the mean would be the same for both high and low achieving schools. The subjects (teachers) are nested within the schools which are either designated as high or low performing (independent variables) and are giving their perception of the principal's behaviors across each of the dependent variables. The ANOVA tested the research hypothesis that the specification of the school would impact how teachers from low performing schools responded compared to high performing schools.

Table 8 shows the tests of between subject effects for each of the three independent variables: adolescent needs, faculty needs, and organizational needs. The test of between subject effects showed no significance across all three scales. In each of the subscales the $p < .05$ score indicated a rejection of the null hypothesis (the mean being the same for both high and low achieving schools).

Table 8

Analysis of Variance for Perceptions of Principal Leadership

Source	df	F	η	p
	Between	subjects		
Adolescent Needs	1	0.72	0.18	0.41
Error	21.14	(1.24)	_	_
Faculty Needs	1	0.97	0.20	0.34
Error	22.31	(1.54)	_	_
Organizational Needs	1	1.23	0.24	0.28
Error	20.40	(2.76)	_	_

Significance would have been attained with any number lower than p = .05 or a 95% chance that the relationship is not due to randomness. The p score for low and high performing schools using the adolescent needs, faculty needs, and organizational needs scale was p = .405, .335, and .280 respectively. Significance indicates how much of a chance the relationship is due to randomness. In the adolescent scale there was an approximate 40.5% chance that the observed relationship between the responses of teachers in low verses high performing schools was due to randomness. The faculty scale showed an approximate 33.5% chance of randomness between the specifications and a 28% chance of randomness in the organizational specification.

Computed using an alpha = 0.05, the observed power or the likelihood of achieving statistical significance for each scale was minimal. For each scale, adolescent, faculty and organizational, the observed power calculation respectively produced scores of .128, .157, and .185. It is desirable to obtain power of at least .8. If there was any

significance between the perceptions of teachers from high and low performing schools, the low sample size prevented any opportunity for the data to show significance.

While there was no statistical significance between how teachers from low and high performing schools rated the performance of their principal, teachers from low performing schools tended to rate their principal more favorably than teachers from high performing schools. Table 9 shows the mean scores for each specification within each scale.

Research Question 2

The second question in this study sought to determine if there was any relationship between the perceptions of teachers and those of building administrators concerning the degree to which the principal exercises developmentally responsive leadership. Table 9 presents the mean and standard deviation for each school in the low and high specification. For purposes of statistical analysis 2 of the 8 administrators who responded were from the same school. These two were averaged together since they were being rated by the same teachers.

Table 9

Descriptive Statistics for Dependent Variables - Principals

		Adolescent_Needs		Faculty_Needs		Organizational_Needs		
Specification	School_ID	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	N
Low	4	1.0000	.	1.0000	.	1.0000	.	1
	8	2.1111	.	1.8750	.	1.8571	.	1
	10	1.6944	.82496	1.9375	1.14905	1.3571	.50508	2
	Total	1.6250	.66260	1.6875	.80687	1.3929	.45737	4
High	12	1.5556	.	1.1250	.	1.5714	.	1
	13	1.8333	.	1.3750	.	1.8571	.	1
	17	1.4444	.	1.2500	.	1.4286	.	1
	19	1.2222	.	1.6250	.	1.4286	.	1
	Total	1.5139	.25408	1.3438	.21348	1.5714	.20203	4
Total	4	1.0000	.	1.0000	.	1.0000	.	1
	8	2.1111	.	1.8750	.	1.8571	.	1
	10	1.6944	.82496	1.9375	1.14905	1.3571	.50508	2
	12	1.5556	.	1.1250	.	1.5714	.	1
	13	1.8333	.	1.3750	.	1.8571	.	1
	17	1.4444	.	1.2500	.	1.4286	.	1
	19	1.2222	.	1.6250	.	1.4286	.	1
	Total	1.5694	.46835	1.5156	.57646	1.4821	.34096	8

Principals from high and low achieving schools tended to rate themselves favorably. The total mean for low schools (M = 1.6250, SD = .66260) was only slightly lower than the mean for high achieving schools (M = 1.5139, SD = .25408). On average though, principals from high achieving schools rated themselves slightly more favorably than principals from low achieving schools.

Table 10 represents the mean and standard deviation for self-perceptions of administrative behavior concerning meeting the needs of adolescents. There are a total of 18 questions in Table 11 designed to measure administrative self-perceptions in the area of meeting the needs of adolescents ($\alpha = .959$). Refer to Appendix B for a complete listing of survey questions. There are a total of 4 administrators from low performing schools and a total of 4 from high performing schools.

Table 10

Administrative Ratings for Adolescent Needs

		N	Mean	Std. Deviation
Q1 – Policies and Procedures	Low	4	2.00	1.155
	High	4	1.75	.957
Q3 – Transition Programs	Low	4	2.00	.816
	High	4	1.25	.500
Q4 – Transition Programs	Low	4	1.75	.957
	High	4	1.75	.957
Q5 - Curriculum	Low	4	2.00	1.155
	High	4	1.75	.957
Q7 – Daily Schedule	Low	4	1.75	.957
	High	4	2.00	1.414
Q9 – Learning Communities	Low	4	1.75	.957
	High	4	2.00	1.155
Q11 - Curriculum	Low	4	1.75	.957
	High	4	1.75	.500
Q12 – Counseling/ Advisory	Low	4	1.25	.500
	High	4	1.00	.000
Q13 – Adolescent Characteristics	Low	4	1.25	.500
	High	4	1.00	.000
Q14 – Adolescent Characteristics	Low	4	1.25	.500
	High	4	1.25	.500
Q15 – Student Interaction	Low	4	1.50	1.000
	High	4	1.50	.577
Q16 – Varied Curriculum	Low	4	2.00	1.414
	High	4	1.75	.500
Q18 – Age Appropriate Activities	Low	4	1.50	.577
	High	4	1.50	.577
Q20 – School Culture	Low	4	1.25	.500
	High	4	1.00	.000
Q21 – Student Involvement	Low	4	1.50	.577
	High	4	2.25	.500
Q22 – Decision Making	Low	4	1.25	.500
	High	4	1.25	.500
Q28 – Discovery Learning	Low	4	1.50	1.000
	High	4	1.50	.577
Q33 – Differentiated Instruction	Low	4	2.00	1.414
	High	4	1.00	.000
	Total	8	1.50	1.069

