THE RELATIONSHIPS AMONG MIDDLE LEVEL LEADERSHIP, TEACHER

COMMITMENT, TEACHER COLLECTIVE EFFICACY, AND STUDENT ACHIEVEMENT

Review of Related Literature

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Chapter 2

Review of the Related Literature

Introduction

Public schools are constantly faced with challenges of how to improve student

achievement. Further complicating the issue is the fact that the student population is now more

heterogeneous than ever before (Riehl, 2000). In many instances as local districts attempt to

improve, school leaders become the focal point of the discussion. Principals are being asked to

assume responsibilities they are not equipped to handle and the consequences of failure are high

for everyone, especially high for children (Elmore, 2000). To address these challenges, schools

are engaging in various restructuring and reform efforts ultimately designed to improve student

achievement. The challenges of restructuring have been noted as reasons for advocating

transformational leadership in schools (Barnett, McCormick, & Conners, 2001).

Transformational leadership has been associated with effective leaders (Griffith, 2004).

As this form of leadership is exercised in schools, it has the potential for building high levels of

teacher commitment to the complex nature of school reform (Barnett, McCormick, & Conners,

2001). Previous research on transformational leadership has suggested the greatest contribution

is mediated by other factors (Hallinger & Heck, 1998). Research has also shown that teacher

commitment (Riehl & Sipple, 1996) and teacher efficacy (Ashton, 1985; Goddard, Hoy, & Hoy,

2000; Ross, 1993) are two factors that significantly impact student achievement. In this literature

review teacher commitment and efficacy are examined further to better understand the previous

research and to identify potential areas of future research.

The first major section of the literature review addresses leadership. It begins by discussing the broader scope of leadership as it has been defined and studied in the past and moves to a narrower view that focuses on the school principal. Next is a discussion of transformational leadership and the principal's leadership role. The third major section discusses teacher commitment followed by sections on teacher efficacy and collective efficacy respectively.

Leadership

Leadership is a difficult concept to define. Taylor (1994) argued that the literature has shown no one definition, list of descriptors, or theoretical model that provides a complete picture of either the theory or practice of leadership in education. Yukl (2006) concurred as he suggested there are many definitions offered, but no one particular definition captures the essence of leadership. Beyond the general definitions of leadership, one can find considerable research on the various contexts in which leadership is practiced. Although no universally agreed upon definition of leadership exists, it is appropriate to discuss some definitions others have suggested in previous works. After a brief discussion of leadership in general, the literature review discusses school principal leadership followed by a review of the literature on transformational leadership.

Leadership Defined and Conceptualized

Leadership has been defined and conceptualized in a variety of ways. Burns (1978) referred to leadership as the ability to inspire followers to attempt to accomplish goals that represent the values, motivations, wants, needs, aspirations, and expectations of both the leaders and followers. Leadership is more about the ability to operate outside of the existing culture to

13

start evolutionary change processes (Schein, 1992). Others have attempted to describe leadership in broader terms.

The concise definition of leadership involves a number of assumptions and understandings from both empirical and conceptual sources (Leithwood & Riehl, 2003). Leadership (a) exists within social relationships and serves social ends; (b) involves purpose and direction; (c) is an influence process; (d) is a function; and (e) is contextual and contingent. Therefore, leadership involves those "who work with others to provide direction and who exert influence on persons and things in order to achieve the school's goals" (p. 9, Leithwood & Riehl, 2003). Likewise, Northouse (2004) suggested that "[L]eadership is a process whereby an individual influences a group of individuals to achieve a common goal"(p. 3).

Definitions of leadership are also based upon what leaders actually do. According to Kouzes and Posner (1987) leaders are at their best when they:

- challenge the process by having a willingness to take risks,

- inspire a shared vision that becomes the driving force that creates the future,

- enable others to act by creating a sense of ownership,

- model the way through personal example and execution, and

- encourage the hearts of others and themselves during difficult times.

A leader is someone who finds a way to make others want what he or she wants, not through coercion but by articulating a vision and persuading others so they would want to become part of it (Hammer & Champy, 1993).

A number of different research approaches have been used over the years to analyze the leadership construct. Although many researchers have offered different categories for the various research approaches, several of them are the same. The leadership theories developed in

the past 50 years have emphasized leader characteristics; therefore it is helpful to classify the leadership literature into the following five approaches: (1) the trait theory, (2) the behavioral approach, (3) the power-influence approach, (4) the situational approach, and (5) the integrative approach (Yukl, 2006).

The trait approach emphasizes the importance of having a leader with a certain set of traits critical to effective leadership (Northouse, 2004). Emphasis is also placed on attributes such as personality, skills, motives, and values (Yukl, 2006). An assumption underlying this approach is that some people are natural leaders and are endowed with certain traits not possessed by others. Trait studies in the 1930s and 1940s seeking to capture the extraordinary abilities posited by earlier researchers failed to find any traits that would lead to guaranteed success. The research predominately looked for significance between leader attributes and a criterion for leader success, without examining explanatory processes (Yukl, 2006). Over the years, it has been documented that leader traits contribute significantly to the prediction of leader effectiveness, leader emergence, and leader advancement. However, there continues to be a lack of agreement among researchers regarding leader traits and attributes (Zaccaro, Kemp, & Bader, 2004).

The behavioral approach began in the 1950s as researchers became discouraged with the trait approach and started to pay closer attention to what leaders actually do (Yukl, 2006). Typically, two lines of research methods evolved to study leader behavior. One method uses observations of how leaders spend their time completing the activities, responsibilities, and functions of the job. Researchers, therefore, collect data from direct observation, diaries, job description questionnaires, and interviews. The other method of research focused on perceptions of effective leadership behavior. The common form of data collection for this method involves a

survey field study with a behavior description questionnaire. Stogdill and Coons' (1957) Leadership Behavior Description Questionnaire used in their early work at The Ohio State University has been a widely used survey tool to measure leadership behaviors. The behaviors measured by their instrument were the human relations dimension and the task dimension. Questions remain unanswered whether leaders can blend the different behavioral dimensions in order to be an effective leader (Daft, 1999).

The third approach is the power-influence approach. This approach attempts to explain leadership effectiveness based on the amount of power possessed by the leader and how power is exercised (Yukl, 2006). Power is viewed as important for influencing subordinates, peers, and superiors, as well as people outside the organization. Researchers have used questionnaires and descriptive incidents to determine the influence leaders have on the attitudes and behaviors of followers. Questionnaire data have also been used to correlate subordinates' perceptions of participative leadership with criteria of effective leadership. Comparisons have also been made to autocratic leadership styles using laboratory and field experiments to determine the effects of the power-influence approach.

The situational approach emphasizes the importance of contextual factors that might influence the leadership process. The characteristics of followers, the nature of the work that the leader's unit performs, the organization type, and the external environment are all major situational variables (Yukl, 2006). One perspective of this approach is to examine the extent to which leadership processes are the same or unique across different types of organizations, levels of management, and cultures. Another perspective is to identify aspects of the situation that facilitate the relationship of leader attributes to leader effectiveness. This approach is sometimes referred to as the contingency theory, where the assumption is that different attributes should be

16

used in different situations, contingent upon the situation. Although this approach has some

advantages, it has also been criticized as being an ambiguous approach (Northouse, 2004).

The final approach categorized by Yukl (2006) is the integrative approach. This approach

involves studying more than one type of leadership variable. Leithwood and Duke (1999) argue

that it is better to study leadership in this manner. However, few theories or studies include traits,

behavior, influence processes, situation variables, and outcomes all in the same design (Yukl,

2006). As leaders engage in the constantly changing environment and demands of others, this

approach may offer a meaningful analysis of the practical day-to-day situations that leaders

might encounter.

Leaders influence a number of situations (Yukl, 2006). Leaders impact the effectiveness

of a group or organization by influencing the: (a) interpretation of external events by members;

(b) choice of objectives and strategies to pursue; (c) motivation of members to achieve the

objectives; (d) mutual trust and cooperation of members; (e) organization and coordination of

work activities; (f) allocation of resources to activities and objectives; (g) development of

members' skills and confidence; (h) learning and sharing of new knowledge by members; (i)

enlistment of support and cooperation from outsiders; (j) design of formal structure, program,

and systems; and (k) shared beliefs and values of members. All of these situations are important

and require that a leader effectively recognize the situation and employ the appropriate

leadership strategies (Yukl, 2006).

The influence of a leader on an organization, as described by Yukl (2006), is well

documented. An examination of the influence of school leaders on the process and outcomes of

schooling is essential to the larger context of educational improvement. Therefore, the study of

principal leadership can be informative to schools just as the study of leadership in other organizations is valuable to understanding organizational outcomes.

Principal Leadership

Throughout the many years researchers have studied principal leadership, the changing nature of the school leader's position has been thoroughly documented. The role of the principal has changed and has become increasingly more complex in recent decades (Fullan, 1991). This section provides a brief historical perspective of how the principalship has evolved throughout the years.

Beck and Murphy (1993) discussed the evolution of the principalship from the 1920s into the 1990s. During the 1920s and spanning much of the 20th century, the role of the principal was that of a manager (Hallinger, 1992). Beck and Murphy noted that the principalship was associated with four major themes in the 1920s:

1. The work of the principal was linked with absolute, spiritual truths and values.

2. The principalship was a role energized by a zeal for education and guided by principles of scientific management.

3. The principal was expected to be a social leader in the community.

4. For all of these reasons, the role was vested with dignity and importance (p. 13).

This period was one of optimism, with the focus being on the positive dimensions of the principal's role. This differed dramatically from much of the literature of later decades (Beck & Murphy, 1993).

In the 1930s, the primary tasks of the principal were administrative rather than instructional. There was a heavy emphasis on organization and supervision. As a result of the administrative focus, the principalship was becoming established as a separate profession from,

but related to, teaching (Beck & Murphy, 1993). The focus of the writers during the 1930s was on the practical dimensions of the principalship. Callahan (1962) argued that this focus on practical issues at times turns into trivia. Educational improvement during the decade of the thirties was measured by sound business and fiscal management.

By the 1940s principals were expected to demonstrate a democratic leadership style. The principal was asked to fulfill the role of curriculum developer and the school's public relations representative within the community. The decade of the forties marked a shift in the principal's role from being an inspector to cooperatively working with teachers to improve teaching (Parker, 1986). The assumption during the 1940s was that a smoothly run school, together with democratic leadership, was a measure of the principal's effectiveness (Campbell, Fleming, Newell, & Bennion, 1987).

The expectation during the 1950s was that the principal act as a skilled administrator combining the skills of teaching and managing drawn from educational and business research. The principal was also expected to defend the work of educators and answer critics of education with empirical data and concern for the effective and efficient use of time was prevalent (Beck & Murphy, 1993). This decade marked a transitional phase for administrators and created a dilemma for principals who began wavering between taking highly theoretical perspectives and dwelling on the mundane issues of practice (Beck & Murphy, 1993).

The principal of the 1960s was considered a protector of the bureaucracy, with clearly defined bases of power and responsibility. The principal was expected to use sophisticated, scientific strategies for planning and measuring (Sergiovanni, 2006). Educational outcomes were viewed as the responsibility of the principal. The accountability placed on the principal by a wide array of groups caused considerable role conflict. Beck and Murphy (1993) suggested that this

was a period of uniformity and standardization. There was a denial of reality and the complex

problems that existed during this period.

The principalship of the 1970s began to have a community focus, with the principal

expected to be a community leader. The expectation was to impart meaning to educational

efforts (Matthews & Crow, 2003). The principal was also expected to facilitate positive

interactions within the school. There was also an expectation that the principal skillfully handle

several roles, even if it required using different traits or abilities (Beck & Murphy, 1993; Day,

2000). In this decade principals were charged to develop schools that focus on the human aspect.

The challenge was to utilize political and personal skills to develop affective-oriented schools.

In the 1970s the principal was expected to reach out to the community in an effort to

ameliorate social problems. In the 1980s, however, the community began reaching into the

schools to influence the educational processes and those leading them (Murphy, 1990). The

community expected the principal to serve as the instructional leader who guided the learning

process for teachers and students so they would have productive experiences. During this decade

the principal was asked to solve problems and provide resources that facilitated the learning

process. Strong administrative leadership was considered a critical component in instructionally

effective schools (Edmonds, 1979). The principal was expected to be a visionary, leading the

school toward becoming an ideal school. The successful principal of this decade was often

considered a change agent (Beck & Murphy, 1993). The principal was expected to understand

the educational environment then provide appropriate instructional leadership (Matthews &

Crow, 2003).

As we moved into the 1990s, the role of the principal shifted back to a focus on

community involvement. Educational communities were drastically changing with a greater

number of non-English speaking students and parents, growing minority enrollments, and a greater number of children living in poverty (Kavanaugh, 2005). In the decade of the nineties, schools had to address increased numbers of children affected by societal ills such poverty, unemployment, crime, and drug addiction. These issues meant a more intensive need for additional services from societal organizations, schools in particular (Beck & Murphy, 1993). Schools remained accountable to the community for student achievement with more attention being placed on state and national standards for testing. There was a call for leaders to move beyond instructional leadership and evoke a more appropriate range of practice (Leithwood, 1992).

The principalship in the first decade of the new millennium has become more complicated than ever, with increased school and leader accountability. Today, principals are being evaluated by student achievement on standardized achievement tests (Kavanaugh, 2005). Matthews and Crow (2003) noted that the demand for raising student achievement has placed an unprecedented level of public scrutiny on the job performance of principals. The demands relating to the level of accountability, social issues, and standardized testing have created pressures that could not have been anticipated a decade ago. To appropriately meet the challenge of tomorrow's schools, the new approach demands that "the principal, faculty, staff, parents, and community work together sharing a vision of how to help all students achieve" (p.5, Lunenburg & Irby, 2006). This suggests the need for school reform and processes by which to transform schools into what is considered effective. However, the management functions traditionally associated with school leadership have not disappeared and have possibly become even more demanding (Matthews & Crow, 2003). The following section of this literature review examines transformational leadership.

Transformational Leadership

Transformational leadership has gained widespread attention and the evidence to support this leadership theory has increased over the past decade (Griffith, 2004). Griffith noted that transformational leaders positively affect the commitment and motivation of group members. Most definitions of transformational leadership include either a direct reference to, or implication of, commitment and motivation (Leithwood & Jantzi, 2005). As is the case with other leadership concepts, transformational leadership has been defined by a number of scholars.

Bennis (1959) offered one of the earliest definitions of leadership with an implication towards transformational leadership by suggesting that leadership is the process by which a person is able to reach the souls and satisfy the needs of others in a manner to achieve the desired results. Burns (1978) described it as a process through which leaders and followers raise each other to higher levels of morality and motivation. Leithwood and Jantzi (1999) noted that transformational leadership fosters capacity development and higher levels of personal commitment to organizational goals on the part of leaders' colleagues. As schools engage in restructuring efforts, transformational leadership is well suited to the challenges (Barnett, McCormick, & Conners, 2001). Barnett et al. noted, since Bennis' (1959) initial work, transformational leadership was studied further in the 1970s and has been considered a viable leadership theory since (Bass, 1985; Burns, 1978).

Transformational Leadership Conceptualized

Transformational leadership was first conceptualized by Burns (1978), who addressed the nature of leadership by first discussing the essence of power. Burns argued that the essence of power is found in the relationships, motives, and resources of both leaders and followers. Burns suggested that motives and resources are the two essentials of power and there is a concomitant

relationship between motives and power. Without motives, resources diminish and when resources are lacking motives lie idle. When either is lacking, power ultimately collapses.

As Burns (1978) conceptualized transformational leadership, he contrasted it to transactional leadership. He suggested the two are on the opposite ends of the spectrum where the transformational leader focuses on intrinsic motivation and the transactional leader focuses on extrinsic motivation. According to Burns (1978) both provide results, but results from transactional leadership do not have the lasting effect compared to that of the transformational leadership.

The transactional leader is one who makes contact with others for the purpose of an exchange of valued things (Burns, 1978). The exchange could be for a number of different reasons including economic, political, or psychological. There is no intention of an enduring relationship; therefore, both parties may go their separate ways. The transactional leader needs "a shrewd eye for opportunity, a good hand at bargaining, persuading, and reciprocating" (p. 169). These qualities are necessary but if there is to be true reform much more is required.

The transformational leader is the polar opposite of the transactional leader (Burns, 1978). Transformational leadership is described as having an effect on both the leader and the follower. Transformational leadership raises both the leader and follower to higher levels of motivation and morality. The transformational leader moves both from separate starting points to a point of commonality. There is a raised level of conduct and ethical aspirations, which fosters a transforming effect on both. Both the leader and follower are intrinsically motivated, not extrinsically motivated as in transactional leadership. Transformational leaders are attentive to the motives of followers, as well as their own, and create a change in followers' motivation base through gratification (Bass, 1985; Leithwood, 1992).