Self-perceptions tended to fall within the range of 1 (*Frequently, if not always)* and 2 (*Fairly often)* when assessing their practices in meeting the needs of adolescents. Question 12 for example, asks if the principal "provides adequate counseling/advisory opportunities for students". All 8 administrators rated themselves between 1 (*Frequently, if not always)* and 2 (*Fairly often)* (Low M = 1.25 and High M = 1.00) compared to the teacher responses on the same question in the low performing school with a mean of 1.88 and a mean of 2.27 for teachers in high performing schools. Question number 22 asked for perceptions related to "makes decisions based on young adolescent development and effective middle level practices". Administrators from both specifications responded similarly (M = 1.25) leaning towards the 1 (*Frequently, if not always)* response choice.

Only on one item did principals rate themselves in the 1 (*Frequently, if not always)* to 2 (*Fairly often)* range. The administrators from the low performing schools, when responding to item 21, fell between the two ranges (M = 2.25). Item 21 asks for perceptions concerning the principal "regards young adolescents as resources in planning and program development and involves them in meaningful roles". This response closely mirrored the perceptions of teachers in both low (M = 2.30) and high (M = 2.75) performing schools.

Table 11 represents the mean and standard deviation for self-perceptions of administrative behavior concerning meeting the needs of the faculty. There are a total of 8 questions in Table 11 designed to measure the administrators' self-perceptions of their behavior in the area of meeting the needs of the faculty ($\alpha = .919$).

Table 11

Administrative Ratings for Faculty Needs

		N	Mean	Std. Deviation
Q23 – Decision Making	Low	4	1.75	.957
	High	4	1.50	.577
Q24 – Teacher Collaboration	Low	4	1.50	.577
	High	4	1.25	.500
Q25 – Decision Making	Low	4	1.50	.577
	High	4	1.25	.500
Q26 – Teacher Interaction	Low	4	1.00	.000
	High	4	1.00	.000
Q27 – Instruction Strategies	Low	4	1.75	1.500
	High	4	1.00	.000
Q30-Professional Development	Low	4	1.75	.957
	High	4	1.50	.577
Q31-Resource Allocation	Low	4	1.75	.957
	High	4	2.00	.816
Q32 – Cross Curricular Development	Low	4	2.50	1.915
	High	4	1.25	.500
	Total	8	1.88	1.458

These questions focused on behaviors designed to address the needs of building faculty. Question 27, for example, asks if the principal "encourages teachers in their use of a wide variety of instructional approaches and materials". Principals tended to rate themselves favorably from both low and high performing schools, falling within the range of 1 (*Frequently, if not always).* In contrast, teachers from low performing schools average response was between 1 (*Frequently, if not always)* and 2 (*Fairly often) (M = 1.88)* and teachers in the high specification schools responded on average between 2 (*Fairly often)* and 3 (*Sometimes)* (M = 2.27). Items 27, 28, 30 were related in that they referred to encouraging and planning varied instructional practices geared to the adolescent learner, such as active learning, rather than teacher lecture and differentiation

of instruction. On all three items, principals gave themselves favorable ratings. Specifically, on item 27 which refers to whether they "encourage teachers in their use of a wide variety of instructional approaches and materials", principals from low and high performing schools were unanimous giving themselves a rating of 1 (*Frequently, if not always)* (M = 1.00). The item with the widest spread between means was item number 32. Principals from low performing schools rated themselves 2 (*Fairly often)* to 3 (*Sometimes)* (M = 2.50) compared to their counterparts in high performing schools who were solidly within the 1 *(Frequently, if not always)* range *(*M = 1.25).

Table 12 represents the mean and standard deviation for principals' self-perceptions of their behavior concerning meeting organizational needs. There are a total of 7 questions in Table 12 designed to measure principals' self-perceptions of their behavior in the area of meeting the needs of the organization to have structures such as grade level teaming, an advisory program and interdisciplinary curriculum ($\alpha = .928$).

Table 12

Administrative Ratings for Organizational Needs

		N	Mean	Std. Deviation
Q2 – School Culture	Low	4	1.50	.577
	High	4	1.50	.577
Q6 – Middle School Concept	Low	4	1.50	.577
	High	4	1.50	1.00
Q8 – Best Practices	Low	4	1.75	.957
	High	4	1.50	.577
Q10 – Vision Casting	Low	4	1.25	.500
	High	4	1.00	.000
Q17 – Family Involvement	Low	4	1.25	.500
	High	4	2.00	.816
Q19 – School Culture	Low	4	1.25	.500
	High	4	1.25	.500
Q29 – Discovery Learning	Low	4	1.25	.500
	High	4	2.25	.500
	Total	8	1.75	.707

These questions focused on behaviors designed to address the needs of the school to be a distinct organization designed to address the needs of middle level learners. Question 10, for example, asks if the principal has "a vision of what an exemplary middle school is and strives to bring that vision to life". Principals from both low and high achieving schools scored themselves favorably. Comparably, teachers in low performing schools' average response was between 1 (*Frequently, if not always)* and 2 (*Fairly often) (M = 1.57)* while teachers in the high specification responded on average between 2 (*Fairly often)* and 3 (*Sometimes)* (M = 2.20). Other questions, such as item number 19, asked for perceptions of whether the principal provides "students with opportunities to explore, make mistakes, and grow in a safe, caring environment". In both specifications,

principals were inclined to rate themselves favorably within the 1 (*Frequently, if not always)* to 2 (*Fairly often)* range. Both specifications had a mean of 1.25.

All of the teachers, who rated a particular principal, had their ratings averaged together for the purpose of this analysis. For example, when both groups were asked to rate the principal's provision of adequate counseling/advisory opportunities, principals' self-ratings were more favorable than the ratings given by their teachers. The relationships between the perceptions of administrators and teachers as measured by the 3 subscales were first investigated using the Pearson correlation coefficient. There were no relationships that obtained statistical significance between the variables. The administrator/teacher pair in the adolescent scale had a negative correlation of -.381 ($p = .400$). The faculty needs scale pair had a negative correlation of -.305 ($p = .506$). A negative correlation of -.207 ($p=.656$) was obtained in the organizational needs pairing of administrator and teacher responses.

A series of paired-samples t-tests were conducted to compare responses of teachers and administrators within each scale. The null hypothesis is that there would be no difference between the means of the perceptions of teachers and the perceptions of principals. Once the p value is calculated a decision can be made whether a relationship truly exists or is due to chance or randomness. Table 13 shows the paired samples statistics. In Pair 1 AdolNeedsA represents needs of adolescents as rated by the administrator and AdolNeedsT represents needs of adolescents as rated by the teacher. Pair 2 and pair 3 will follow this same pattern.

Table 13

Paired Samples Statistics

	M	N	SD	SE
Pair 1 AdolNeedsA	1.5516	7	.37351	.14117
AdolNeedsT	2.3892	7	.56695	.21429
Pair 2 FacNeedsA	1.4554	7	.36571	.13822
FacNeedsT	2.1761	7	.64870	.24519
Pair 3 OrgNeedsA	1.5000	7	.30023	.11348
OrgNeedsT	2.3179	7	.66397	.25096

Pair 1 grouped the administrators' responses and teachers' responses in the adolescent need scale. Within this pair administrators tended to rate themselves within the range of 1 *(Frequently, if not always)* to 2 (*Fairly often)* while teachers' responses were in the 2 (Fairly *often)* to 3 (*Sometimes)* range. Pair 2 grouped the administrators' responses and teachers' responses in the faculty need scale. Within pair 2 the same pattern is found with administrators rating themselves within the range of 1 *(Frequently, if not always)* to 2 (*Fairly often)* and teachers' responses falling into the 2 (*Fairly often)* to 3 (*Sometimes)* range. Pair 3 grouped the administrators' responses and teachers' responses in the organizational need scale and followed the same pattern as the first two pairings.

While administrators tended to respond within the 1 (*Frequently, if not always)* to 2 (*Fairly often)* range and teachers tended to rate principals in the 2 (*Fairly often)* to 3

(*Sometimes)* range the question is whether or not this difference was significant. Table 14 shows the mean and significance for each pair.

Table 14

Paired Samples Test

	Paired Differences					
	M	SD	SE	t	df	Sig. (2 tailed)
Pair 1	-.83766	.78878	.29813	-2.810	6	.031
Pair 2	-.72077	.83628	.31608	-2.280	6	.063
Pair 3	-.81795	.78326	.29605	-2.763	6	.033

Pair 1 and 3, adolescent needs and organizational needs respectively, demonstrated significance ($p = .031$, $p = .033$). Pair 2 approached significance. Significance indicates how much of a chance the relationship between teacher and principal responses is due to randomness. The administrators tended to rate themselves more favorably when compared to the ratings given by their respective teachers.

Summary

In answering the questions asked in this study, descriptive statistics and comparative data for the two types of schools were given, along with a discussion of the differences found within each subscale. Teacher perceptions of the principal's leadership behavior, on average, fell within the 1 (*Fairly often)* to 2 (*Sometimes)* range. Teachers in low performing schools tended to rate their principal higher than their counterparts in the

higher performing schools. Principals tended to rate themselves higher than the teachers with an average response falling within the 1 (*Frequently, if not always)* and 2 (*Fairly often)* range. Chapter V presents a discussion of the results of the study, interprets the findings, and explains the relationship of this study to previous research. It will also give recommendations for further research.

CHAPTER V

CONCLUSIONS AND DISCUSSION

This study sought to determine from teachers' and principals' perspectives, the extent to which Pennsylvania middle school principals in high poverty schools exhibited developmentally responsive leadership practices. Teacher and principal perceptions were obtained with the Middle Level Leadership Questionnaire (MLLQ) (Anafara et al., 2006). The MLLQ is a three tiered instrument that identifies principals' leadership behaviors in the areas of meeting the needs of adolescents, meeting the needs of faculty members, and having organizational structures in place that support the middle school concept, structures such as grade level teaming and advisory programs. Two categories of schools have been identified: those recognized as high achieving and those identified as low achieving. High achieving schools were able to make AYP for two consecutive years thereby receiving a Keystone Achievement Award. Schools designated as low achieving failed to make AYP for two consecutive years.

Conclusions

Data were analyzed for each subscale of the MLLQ as it related to the principals' developmentally responsive leadership behaviors. Middle level teachers and principals were asked to complete the MLLQ to obtain their perceptions. The data from each subsection statistically addressed the two research questions for this study.

Research Question 1

As perceived by teachers, is there a difference in the extent to which Pennsylvania public middle school principals in a high and low performing school with high poverty populations exercises developmentally responsive practices in relation to: A) The

developmental needs of adolescents? According to teachers' perceptions a difference was found in the extent to which principals meet the needs of adolescents in high and low achieving schools. On average, teachers in low performing schools reported a lower mean than did the teachers in high performing schools. This lower mean represents a more favorable rating. When asked if principals "provide adequate counseling/advisory opportunities for students", the teachers in low achieving schools average response was between 1 (*Frequently, if not always)* to 2 (*Fairly often) (M = 1.88)* while teachers in the high achieving schools responded on average between 2 (*Fairly often)* and 3 (*Sometimes)* (M = 2.27). When teachers were asked whether the principal made "decisions based on young adolescent development and effective middle level practices", teachers from low performing school responded on average between the 1 (*Frequently, if not always)* to 2 (*Fairly often)* range (M = 1.74) while teachers in high performing schools were in the 2 (*Fairly often)* to 3 (*Sometimes)* range (M = 2.16). On this subsection, teachers in low achieving schools average response was 1 (*Frequently, if not always)* to 2 (Fairly *often) (M = 1.88)* while teachers in the high achieving schools responded on average between 2 (*Fairly often)* to 3 (*Sometimes)* (M = 2.27).