Bass (1985) described a transformational leader as one who motivates others to do more than originally expected. This can be accomplished by (a) raising the level of awareness and consciousness about the value of designated outcomes and ways of reaching them, (b) getting others to transcend from their own self-interest for the sake of the team or organization, or (c) altering the Maslow's hierarchy need level of others or expanding their portfolio of needs and wants. This conceptualization by Bass is similar to that of Burns (1978), however Bass noted three fundamental differences. First, Bass suggested that the expansion of followers' needs at any level of Maslow's hierarchy is viewed as a potential to increase performance, whereas Burns believed the expansion needed to be at higher levels on the hierarchy. Second, Burns suggested that transformation takes place when there was a furthering of what was good rather than evil for the person and organization. Bass argued that regardless of whether it is for good or evil, transformations can take place. Finally, according to Burns transformational and transactional leadership are polar opposites, whereas Bass argued that most leaders use both to some extent.

Bass (1985) provided more insight on the notion of transformational leadership by adding that "the leader with charisma attains a generalized influence which is transformational" (p.39). Charismatic leaders relate the work and mission of others to the strongly held shared values and aspirations of the overall organization's culture. Charismatic leadership is one of a four-factor model which Bass (1998) further developed.

Bass (1998) proposed a transformational leadership model that includes four factors. The first, idealized influence (charismatic leadership), occurs when a leader acts in a manner that causes him or her to serve as a role model for the organization's followers. Actions will have an impact that develops followers' trust. When trust is not present, change must occur primarily through merit and perhaps becomes much more difficult. Simons (1999) argued that

24

transformational leaders who demonstrate integrity through their behaviors cultivate trust and loyalty. Displaying integrity by serving as roles models for others was found to be an important part of good leadership (Avolio, 1999; Leithwood, Tomlinson, & Genge, 1996). Transformational leaders model the appropriate behaviors by operating with high standards of ethical and moral conduct, conveying a vision, and sharing risks with followers (Hoy and Miskel, 2001; Jantzi & Leithwood, 1996).

Inspirational motivation is the second factor and it involves leadership that provides meaning and challenge to the work of the followers (Bass, 1998). Individuals become more focused on the vision through the spirited appeals and images from the leader. Leaders work collaboratively with colleagues to develop a vision for the organization (Jantzi & Leithwood, 1996). Appeals are based upon a mutually developed vision of the future. Leaders engaging in inspirational motivation use words to clearly articulate the vision; symbols and body language to inspire others; and they show the relationship between the vision and the processes of change (Bass, 1998; Jantzi & Leithwood, 1996).

Bass (1998) labeled the third factor as intellectual stimulation. The basis of this factor involves leaders that will question organizational assumptions, find new ways of looking at problems, and create new viewpoints for current conditions. Intellectual stimulation is fostered by questioning current strategies, posing problems from various perspectives, and supporting new procedures for work (Hoy and Miskel, 2001). The transformational leader actively solicits and encourages ideas and solutions to problems (Bass, 1998). Leaders insist that evidence be provided to support arguments while also encouraging new and creative ways of thinking (Jantzi & Leithwood, 1996).

Individualized consideration is the final factor of the model by Bass (1998). Leaders behave as coaches and mentors to help meet the needs of followers. There is a focus on the individual and his or her needs. The primary focus is to foster personal growth and development. Transformational leaders take the necessary time to know individual members rather than treat them as just another part of the organization. As changes are considered, there are ample opportunities for individuals to express concerns (Jantzi & Leithwood, 1996).

Leithwood and his colleagues are credited as being among the first to conceptualize transformational leadership in the school context (Jantzi & Leithwood, 1996; Leithwood & Jantzi, 1990; Leithwood & Steinbach, 1991). Leithwood and his colleagues suggested a six-component conceptualization of transformational leadership that includes the four posited by Bass with two additional components. The four components of Leithwood's that are synonymous to those proposed by Bass are (1) "modeling" (idealized influence), (2) "vision identification" (inspirational motivation), (3) "intellectual stimulation," and (4) "individualized support" (individualized consideration). The two additional components are "goal acceptance" and "high performance expectations."

Transformational leaders foster the acceptance of group goals (goal acceptance) and work toward a consensus (Jantzi & Leithwood, 1996). Individual group members' goals are considered and incorporated into group goals. There is a conscious effort to involve stakeholders in a comprehensive and systemic process that involves regularly reviewing the progress being made toward the desired goals. Previously established goals are considered when new school-wide decisions are made (Leithwood, Tomlinson, & Genge, 1996).

Transformational leaders hold "high performance expectations" in all aspects of their work. There is an expectation of excellence throughout the school. Leaders express their

judgments and beliefs about the performance expectations while encouraging others to make their judgments. The principal sets high standards and expects teachers to be creative and design ways to enhance the teaching and learning process (Jantzi & Leithwood, 1996; Leithwood, Tomlinson, & Genge, 1996).

Leithwood (1992) suggested school leaders are constantly striving for three fundamental goals: (a) helping staff members develop and maintain a collaborative, professional school culture; (b) fostering teacher development; and (c) helping them solve problems together more effectively. Leithwood's argument for the usefulness of transformational leadership is based upon the assumptions that leadership is typically visible during times of change and the era of school change will most likely extend into the distant future. Leithwood asserted that school leaders who demonstrate the behaviors of transformational leadership empower teachers to rise above their personal expectations, help create and believe in group goals, and participate in the decision-making process.

Transformational Leadership Research

Although transformational leadership was initially studied in noneducational settings, the research based in school settings is the primary focus of this literature review. The importance of transformational leadership has been noted in a number of studies. There are examples where regardless of the socioeconomic conditions of the school, the more principals demonstrated these types of transformational and other leadership behaviors, the more likely was the school to have students with high levels of academic success (Valentine, Goodman, & Solomon, 2006, in press).

To examine transformational leadership in the school context, Leithwood and Jantzi (1990) conducted a study of 12 principals engaged in the process of school restructuring. The

researchers found that principals who exhibit transformational leadership characteristics utilize a combination of six strategies to reform. These strategies include:

- Strengthening the culture by clarifying and prioritizing the shared goals for school improvement;

- Using decision making by staff, including staff's involvement in the hiring process;

- Fostering staff development by enhancing teachers' skills and knowledge of instructional strategies;

- Frequent and direct communication that keeps teachers informed through teacher-principal interactions and through the use of planning teams;

- Establishing school decision-making teams to share power and responsibility with teacher teams; and

- Using rituals and symbols to express cultural values by conducting various celebration and award ceremonies in recognition of school improvement.

An examination of the degree of transformational and transactional behaviors of 27 elementary and secondary principals indicated that, overall, the principals who were identified by others as top performing tended to demonstrate transformational leadership (Stone, 1992). Chirichello (1997) examined the relationship between the preferred leadership styles of principals in six successful public elementary schools. Each principal's style exhibited characteristics of transformational leadership. The conclusions from this study indicated that transformational leaders: (a) can build capacity for change, (b) will embrace teachers as leaders, (c) will encourage reflective study and professional growth, and (d) will provide scheduled times for collegial activities.

Eyal and Kark (2004) examined how school reform in 140 Israeli elementary schools might influence transformational leadership behaviors. They found that transformational leadership was at the highest level when associated with moderate, as opposed to vigorous or conservative, levels of organizational innovativeness. There also was a significant relationship between principal proactivity and the use of transformational leadership behavior. In a study of teachers and students from 94 elementary schools in Canada to determine the effects of transformational leadership on selected organizational conditions and student engagement with school, Leithwood and Jantzi (1999) found strong significant effects of transformational leadership on organizational conditions, but found only moderate, however still significant, total effects on student engagement with school. One of the possible contributions from this research might be that it could assist educators in finding ways to reverse student disengagement in order to achieve the academic goals as well as the "ambitious outcomes advocated by most current reform initiatives" (p.458, Leithwood & Jantzi, 1999).

Transformational leadership has been documented to match well with the reform efforts of a nationwide school reform project in Britain (Day, Harris, & Hadfield, 2001). Similarly, Leithwood, Riedlinger, Bauer, and Jantzi (2003) conducted a study using a large scale school reform context and reported evidence of transformational leadership behaviors being used by those in leadership roles throughout the school system to promote the country's reform agenda. Although the studies were conducted at different points in time, the results proved to be consistent. The same confirming results apply to other studies (Leithwood, Jantzi, Earl, Watson, Levin, & Fullan, 2004; Ross, 2004) that found two different formal leadership training experiences have significant effects on transformational leadership behaviors among school principals. Regardless of the positive effects on principals, many would seek to determine how

29

those effects contribute to the academic achievement of students in order to consider reform efforts to be successful.

In a review of the transformational leadership literature of the past 10 years, Leithwood and Jantzi (2005) noted that there were nine studies examining the effects of transformational leadership on student achievement. For example, Ross (2004) found significant positive effects of transformational leadership on math and language achievement in a study using student achievement scores on provincial, state or national tests. However, Leithwood et al. (2004) found no significant effects using the same type of achievement measures. Significant indirect relationships were also reported between transformational leadership and end-of-high school examination scores from several subjects (Silins & Murray-Harvey, 1999). Griffith (2004), using a value-added measure, reported positive effects on student achievement. The process consisted of averaging the performance progress on standardized test scores for students in various schools in the study. The initial (grade 3) scores were regressed on the current (grade 5) scores, with the residuals being used to help determine the value above or below the average (Griffith, 2004).

The literature confirms that principals who practice a transformational leadership style have a positive influence on schools in a number of ways. Studies have shown that transformational leadership is effective in schools by fostering higher levels of commitment, extra effort and motivation (Griffith, 2004). To make an impact on student achievement, being attentive to teachers' levels of commitment may be an important aspect of leadership for school principals. As noted in the educational literature, administrative support seems to foster higher levels of teacher commitment (Riehl and Sipple, 1996). Therefore, further review of the literature on the impact of teacher commitment on students should provide greater insight to those engaged

in school improvement and reform efforts. The section that follows includes some of the related literature on teacher commitment.

Teacher Commitment

Regardless of the efforts of the most capable leaders in a school, accomplishing school goals depends in large part on a better understanding of the sources, nature and development of a teacher's commitment (Dannetta, 2002). An understanding of teachers' level of commitment is important because it reflects their personal interpretation of how absorbing and meaningful their work experiences are. To study teacher commitment there has to be clarity on what is actually meant by the term.

Commitment in general refers to one's level of involvement in the organization. Commitment describes an outcome in which one agrees with a decision or request and makes a great effort to carry out that decision or request effectively (Yukl, 2006). "[F]or a complex, difficult task, commitment is usually the most successful outcome from the perspective of the agent who makes an influence attempt."(p.147, Yukl 2006). Rosenholtz (1989), referring to work motivation and commitment, argued that it is more about the design and management of tasks and circumstances within the organization than it is about the personal qualities people bring to the workplace. The term *commitment* is the subject of interest in many organizations since committed employees are more likely to stay with the organization (Reichers, 1985). In public schools where teachers are committed, there is a positive effect on student achievement (Riehl & Sipple, 1996).

The definitions of teacher commitment differ depending on the context in which it is analyzed. Commitment involves a psychological state that identifies the objects an individual closely associates with or desires to be involved with (Leithwood, Menzies, & Jantzi, 1994).

31

Teacher commitment has been emphasized in three broad categories (Dannetta, 2002). The first is the commitment to the organization. Organizational commitment definitions include the belief in and acceptance of organizational goals and values; willingness to exert effort on the organization's behalf; and a desire to remain in the organization (Mowday, Steers, & Porter, 1982). Second, there is commitment to the teaching profession. Commitment to the profession is generally the degree to which one has a positive, affective attachment to one's work (Coladarci, 1992; Firestone & Rosenblum, 1988). The third type is commitment to student learning (Kushman, 1992). Commitment to student learning focuses on the degree to which teachers are dedicated to student learning, regardless of the other issues that may be involved (e.g., academic difficulties, social background).

Conceptualizations of Teacher Commitment

Teacher commitment is a critical factor influencing teaching and learning and has been examined from various theoretical perspectives (Reyes, 1990; Rosenholtz, 1989). Researchers have studied the concept of teacher commitment in a number of ways. The literature in this review explores three major areas associated with teacher commitment. The following paragraphs elaborate on teacher commitment to (1) the organization, (2) the profession, and (3) students.

Commitment to the organization creates a sense of community, affiliation, and personal caring among adults within the schools and facilitates integration between personal life and work life (Louis, 1998). Many factors impact teachers' levels of commitment to the organization. Specifically, previous studies show that teachers' commitment to the organization is influenced by (a) beliefs and acceptance of organizational goals (Mowday, Steers, & Porter, 1979; Riehl & Sipple, 1996), (b) level of involvement in decision making (Kushman, 1992), (c) orderly

climates conducive to learning (Kushman, 1992; Rosenholtz, 1989), and (d) student achievement (Kushman, 1992).

Rosenholtz (1989) suggested two workplace factors that shape teacher commitment to the organization – psychic rewards and task autonomy. Psychic rewards are important in shaping organizational commitment. For the work to be motivating, people must have knowledge of the success of their efforts (Hackman & Oldham, 1980). The amount of positive feedback one receives from doing work and one's knowledge of his or her own performance are directly related (Rosenholtz, 1989). Feedback can be obtained directly from the work itself or it can be obtained from external recognition and approval that may be offered by others within the organization. When people are able to gain estimates of their particular worth based upon positive performances it amounts to psychic rewards (Rosenholtz, 1989).

Increased task autonomy is another organizational condition that Rosenholtz (1989) suggested can enhance teacher commitment. Professional autonomy has a strong association with teacher commitment and gives teachers a sense of making a greater contribution to the organization (Nir, 2002). Rosenholtz suggested that as people are given more autonomy and discretion to exercise judgment and choice, they become more aware of themselves as causal agents in their own performance. Professional independence and discretion bolster motivation, responsibility, and commitment, while a lack of autonomy is cited as a reason for dissatisfaction, absenteeism, and defection (Chapman & Hutcheson, 1982). When specific rules and mandatory teaching practices are counter to the professional practices that teachers know are successful, frustrations develop that can outweigh their rewards and inevitably the academic success of the school suffers (Rosenholtz, 1989).

The second type of teacher commitment, commitment to teaching, refers to the teaching profession in a general sense. Firestone and Rosenblum (1988) described this dimension as emphasizing fulfillment from exercising craft skill. They also suggested that higher levels of commitment are experienced when there is a sense of relevance or purpose in one's work. Teachers with no sense of relevance to their teaching are not as committed as others, possibly due to the frustrations of their work. Not only do teachers leave the profession because of frustration, but also because they become attracted to alternative activities (Fresko, Kfir, & Nasser, 1997).

Commitment and the degree to which teachers are satisfied and enjoy what they are doing are interactions that take place throughout a teacher's career (Fresko, Kfir, & Nasser, 1997). Firestone and Pennell (1993) noted that the committed teacher is one who is intrinsically motivated because of a sense of meaning in the job responsibilities. The level of commitment is further enhanced when there is a connection to the larger purpose as opposed to a routine task. To maximize intrinsic motivation and commitment, tasks should be neither too complex nor too simplistic, but optimally challenging (Deci & Ryan, 1985). It is incumbent upon administrators to discern the difference and provide the appropriate support as needed in various situations.

Administrative support for teachers can enhance teacher commitment to teaching (Firestone and Rosenblum, 1988). Support from administrators contributes to teachers' performance and willingness to stay in the teaching field (Dworkin, 1987). A primary area of support is student discipline. Teachers expect the principal to control the public spaces in the school and to be sympathetic when teachers have problems with uncontrollable students (Firestone & Rosenblum, 1988). Teachers also expect administrators to reduce paperwork,

support them in parental disputes, and minimize outside interruptions to their classroom (Rosenholtz, 1985).

Third, there is teacher commitment to students. Teacher commitment to students can be conceptualized as a commitment to students as unique, whole individuals (Louis, 1998) or as a commitment to student learning (Dannetta, 2002). Hoy and his colleagues' conception of teacher commitment consists of the committed behaviors directed toward both the social and intellectual development of students (Hoy & Sabo, 1998; Hoy & Tarter, 1997). Commitment to students as unique, whole individuals is a form of commitment that may motivate teachers to interact with students on a more sensitive level, such as adolescent development issues or extracurricular activities (Louis, 1998). Commitment to student learning involves teacher dedication to helping students learn regardless of academic difficulties or social background (Dannetta, 2002).

As student learning increases, teachers gain intrinsic rewards and thus become more committed (Kushman, 1992). Teacher commitment to students may not necessarily contribute much to student learning (Firestone & Rosenblum, 1988). Although high teacher commitment may not increase academic success, Firestone and Pennell (1993) noted that low teacher commitment can contribute to a reduction in student achievement. Teachers with lower levels of commitment develop fewer plans to improve the academic quality of their instruction. They are less sympathetic toward students, have more anxiety, and have less tolerance for frustration in the classroom (Firestone & Pennell, 1993).