B) The developmental needs of faculty? According to teachers' perceptions a difference was found in the extent to which principals meet the needs of the faculty in high and low achieving schools. When teachers were asked whether the principal encouraged "teachers in their use of a wide variety of instructional approaches and materials", teachers from low performing schools average response was 1 (*Frequently, if not always)* to 2 (*Fairly often) (M = 1.88).* Responding to the same item, teachers in the high specification responded on average within the 2 (Fairly *often)* to 3 (*Sometimes)*

range (M = 2.27). Teachers in low performing schools reported a lower mean than did the teachers in high performing schools. This lower mean represents a more favorable rating. The teachers in low achieving schools average response was 1 (*Frequently, if not always)* to 2 (*Fairly often) (M = 1.88)* while teachers in the high achieving schools responded on average between 2 (*Fairly often)* to 3 (*Sometimes)* (M = 2.27). Teachers perceptions of whether the principal encouraged varied instructional practices geared towards the adolescent learner, such as active learning and differentiation of instruction, rather than teacher lecture were similar for both high and low schools. On average they responded within the same range of 1 (*Frequently, if not always)* to 2 (Fairly *often)*.

C) The needs of a middle school to have organizational structures such as grade level teaming, an advisory program and interdisciplinary curriculum? Teachers in low performing schools reported a lower mean than did teachers in high performing schools. The teachers in the low specification average response was 1 (*Frequently, if not always)* to 2 (Fairly *often) (M = 1.57)* while teachers in the high specification responded on average between 2 (*Fairly often)* to 3 (*Sometimes)* (M = 2.20).

Many of the items in this subscale were asking if the principal addressed the needs of the school to be a distinct organization designed to address the needs of middle level learners. For example, when asked if the principal has "a vision of what an exemplary middle school is and strives to bring that vision to life", teachers in the low achieving schools tended to respond with 1 (*Frequently, if not always)* to 2 (*Fairly often) (M = 1.57)*. Teachers in the high performing schools tended to respond between 2 (*Fairly often*) and 3 (*Sometimes)* (M = 2.20).

Research Question 2

Is there any correlation between the perceptions of the teachers and the perceptions of their principals concerning the degree to which the principal exercises developmentally responsive leadership? When asked their perceptions concerning meeting the needs of adolescents, principals reported a lower mean than did teachers. Self-perceptions tended to fall within the range of 1 (*Frequently, if not always)* and 2 (*Fairly often).* Teachers were asked to rate their principal on whether he/she made "decisions based on young adolescent development and effective middle level practices". When responding to this item administrators from both specifications responded similarly (M = 1.25) leaning towards the 1 (*Frequently, if not always)* response choice.

When responding to the item asking them to rate themselves as to whether they regarded "young adolescents as resources in planning and program development and involves them in meaningful roles", responses of administrators from the low performing schools fell between 2 (*Fairly often)* to 3 (*Sometimes)* range (M = 2.25). Administrators from higher performing schools rated themselves more favorably and were well within the 1 (Frequently, *if not always)* to 2 (Fairly *often)* range (M = 1.50).

When asked their perceptions concerning meeting the needs of faculty, principals reported a lower mean than did teachers. These questions focused on behaviors designed to address the needs of building faculty. Principals tended to rate themselves favorably from both low and high performing schools, falling within the range of 1 (*Frequently, if not always).* When asked to rate themselves as to whether they encouraged "teachers in their use of a wide variety of instructional approaches and materials", principals tended to

rate themselves favorably from both low and high performing schools, falling within the range of 1 (*Frequently, if not always).*

The biggest difference between principals from high and low achieving schools consisted of whether or not they encouraged "teachers to make connections across disciplines to reinforce important concepts." Principals from low performing schools rated themselves between 2 (*Fairly often)* and 3 *(Sometimes)* (M = 2.50) compared to their counterparts in high performing schools who were solidly within the 1 (*Frequently, if not always)* range (M = 1.25). In reporting their perceptions concerning the degree to which the principal met the organizational needs of the school, principals (M = 1.5000) reported a lower mean than did teachers (M = 2.3179).

Principals from both low and high achieving schools scored themselves favorably, usually within the 1 (*Frequently, if not always)* range. When asked for their perceptions of whether they provided "students with opportunities to explore, make mistakes, and grow in a safe, caring environment", principals were inclined to rate themselves favorably within the 1 (*Frequently, if not always)* to 2 (*Fairly often)* range (M = 1.25).

Discussion of the Results

While teachers from low performing schools tended to rate their principal higher in all three subsections of the MLLQ than teachers from high performing schools, the difference did not reach a $p < .05$ significance level.

Principals in low performing schools were perceived to address the needs of adolescents to a higher degree than principals in high performing schools. This section included principal behaviors such as providing transition programs, organizing curriculum around real life concepts, spending time with students and providing age

appropriate co-curricular activities. Responsiveness to the needs of young adolescents includes recognition of the role of curriculum, instruction, and assessment within the context of the fundamental needs of students to be in a nurturing and caring environment. The mean score was lower and with a better standard deviation among teacher responses from the low performing schools. This signifies that these teachers' perceptions were in more agreement than were perceptions of teachers in high performing schools. It is possible that teachers in higher performing schools either saw the principal in a less favorable light or did not consider the actions of the principal impacting the overall student population. Research has shown that the key to helping students from impoverished backgrounds is to build relationships. Relationships are the most significant motivator for these students and are built one at a time, one teacher or other significant adult to one student (Payne et al., 2003). Teachers from low achieving schools would possibly tend to see the impact of these relationships more clearly than would teachers in high achieving schools.

The perceptions of teachers in high performing schools tended to be less favorable when asked about how their principal addressed the needs of the faculty. While this difference did not reach significance, teachers from low performing schools rated their principal more favorably and more consistently than their counter parts in high performing schools. This responsiveness to the needs of the faculty is not simply intended to focus the attention of professional staff on the developmental needs of students. The faculty themselves are also at various stages of life span development (Lemme et al., 2002). Activities such as grade level teacher teaming, using a wide variety of instructional approaches and cross curricular collaboration encourage teachers to meet the

needs of adolescent learners while recognizing the contribution of faculty to the overall success of the school.

The third tier in the developmentally responsive leadership model concerns itself with the leader's responsiveness to the needs of the school. There are several unique structures that have been identified with effective middle schools. These include grade level teaming, advisory groups, interdisciplinary curriculum, and exploratory courses such as art and technology education. Principals in low performing schools were perceived to address the needs of the school to a higher degree than principals in high performing schools. While results in this tier did not approach significance, the mean score was lower and with a better standard deviation among teacher responses from the low performing schools.

It is possible that in a low performing environment teachers were more aware of the technical problem solving characteristics of the principal and hence were inclined to rate them more favorably. In many instances, a principal exercises technical skill in solving the problems associated with school leadership. A technical fix requires a clear definition of the problem which lends itself to a textbook remedy. In low performing schools the obvious problem is low student achievement and principals would be inclined to attempt the implementation of best practice solutions. However, not all problems lend themselves to such prescribed solutions. In these cases, leadership takes on more adaptive characteristics which require learning by all parties to both define the problem and implement solutions (Heifetz et al., 2000). As a result, low performing schools' perceptions averaged between 1 (*Frequently, if not always)* and 2 (*Fairly often),* across all three subscales. Schools that are high performing already might not be as aware of the

technical aspects of the principal leadership since the school is already achieving at a high rate.

It is also possible that perceptions of teachers in low performing schools were more favorable towards the principal due to lower expectations placed on them by the building principal. Indeed it may be a matter of low performance expectations that were largely responsible for the school failing to make AYP while the exact opposite may have been true in the schools that did make AYP. In these higher performing schools it could be possible that the principal maintained high expectations for teacher performance and that these expectations helped the school to achieve AYP but caused the teachers to have a less favorable impression of the principal's overall behaviors.

Depending on the average age and years of experience of the teaching staff, a principal who placed high performance expectations on the teaching staff might experience varying degrees of receptiveness to these expectations. From a career perspective, individuals enter the job market with a Dream. This Dream is about what they want to accomplish, what they want to be, and what they want to earn. The Dream begins when one first enters the job market and begins to evolve into goal oriented behaviors (Neufeldt, 1985). Teachers at this stage would possible be more open to the principal's influence than teachers at later stages of their career, when patterns of behavior are more fixed.

Implications

There were 143 middle schools in Pennsylvania meeting the criteria of having 30% or more of their student population receiving free or reduced lunch, thus qualifying as a high poverty school. All of these districts' superintendents were invited to allow their

middle level faculty to participate in this research study. Of this total, 21 district superintendents agreed to have their middle level teachers and administrators participate in the survey. This resulted in a total distribution of 956 teacher and 30 administrative surveys. A total of 21 schools had teachers respond to the survey. Of the 121 teachers who responded, there were 76 teachers from 11 low performing schools and 44 teachers from 10 high performing schools. This return rate resulted in a low sample from which to obtain data. This is especially the case with the low return rate for the administrative surveys (n = 7).

Developmentally responsive leadership is a model for identifying specific principal behaviors targeting middle level learners and those who teach these children. The question is whether or not these behaviors actually impact what is happening in the school. Based upon the results of this study, the answer is not conclusive. But drawing upon research defining effective leadership, knowledge of the needs of adolescents and the needs of teachers would contribute to the overall set of skills and practices that make up the tools used by successful principals (Kouzes and Posner et al., 2003).

There is little doubt that poverty may have a negative impact on a child's social, emotional, and cognitive development. There are some that might argue that this does not necessarily have to be the case. A report produced by the Mass Insight Education & Research Institute, Inc. (2007) contends that the "best opportunity to dramatically improve student achievement lies in our worst-performing schools" (p.4). By identifying many high poverty, high performing schools throughout the nation, this report indicates that these schools share some distinct characteristics that fall into what the report refers to as the Readiness model: readiness to learn, readiness to teach, and readiness to act.

According to this report, successful turnaround schools address student needs with strategies such as extended school days and a longer year as well as close student-adult relationships.

In high poverty, high achieving schools there is a communal sense of shared responsibility for student achievement among staff members. This sense of shared responsibility may be part of the ongoing evolution of public education's mission of universal access to high quality instruction amid a variety of contextual distracters. Researchers as early as 1995 were not only detecting the need for school leadership to be distributed and shared across traditional managerial verses labor lines, but also its absolute necessity in aiding failing schools (Hart, 1995).

Data driven instruction and a culture of collaboration also characterize high poverty, high achievement schools. In this collaborative environment, principals encourage and expect instruction that is driven by the social, emotional and academic needs of students. Teachers free themselves from structurally induced isolationism and work in teams to address student needs.

Recommendations conclude, in part, it is imperative the principal has control over decisions concerning people, time, money and programs that directly impact student learning, as well as being adept at "securing additional resources and leveraging partner relationships" (Mass Insight Education and Research Institute, p. 5).

The 2007 report calls for principals to be part of a larger leadership team sharing a common commitment to hiring high quality teachers and providing ongoing professional development. High poverty, low performing schools need leadership that has the authority to act on what is best for the child. This authority, coupled with "performance-

based behavioral expectations and integrated, research-based programs and related social services", (et al p. 11), will create a climate for effective school turnaround. What is clear is the key role of the principal in creating this school success. Nodding (et al, 2005) would agree about the significant role played by the building principal in creating a culture and ethic of care that helps schools meet the unique development needs of students and faculty.

But the principal is not enough to ensure success. What is needed is comprehensive system redesign that includes school improvement strategies, a replacement of state management systems based on an antiquated industrial model, and broad based reform of local district management structures. Only in this type of environment can there be widely accomplished school reform rather than schools that are anomalies among the many failing schools. What is clear from research is the significant role of an effective building level principal in carrying out the reforms called for in this study.

Recommendations

Never has there been a time in public education when the juxtaposition of heightened accountability and opposing contextual variables, such as poverty, have been so pitted against one another. No one else feels the pressure to perform as acutely as the building principal. With mounting pressure to make AYP on the one hand and the need to restructure failing schools on the other, the role of the principal has taken on greater responsibility for all aspects of school culture having impact on student achievement. Several recommendations can be made to prepare principals to overcome the debilitating

effects of poverty in schools while leading all members of school communities towards social, emotional and academic health.