Teacher Commitment Research

Researchers have studied teacher commitment in various ways. Some studies examined the factors affecting teacher commitment and the behaviors of committed teachers. Another line

of inquiry examined teacher commitment to the organization, teaching profession, and students. A combination of different studies on teacher commitment is presented in this review.

Rosenholtz and Simpson (1990) sampled 78 elementary schools to determine if the level of teacher commitment was different among novice teachers (1-5 years), midcareer teachers (6-10 years), and veteran teachers (10+ years). They found a modest change across the teaching career with a fall after five years and partially returning in the veteran stage. They noted that there were differences in the impact of certain organizational qualities on novice teachers compared to the veteran teachers. Novice teachers were impacted greater by "managing the students' normative system and buffering the professional work from various nonprofessional interruptions" (p. 252). Experienced teachers, on the other hand, were influenced more by conditions directly associated with the core tasks such as discretion and autonomy felt in the school context. Classroom autonomy positively correlated with teachers' levels of professional commitment and teachers empowered with more classroom autonomy are more likely to persevere when working toward school goals (Riehl & Sipple, 1996).

Rosenholtz and Simpson's (1990) findings concerning the impact of the task environment contradict some of the current research. For example, Riehl and Sipple (1996) found that the task environment had weak and inconsistent relationships to teacher commitment. What one teacher might have perceived as discouraging and difficult, the other may have viewed as a motivating challenge. It has also been documented that as teachers' service durations get longer, their organizational commitment levels increase (Celep, 2000). This was apparent, based on increases in the levels of commitment to the school, teaching work, and work group.

Hausman and Goldring (2001) studied teachers grouped according to whether they were located at a magnet or a non-magnet elementary school and found that magnet teachers rated

their levels of commitment higher than their peers in non-magnet schools. Possible reason for the difference was that magnet teachers chose the schools in which they worked and teachers are more likely to be more committed to schools they have chosen (Hausman & Goldring, 2001). Higher levels of commitment result from having a sense of community, affiliation, and personal caring among the adults within the school (Louis, 1998). Personal caring was a key element in providing academic and social support for students, just as teachers' levels of commitment to student learning were a function of the length of time the teachers were able to spend together (Day, 1996).

Many factors have an influence on teachers' levels of commitment to student learning. A review of the literature on teacher commitment revealed 17 factors that influence teacher commitment to student learning (Dannetta, 2002). Of the factors listed in the various studies many did not study an impact on student achievement. Kushman (1992) sampled 63 urban elementary and middle schools and examined organizational commitment and teacher commitment to student learning. There were positive, nonsignificant, relationships between teacher commitment to student learning and academic achievement. Interviews were conducted with 17 elementary teachers in a high-poverty urban school in Texas to understand the dynamics of teacher commitment related to the organizational characteristic of high-poverty. Teacher commitment was related to: (a) culturally and ideologically based dedication to making a difference for students; (b) willingness to devote personal time outside of the classroom; (c) quality relationships with other teachers while managing the work of teaching (Mutchler, 2005).

As the work of teaching is carried out, it has been suggested that the degree to which teachers collaborate and engage in the decision making process might affect teacher commitment and student achievement. In a 3-year longitudinal study of 28 elementary schools in Jerusalem

implementing school-based management (SBM), teachers in the SBM schools expressed

increased levels of commitment to the academic success of students. The implication is that as

the schools had more control over the decision making the more teachers were able to heighten

their level of commitment to student achievement without the numerous external distractions that

often leave teachers feeling powerless (Nir, 2002). Teachers who are "powerless to shape the

substance of their classroom plans or the policies of their school not only profess no ownership

of them, but tend to become alienated from the essence of their work" (p. 162, Rosenholtz,

1989). Providing further support, Rosenholtz noted that the less alienated teachers felt, the

greater the students achieved in fourth-grade reading and mathematics.

Pressley, Rankin and Yokoi (1996) also reported that teacher commitment has a positive

effect on reading achievement. In a sample of 128 primary teachers and supervisors, teachers

who reported a commitment to teaching specific literacy strategies were able to increase student

reading achievement. Committed teachers reported many instructional activities designed to

engage students in reading and writing. Likewise, high levels of teacher commitment to

implementing a reading program in a high school in Georgia contributed to its success. Both

reading achievement increased and students' attitudes toward reading were enhanced (Weller &

Weller, 1999).

Regardless of the type of commitment being analyzed, principals have a strong influence

on teacher commitment (VanderStoep, Anderman, & Midgley, 1994). Singh and Billingsley

(1998) also found that principal leadership had a direct effect on professional commitment. The

impact of principal leadership was noted as being small, but significant nonetheless, across

gender, levels of education, and years of experience. In a study using values theory, Sun (2004)

concluded that a principal influences teachers' levels of commitment based on the teacher's

perception of the degree of match between the principals' value orientations and his or her own. Therefore, a principal's leadership style can have a limited influence on teacher commitment (Sun, 2004).

Day, Elliot, and Kington (2005) conducted a qualitative study on a group of Australian and English teachers and concluded from the teachers' responses that there were some identifiable factors that sustained teacher commitment and some factors that diminished teacher commitment. Personal and school context factors were found to be most significant in sustaining teacher commitment while system context factors were found to be most significant in diminishing teacher commitment. Personal context factors that sustained teacher commitment included: (a) having friends of similar professional interests and needs; (b) a stable emotional environment at home; (c) social life outside of education; (d) leadership and school culture; and, (e) self-efficacy – feeling you are doing a good job and can make a difference. School context factors that sustained teacher commitment included: (a) sharing with and supporting peers; (b) positive feedback from colleagues; (c) working with parents to bring about change; and, (d) children in class and dynamic work environments. System context factors that diminished teacher commitment included: (a) time related to imposed innovation and the steep learning curves involved; (b) department initiatives that increase bureaucratic tasks; (c) cutting down on resources/lack of funding; (d) reduction of classroom autonomy and sense of agency; and, (e) decisions being made about your students in forums outside of your control (p. 573, Day, Elliot, & Kington, 2005). The role of the principal is critical in sustaining teacher commitment by being attentive to personal and school context factors. Moreover, the principal's role is equally critical in addressing the system context factors that diminish teacher commitment (Day, Elliot, & Kington, 2005).

Summary of the Teacher Commitment Literature

With the current accountability measures placing a great deal of pressure on schools, having teachers with high levels of commitment to student achievement and sustaining that high teacher commitment level appears to be most relevant for school principals. Consequently, if the belief is that teacher commitment will make a difference in students' academic achievement and the research proves this to be true, teachers might start to feel that their efforts really do matter. The extent to which a teacher believes his or her individual efforts make a difference is the fundamental premise of teacher efficacy. The nature of schools is such that individual efforts may cause teachers to feel overwhelmed. It might seem more relevant to consider the teachers' collective efficacy beliefs to determine teachers' beliefs of the difference their efforts make collectively. Prior to examining teachers' collective efficacy beliefs, background about the origin of teacher efficacy and some of existing research on teacher efficacy is presented to provide more insight. The next section presents a review of the literature on teacher efficacy and how efficacious teachers impact student achievement.

Teacher Efficacy

Teachers have to endure the numerous opinions of those who are assessing whether they are able to positively impact students and how well students progress academically. However, what may be the most important is how the teachers assess themselves on their ability to affect student academic success. This is typically referred to in the literature as teacher self-efficacy. In recent years, Bandura's (1977, 1986, 1993) work has been the basis for defining teacher self-efficacy.

According to Guskey (1994), most definitions of efficacy can be traced to the early psychological research of Heider (1958) and White (1959). Woolfolk and Hoy (1990) noted that

Barfield and Burlingame (1974) defined efficacy as being derived from a personality that allows one to deal effectively with the world. Another of the earliest definitions of teacher self-efficacy was offered in a RAND study conducted by Armor, et al. (1976). Teacher self-efficacy was defined as the extent to which a teacher believes he or she has the capacity to affect students' learning outcomes. Similarly, Ashton (1984) defined it as the degree to which teachers believe in their ability to affect student performance.

However, Guskey (1982) defined teacher efficacy as a teacher's willingness to take responsibility for student successes and failures. In general, teacher self-efficacy is a teacher's belief that he or she can influence how well students learn; even those students considered to be difficult or appear to lack motivation (Guskey & Passaro, 1994). Though there is some variation in the definitions of teacher self-efficacy, researchers have consistently found a relationship between teachers' sense of efficacy and the behavior and learning of students (Henson, 2002). Teacher efficacy refers to the "teachers' perceptions that they have the skills and ability to help students learn, are competent in building effective programs for students, and can effect changes in student learning" (p. 490, Short, 1998). The belief of teachers that their efforts or capability affect outcomes is critical to teacher self-efficacy definitions. The teacher efficacy literature distinguishes between teacher's individual (self) efficacy and teachers' collective (general) efficacy. The following sections describe the early conceptual beginnings of self-efficacy and selected teacher self-efficacy research.

Conceptualizations of Self-Efficacy

Julian Rotter and Albert Bandura were instrumental in developing the concept of self-efficacy. Individuals develop general expectancies about what determines whether or not their own behaviors get reinforced in life (Rotter, 1966). Individuals are either "internally oriented" or

"externally oriented" (Rotter, 1966). Internally oriented individuals are those tending to believe that reinforcers are subject to their own control and occur as a result of displaying their skills. Externally oriented individuals, conversely, are those who tend to see little or no connection between their own behavior and various reinforcers. These individuals tend to view occurrences as being determined by fate, chance, or other individuals with power. According to Rotter (1966) individuals are measured by the degree to which they are internal or external not whether they are either one or the other. Rotter's theory was grounded in locus of control and reinforcement.

Bandura (1977) conceptualized self-efficacy using social cognitive theory as the foundation. Bandura described self-efficacy as the belief in one's capabilities to organize and set forth a course of action necessary to produce the given attainments. The two dimensions of Bandura's (1977, 1986) notion of self-efficacy are outcome expectation and efficacy expectation. Outcome expectation refers to one's estimation that a given behavior will lead to a specific outcome. Efficacy expectation refers to one's belief of being capable of demonstrating the behaviors necessary to achieve the outcome. Bandura concluded that the two dimensions are different continuums that are interrelated, situational, and affect motivation and future learning. The two discrete expectations interact to determine the initiation and persistence of coping behaviors. Thus, one's confidence that a certain behavior will lead to certain outcomes, together with the confidence one has the ability to perform the behavior, determines one's action. Self-efficacy is a cognitive process that mediates and regulates behavior (Bandura, 1982). This can have a meaningful impact on teachers as the construct of self-efficacy has been defined, conceptualized and operationalized in public schools.

Gibson and Dembo (1984) attempted to improve the validity and reliability of earlier work on teacher efficacy and expand Bandura's two-component cognitive learning theory model.

They developed a 30-item scale that consisted of two factors – personal teaching efficacy and teaching efficacy. The first factor, personal teaching efficacy, equates to Bandura's efficacy expectation which represents a teacher's belief that he or she has the skills to bring about student learning. The second factor, teaching efficacy, matches Bandura's (1977) outcome expectancy factor which represents a teacher's belief that any teacher's ability to bring about change is limited by external factors such as family background or parental influence. Hoy and Spero (2005) argued against the direct connection between Gibson and Dembo's (1984) teaching efficacy and Bandura's outcome expectancy noting that the teaching efficacy factor "appears to reflect a general belief about the power of teaching to reach difficult children and may have more in common with teachers' conservative/liberal attitudes towards education"(p. 347, Hoy & Spero, 2005).

Teacher Self-Efficacy Research

There are many factors to consider when examining the academic environment in the public schools. Teacher efficacy is one of the key factors that consistently influences teaching and learning (Woolfolk & Hoy, 1990). Ashton and Webb (1986) were among the first to apply Bandura's social learning theory to the study of teacher efficacy. Their research stemmed from one of the original measures of teacher efficacy developed by the Rand Corporation (Berman & McLaughlin, 1977) to assess two dimensions of the construct. The first was labeled teacher efficacy, which they believed corresponded to Bandura's outcome expectations. The second was labeled personal efficacy, which they believed corresponded to Bandura's efficacy expectations. According to Ashton and Webb (1982) the two items they used to measure teacher efficacy supported the fact that there are at least two different dimensions of efficacy. Bandura's (1977) two dimensions were reconceptualized and consequently changing efficacy expectation to

43

"personal teacher efficacy" and outcome expectation to "general teacher efficacy" (Hoy & Woolkfolk, 1993). The research on personal teacher efficacy and its effect has been documented by a number of researchers.

The Rand Corporation studies by Armor, et al. (1976) and Berman and McLaughlin (1977) were among the first to examine teacher efficacy as a predictor variable. Both of the studies were conceptually based on the work of Rotter (1966) and used a locus of control approach. The instrumentation simply gauged teacher efficacy in two ways. The first item, "When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment" (p. 73), was an external locus of control orientation. The second item, "If I try hard enough I can get through to even the most difficult or unmotivated students" (p. 73), measured the internal locus of control orientation.

Both of the Rand studies indicated that teacher efficacy has a positive effect on achievement and other school conditions. The first Rand study sought to gather information on school leadership, reading program content and implementation, classroom atmosphere, and teacher attributes. After interviews of sixth grade teachers and principals of 20 elementary schools in the Los Angeles Unified School District, Armor et al. (1976) concluded that teacher efficacy was strongly related to increases in reading. The second Rand study conducted by Berman and McLaughlin (1977) also found teachers' sense of efficacy to have a positive impact. Their study consisted of 18 school districts across the nation with interviews of 100 superintendents, 171 principals, and 1072 teachers and the findings showed that teachers' sense of efficacy had major positive effects on the percentage of project goals achieved and improved student performance.

Since the early teacher efficacy studies, research findings have documented the effect of teacher efficacy on classroom management (Ashton & Webb, 1986; Gibson & Dembo, 1984; Woolfok & Hoy, 1990), special education referrals (Meijer & Foster, 1988; Soodak & Podell, 1993), and family involvement in school (Garcia, 2004). For example, Soodak and Podell (1993) found that high efficacy teachers were more willing to take responsibility for students with special needs. These teachers were more likely to develop special programs for students with special needs, rather than refer them to special services. Soodak and Podell noted that the impact on regular class placement was mediated by the social class of the students. For low socioeconomic (SES) students, teachers with high personal efficacy were more likely to consider a regular classroom placement as being appropriate for special needs students. There was no relationship for high SES students.

The relationship between teacher efficacy and various aspects of teaching has also been studied. Teachers' teaching efforts, level of aspiration, and goals all appear to be affected by their efficacy beliefs (Hoy & Spero, 2005). Teachers who have a strong sense of efficacy tend to employ greater levels of organization, planning, and enthusiasm (Allinder, 1994). There has also been evidence that higher efficacious teachers spend more time teaching in subject areas where there sense of efficacy is higher (Riggs & Enochs, 1990); whereas, teachers with lower efficacy tend to avoid subjects (Riggs, 1995). Higher efficacious teachers tend to be more willing to try new ideas and methods to better meet students' needs (Cousins & Walker, 2000; Guskey, 1988). Clearly, teacher efficacy can impact teaching and learning.

Dating back to the early Rand study (Armor et al., 1976), higher teacher efficacy was found to correlate with student reading achievement. Researchers analyzing the impact of teacher efficacy on student achievement found students with efficacious teachers generally outperformed

those in classrooms with less efficacious teachers. Additional research supports findings from the Rand study that student achievement is higher when there is higher teacher self-efficacy (Ashton & Webb, 1986).

According to Ross' (1994) review of the teacher efficacy literature, teacher efficacy may have an impact on student achievement in a number of ways. First, teachers with higher efficacy are more likely to learn about and implement new teaching methods, particularly the techniques that are especially demanding. Second, efficacious teachers use various classroom management approaches that stimulate student autonomy and reduce custodial control. Keeping these students on task as a result of effective management strategies may contribute to higher student achievement (Woolfolk, Rosoff, & Hoy, 1990). Third, efficacious teachers may be more successful because they are more attentive to the needs of students with lower ability levels. According to Ashton, Webb, and Doda (1983) teachers with low efficacy beliefs were found to concentrate their efforts on the upper ability group, giving less attention to lower ability students who were viewed as potential sources of disruption.

The fourth effect of teacher efficacy on student achievement is that it may lead to specific teacher behavioral changes which create changes in students' perceptions of their academic skills. Fifth, it may be possible that teacher efficacy influences student achievement through teacher goals of beginning and pre-service teachers (Brookhart & Loadman, 1993; Czerniak & Schriver-Waldon, 1991). Finally, efficacious teachers may influence student achievement through teacher persistence. Teachers with high perceived efficacy may view student failure as a challenge to intensify their teaching effort (Ross, 1994).