At the state level, principal certification programs should focus on developing instructional leadership skills in candidates. Special attention should be given to exiting administrators who are experts in coaching the implementation of effective instructional strategies based on student data. When asked if their principal encouraged a wide use of instructional approaches and materials, teachers in both high and low achieving schools responded with 1 (*Frequently, if not always)* and 2 (*Fairly often)*. Thus giving an indication of the value placed on this skill. In addition, program focus should include instruction in application of leadership theory targeting the development of a school culture of shared responsibility and accountability. This training should be continued in the Pennsylvania Inspired Leadership program, required of all administrators working towards permanent certification. The MLLQ included several items focusing on school culture, such as "promoting the development of caring relationships" and "providing students with opportunities to explore, make mistakes, and grow in a safe, caring environment". While teachers in low performing schools placed a higher emphasis on these items, both groups of teachers fell within the 1 (*Frequently, if not always)* to 2 *(Fairly often*) range.

At the local level, annual evaluation of building administrators should be multi-tiered and take into account, for example, student achievement and teacher satisfaction. Many of the items on the MLLQ focused on student and teacher involvement in decision making and "providing time for general education teachers to collaborate with special

education teachers". Ineffective administrators would be placed on improvement plans that reward achievement and apply consequences for lack of progress.

In addition, participation in state and national professional organizations should be funded locally. In these forums, opportunities exist to interact with other administrators in a mixture of social and structured capacities. In this way, the same accountability and achievement expected of students and teachers could be evenly applied to building administrators.

Many schools relegate the assistant principal to the primary role of enforcing classroom discipline, when instead, the role of assistant needs to be broadened to include exposure to a greater role in overall school achievement. Teachers and principals indicated the need for "students to explore, make mistakes and grow in a safe caring environment", and tended to rate this item favorably. This would be a key role for an assistant principal. For such a climate to exist, the assistant principal would need to have a widespread understanding of middle schools and the middle school concept as well as a strong understanding of adolescent characteristics. Rather than leaving their knowledge of applied leadership theory to chance, the district, with the support of state education authorities, would provide structured learning opportunities that emphasize data analysis, building leadership capacity in others, and developmentally responsive practices. The assistant principal should operate in micro what the building principal is large scale, thus being prepared when opportunities for promotion arise.

At the school level, there are strategies which may be used to create an environment where the needs of students are the primary motivation. Teachers should have the ability to work collaboratively and share decision making. Data should be an

everyday part of the classroom teachers' instructional decision making as well as their clear understanding of mitigating factors that limit student achievement such as poverty. Professional development should be aligned with the identified needs of students and data driven. This, coupled with an overarching aura of high expectations should drive administrative tasks such as scheduling. Induction programs should include multi-tiered activities that promote a collaborative work environment, peer accountability, and prescriptive instructional strategies.

Recommendations for Further Research

Further research is needed in the area of the principals' developmentally responsive leadership practices and the impact on overall school success. For example, this study could be extended to include all middle schools, not just high poverty schools. Poverty is a contextual variable that impacts students on several levels, not just academic performance. The inclusion of middle schools that do not have large pockets of impoverished students would provide the collection of teacher perceptions that are not tinged by such a dominant contextual distracter.

For purposes of research replication and greater statistical significance, a larger sample of teacher and administrative perceptions could be obtained. This study received information from 121 teachers and seven administrators. There were 76 teachers from 11 low performing schools and 44 teachers from 10 high performing schools.

Qualitative research could add depth to teacher perception data helping to gauge the importance of developmentally responsive practices to middle school achievement. Interviews and focus groups would add anecdotal data that would increase the knowledge

base for understanding the impact of and proclivities towards developmentally responsive behaviors.

This study could also be duplicated in other states with results analyzed to determine if there existed differences between administrative practices based upon region. While the characteristics of poverty would remain constant, the degree or duration of poverty conditions would impact educational success from state to state and region to region.

Summary

This study sought to determine if certain leadership behaviors practiced by middle level principals had any impact on student achievement based on teachers' perceptions. The schools chosen for this study were all designated as having high poverty student populations with at least 30% of the students receiving free or reduced lunch. Some of the schools were designated as high achieving having made AYP for two consecutive years. The other schools in the sample were designated as low achieving due to having failed to make AYP for two consecutive years.

Teacher perceptions of the principal's leadership behavior, on average, fell within the 2 (Fairly *often)* to 3 (*Sometimes)* range. Teachers in low performing schools tended to rate their principal higher than their counterparts in the higher performing schools. This is exactly opposite of the results anticipated at the beginning of the study. The data seemed to indicate that teachers valued certain distinct activities and behaviors of their principals. But it appears teachers in higher performing schools did not perceive certain principal behaviors as acutely as teachers in lower performing schools. According to teachers' perceptions, their principals all exhibit leadership behaviors that tend to characterize a

middle school. What is not clear is the impact of these leadership behaviors on overall school achievement.

Principals tended to rate themselves higher than the teachers with an average response falling within the 1 (*Frequently, if not always)* to 2 (*Fairly often)* range. This was anticipated at the beginning of this study and has been borne out by the data. There seems to be a natural tendency to be more favorable when self-evaluating.

Based upon the results of this study, it is inconclusive as to whether or not a principal who exercises developmentally responsive leadership makes significant contributions to a school's overall achievement. But drawing upon research defining effective leadership, knowledge of the needs of adolescents and the needs of teachers would contribute to the overall set of skills and practices that make up the tools used by successful principals (Kouzes and Posner et al., 2003).

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APPENDICES

Appendix A

Survey Questions

The Middle Level Leadership Questionnaire (MLLQ) focuses on the actions (behaviors) of middle level principals (typically grades 6-8) in areas related to students, teachers, parents, the curriculum, professional development, school-community relations, and the structuring of the school day. You are asked to reflect on the actions of your middle school principal.

PART ONE. Demographic Information

Directions: *Please complete the following background information before completing the questionnaire.*

School: _____

Age

_____ 20-24
_____ 25-40
_____ 40 +

Gender

_____ Female
_____ Male

Race:

_____ American Indian or Native Alaskan
_____ Asian
_____ Black
_____ Hispanic
_____ White

Level of education:

_____ B.S. in Education
_____ Masters
_____ Doctorate

Years of teaching

_____ 1-5
_____ 6- 15
_____ 16 +

Certification

_____ elementary
_____ secondary
_____ other

Subjects certified to teach: _____

PART TWO. Questionnaire (Teacher's Form)

Directions: *Listed below are statements that describe a variety of behaviors middle school principals may exhibit. Reflecting on your principal's behaviors, please respond to each item by filling in the appropriate response following each statement.*

Frequently, if not always
Fairly often
Sometimes
Once in a while
Not at all

The Principal of my middle school…

1. designs and implements policies and procedures that reflect the needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

2. promotes the development of caring relationships between teachers and students through structures like advisory periods, etc.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

3. provides transition programs from middle to high school for my middle school students.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

4. provides transition programs from elementary to middle school for my middle school students.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

5. organizes the curriculum around real-life concepts.
____ Frequently, if not always

____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

6. advocates the middle schools and the middle school concept in the school district.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

7. prepares a daily schedule that includes time for team planning and meeting.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

8. stays current on what the research says about the best practices for middle schools.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

9. groups students and teachers in small learning communities.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

10. has a vision of what an exemplary middle school is and strives to bring that vision to life.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

11. provides curricular materials that enhance young adolescents' acceptance of self and others and that enable them to accept differences and similarities among people.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

12. provides adequate counseling/advisory opportunities for students

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

13. demonstrates an understanding of the intellectual, physical, psychological and social characteristics of young adolescents

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

14. demonstrates an understanding of the relationship between the cognitive and affective needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

15. spends time each day with students.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

16. provides students with opportunities to explore a rich variety of topics in order to develop their identy and demonstrate their competence.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

17. develops connections with and involves families in the education of their children.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

18. provides age appropriate, co-curricular (or extra-curricular) activities

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

19. provides students with opportunities to explore, make mistakes, and grow in a safe, caring environment.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

20. encourages mature value systems by providing opportunities for students to examine options of behavior and to study consequences of various actions.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

21. regards young adolescents as resources in planning and program development and involves them in meaningful roles.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

22. makes decisions based on young adolescent development and effective middle level practices.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

23. allows teachers and students to plan activities that integrate genders

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

24. provides time for general education teachers to collaborate with special education teachers in order meet the diverse needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

25. encourages teachers to modify time, grouping, and instructional strategies to help individual students achieve mastery of subject matter.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

26. encourage teachers to respond to the needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

27. encourages teachers in their use of a wide variety of instructional approaches and materials.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

28. encourages active discovery learning by students rather than teacher lecture.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

29. encourages activities such as special interest classes and hands on learning.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

30. creates opportunities for professional development of teachers/staff that address strategies for meeting the needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

31. supports appropriate instructional strategies with the necessary resources (i.e. money, time, etc.).

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

32. encourages teachers to make connections across disciplines to reinforce important concepts.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

33. requires teachers to provide classroom activities that address the needs of academically diverse learners who vary greatly in readiness, interest, and learning profile.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

PART THREE. Inventory of Middle School Practices

Directions: *Please put a check in front of each of the middle school components that are implemented in your school to the extent that you would invite others to observe them in action.*

____Exploratory curriculum

____ Grade Level Teacher Teaming

____ Varied teaching methods to meet the needs of all learners

____ Advisory programs that promote teacher/student interactions

____ Flexible scheduling

____ Involvement of families and communities

____ Democratic governance of the school (with teachers, parents, community members involved in decision making)

____ Programs that promote good health, wellness, and safety

Appendix B

Survey Questions

The Middle Level Leadership Questionnaire (MLLQ) focuses on the actions (behaviors) of middle level principals (typically grades 6-8) in areas related to students, teachers, parents, the curriculum, professional development, school-community relations, and the structuring of the school day. You are asked to reflect on your actions as a middle school principal.

PART ONE. Demographic Information

Directions: *Please complete the following background information before completing the questionnaire.*

Name (Optional): _____

School: _____

Age

_____ 20-24

_____ 25-35

_____ 36-46

_____ 47-57

_____ 58+

Gender

_____ Female

_____ Male

Race:

_____ American Indian or Native Alaskan

_____ Asian

_____ Black

_____ Hispanic

_____ White

_____ Other

Level of education:

_____ B.S. in Education

_____ Masters

_____ Doctorate

Years of teaching before becoming a principal: _____

Principal Certification

_____ elementary
_____ middle
_____ K-12
_____ secondary
_____ other

Years as a principal: _____

Years as principal at this school: _____

Please include any personal or professional information you feel would be important for the researcher to know.

_____

_____

PART TWO. Questionnaire (Principal's Form)

Directions: *Listed below are statements that describe a variety of behaviors middle school principals may exhibit. Reflecting on your principal's behaviors, please respond to each item by filling in the appropriate response following each statement.*

Frequently, if not always
Fairly often
Sometimes
Once in a while
Not at all

As the principal of a middle school, I

1. design and implement policies and procedures that reflect the needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

2. promote the development of caring relationships between teachers and students through structures like advisory periods, etc.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

3. provide transition programs from middle to high school for my middle school students.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

4. provide transition programs from elementary to middle school for my middle school students.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

5. organize the curriculum around real-life concepts.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

6. advocate the middle schools and the middle school concept in the school district.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

7. prepare a daily schedule that includes time for team planning and meeting.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

8. stay current on what the research says about the best practices for middle schools.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

9. group students and teachers in small learning communities.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

10. have a vision of what an exemplary middle school is and strives to bring that vision to life.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

11. provide curricular materials that enhance young adolescents' acceptance of self and others and that enable them to accept differeneces and similarities among people.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

12. provide adequate counseling/advisory opportunities for students.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

13. demonstrate an understanding of the intellectual, physical, psychological, and social characteristics of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

14. demonstrate an understanding of the relationship between the cognitive and affective needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

15. spend time each day with students.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