Students of efficacious teachers have been found to generally outperform students in other classes (Henson, 2001). The effect teacher efficacy has on study achievement appears to be

well documented. Teacher efficacy was predictive on the Canadian Achievement Tests (Anderson, Greene, & Loewen, 1988) and the Ontario Assessment Instrument Pool (Ross, 1992). In rural, urban, majority Black, and majority White schools, student achievement was found to be greater for students of efficacious teachers (Watson, 1991). This should offer encouragement to principals who are seeking to improve their schools, especially since studies have shown that transformational leadership behaviors have a positive impact on teacher self-efficacy (Hipp, 1997; Leithwood, Jantzi, & Fernandez, 1993).

Summary of the Self-Efficacy Literature

Efficacy definitions are numerous and date back to the 1950s. The most notable studies of efficacy began with the work of Rotter (1966) who developed a conceptualization of self-efficacy based on one's locus of control. Bandura later studied self-efficacy using social cognition theory. Many others have studied self-efficacy using some variation of these two conceptualizations. The Rand Corporation funded two of the earliest efficacy studies with findings that efficacy has a positive impact on student achievement and program implementation. Throughout the years, others have made a connection between efficacious teachers and (a) classroom management, (b) special education referrals, (c) teaching strategies, and (d) students' perceptions of their own academic skills.

Although teacher efficacy has been found to have an overall positive impact on students, it continues to be a construct worthy of further exploration. According to Henson (2001), "the advancement of teacher efficacy into the next stage of its developmental life would be fostered by empirical evaluation of sources of efficacy building information, collective teacher efficacy,

and methods for impacting efficacy change in teachers" (p. 18). Collective efficacy is further explored in the next section of this literature review.

<div align="center">Collective Efficacy</div>

Although there have been few studies of collective efficacy, a growing body of research suggests that teacher efficacy is positively related to important educational outcomes (Goodard, 2001). Collective efficacy has promise as a construct for promoting the understanding of fostering student achievement (Tschannen-Moran & Barr, 2004). In order to understand this construct it must first be defined. Definitions of collective efficacy expand the notion beyond the individual teacher and move to the school level.

Bandura (1997) suggested that collective efficacy refers to a group's shared belief in its conjoint capabilities to organize and execute the necessary courses of action to produce given levels of attainments. Collective efficacy has been defined as the shared beliefs of the capability of teachers and principals that the efforts of the faculty as a whole will have a positive effect on students (Hoy & Miskel, 2005). Goddard and Goddard (2001) defined collective efficacy as "the perceptions of teachers in a school that the faculty as a whole can organize and execute the courses of actions required to have a positive effect on students" (p. 809).

Collective efficacy has been defined as the members' perception of their group's competency or aggregated ability to successfully complete a designated task (Zellars, Hochwarter, Perrewe, Miles, & Kiewitz, 2001). It has also been defined as each person's assessment of his or her group's collective capability to perform job-related behaviors (Riggs & Warka, 1994). Tschannen-Moran and Barr (2004) provided a more extensive definition referring to collective efficacy as the collective self-perception that teachers in a particular school make an educational difference to their students over and above that of their homes and communities.

<div align="center">48</div>

Although collective efficacy definitions are similar to self efficacy definitions, the two are considered to be conceptually distinct (Ross, Hogaboam-Gray, & Gray, 2003). The next section includes research about collective efficacy as a distinct construct.

Collective Efficacy Research

Collective efficacy is a concept that is relatively new (Goddard & Goddard, 2001) and has been the subject of little research (Bandura, 1997). Based upon the research showing the impact of teacher efficacy on students, a logical next step would be to take a closer look at the impact of collective efficacy on students. Studies show collective efficacy perceptions are an important predictor of differences among student achievement in schools (Bandura, 1993; Goddard, 2000). Though self-efficacy and collective efficacy are two similar concepts, collective efficacy is discussed further to note the distinctions in its conceptualization and its impact on schools.

In the study of teacher efficacy, the individual is the unit of analysis; but in the study of teacher collective efficacy, the unit of analysis shifts to the group (Goddard, 2002). Collective efficacy is an important school property (Bandura, 1993, 1997). Goddard, Hoy, and Hoy (2000) concurred as they suggested "collective efficacy is an emergent group-level attribute, the product of the interactive dynamics of the group members" (p. 482). Attention to the correct unit of analysis when measuring collective efficacy is important. However, the sources of information and elements to measure collective efficacy are the same (Goddard, Hoy, & Hoy, 2000; Tschannen-Moran, Hoy, & Hoy, 1998).

The sources of collective efficacy are mastery experience, vicarious experience, social persuasion, and affective states (Bandura, 1997). Mastery experience consists of an individual's performance that he or she believes has been successful. These experiences contribute to efficacy beliefs and can increase or decrease the expectation that the performance will be proficient in the future. Vicarious experiences are gained through the exposure to successful social role models who are similar (Bandura, 1997). The greater the assumed similarity, the more persuasive the successes and failures of the model will be on the perceived efficacy. Social persuasion occurs when people are verbally persuaded that they have the capability to master given activities. This persuasion leads to greater efforts resulting from an increase in the sense of efficacy. Affective states of individuals can affect their judgment of their efficacy. Positive mood along with reduced stress reactions can increase efficacy (Bandura, 1997).

Tschannen-Moran, Hoy, and Hoy (1998) suggested a model that added two key elements to the development of collective efficacy. Their argument for the need of the two additional elements was based upon the fact that teacher efficacy is context specific. Therefore, an appropriate model to measure general (collective) teacher efficacy and personal teacher efficacy should include not only Bandura's (1997) four sources but also an analysis of the teaching task and its context and an assessment of personal teaching competence (Goddard, Hoy, & Hoy, 2000; Tschannen-Moran, Hoy, & Hoy, 1998).

An analysis of the teaching tasks is the process by which the teachers analyze the tasks of teaching at the individual and school levels. As a result of the analysis, inferences are made about the faculty's teaching skills, methods, training, and expertise at the school level. Concepts associated with this analysis include the abilities and motivations of students, availability of instructional materials, the presence of community resources and constraints, and the

appropriateness of the physical facilities of the school. In essence, "teachers analyze what

constitutes successful teaching in their school, what barriers or limitations must be overcome,

and what resources are available to achieve success." (p. 485, Goddard, Hoy, & Hoy, 2000).

The second element working in conjunction with the analysis of the teaching task is the

assessment of teaching competence, where teachers make explicit judgments of their colleagues'

teaching competence. This school level assessment produces inferences about the faculty's

teaching skills, methods, training, and expertise. Teacher competency judgments may also

include positive faculty beliefs in the ability of all children in their school to succeed, thus

making it more difficult to separate the two domains. They often occur simultaneously as

collective efficacy emerges. This notion points to the dilemma of whether an assessment of

collective efficacy should ask teachers about perceptions of themselves or about the faculty as a

whole (Goddard, Hoy, & Hoy, 2000).

A noted drawback is that when individual-level responses are used to measure group-

level issues, the individual responses are not independent but they are subject to the influences of

group membership (Porter, 1992). Noting this type of problem in measuring collective efficacy

and the problem of influential positive or negative wording in previous instruments, Goddard,

Hoy, and Hoy (2000) created an instrument to include positively and negatively worded items to

measure group competence (GC+, GC-) and positively and negatively worded items to measure

task analysis (TA+, TA-).They used items from a version of Gibson and Dembo's (1984)

efficacy scale as a starting point and found that Gibson and Dembo's instrument measured only

two categories – positively worded items about competence and negatively worded items about

the task. After adding new items and validating the instrument, Goddard and others have further

tested some of the predictions about collective efficacy and its effect on students.

Collective efficacy influences student achievement because greater efficacy leads to greater teacher effort and persistence, which in turn produces better performance (Tschannen-Moran & Barr, 2004). One of the earliest studies of collective efficacy and the impact on students was conducted by Bandura (1993). The findings showed that collective efficacy is significantly related to achievement at the school level. According to Bandura the stronger the faculty's shared beliefs in their instructional efficacy, the better the students performed academically. Moreover, the greater the beliefs held about one's collective efficacy capabilities the greater the achievement by the school. Bandura's study documented that student achievement (aggregated to the school level) in reading and math and collective teacher efficacy are positively related. Bandura also noted that teachers' beliefs about their school's capacity to impact the level of academic attainment is just as viable in predicting school performance as teachers' belief in their own efficacy.

Goddard, Hoy, and Hoy (2000) conducted a study of 47 elementary schools in a large urban midwestern school district with a sample population of 452 teachers. Teacher were given surveys with items measuring collective efficacy, personal teaching efficacy, and faculty trust in their colleagues. The dependent variables were student achievement in reading and math on the Metropolitan Achievement Test of second, third, and fifth grade students in the participating schools. Collective efficacy was found to be a predictor of student achievement in reading and math achievement (Goddard, Hoy, & Hoy, 2000). The findings supported Bandura's (1993) and documented that collective efficacy has a greater impact on student achievement than the demographic controls of socioeconomic status and ethnicity. However, a difference from the Bandura study was in the manner in which student achievement was measured. Bandura

aggregated student achievement to the school level, whereas Goddard and his colleagues used student-level scores.

Further evidence was provided in a study examining the relationships between mastery experiences and collective efficacy, differences between schools in student achievement, and variability in faculty perceptions of collective efficacy (Goddard, 2001). Student-level and school-level measures were used during analysis. Student-level measures included gender, race/ethnicity, free and reduced-price lunch status, and longitudinal student achievement data. School-level measures included a collective efficacy score and a group efficacy consensus score for each of the schools in the study.

The results indicated that collective efficacy was significantly and positively related to differences between schools in student achievement, even when school means were adjusted for students' prior achievement and demographic characteristics. Consistent with Bandura's (1993) mastery experiences, Goddard (2001) found that past school performance was related to teachers' perception of collective efficacy. The final measure of Goddard's study indicated that group consensus about collective efficacy was not an important predictor of student achievement.

Hoy, Sweetland, and Smith (2002) developed a theoretical model consisting of socioeconomic status (SES), academic press, and collective efficacy. Socioeconomic status was based on an index created by the Ohio Department of Education consisting of a composite measure of income, overall level of college, and professional leanings. Academic press was defined as "the extent to which the school is driven by the quest for academic excellence" (p. 79, Hoy, Sweetland, & Smith, 2002). Hoy and his colleagues posited that collective efficacy should have the strongest impact on student achievement for two reasons. The first reason is that both

SES and academic press flow through collective efficacy. Second, greater efficacy leads to greater effort, persistence, and more challenging goals, which in turn produces better performance and higher achievement (Hoy, Sweetland, & Smith, 2002).

Data were collected from 97 high schools in Ohio designed to measure collective efficacy and academic press. Student math achievement data were collected from an Ohio 12th grade math proficiency test. The results of the analysis showed a significant relationship between: (a) academic press and student achievement, and (b) collective efficacy of the school and student achievement in math. The findings indicated that the greater the collective efficacy of a school, the higher the degree of school achievement in math. Academic press, SES, and collective efficacy combined to account for 45% of the variance in school math achievement. Of the three, collective efficacy was found to be the strongest predictor of school math achievement (Hoy, Sweetland, & Smith, 2002). Similarly, collective efficacy, when working through academic optimism and trust in parents and students, had a positive influence on student achievement (Hoy, Tarter, & Hoy, 2006).

Summary of the Collective Efficacy Literature

Collective efficacy is the shared belief that, as a group, teachers can make a difference in their students' academic performance despite external mechanisms outside of the school (Tschannen-Moran & Barr, 2004). Collective efficacy is a relatively new concept and is based on social cognition theory similar to teacher efficacy proposed by Bandura (1977). There are four sources of collective efficacy – mastery experience, vicarious experience, social persuasion, and affective states. Mastery experience is one's performance that he or she believes to be successful. Vicarious experience is gained through the exposure to successful social role models who are similar. Social persuasion is when one is verbally persuaded that they can master a task.

Affective states affect efficacy through various moods and feelings. These sources mirror those of self-efficacy, but they are based on the collective set of individuals rather than the beliefs about one individual's ability to impact outcomes. Studies have shown that collective efficacy positively impacts schools and has resulted in greater teacher effort and performance and an increase in student achievement. Collective efficacy was also a strong predictor of student math achievement, even stronger than socioeconomic status.

References

Allinder, R. M. (1994). The relationship between efficacy and the instructional practices
of special education teachers and consultants. *Teacher Education and Special
Education, 17,* 86-95.

Anderson, R., Greene, M., & Loewen, P. (1988). Relationships among teachers' and
students' thinking skills, sense of efficacy, and student achievement. *Alberta
Journal of Educational Research, 34*(2), 148-165.

Andrews, R. L., & Soder, R. (1987). Principal leadership and student achievement.
Educational Leadership, 44(6), 9-11.

Armor, D., Conry-Oseguera, P., Cox, M., King, N., McDonnell, L., Pascal, A., Pauly, E.,
& Zellman, G. (1976). *Analysis of the school preferred reading program in selected
Los Angeles minority schools.* Santa Monica, CA: Rand Corporation.

Ashton, P. T. (1985). Motivation and teachers' sense of efficacy. In C. Ames & R. Ames
(Eds.), *Research on motivation in education, Vol. 2: The classroom milieu* (pp. 141-
174). Orlando, FL: Academic Press.

Ashton, P. T. (1984). Teacher efficacy: A motivational paradigm for effective teacher
education. *Journal of Teacher Education, 35*(5), 28-32.

Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teacher's sense of efficacy
and student achievement.* New York: Longman.

Ashton, P. T., Webb, R. B., & Doda, N. (1983). *A study of teacher's sense of efficacy.*
Final report to the National Institute of Education, Executive Summary. ERIC
Document No. ED 231 833.

Avolio, B. (1999). *Full leadership development: Building the vital forces in*

organizations. Thousand Oaks, CA: Sage.

Bandura, A. (1997). *Self-efficacy in changing societies.* New York: Cambridge

University Press.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning.

Educational Psychologist, 28(2), 117-148.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.*

Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist,*

37, 122-147.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change.

Psychological Review, 84(2), 191-214.

Barfield, V., & Burlingame, M. (1974). The pupil control ideology of teachers in selected

schools. *Journal of Experimental Education, 42,* 6-11.

Barnett, K., McCormick, J., & Conners, R. (2001). Transformational leadership in

schools: Panacea, placebo, or problem? *Journal of Educational Administration,*

39(1), 24-46.

Bass, B. M. (1985). L*eadership and performance beyond expectations.* New York: Free

Press.

Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational*

impact. Mahway, NJ: Lawrence Erlbaum Associates.

Beck, L. G., & Murphy, J. (1993). *Understanding the principalship: Metaphorical*

themes, 1920s-1990s. New York: Teachers College Press.

Bennis, W. G. (1959). Leadership theory and administrative behavior: The problem of

authority. *Administrative Quarterly, 4*, 259-301.

Berman, P, & McLaughlin, M. W. (1977). *Federal programs supporting educational*

Change, Volume VII: Factors affecting implementation and continuation. Santa

Monica, CA: Rand Corporation.

Bossert, S. T., Dwyer, D. C., Rowan, B., & Lee, G. V. (1982). The instructional

management role of the principal. *Educational Administration Quarterly, 18*(3), 34-64.

Brookhart, S., & Loadman, W. (1993). *Relations between self-confidence and*

educational beliefs before and after teacher education. Paper presented at the annual

meeting of the American Educational Research Association, Atlanta.

Burns, J.M. (1978). *Leadership*. New York: Harper & Row Publishers.

Callahan, R. E. (1962). *Education and the cult of efficiency.* Chicago: University of

Chicago Press.

Campbell, R. F., Fleming, T., Newell, L. J., & Bennion, J. W. (1987). *A history of*

thought and practice in educational administration. New York: Teachers College

Press.

Celep, C. (2000). Teachers' organizational commitment in educational organizations.

National Forum of Teacher Education Journal, 10(3). ERIC Document No. ED

452179.

Chapman, D. W., & Hutcheson, S. M. (1982). Attrition from teaching careers: A

discriminate analysis. *American Educational Research Journal, 19*, 93, 105.

Chirichello, M. P. (1997). *A study of the preferred leadership styles of principals and the*

organizational climates in successful public elementary schools in New Jersey.

Unpublished doctoral dissertation, Seton Hall University, New Jersey.

Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education, 60,* 323-337.

Cotton, K. (2003). *Principals and student achievement: What the research says.* Arlington, VA: Association for Supervision and Curriculum Development.

Cousins, J. B., & Walker, C. A. (2000). Predictors of educators' valuing of systemic inquiry in schools. *Canadian Journal of Program Evaluation (Special Issue),* 25-53.

Czerniak, C., & Schriver-Waldon, M. (1991). *A study of science teaching efficacy using qualitative and quantitative research methods.* Paper presented at the annual meeting of the National Association of Science Teaching, Lake Geneva, WI.

Daft, R. L. (1999). *Leadership theory and practice.* Fort Worth, TX: Dryden Press.

Dannetta, V. (2002). What factors influence a teacher's commitment to student learning? *Leadership and Policy in Schools, 1*(2), 144-171.

Day, C. (2000). Beyond transformational leadership. *Educational Leadership, 57*(7), 56-59.

Day, B. S. (1996). *Academic teaming and teacher commitment to student learning: A study of middle schools.* Unpublished dissertation. University of Texas at Austin.

Day, C., Elliot, B., & Kington, A. (2005). Reform, standard and teacher identity: Challenges of sustaining teacher commitment. *Teaching and Teacher Education, 21,* 563-577.

Day, C., Harris, A., & Hadfield, M. (2001). Challenging the orthodoxy of effective school leadership. *International School Journal of Leadership in Education, 4*(1), 39-56.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human*

behavior. New York: Plenum.

Dworkin, A. G. (1987). *Teacher burnout in public schools: Structural causes and*

   consequences for children. Albany: SUNY Press.

Edmonds, R. R. (1979). Effective schools for the urban poor. *Educational Leadership,*

   37(1), 15-18, 20-24.

Elmore, R. F. (2000). *Building a new structure for school leadership.* Washington, DC:

   The Albert Shanker Institute. Retrieved from

   http://www.ashankerinst.org/Downloads/building.pdf

Eyal, O., & Kark, R. (2004). How do transformational leaders transform organizations? A

   study of the relationship between leadership and entrepreneurship. *Leadership and*

   Policy in Schools, 3(3), 211-235.

Firestone, W. A., & Rosenblum, S. (1988). Building commitment in urban high schools.

   Education, Evaluation, and Policy Analysis, 10(4), 285-289.

Firestone, W. A., & Pennell, J. R. (1993). Teacher commitment, working conditions, and

   differential incentive policies. *Review of Educational Research, 63*(4), 489-525.

Fresko, B., Kfir, D., & Nasser, F. (1997). Predicting teacher commitment. *Teaching and*

   Teacher Education, 13(4), 429-438.

Fullan, M. (1991). *The new meaning of educational change.* New York: Teachers College

   Press.

Garcia, D. C. (2004). Exploring connections between the construct of teacher efficacy

   and family involvement practices: Implications for urban teacher preparation. *Urban*

   Education, 39(3), 290-315.

Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of*

Educational Psychology, 76, 569-582.

Goddard, R.D. (2002). A theoretical and empirical analysis of the measurement of collective efficacy: The development of a short form. *Educational and Psychological Measurement, 93,* 467-476.

Goddard, R. D. (2001). Collective efficacy: A neglected construct in the study of schools and student achievement. *Journal of Educational Psychology, 93*(3), 467-476.

Goddard, R. D. (2000). *Collective Efficacy and student achievement.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

Goddard, R. D., & Goddard, Y. L. (2001). A multilevel analysis of the relationship between teacher and collective efficacy in urban schools. *Teaching and Teacher Education, 17,* 807-818.

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal, 37*(2), 479-507.

Griffith, J. (2004). Relation of principal transformational leadership to school staff job satisfaction, staff turnover, and school performance. *Journal of Educational Administration, 42*(3), 333-356.

Guskey, T. R. (1994). What you assess may not be what you get. *Educational Leadership, 51*(6), 51-54.

Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education, 4*(1), 63-69.

Guskey, T. R. (1982). Differences in teachers' perceptions of personal control of positive

    versus negative student learning outcomes. *Contemporary Educational Psychology,*

    7, 70-80.

Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct

    dimensions. *American Educational Research Journal, 31,* 627-643.

Hackman, R. J., & Oldham, G. R. (1980). *Work redesign.* Reading, MA: Addison-

    Wesley.

Hallinger, P. (1992). The evolving role of American principals: From managerial to

    instructional to transformational leaders. *Journal of Education Administration,*

    30(3), 35-48.

Hallinger, P., & Heck, R. (1998). Exploring the principal's contribution to school

    effectiveness: 1980-1995. *School Effectiveness and School Improvement, 9(2)*, 157-191.

Hammer, M., & Champy, J. (1993). *Reengineering the corporation: A manifesto for*

    business revolution. New York: Harper.

Hausman, C. S., & Goldring, E. B. (2001). Sustaining teacher commitment: The role of

    professional communities. *Peabody Journal of Education, 76*(2), 30-51.

Hausman, C. S., Crow, G., & Sperry, D. (2000). Portrait of the ideal "principal": Context

    and self. *The Bulletin, 83*(608), 64-76. Reston, VA: National Association of Secondary

    School Principals.

Heider, F. (1958). *The psychology of interpersonal relations.* New York: Wiley & Sons.

Henson, R. K. (2002). From adolescent angst to adulthood: Substantive implications and

    measurement dilemmas in the development of teacher efficacy research.

    Educational Psychologist, 37(3), 137-150.

Henson, R. K. (2001). The effects of participation in teacher research on teacher efficacy. *Teaching and Teacher Education, 17,* 819-836.

Hipp, K. A. (1997). *Teacher efficacy: Influence of principal leadership behavior.* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Hipp, K. A., & Bredeson, P. V. (1995). Exploring connections between teacher efficacy and principals' leadership behaviors. *Journal of School Leadership, 5*(2), 136-150.

Horning, D. L. (2005). *A leadership function analysis of high school principals: The competing interests of managerial and instructional standards.* Unpublished doctoral dissertation, University of Idaho. Dissertation Abstracts International Accession Number AAI3196091.

Hoy, A. W., & Spero, R. B. (2005). Changes in the teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21,* 343-356.

Hoy, W. K., & Miskel, C. G. (2005). *Educational administration: Theory, research and practice* (7th ed). New York: McGraw-Hill.

Hoy, W. K., & Miskel, C. G. (2001). *Educational administration: Theory, research, and practice*. Boston, MA: McGraw-Hill.

Hoy, W. K., & Sabo, D. J. (1998). *Quality middle schools: Open and healthy.* Thousand Oaks, CA: Corwin Press.

Hoy, W. K., & Tarter, C. J. (1997). *The road to open and healthy schools: A handbook for change.* Thousand Oaks, CA: Corwin Press.

Hoy, W. K., & Woolfolk, A. (1993). Teachers sense of efficacy and the organizational

health of schools. *The Elementary School Journal, 93*(4), 355-372.

Hoy, W. K., Sweetland, S. R., & Smith, P. A. (2002). Toward an organizational model of achievement in high schools: The significance of collective efficacy. *Educational Administration Quarterly, 38,* 77-93.

Hoy, W. K., Tarter, C. J., Hoy, A. W. (2006). Academic optimism of schools: A force for student achievement. *American Educational Research Journal, 43*(3), 425-446.

Jantzi, D., & Leithwood, K. (1996). Toward an explanation of variation in teachers' perceptions of transformational school leadership. *Educational Administration Quarterly, 32*(4), 512-538.

Johnson, J. (2002). Staying ahead of the game. *Educational Leadership, 59*(8), 26-30.

Kavanaugh, A. L. (2005). Introduction to principalship. In J. Shen (Ed.). *School principals.* New York: Peter Lang Publishing, Inc.

Kouzes, J. M., & Posner, B. Z. (1987). *The leadership challenge: How to get extraordinary things done in organizations.* San Francisco: Jossey-Bass.

Kushman, J. W. (1992). The organizational dynamics of teacher workplace commitment: A study of urban elementary and middle schools. *Educational Administration Quarterly, 28*(1), 5-42.

Leithwood, K. (1994). Leadership for school restructuring. *Educational Administration Quarterly, 30*(4), 498-518.

Leithwood, K. (1992). The move toward transformational leadership. *Educational Leadership, 49(5),* 8-12.

Leithwood, K., & Duke, D. L. (1999). A century's quest to understanding school leadership. In J. Murphy & K.S. Louis (Eds*.) Handbook of research on education*

administration (2nd edition). 45-72.

Leithwood, K., & Duke, D. L. (1998). Mapping the conceptual terrain of leadership: A

critical point of departure for cross-cultural studies. *Peabody Journal of Education, 73*(2),

31-50.

Leithwood, K., & Jantzi, D. (2005). A review of transformational leadership research

1996-2005. *Leadership and Policy in Schools, 4*, 177-199.

Leithwood, K., & Jantzi, D. (2000). The effects of transformational school leadership

on organizational conditions and student engagement with school. *Journal of*

Educational Administration, 38(2), 112-129.

Leithwood, K., & Jantzi, D. (1999). Transformational school leadership effects: A

replication. *School Effectiveness and School Improvement, 10*(4), 451-479.

Leithwood, K., & Jantzi, D. (1990). Transformational leadership: How principals can

help reform school cultures. *School Effectiveness and School Improvement, 1*(4),

249-280.

Leithwood, K., & Montgomery, D. (1986). *The principal profile.* Toronto, ON: OISE

Press.

Leithwood, K. A., & Riehl, C. (2003). *What do we already know about successful school*

leadership? American Educational Research Association Division A Task Force on

Developing Research in Educational Leadership. March, 2003.

Leithwood, K., & Steinbach, R. (1991). Indicators of transformational leadership in the

everyday problem solving of school administrators. *Journal of Personnel Evaluation in*

Education, 4, 221-244.

Leithwood, K., Jantzi, D., & Fernandez, A. (1993). *Secondary school teachers'*

commitment to change: The contributions of transformational leadership. Paper

presented at the Annual Meeting of the American Educational Research Association,

Atlanta, GA.

Leithwood, K., Jantzi, D., & Steinbech, R. (1999). *Changing leadership for changing*

times. Philadephia, PA: Open University Press.

Leithwood, K., Menzies, T., & Jantzi, D. (1994). Earning teachers' commitment to

curriculum reform. *Peabody Journal of Education, 69*(4), 38-61.

Leithwood, K., Tomlinson, D. & Genge, M. (1996). Transformational school leadership.

In K. Leithwood et al. (Ed.), *The International Handbook of Educational Leadership*

and Administration. The Netherlands: Kluwer Academic Publishers.

Leithwood, K., Riedlinger, B., Bauer, S., & Jantzi, D. (2003). Leadership program effects

on student learning: The case of the Greater New Orleans school leadership center.

Journal of School Leadership, 13(6), 707-738.

Leithwood, K., Jantzi, D., Earl, L., Watson, N., Levin, B., & Fullan, M. (2004). Strategic

leadership for large-scale reform: The case of England's National Literacy and

Numeracy Strategies. *Journal of School Leadership and Management, 24*(1), 57-80.

Louis, K. S. (1998). Effects of teacher quality work life in secondary schools on

commitment and sense of efficacy. *School Effectiveness and School Improvement,*

9(1), 1-27.

Lunenburg, F. C., & Irby, B. J. (2006). *The principalship: Vision to action.* Belmont, CA:

Thomson Wadsworth.

Matthews, L. J., & Crow, G. M. (2003). *Being and becoming a principal: Role*

conceptions for contemporary principals and assistant principals. Boston: Allyn and

Bacon.

Meijer, C., & Foster, S. (1988). The effect of teacher self-efficacy on referral chance. *Journal of Special Education, 22*(3), 378-385.

Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-Organization Linkages: The psychology of commitment, absenteeism and turnover.* New York, NY: Academic Press.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measure of organizational commitment. *Journal of Vocational Behavior, 14*(2), 224-247.

Murphy, J. F. (1990). The educational reform movement of the 1980s: A comprehensive analysis. In J. Murphy (Ed.), *The reform of American public education in the 1980s: Perspectives and cases* (pp. 3-55). Berkeley: McCutchan.

Mutchler, S. E. (2005). *Teacher commitment in an academically improving, high-poverty public school.* Unpublished doctoral dissertation, University of Texas-Austin. Dissertation Abstracts International Accession Number AAI3176314.

Nir, A. E. (2002). School-based management and its effect on teacher commitment. *International Journal of Leadership in Education, 5*(4), 323-341.

Northouse, P. G. (2004). *Leadership: Theory and practice.* 3rd Ed. Thousand Oaks, CA: Sage Publications, Inc.

Ogawa, R. T., & Bossert, S. T. (1995). Leadership as an organizational quality. *Educational Administration Quarterly, 31*(2), 224-243.

Parker, D. C. (1986). From conventional wisdom to concept: School administration texts

1934-1945. In T. E. Glass (Ed.), *An analysis of texts on school administration 1820-1985: The reciprocal relationship between the literature and the profession,* (pp. 39-75). Danville, IL: Interstate.

Porter, G. (1992). *Collective efficacy and esteem: Measurement and study of "self" attributes at a group level.* Unpublished doctoral dissertation, The Ohio State University.

Pressley, M. Rankin, J., & Yokoi, L. (1996). A survey of instructional practices of primary teachers nominated as effective in promoting literacy. *The Elementary School Journal, 96*(4), 363-384.

Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. *Academy of Management Review, 10,* 465-476.

Reyes, P. (1990). *Teachers' and their workplace: Commitment, performance and productivity.* Newbury Park, CA: Sage.

Riehl, C. J. (2000). The principal's role in creating inclusive schools for diverse students: A review of normative, empirical, and critical literature on the practice of educational administration. *Review of Educational Research, 70*(1), 55-81.

Riehl, C., & Sipple, J. W. (1996). Making the most of time and talent: Secondary school organizational climates, teaching task environments, and teacher commitment. *American Educational Research Journal, 33*(4), 873-901.

Riggs, I. (1995). *The characteristics of high and low efficacy elementary teachers.* Paper

presented at the annual meeting of the National Association for Research in Science

Teaching, San Francisco.

Riggs, I., & Enochs, L. (1990). Toward the development of an elementary teacher's

science teaching efficacy belief instrument. *Science Education, 74*(6), 625-638.

Riggs, M. L., & Warka, J. (1994). Development and validation of self-efficacy and

outcome expectancy scales. *Educational and Psychological Measurement, 54*(3),

793-802.

Rosenholtz, S. J. (1989). Workplace conditions that affect teacher quality and

commitment: Implications for teacher induction programs. *The Elementary School

Journal, 89,* 421-439.

Rosenholtz, S. J. (1985). Effective schools: Interpreting the evidence. *American Journal

of Education, 93,* 352-388.

Rosenholtz, S. J., & Simpson, C. (1990). Workplace conditions and the rise and fall of

teacher commitment. *Sociology of Education, 63*(4), 241-257.

Ross, J. A. (2004). *Effects on early literacy achievement of running records assessment:

Results of a controlled experiment.* Paper presented at the annual meeting of the

American Educational Research Association.

Ross, J. A. (1994). The impact of an inservice to promote cooperative learning on the

stability of teacher efficacy. *Teaching and Teacher Education, 10,* 381-394.

Ross, J. A. (1993). *Research on teacher efficacy.* The Ontario Institute for Studies in

Education, Trent Valley Centre.

Ross, J. A. (1992). Teacher efficacy and the effect of coaching on student achievement. *Canadian Journal of Education, 17*(1), 51-65.

Ross, J. A., & Gray, P. (2004). *Transformational leadership and teacher commitment to organizational values: The mediating effects of collective efficacy.* Paper presented at the annual meeting of the American Educational Research Association, San Diego.

Ross, J. A., Hogaboam-Gray, A., & Gray, P. (2003). *The contribution of prior student achievement and school processes to collective teacher efficacy in elementary schools.* Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs, 80*(1), 1-28.

Sarason, S. (1996). *Revisiting the culture of the school and the problem of change.* New York: Teachers College Press.

Schein, E. H. (1992). *Organizational culture and leadership* (2nd ed.). San Francisco: Jossey-Bass.

Sergiovanni, T. J. (2006). *The principalship: A reflective practice perspective* (5th ed.). Boston: Allyn and Bacon.

Short, P. M. (1998). Empowering leadership. *Contemporary Education, 69*(2), 70-72.

Silins, H. C, Murray-Harvey, R. (1999). What Makes a Good Senior Secondary School? *Journal of Educational Administration, 37*(4), 329-344.

Simons, T. L. (1999). Behavioral integrity as a critical ingredient for transformational leadership. *Journal of Organizational Change*, 12, 89-104.

Singh, K., & Billingsley, B. S. (1998). Professional support and its effects on teachers'
commitment. *Journal of Educational Research, 91*, 229-239.

Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic
review of research. *Review of Educational Research, 75*(3), 417-453.

Soodak, L., & Podell, D. (1993). Teacher efficacy and student problem as factors in
special education referral. *Journal of Special Education, 27,* 66-81.

Stogdill, R. M., & Coons, A. E. (Eds.). (1957). *Leader behavior: Its description and
measurement* (Research Monograph Number 88). Columbus: Bureau of Business
Research, Ohio State University.

Stone, P. (1992). *Transformational leadership in principals: An analysis of the
multifactor leadership questionnaire results.* Monograph Series, 2(1), ERIC
Document No. ED 355613.

Sun, J. (2004). Understanding the impact of perceived principal leadership style on
teacher commitment. *International Studies in Educational Administration, 32*(2),
18-31.

Taylor, P. (1994). Leadership in education. *Emergency Librarian, 21*(3), 9-17.

Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of
collective efficacy and student achievement. *Leadership and Policy in Schools, 3*(3),
189-209.

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning
and measure. *Review of Educational Research, 68*(2), 202-248.