16. provide students with opportunities to explore a rich variety of topics in order to develop their identy and demonstrate their competence.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

17. develop connections with and involves families in the education of their children.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

18. provide age appropriate, co-curricular (or extra-curricular) activities

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

19. provide students with opportunities to explore,
make mistakes, and grow in a safe, caring environment.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

20. encourage mature value systems by providing
opportunities for students to examine options of
behavior and to study consequences of various actions.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

21. regard young adolescents as resources in planning and program development and involves them in meaningful roles.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

22. make decisions based on young adolescent
development and effective middle level practices.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

23. allow teachers and students to plan activities that integrate genders

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

24. provide time for general education teachers to collaborate with special education teachers in order meet the diverse needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

25. encourage teachers to modify time, grouping, and instructional strategies to help individual students achieve mastery of subject matter.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

26. encourage teachers to respond to the needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

27. encourage teachers in their use of a wide variety of instructional approaches and materials.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

28. encourage active discovery learning by students rather than teacher lecture.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

29. encourage activities such as special interest classes and hands on learning.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

30. create opportunities for professional development of teachers/staff that address strategies for meeting the needs of young adolescents.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

31. support appropriate instructional strategies with the necessary resources (i.e. money, time, etc.).

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

32. encourage teachers to make connections across disciplines to reinforce important concepts.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

33. require teachers to provide classroom activities that address the needs of academically diverse learners who vary greatly in readiness, interest, and learning profile.

____ Frequently, if not always
____ Fairly often
____ Sometimes
____ Once in a while
____ Not at all

PART THREE. Inventory of Middle School Practices

Directions: *Please put a check in front of each of the middle school components that are implemented in your school to the extent that you would invite others to observe them in action.*

____ Exploratory curriculum

____ Grade Level Teacher Teaming

____ Varied teaching methods to meet the needs of all learners

____ Advisory programs that promote teacher/student interactions

____ Flexible scheduling

____ Involvement of families and communities

____ Democratic governance of the school (with teachers, parents, community members involved in decision making)

____ Programs that promote good health, wellness, and safety

Appendix C

Dear Fellow Superintendent,

The middle school teachers/administrator(s) within your district are cordially invited to participate in a research study to be conducted by Mr. David R. Goodin, Indiana University of Pennsylvania doctoral student, under the supervision of Dr. Sue Rieg, dissertation committee chair and professor at Indiana University of Pennsylvania. The study intends to survey both teachers' and principals' perceptions of how middle school principal's work within populations of high poverty students. These conditions constitute special challenges for Pennsylvania's school leaders as well as having a significant impact on overall assessment measures used in determining AYP. This study should add to the scholarly body of knowledge pertaining to the qualities of principal behavior leading to overall success in middle schools with high poverty populations.

With your approval, middle school teachers and the building principal will be asked to complete an electronic survey. The survey should take approximately 10 minutes and will ask a series of questions focused on the actions (behaviors) of middle level principals (typically grades 6-8) in areas related to students, teachers, parents, the curriculum, professional development, school-community relations, and the structuring of the school day.

Teacher participation in this study is, of course voluntary, and no known risks are involved since survey responses will be anonymously submitted. If your teachers choose to participate, all e-mail lists will be discarded once invitations have been distributed. The information obtained in this study may be published or presented at conferences but individual schools or districts can not be identified.

If you are willing to allow your middle level teachers to be surveyed, please sign the voluntary consent form below and return it using the stamped return envelope. Please don't hesitate to contact me with any questions you may have concerning participating in this worthwhile study.

Educationally Yours,

David R. Goodin

Connellsville Area School District

732 Rockridge Road, PO Box 861

Connellsville PA 15425 (724) 628-3300

Dr. Sue Rieg, Dissertation Chair

323 Davis Hall, IUP

Indiana Pa 15705

(724) 357-2416

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).

Appendix D

VOLUNTARY CONSENT FORM:

I have read and understand the information on the above Informed Consent Form and I consent to allow an electronic survey be sent to the middle level teachers and principals within the district. I understand that responses are completely anonymous and that I have the right to withdraw my district's data at any time. I have received an unsigned copy of this Informed Consent Form to keep in my possession.

Name (PLEASE PRINT)_____

Signature _____ Date _____

School District _____

Phone number where you can be reached _____

Email address _____

Best days and times to reach you _____

(Do not write below this line, for Primary Researcher's use only)

I certify that I have explained to the above individual the nature and purpose, the potential benefits, and possible risks associated with participating in this study, and have answered any questions that have been raised.

_____

Date Primary Researcher's Signature

Appendix E

Invitation to participate for Middle Level Teacher/Administrator

Having received permission to survey administration and teachers, you are cordially invited to participate in a research study to be conducted by Mr. David R. Goodin, Indiana University of Pennsylvania doctoral student, under the supervision of Dr. Sue Rieg, dissertation committee chair and professor at Indiana University of Pennsylvania. The study intends to survey both teachers' and principals' perceptions of how middle school principal's work within populations of high poverty students. These conditions constitute special challenges for Pennsylvania's school leaders as well as having a significant impact on overall assessment measures used in determining AYP. This study should add to the scholarly body of knowledge pertaining to the qualities of principal behavior leading to overall success in middle schools with high poverty populations.

Participation involves the completion of an electronic survey. The survey should take approximately 10 minutes and will ask a series of questions focused on the actions (behaviors) of middle level principals (typically grades 6-8) in areas related to students, teachers, parents, the curriculum, professional development, school-community relations, and the structuring of the school day.

Your participation in this study is, of course voluntary, and no known risks are involved since survey responses will be anonymously submitted. If you choose to participate, all e-mail lists will be discarded once invitations have been distributed. The information obtained in this study may be published or presented at conferences but individual schools or districts can not be identified.

Click on this link _____and you will be directed to the survey. Once completed simply click the submit button. Please don't hesitate to contact me with any questions you may have concerning participating in this worthwhile study.

Educationally Yours,

David R. Goodin

Connellsville Area School District

732 Rockridge Road, PO Box 861

Connellsville PA 15425 (724) 628-3300

Dr. Sue Rieg, Dissertation Chair

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