Valentine, J. W., Goodman, M., & Solomon, C. B. (2006, in press). Organizational
health, middle school programs, and student success: Findings from a national study

of highly successful middle level schools. *Middle Level Research Annual.*
Westerville, OH: National Middle School Association.

Valentine, J. W., Clark, D. C., Hackmann, D. G., & Petzko, V. N. (2002). *A national study of leadership in middle level schools, Volume I: A national study of middle level leaders and school programs.* Reston, VA: National Association of Secondary School Principals.

Valentine, J. W., Clark, D., Irvin, I., Keefe, J., & Molton, G. (1993). *Leadership in middle level education, Volume 1: A national survey of middle level leaders and schools.* Reston, VA: National Association of Secondary School Principals.

VanderStoep, S. W., Anderman, E., & Midgley, C. (1994). The relationship among principal 'venturesomeness,' a stress on excellence, and the personal engagement of teachers and students. *School Effectiveness and School Improvement,* (5), 254-271.

Walumbwa, F. O., Wang, P., Lawler, J. J., & Shi, K. (2004). The role of collective efficacy in the relations between transformational leadership and work outcomes. *Journal of Occupational and Organizational Psychology, 77*(4), 515-530.

Watson, S. (1991). *A study of the effects of teacher efficacy on the academic achievement of third-grade students in selected elementary schools in South Carolina.* Unpublished doctoral dissertation, South Carolina State College, Orangeburg, SC. UMI 9230552.

Weller, L. D., & Weller, S. J. (1999). Secondary school reading: Using the quality principle of continuous improvement to build an exemplary program. *NASSP Bulletin, 83*(607), 59-68.

White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66,* 297-333.

Witziers, B., Bosker, R. J., & Kruger, M. L. (2003). Educational leadership and student achievement: The elusive search for an association. *Educational Administration Quarterly, 39*(3), 398-425.

Woolfolk, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82*(1), 81-91.

Woolfolk, A., Rosoff, B., & Hoy, W. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and Teacher Education, 6*(2), 137-148.

Yu, H., Leithwood, K., & Jantzi, D. (2002). The effects of transformational leadership on teachers' commitment to change in Hong Kong. *Journal of Educational Administration, 40*(4), 368-389.

Yukl, G. (2006). *Leadership in organizations* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Zaccaro, S. J., Kemp, C., & Bader, P. (2004). Leader traits and attributes. In J. Antonakis, A. T. Cianciolo, & R. J. Sternberg (Eds). *The nature of leadership.* Thousand Oaks, CA: Sage Publications, Inc.

Zellars, K. L., Hochwarter, W. A., Perrewe, P. L., Miles, A. K., & Kiewitz, C. (2001). Beyond self-efficacy: Interactive effects of role conflict and perceived collective efficacy. *Journal of Managerial Issues, 13*(4), 483-499.

Appendix A

Transformational Leadership Survey (PLQ)

MISSOURI STUDY OF MIDDLE LEVEL EDUCATION

Teacher Survey Form B

*School Name:*_____

Please use the following key to indicate the degree to which each statement applies to your school. This survey may look lengthy, but the items have been spaced for easy reading to save you time. The typical time to complete this survey is about 15-20 minutes.

1=Strongly Disagree   2=Disagree   3=Somewhat Disagree   4=Somewhat Agree   5=Agree   6=Strongly Agree
(Circle, check, or darken the number that applies)

1.	Teachers utilize professional networks to obtain information and resources for classroom instruction.	1	2	3	4	5	6
2.	Leaders value teachers' ideas.	1	2	3	4	5	6
3.	Teachers have opportunities for dialogue and planning across grades and subjects.	1	2	3	4	5	6
4.	Teachers trust each other.	1	2	3	4	5	6
5.	Teachers support the mission of the school.	1	2	3	4	5	6
6.	Teachers and parents have common expectations for student performance.	1	2	3	4	5	6
7.	Leaders in this school trust the professional judgments of teachers.	1	2	3	4	5	6
8.	Teachers spend considerable time planning together.	1	2	3	4	5	6
9.	Teachers regularly seek ideas from seminars, colleagues, and conferences.	1	2	3	4	5	6
10.	Teachers are willing to help out whenever there is a problem.	1	2	3	4	5	6
11.	Leaders take time to praise teachers that perform well.	1	2	3	4	5	6
12.	The school mission provides a clear sense of direction for teachers.	1	2	3	4	5	6
13.	Parents trust teachers' professional judgments.	1	2	3	4	5	6
14.	Teachers are involved in the decision-making process.	1	2	3	4	5	6
15.	Teachers take time to observe each other teaching.	1	2	3	4	5	6
16.	Professional development is valued by the faculty.	1	2	3	4	5	6
17.	Teachers' ideas are valued by other teachers.	1	2	3	4	5	6
18.	Leaders in our school facilitate teachers working together.	1	2	3	4	5	6

	1=Strongly Disagree 2=Disagree 3=Somewhat Disagree 4=Somewhat Agree 5=Agree 6=Strongly Agree						
19.	Teachers understand the mission of the school.	1	2	3	4	5	6
20.	Teachers are kept informed on current issues in the school.	1	2	3	4	5	6
21.	Teachers and parents communicate frequently about student performance.	1	2	3	4	5	6
22.	My involvement in policy or decision making is taken seriously.	1	2	3	4	5	6
23.	Teachers are generally aware of what other teachers are teaching.	1	2	3	4	5	6
24.	Teachers maintain a current knowledge base about the learning process.	1	2	3	4	5	6
25.	Teachers work cooperatively in groups.	1	2	3	4	5	6
26.	Teachers are rewarded for experimenting with new ideas and techniques.	1	2	3	4	5	6
27.	The school mission statement reflects the values of the community.	1	2	3	4	5	6
28.	Leaders support risk-taking and innovation in teaching.	1	2	3	4	5	6
29.	Teachers work together to develop and evaluate programs and projects.	1	2	3	4	5	6
30.	The faculty values school improvement.	1	2	3	4	5	6
31.	Teaching performance reflects the mission of the school.	1	2	3	4	5	6
32.	Administrators protect instruction and planning time.	1	2	3	4	5	6
33.	Teaching practice disagreements are voiced openly and discussed.	1	2	3	4	5	6
34.	Teachers are encouraged to share ideas.	1	2	3	4	5	6
35.	Students generally accept responsibility for their schooling, for example they engage mentally in class and complete homework assignments.	1	2	3	4	5	6
36.	Overall, the culture of our school is positive, caring, and collaborative.	1	2	3	4	5	6
37.	My principal has both the capacity and the judgment to overcome most obstacles.	1	2	3	4	5	6
38.	My principal commands respect from everyone on the faculty.	1	2	3	4	5	6

	1=Strongly Disagree 2=Disagree 3=Somewhat Disagree 4=Somewhat Agree 5=Agree 6=Strongly Agree						
39.	My principal excites faculty with visions of what we may be able to accomplish if we work together as a team.	1	2	3	4	5	6
40.	My principal makes faculty members feel and act like leaders.	1	2	3	4	5	6
41.	My principal gives the faculty a sense of overall purpose for its leadership role.	1	2	3	4	5	6
42.	My principal leads by "doing" rather than simply by "telling."	1	2	3	4	5	6
43.	My principal symbolizes success and accomplishment within the profession of education.	1	2	3	4	5	6
44.	My principal provides good models for faculty members to follow.	1	2	3	4	5	6
45.	My principal provides for our participation in the process of developing school goals.	1	2	3	4	5	6
46.	My principal encourages faculty members to work toward the same goals.	1	2	3	4	5	6
47.	My principal uses problem solving with the faculty to generate school goals.	1	2	3	4	5	6
48.	My principal works toward whole faculty consensus in establishing priorities for school goals.	1	2	3	4	5	6
49.	My principal regularly encourages faculty members to evaluate our progress toward achievement of school goals.	1	2	3	4	5	6
50.	My principal provides for extended training to develop my knowledge and skills relevant to being a member of the school faculty.	1	2	3	4	5	6
51.	My principal provides the necessary resources to support my implementation of the school's program.	1	2	3	4	5	6
52.	My principal treats me as an individual with unique needs and expertise.	1	2	3	4	5	6
53.	My principal takes my opinion into consideration when initiating actions that affect my work.	1	2	3	4	5	6
54.	My principal behaves in a manner thoughtful of my personal needs.	1	2	3	4	5	6
55.	My principal challenges me to reexamine some basic assumptions I have about my work in the school.	1	2	3	4	5	6

	1=Strongly Disagree 2=Disagree 3=Somewhat Disagree 4=Somewhat Agree 5=Agree 6=Strongly Agree						
56.	My principal stimulates me to think about what I am doing for the school's students.	1	2	3	4	5	6
57.	My principal provides information that helps me think of ways to implement the school's program.	1	2	3	4	5	6
58.	My principal insists on only the best performance from the school's faculty.	1	2	3	4	5	6
59.	My principal shows us that there are high expectations for the school's faculty as professionals.	1	2	3	4	5	6
60.	My principal does not settle for second best in the performance of our work as the school's faculty.	1	2	3	4	5	6
61.	Overall, our principal effectively leads our school-wide efforts toward excellence in teaching and learning.	1	2	3	4	5	6

Demographic Items

Demographic responses provide the opportunity to gain insight into differences and similarities of responses from the various groups. Such information is very valuable in this comprehensive statewide study of middle level education. Please circle or mark the most appropriate response item. Select only one response per question. Please understand that demographic items will not be used in any way to identify individual respondents. Thank you for taking a moment to respond to these items.

1. Which of the following most accurately describes your teaching area?
   a. Core content area (math, science, social studies, language arts)
   b. Non-core exploratory or elective content area
   c. Special education teacher
   d. Other, or not sure which of these to select

2. Which of the following most accurately describes your teaching assignment?
   a. I am a member of an interdisciplinary teaching team of four or more teachers.
   b. I am a member of an interdisciplinary team of two or three teachers.
   c. I am not a member of an interdisciplinary team.
   d. Other, or not sure which of these to select

3. How many years (including this year) have you been an educator?
   a. 1 to 2 years   b. 3 to 5 years   c. 6 to 10 years   d. 11 to 20 years   e. 21+ years

4. What is your gender?
   a. Female   b. Male

5. How many years (including this year) have you been at your present school?
   a. 1 to 2 years   b. 3 to 5 years   c. 6 to 10 years   d. 11 to 20 years   e. 21+ years

6. What subjects do you teach?
   a. Math   b. Science   c. Social Studies   d. English/Language Arts

e. Reading   f.   Other, or not sure which to select

7. Through which means did you obtain your certification?
      a. Traditional certification program   b. Alternative certification program
      c.   I do not hold teacher certification   d. Other, or not sure which of these to select

8. As part of your teacher certification coursework, were you required to take a course on student assessment?   a. Yes   b. No

9. Do you teach in your area of your certification?   a. Yes   b. No

10. Please indicate the grade level of your certification: (please select the most appropriate response)
      a. Elementary   b. Middle c. High   d. Elementary/Middle e. Middle/High
      f. K-8   g. K-12   h. I don't know   i. Other, not sure which of these to select

If you would like to provide any feedback to our Center about this survey or other information that would help us understand your school and the items asked in this survey, please use the following space.

Thank you for taking the time to complete this survey. Please seal this Survey and your Consent Form in the envelope provided and return it to the office secretary for mailing to the Middle Level Leadership Center.

Appendix B

PLQ Item Descriptive Data

PLQ Item Descriptive Data

Mean	SD	Variance	Min	Max
37. My principal has both the capacity and the judgment to overcome most obstacles.				
4.9433	.72147	.521	2.50	6.00
38. My principal commands respect from everyone on the faculty.				
4.7549	.80838	.653	2.00	6.00
39. My principal excites faculty with visions of what we may be able to accomplish if we work together as a team.				
4.5806	.81820	.669	2.00	6.00
40. My principal makes faculty members feel and act like leaders.				
4.6721	.80034	.641	2.00	6.00
41. My principal gives the faculty a sense of overall purpose for its leadership role.				
4.6992	.78864	.622	2.00	6.00
42. My principal leads by "doing" rather than simply by "telling."				
4.5430	.87404	.764	2.00	6.00
43. My principal symbolizes success and accomplishment within the profession of education.				
4.7855	.76459	.585	2.33	6.00
44. My principal provides good models for faculty members to follow.				
4.7312	.82064	.673	2.00	6.00
45. My principal provides for our participation in the process of developing school goals.				
4.8495	.65110	.424	3.00	6.00

PLQ Item Descriptive Data (Continued)

Mean	SD	Variance	Min	Max
46. My principal encourages faculty members to work toward the same goals.				
5.0288	.61843	.382	3.00	6.00
47. My principal uses problem solving with the faculty to generate school goals.				
4.6374	.75521	.570	2.33	6.00
48. My principal works toward whole faculty consensus in establishing priorities for school goals.				
4.5907	.74203	.551	2.00	6.00
49. My principal regularly encourages faculty members to evaluate our progress toward achievement of school goals.				
4.7208	.69029	.477	2.67	6.00
50. My principal provides for extended training to develop my knowledge and skills relevant to being a member of the school faculty.				
4.8283	.68591	.470	3.00	6.00
51. My principal provides the necessary resources to support my implementation of the school's program.				
4.8118	.65623	.431	2.67	6.00
52. My principal treats me as an individual with unique needs and expertise.				
4.9793	.69965	.490	2.67	6.00
53. My principal takes my opinion into consideration when initiating actions that affect my work.				
4.8233	.77192	.596	2.50	6.00
54. My principal behaves in a manner thoughtful of my personal needs.				
4.9462	.77746	.604	2.00	6.00

1=Strongly Disagree   2=Disagree   3=Somewhat Disagree   4=Somewhat Agree   5=Agree
6=Strongly Agree

PLQ Item Descriptive Data (Continued)

Mean	SD	Variance	Min	Max
55. My principal challenges me to reexamine some basic assumptions I have about my work in the school.				
4.6293	.66080	.437	2.67	6.00
56. My principal stimulates me to think about what I am doing for the school's students.				
4.8310	.69601	.484	2.67	6.00
57. My principal provides information that helps me think of ways to implement the school's program.				
4.6709	.70873	.502	2.33	6.00
58. My principal insists on only the best performance from the school's faculty.				
4.9149	.65357	.427	2.50	6.00
59. My principal shows us that there are high expectations for the school's faculty as professionals.				
5.0101	.72636	.528	2.00	6.00
60. My principal does not settle for second best in the performance of our work as the school's faculty.				
4.7903	.66488	.442	2.67	6.00
61. Overall, our principal effectively leads our school-wide efforts toward excellence in teaching and learning.				
4.9086	.79551	.633	2.00	6.00

1=Strongly Disagree   2=Disagree   3=Somewhat Disagree   4=Somewhat Agree   5=Agree
6=Strongly Agree

Appendix C

Teacher Commitment Survey (OCDQ)

Collective Efficacy (CE-Scale)

MISSOURI STUDY OF MIDDLE LEVEL EDUCATION

Teacher Survey Form D

School Name:_____

Please use the following key to indicate the degree to which each statement applies to your school. This survey may look lengthy, but the items have been spaced for easy reading to save you time. The typical time to complete this survey is about 15-20 minutes.

1=Rarely Occurs   2=Sometimes Occurs   3=Often Occurs   4=Very Frequently Occurs
(Circle, check, or darken the number that applies)

1.	The principal compliments teachers.	**1**	**2**	**3**	**4**
2.	Teachers have parties for each other.	**1**	**2**	**3**	**4**
3.	Teachers are burdened with busy work.	**1**	**2**	**3**	**4**
4.	Routine duties interfere with the job of teaching.	**1**	**2**	**3**	**4**
5.	Teachers "go the extra mile" with their students.	**1**	**2**	**3**	**4**
6.	Teachers are committed to helping their students.	**1**	**2**	**3**	**4**
7.	Teachers help students on their own time.	**1**	**2**	**3**	**4**
8.	Teachers interrupt other teachers who are talking in staff meetings.	**1**	**2**	**3**	**4**
9.	The principal rules with an iron fist.	**1**	**2**	**3**	**4**
10.	The principal encourages teacher autonomy.	**1**	**2**	**3**	**4**
11.	The principal goes out of his or her way to help teachers.	**1**	**2**	**3**	**4**
12.	The principal is available after school to help teachers when assistance is needed.	**1**	**2**	**3**	**4**
13.	Teachers invite other faculty members to visit them at home.	**1**	**2**	**3**	**4**
14.	Teachers socialize with each other on a regular basis.	**1**	**2**	**3**	**4**
15.	The principal uses constructive criticism.	**1**	**2**	**3**	**4**
16.	Teachers who have personal problems receive support from other staff members.	**1**	**2**	**3**	**4**
17.	Teachers stay after school to tutor students who need help.	**1**	**2**	**3**	**4**
18.	Teachers accept additional duties if students will benefit.	**1**	**2**	**3**	**4**
19.	The principal looks out for the personal welfare of the faculty.	**1**	**2**	**3**	**4**
20.	The principal supervises teachers closely.	**1**	**2**	**3**	**4**

	1=Rarely Occurs 2=Sometimes Occurs 3=Often Occurs 4=Very Frequently Occurs				
21.	Teachers leave school immediately after school is over.	1	2	3	4
22.	Most of the teachers here accept the faults of their colleagues.	1	2	3	4
23.	Teachers exert group pressure on nonconforming faculty members.	1	2	3	4
24.	The principal listens to and accepts teachers' suggestions.	1	2	3	4
25.	Teachers have fun socializing together during school time.	1	2	3	4
26.	Teachers ramble when they talk at faculty meetings.	1	2	3	4
27.	Teachers are rude to other staff members.	1	2	3	4
28.	Teachers make "wise cracks" to each other during meetings.	1	2	3	4
29.	Teachers mock teachers who are different.	1	2	3	4
30.	Teachers don't listen to other teachers.	1	2	3	4
31.	Teachers like to hear gossip about other staff members.	1	2	3	4
32.	The principal treats teachers as equals.	1	2	3	4
33.	The principal corrects teachers' mistakes.	1	2	3	4
34.	Teachers provide strong social support for colleagues.	1	2	3	4
35.	Teachers respect the professional competence of their colleagues.	1	2	3	4
36.	The principal goes out of his or her way to show appreciation to teachers.	1	2	3	4
37.	The principal keeps a close check on sign-in times.	1	2	3	4
38.	The principal monitors everything teachers do.	1	2	3	4
39.	Administrative paperwork is burdensome at this school.	1	2	3	4
40.	Teachers help and support each other.	1	2	3	4
41.	The principal closely checks teacher activities.	1	2	3	4
42.	Assigned non-teaching duties are excessive.	1	2	3	4
43.	The interactions between team/unit members are cooperative.	1	2	3	4
44.	The principal accepts and implements ideas suggested by faculty members.	1	2	3	4
45.	Members of teams/units consider other members to be their friends.	1	2	3	4
46.	Extra help is available to students who need help.	1	2	3	4
47.	Teachers volunteer to sponsor after-school activities.	1	2	3	4

	1=Rarely Occurs 2=Sometimes Occurs 3=Often Occurs 4=Very Frequently Occurs				
48.	Teachers spend time after school with students who have individual problems.	1	2	3	4
49.	The principal sets an example by working hard himself or herself.	1	2	3	4
50.	Teachers are polite to one another.	1	2	3	4
51.	Overall, our school climate is positive, trusting, and respectful.	1	2	3	4
52.	Overall, the teachers in our school are committed to the personal and academic success of each and every student.	1	2	3	4
53.	Overall, the teachers in our school are committed to the success of our school.	1	2	3	4

Please note that the remaining items have a different set of response options.
Please use this scale to indicate the degree to which you agree with the following statements.

1=Strongly Disagree   2=Disagree   3=Somewhat Disagree   4=Somewhat Agree   5=Agree   6=Strongly Agree

54.	The amount a student can learn is primarily related to family background.	1	2	3	4	5	6
55.	If students aren't disciplined at home, they aren't likely to accept any discipline.	1	2	3	4	5	6
56.	When I really try, I can get through to most difficult students.	1	2	3	4	5	6
57.	A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement.	1	2	3	4	5	6
58.	If parents would do more for their children, I could do more.	1	2	3	4	5	6
59.	If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.	1	2	3	4	5	6
60.	If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.	1	2	3	4	5	6
61.	If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.	1	2	3	4	5	6

	1=Strongly Disagree 2=Disagree 3=Somewhat Disagree 4=Somewhat Agree 5=Agree 6=Strongly Agree						
62	If I really try hard, I can get through to even the most difficult or unmotivated students.	1	2	3	4	5	6
63	When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment.	1	2	3	4	5	6
64.	Teachers in this school are able to get through to the most difficult students.	1	2	3	4	5	6
65.	Teachers here are confident they will be able to motivate their students.	1	2	3	4	5	6
66.	If a child doesn't want to learn teachers here give up.	1	2	3	4	5	6
67.	Teachers here don't have the skills needed to produce meaningful learning.	1	2	3	4	5	6
68.	Teachers in this school believe that every child can learn.	1	2	3	4	5	6
69.	These students come to school ready to learn.	1	2	3	4	5	6
70.	Home life provides so many advantages that students here are bound to learn.	1	2	3	4	5	6
71.	Students here just aren't motivated to learn.	1	2	3	4	5	6
72.	Teachers in this school do not have the skills to deal with student disciplinary problems.	1	2	3	4	5	6
73.	The opportunities in this community help ensure that these students will learn.	1	2	3	4	5	6
74.	Learning is more difficult at this school because students are worried about their safety.	1	2	3	4	5	6
75.	Drug and alcohol abuse in the community make learning difficult for students here.	1	2	3	4	5	6
76.	Overall, our school faculty believes we can make a difference in the lives of our students.	1	2	3	4	5	6

Demographic Items

Demographic responses provide the opportunity to gain insight into differences and similarities of responses from the various groups. Such information is very valuable in this comprehensive statewide study of middle level education. **Please circle or mark the most appropriate response item.** Select only one response per question. Please understand that demographic items will not be used in any way to identify individual respondents. Thank you for taking a moment to respond to these items.

1. **Which of the following most accurately describes your teaching area?**
   a. Core content area (math, science, social studies, language arts)
   b. Non-core exploratory or elective content area
   c. Special education teacher
   d. Other, or not sure which of these to select

2. **Which of the following most accurately describes your teaching assignment?**
   e. I am a member of an interdisciplinary teaching team of four or more teachers.
   f. I am a member of an interdisciplinary team of two or three teachers.
   g. I am not a member of an interdisciplinary team.
   h. Other, or not sure which of these to select

3. **How many years (including this year) have you been an educator?**
   a. 1 to 2 years   b. 3 to 5 years   c. 6 to 10 years   d. 11 to 20 years   e. 21+

4. **What is your gender?**
   i. Female   b. Male

5. **How many years (including this year) have you been at your present school?**
   a. 1 to 2 years   b. 3 to 5 years   c. 6 to 10 years   d. 11 to 20 years
   e. 21+ years

6. **What subjects do you teach?**
   j. Math   b. Science   c. Social Studies   d. English/Language Arts
   e. Reading   f. Other, or not sure which to select

7. **Through which means did you obtain your certification?**
   k. Traditional certification program   b. Alternative certification program
   d. I do not hold teacher certification   d. Other, or not sure which of these to select

8. **As part of your teacher certification coursework, were you required to take a course on student assessment?**
   l. Yes   b. No

9. **Do you teach in your area of your certification?**
   m. Yes   b. No

10. Please indicate the grade level of your certification: (please select the most appropriate response)
a. Elementary   b. Middle c. High   d. Elementary/Middle e. Middle/High
f. K-8   g. K-12   h. I don't know   i. Other, not sure which of these to select

If you would like to provide any feedback to our Center about this survey or other information that would help us understand your school and the items asked in this survey, please use the following space.

Thank you for taking the time to complete this survey. Please seal this Survey and your Consent Form in the envelope provided and return it to the office secretary for mailing to the Middle Level Leadership Center.

Items in this survey not developed by the Middle Level Leadership Center were used with permission of the authors. Do not duplicate or use this survey without written permission from MLLC or the contributing authors. For information about the use of the survey or survey items, contact Jerry Valentine, Director, Middle Level Leadership Center.

Appendix D

Teacher Commitment Descriptive Data

Teacher Commitment Item Descriptive Data

Mean	SD	Variance	Min	Max
5. Teachers "go the extra mile" with their students.				
3.4197	.34820	.121	2.33	4.00
6. Teachers are committed to helping their students.				
3.6001	.30957	.096	2.50	4.00
7. Teachers help students on their own time.				
3.3250	.41888	.175	1.67	4.00
17. Teachers stay after school to tutor students who need help.				
3.4204	.42268	.179	2.33	4.00
18. Teachers accept additional duties if students will benefit.				
3.2264	.40843	.167	1.50	4.00
21 (R). Teachers leave school immediately after school is over.				
3.0303	.39187	.154	2.00	4.00
46. Extra help is available to students who need help.				
3.5646	.38742	.150	2.00	4.00
47. Teachers volunteer to sponsor after-school activities.				
3.2151	.42073	.177	2.00	4.00
48. Teachers spend time after school with students who have individual problems.				
3.1925	.51349	.264	1.00	4.00

(R) = Reversed scored item; SD = Standard Deviation
1=Rarely Occurs   2=Sometimes Occurs   3=Often Occurs   4=Very Frequently Occurs

Appendix E

Teacher Collective Efficacy Descriptive Data

CES Item Descriptive Data

Mean	SD	Variance	Min	Max
64. Teachers in this school are able to get through to the most difficult students.				
4.2282	.52653	.277	2.67	6.00
65. Teachers here are confident they will be able to motivate their students.				
4.5512	.52719	.278	2.33	6.00
66(R). If a child doesn't want to learn teachers here give up.				
4.9695	.58169	.338	3.00	6.00
67(R). Teachers here don't have the skills needed to produce meaningful learning.				
5.4057	.56851	.323	2.00	6.00
68. Teachers in this school believe that every child can learn.				
5.0715	.51684	.267	3.00	6.00
69. These students come to school ready to learn.				
3.7475	.60373	.364	2.17	6.00
70. Home life provides so many advantages that students here are bound to learn.				
3.0154	.66711	.445	1.50	4.71
71(R). Students here just aren't motivated to learn.				
4.1796	.74054	.548	1.83	6.00

(R) = Reversed scored item; SD = Standard Deviation
1=Strongly Disagree 2=Disagree 3=Somewhat Disagree 4=Somewhat Agree 5=Agree
6=Strongly Agree

CES Item Descriptive Data (Continued)

Mean	SD	Variance	Min	Max
72 (R). Teachers in this school do not have the skills to deal with student disciplinary problems.				
4.9428	.61050	.373	3.00	6.00
73. The opportunities in this community help ensure that these students will learn.				
3.7127	.83576	.699	1.33	6.00
74 (R). Learning is more difficult at this school because students are worried about their safety.				
5.4432	.49909	.249	3.00	6.00
75 (R). Drug and alcohol abuse in the community make learning difficult for students here.				
4.3180	.93157	.868	1.00	6.00

(R) = Reversed scored item; SD = Standard Deviation
1=Strongly Disagree   2=Disagree   3=Somewhat Disagree   4=Somewhat Agree   5=Agree
6=Strongly Agree

Appendix F

Documents to Secretaries, Principals, and Teachers

Middle Level Leadership Center

University of Missouri-Columbia • 211 Hill Hall • Columbia, MO 65211
Director: Jerry Valentine (573) 882-0944
Assistants: Bernard Solomon (573) 882-0947; Kris Matthews (573) 882-0947; Greg Mees (573) 882-0947
Fax: 884-7922 • Email: ValentineJ@missouri.edu

Dear School Secretary:

I am asking for your support of this comprehensive statewide study of Middle Level Education being conducted by the Middle Level Leadership Center at the University of Missouri. This study is the most comprehensive and significant study ever conducted in Missouri's middle level schools. For this study to be effective, I need your assistance. What I am asking of you is simple, but critical. Please complete the tasks listed below.

1. From state records we identified the approximate number of full-time classroom teachers in your school. Our numbers may be close, but not exact. Please distribute the enclosed surveys to your full-time classroom teachers in a random manner. Note that there are five different forms labeled "A" through "E" and that those five forms should be distributed evenly among the classroom teachers. Normally, this would be done by loading the surveys in a systematic manner in teachers' mailboxes. But if you prefer to use a teacher list, a faculty meeting, or some other form of distribution and collection, we will leave that to your judgment. We simply need to be sure that the surveys are distributed evenly to the full-time classroom teachers first and then any remaining surveys distributed to part-time teachers.
2. After two or three days, please offer a reminder to classroom teachers to complete and return the survey sealed in their appropriate envelope.
3. When you have about half of the teacher responses (or after one or two weeks), use the first of the two larger addressed, postage-paid envelopes I have provided to send the completed, sealed surveys to me at the Middle Level Leadership Center.
4. When you have all or nearly all of the classroom teachers' responses (or after two or three weeks), use the second larger addressed, postage-paid envelope to return the remainder of the completed, sealed surveys to the Middle Level Leadership Center.
5. If you have additional surveys returned to you after you have used the last large envelope, please call our office at (573) 882-0944 and I will be glad to send you an additional return, postage-paid envelope.
6. Please remember to ask your principal for the completed Principal Survey Form and include the principal's survey envelope when you return the teacher surveys.
7. If you need additional materials, including surveys or envelopes, please call my office at (573) 882-0944 and I will send the materials immediately.
8. Finally, please take a moment to complete the secretary contact form, providing us with a means to contact you in case you win one of the secretary gift cards described below.

To express appreciation to the individual designated to collect and return the survey packets to my office, I will give a **$50 gift card** to the individual from each of the 20 schools that return the highest percentage of completed teacher responses. To make that distribution as fair as possible, I have divided Missouri's middle level schools into quartiles by enrollment. The five individuals from each enrollment quartile with the highest percentage of returned completed teacher responses will receive the gift cards. To be considered for this $50 gift card, the returns must be received within 40 days from the original MU postmark.

Please contact me if you have any questions about the study or the tasks I am asking you to complete. As you can tell, responses from your schools and other middle level schools across Missouri are vital to this effort to support and improve middle level education in our state and beyond our state. Thank you for your time and effort to make this study a success.

Sincerely,

Jerry Valentine
Professor and Director
Middle Level Leadership Center
211 Hill Hall
University of Missouri
Columbia, MO 65211
(573) 882-0944
ValentineJ@missouri.edu
www.MLLC.org

Principal Consent Form

As noted in your cover letter, the purpose of this study is to obtain information that will allow educators to better understand effective practices in middle level schools across the state. From that insight, policy and program recommendations will be made to state school leaders and an understanding of highly effective practices can be shared with middle level educators. The information your teachers provide about your school is extremely valuable in this effort. We are collecting data for this statewide study this winter and expect to analyze the data this spring.

Because our Center is a part of the University of Missouri, we must follow University guidelines when we conduct surveys. Therefore, even though there are no sensitive questions in this survey, we are obligated to inform you of your rights as a school leader whose school is participating in this study:

> *Your participation in this research study is voluntary and your responses, participation, or non-participation will not be used in any evaluative manner. You may choose not to participate for any reason; you may discontinue participation at any time, and you may refuse to answer any questions that may be uncomfortable for you. There are no foreseeable risks or discomforts because of participation. The responses from you and your teachers will be confidential and will go directly to the Middle Level Leadership Center. In compliance with University regulations, all data will be stored at the Middle Level Leadership Center in a locked storage cabinet for three years from the completion of the study. If you have any questions about the survey or its use, please contact Dr. Jerry Valentine, Center Director, at (573) 882-0944. If you have any concerns or questions regarding compliance with this statement, you may contact the University Institutional Review Board office for Human Subjects Research at (573) 882-9585.*

Please (a) sign this Consent Form, (b) enclose both the Consent Form and the completed Survey in the envelope provided, (c) seal the envelope, (d) give the envelope to your school secretary so it can be returned to the Middle Level Leadership Center at MU, (e) encourage your teachers to complete their survey, and (f) encourage your secretary to follow through promptly with the process of collecting and returning surveys to MLLC. When we open your envelope at our Center, your consent form will be filed and the data about your school will remain confidential. Your teachers' responses will also be separated from their consent forms before they are entered into the data set for your school. Your school will be assigned a number code to maintain confidentiality of the school throughout the study. Thus, all individual teacher responses will be confidential and then anonymous; schoolwide data will be confidential; and, data will be analyzed and reported as aggregated group data. Neither your teachers' responses nor data about your school will be identified in any of the reports or recommendations from this statewide study.

Thank you for participating in this survey administered by the Middle Level Leadership Center. Your time and support are vitally important to middle level programs across the state.

_____   _____
            Principal Signature   Date

Thank you,
Jerry Valentine
Director, Middle Level Leadership Center
211 Hill Hall, University of Missouri
Columbia, MO 65211

MISSOURI STUDY OF MIDDLE LEVEL EDUCATION
Principal Survey

School Name: _____

Please take a moment to respond to the following demographic items. Please seal your responses in the envelope and give it to your secretary for mailing to my office at MU. Thank you for taking the time to complete this brief survey and supporting this important study in your school. What we learn will be extremely valuable to middle schools across the state and nation. The items are spaced for quick read and response. It will take you about 5-10 minutes to complete this survey. Thank you! Jerry

	Questions	Responses
1.	What is the current enrollment in your school?	
2.	How many full-time-equivalent teachers (staffing units for individuals who teach) do you have in your building (half-time teacher is .5, full-time teacher is 1.0, etc.)?	
3.	What grades are included in your school (e.g. 6-7-8, 7-8, etc.)?	
4.	What percent of your students are eligible for free or reduced lunch?	
5.	What do you estimate is the percent of average daily attendance for your student body?	
6.	What is your gender?	
7.	With what ethnic group do you identify yourself?	
8.	What is your age?	
9.	How many years were you a classroom teacher, counselor, or other non-administrator regardless of grade level?	
10.	How many years were you a classroom teacher, counselor, or other non-administrator at the middle level?	
11.	How many years were you an assistant principal, regardless of grade level?	
12.	How many years were you an assistant principal at the middle level?	
13.	How many years have you served as a principal, regardless of grade level, including this school year?	
14.	How many years have you served as a middle level principal, including this school year?	
15.	How many years have you served as the principal of this school?	

	Please use this scale to indicate the degree to which you agree with the following statements. 1=Strongly Disagree 2=Disagree 3=Somewhat Disagree 4=Somewhat Agree 5=Agree 6=Strongly Agree						
16.	Overall, the culture of our school is positive, caring and collaborative.	1	2	3	4	5	6
17.	Overall, our school climate is positive, trusting, and respectful.	1	2	3	4	5	6
18.	Overall, our school is a healthy work environment.	1	2	3	4	5	6
19.	Overall, the teachers in our school trust their fellow teachers.	1	2	3	4	5	6
20.	Overall, the teachers in our school trust the clients (students and parents) they serve.	1	2	3	4	5	6
21.	Overall, the teachers in our school trust me (their principal).	1	2	3	4	5	6
22.	Overall, the teachers in our school trust the district-level leadership (district administrators and school board members).	1	2	3	4	5	6
23.	Overall, the teachers in our school are committed to the success of our school.	1	2	3	4	5	6
24.	Overall, the teachers in our school are committed to the personal and academic success of each and every student.	1	2	3	4	5	6
25.	Overall, our school faculty believes they can make a difference in the lives of our students.	1	2	3	4	5	6
26.	Overall, our school faculty effectively uses instructional strategies that enhance learning for each and every student.	1	2	3	4	5	6
27.	Overall, our school faculty effectively uses assessment strategies and data to improve instruction and achievement for each and every student.	1	2	3	4	5	6
28.	Overall, the teacher leaders in our school effectively lead other faculty in our schoolwide efforts toward excellence in teaching and learning.	1	2	3	4	5	6
29.	Overall, I provide effective leadership toward excellence in teaching and learning.	1	2	3	4	5	6
30.	Overall, I provide effective leadership for our school.	1	2	3	4	5	6
31.	Overall, the "leadership team" (principal, assistants, counselors, chairs, team leaders, etc.) provides effective leadership for our school.	1	2	3	4	5	6

Thank you for taking the time to complete this survey. Please seal this Survey and your Consent Form in the envelope provided and return it to the office secretary for mailing to the Middle Level Leadership Center.

Items in this survey not developed by the Middle Level Leadership Center were used with permission of the authors. Do not duplicate or use this survey without written permission from MLLC or the contributing authors. For information about the use of the survey or survey items, contact Jerry Valentine, Director, Middle Level Leadership Center.

Middle Level Leadership Center

University of Missouri-Columbia • 211Hill Hall • Columbia, MO 65211
Director: Jerry Valentine (573) 882-0944
Assistants: Bernard Solomon (573) 882-0947; Kris Matthews (573) 882-0947; Greg Mees (573) 882-0947
Fax: 884-7922 • Email: ValentineJ@missouri.edu

Teacher Instructions -- SHORT VERSION

There are two cover letters explaining this study and requesting your help. This is the "SHORT VERSION." Please take a moment to read this first and if it does not convince you to complete this survey, please read the "LONG VERSION" on the last page. We need your help, but we also want to honor your time…thus this SHORT explanation.

WHAT ARE WE ASKING OF YOU?
1. Read the Directions (if you want to…or you can just begin the survey)
2. Sign the Teacher Consent Form…Please!
3. Complete the enclosed survey of Missouri Middle Level Teachers…Please!
4. Seal the completed items in the envelope provided and return them to your school office so the secretary can mail the sealed responses back to our office at the Middle Level Leadership Center at Mizzou…Please!

Your responses will be confidential and then anonymous (see below).

WHY IS THIS STUDY IMPORTANT TO MISSOURI AND TO YOU?
The fifteen minutes it will take you and fellow teachers to complete this survey will provide vital information about Missouri's middle school programs and practices. Your responses and those of fellow teachers across the state will:
1. Provide findings about key aspects of best practices in Missouri middle schools, including programs, culture, climate, leadership, commitment, efficacy, and assessment practices.
2. Provide findings that can shape policy changes in Missouri so we can better serve students.
3. Provide findings so you can contrast your programs and practices with those across Missouri.

WHO IS CONDUCTING THIS STUDY?
The Middle Level Leadership Center (MLLC) at the University of Missouri is conducting this study. Dr. Jerry Valentine (ValentineJ@missouri.edu), MU Professor and Director of the Center, is a nationally recognized researcher, author, and presenter in middle level education. MLLC is the only research and service Center in the nation devoted specifically to serving the needs of teachers and leaders in middle level schools. Learn more about the work of the Center at www.MLLC.org.

HOW IS THIS STUDY ORGANIZED?
This statewide study is so comprehensive that each teacher in your school will receive one of five randomly distributed surveys. The results will be returned directly to MLLC. When opened in our office, the Teacher Consent Form will be filed separately from the survey responses. Therefore, your responses will become anonymous and compiled with other responses to create a confidential school-wide profile. At no time will those identities or responses be linked to individuals or schools.

PLEASE PARTICIPATE...EDUCATION NEEDS YOUR INSIGHT. THANKS!

Teacher Consent Form

As noted in the cover letter, the purpose of this survey is to obtain information that will allow educators to better understand effective practices in middle level schools across the state. From that insight, policy and program recommendations will be made to state school leaders and an understanding of highly effective practices can be shared with middle level educators. The information you provide about your school is extremely valuable in this effort. We are collecting data for this statewide study this winter and expect to analyze the data this spring.

Because our Center is a part of the University of Missouri, we must follow University guidelines when we conduct surveys. Therefore, even though there are no sensitive questions in this survey, we are obligated to inform you of your rights as a survey respondent:

Your participation in this research study is voluntary and your responses, participation, or non-participation will not be used in any evaluative manner. You may choose not to participate for any reason, you may discontinue participation at any time, and you may refuse to answer any question that might be uncomfortable for you. There are no foreseeable risks or discomforts because of participation. Your responses will be confidential and will go directly to the Middle Level Leadership Center when you complete the survey. In compliance with University research regulations, all data will be stored at the Middle Level Leadership Center in a locked storage cabinet for three years from the completion of the study. If you have any questions about the survey or its use, please contact Dr. Jerry Valentine, Center Director, at (573) 882-0944. If you have any concerns or questions regarding compliance with this statement you may contact the University Institutional Review Board office for Human Subjects Research at (573) 882-9585.

Please (a) sign this Consent Form, (b) enclose both the Consent Form and the completed Survey in the envelope provided, (c) seal the return envelope, and (d) give the sealed envelope to the school secretary for return to our Center at MU. When we open your envelope at our Center, we will separate your Consent Form from the survey and keep both on file, thus rendering your responses anonymous. We will then enter your anonymous responses into the data set for your school and then issue a number code for the school and maintain confidentiality of the school name throughout the study. Thus, all individual responses will be confidential and then anonymous; schoolwide data will be confidential; and, data will be analyzed and reported as aggregated group data. Neither your responses nor data about your school will be identified in any of the reports or recommendations from this statewide study.

Thank you for participating in this survey administered by the Middle Level Leadership Center. Your time and responses are vitally important to our efforts to support middle level programs across the state.

_____   _____
            Respondent Signature   Date

Thank you,
Jerry Valentine
Director, Middle Level Leadership Center
211 Hill Hall, University of Missouri
Columbia, MO 65211

Missouri Study of Middle Level Education
Teacher Survey Directions

Completion Time
The enclosed letter explained the significance of this statewide study of middle-level schools. I know how busy each teacher is every day of the school year and I have kept the items to a minimum. In addition, the survey has been divided into five parts, with every fifth teacher in your school responding to a different set of items. Therefore, completion of the survey should take approximately 15-20 minutes. The items are easy to read and can be answered about as fast as you can read them.

Response Candor
Please be candid in your responses to each question. Honest responses provide the foundation for a good study. There are not highly sensitive items in this survey, so please be candid.

Response Confidentiality
Please remember to write the name of your school on the survey so your responses can be compiled with those of other teachers from your school and thus create the data set for your school. Your responses will be anonymous and your school will never be identified by name. Results will be reported as aggregated findings, never identifying schools or individuals.

Demographic Questions
This survey includes a few demographic questions. Responses to these items provide the opportunity to analyze broad categories of responses from across the state. For example, "Are the perceptions of newer teachers different than those of veteran teachers? Do teachers with certifications in certain content areas view issues differently than those with different certifications?" These items are only for disaggregation of responses. All responses, from all respondents, will remain confidential and become anonymous as soon your sealed responses are opened and separated from your Consent Form. The demographic items will not be used in any way to identify individual respondents. Please complete them.

Returning Responses
Please seal your completed Survey and the Consent Form in the envelope provided and return it to the office secretary. The secretary will mail the sealed envelopes in a larger envelope to the Middle Level Leadership Center at the University. The sealed envelope you give to the secretary should include:
1. Your signed Teacher Consent Form
2. Your completed Teacher Survey

Thank you,
Jerry Valentine
Professor and Director, Middle Level Leadership Center

Middle Level Leadership Center

University of Missouri-Columbia • 211 Hill Hall • Columbia, MO 65211
Director: Jerry Valentine (573) 882-0944
Assistants: Bernard Solomon (573) 882-0947; Kris Matthews (573) 882-0947; Greg Mees (573) 882-0947
Fax: 884-7922 • Email: ValentineJ@missouri.edu

Teacher Instructions – LONG VERSION

I know the tendency will be to toss this letter and the accompanying survey into the trash can…I have been a teacher and fully understand the urge, especially given the many tasks we are asked to complete each day.

However, before you toss these materials please take a moment to read this letter and consider this request. It will take you about five minutes to read this cover letter and the consent form, and about ten or fifteen minutes to complete the enclosed survey. Your time will be a significant contribution toward the development of a better understanding about the most effective practices for Missouri's middle level schools. Middle Level Schools are those that specifically serve students between grades five and nine, meaning with grade configurations such as 6-7-8, 5-6-7-8, 7-8, 8-9, and all combinations in between.

The importance of this study to Missouri…

Throughout our state middle level schools are coming under attack for low student achievement test scores. State officials repeatedly note that MAP test scores in elementary schools are improving significantly while MAP scores in middle schools are less impressive. Few policy makers understand the challenges of working with young adolescents who are intently focused on self and peers, attempting to adjust to new bodies, new emotions, and new social roles, while educators and policy makers continue to add "increased academic expectations" to their already stressful world. Simultaneously, societal changes in our nation are making early adolescence more challenging than ever. Little wonder young adolescents have difficulty developing the focus and commitment needed to achieve those academic standards. In this analysis of middle level education across Missouri, we are trying to understand the types of programs and environments that hold the greatest promise for supporting student success during these challenging years. Without effective middle level programs designed to address young adolescent development, we would have more dropouts and lower grades; with effective programs, we help students successfully navigate early adolescence so they can then be successful in high school. The dilemma is perplexing and we need your assistance to help us all understand what works and what does not work in our middle level schools.

The survey placed in your box by the secretary is one of five different survey forms randomly distributed to the teachers in your school and to the more than 10,000 teachers in each of the 343 middle level schools across Missouri. You will be able to respond to the items in your survey about as quickly as you can read them--so please take the 15-20 minutes to respond. With responses from all Missouri middle schools, we can carefully study responses and offer to state policy makers the insight that will help them appreciate the hard and effective work that middle level educators do on a daily basis.

Responses will be confidential and anonymous…

You will note that your school's name is requested on the survey. To be able to analyze programs and practices across schools and compare those practices with other factors such as student achievement by school, I must know the name of your school so I can group responses by school. However, schools will not be identified by name for any part of this study. Names are needed to compute the types of analyses that generate findings and recommendations that can eventually influence middle school policies and practices across the state.

As mentioned previously, all responses to this survey will be confidential and will become anonymous as soon as the responses are separated from the Consent Form. All individual responses will be grouped by school for analyses. The names of all schools will remain confidential, with results reported by groups, not by individual schools, and certainly not by individual teachers. The results of this study will be made available through publications in professional journals, presentations at state and national professional meetings and via the Middle Level Leadership Center's website. Sharing the results will allow you and other educators to compare Missouri statewide findings with what you see occurring in your own school. I realize these explanations about confidentiality can be confusing, so I want to reassure you that when I say "share results and recommendations" I am talking about aggregated group data, not individual school or individual respondent data. Every response you make will be confidential and the names of each school will remain confidential.

The University of Missouri-Columbia is always sensitive to protecting the privacy and rights of respondents. So if you have any questions about this email or the survey, please contact me at ValentineJ@missouri.edu or by phone at (593) 882-0944 or contact our University Institutional Review Board office for Human Subjects Research at umcresearchcirb@missouri.edu or by phone at (573) 882-9585. All data from this study are confidential and stored on a secure, password protected hard drive here in our Middle Level Leadership Center office. The University requires that we maintain data from studies such as this for three years after the completion of the research project to ensure protection of your rights as a respondent, even when the data have become anonymous by separation of the Consent form. I assure you that we go to great efforts in our Center and at MU to be sure that responses are confidential and anonymous.

Please complete the survey today and if you cannot do it today, please try to do it within the next two or three days. Use the envelope provided to return your completed Survey and Consent Form to the school secretary, who will then mail all responses to our Center in Columbia.

A final perspective…
This is the largest, most comprehensive study of middle level schools ever undertaken in the U. S. More importantly to us in Missouri, it has the potential to provide valuable insight for all educators and policy makers. To make this study successful for all Missouri educators, I am asking that you make an effort to find the 15-20 minutes to respond.

Thank you so much for your consideration and time on this important task for our state.

Jerry Valentine, Professor and Director
Middle Level Leadership Center

211 Hill Hall
University of Missouri
Columbia, MO 65211

Appendix G

Institutional Review Board Documentation

![MU logo] **Campus Institutional Review Board**

University of Missouri-Columbia
483 McReynolds Hall
Columbia, MO 65211-1150

PHONE: (573) 882-9585
FAX: (573) 884-0663

Project Number: **1055838**
Project Title: Missouri Middle School Programs and School-wide Student Achievement
Approval Date: 12-11-2006
Expiration Date: 11-07-2007
Investigator(s): Goodman, Matthew Donald
                  Klinginsmith, Elmo Nyle
                  Matthews, Kristin Weiser
                  Mees, Gregory William
                  Solomon, Cameron Bernard
                  Valentine, Jerry Wayne
Level Granted: Expedited

Your Amendment was reviewed and we have determined that you are APPROVED to continue to conduct human subject research on the above-referenced project.

Federal regulations and Campus IRB policies require continuing review of research projects involving human subjects. Campus IRB approval will expire one (1) year from the date of approval unless otherwise indicated. Before the one (1) year expiration date, you must submit a Campus IRB Continuing Review Report to the Campus IRB. Any unexpected events are to be reported at that time. The Campus IRB reserves the right to inspect your records to ensure compliance with federal regulations at any point during your project period and three (3) years from the date of completion of your research.

Any additional changes to your study must be promptly reported and subsequently approved. If you have any questions, please contact the Campus IRB office at (573) 882-9585.

Vita

Cameron Bernard Solomon was born on June 19, 1963, in Milledgeville, Georgia. At the age of 3, he moved to Macon, Georgia, where he attended public school and went on to graduate from Northeast High School in 1981. Bernard received his Bachelor of Business Administration in Business Management from Georgia College (now Georgia College and State University) in Milledgeville, Georgia, in 1986. He received a Master of Middle Grades Education from Mercer University in Macon, Georgia, in 2001. In 2003, Bernard received his Certificate of Advance Graduate Studies in Educational Leadership from Cambridge College in Cambridge, Massachusetts. He received his Doctor of Philosophy from the University of Missouri-Columbia in 2007. Bernard has been employed as a financial planner and consultant, customer service representative, and a profit center manager. He taught for three years as a sixth grade mathematics teacher for the Wilkinson County Board of Education and three years as a seventh grade mathematics and science teacher for the Bibb County Board of Education. Bernard has also worked as a graduate research assistant with responsibilities that include managing academic research projects, facilitating school improvement projects in Missouri middle schools, presenting at research and practitioner conferences, and assisting with the organization and planning of research-based conventions. Bernard is the newly appointed assistant principal at Oakland Junior High School in Columbia, Missouri. He is actively involved in his church and several community service organizations. Bernard has a lovely wife, Pamela, and three beautiful children, Shantia, Cameron, and Alycia.