

THE ROLES OF PRINCIPAL LEADERSHIP BEHAVIORS AND  
ORGANIZATIONAL ROUTINES IN MONTANA'S  
DISTINGUISHED TITLE I SCHOOLS

by

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## ABSTRACT

This embedded multiple-case study addressed the lack of qualitative research on the contributions of principal leadership behaviors and organizational routines in Montana's distinguished Title I schools. This study was guided by the research question, "How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana's distinguished Title I Schools?" A supporting subquestion for principal leadership behaviors was, "How does relational trust contribute to the high achievement of Montana's distinguished Title I schools?" A supporting subquestion for organizational routines was, "How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?"

The purpose of this embedded multiple-case study was to describe the role played by principal leadership behaviors and organizational routines in Montana's award-winning Title I schools. Three Montana Title I schools, each of which had been recognized by the Office of Public Instruction as Distinguished Title I Schools for exceptional student achievement, 2006 to 2010, were included in the study. Following Yin's (2009) recommendation, the following data collection methods were utilized: principal and teacher interviews, focus group discussions, observation of building principals, document collection, and administration of quantitative questionnaires on transformational leadership and collective teacher efficacy. Data on principal leadership behaviors was pattern-matched to the theoretical propositions of transformational leadership and relational trust. Data on organizational routines was pattern-matched to the theoretical propositions of professional learning communities and collective teacher efficacy.

This study found that principal leadership behaviors of transformational leadership and relational trust had contributed to high student achievement in the schools studied, as had professional learning communities and collective teacher efficacy. The study's cross-case analysis also revealed conclusions, which had not been reported in previous research, in regard to transformational leadership practices, relational trust, and collective teacher efficacy.

## CHAPTER I

## INTRODUCTION

Student achievement is arguably the most important goal of contemporary American education. Rising concerns about the ability of American students to compete with students in foreign countries have led to widespread high-stakes testing, such as that mandated by the No Child Left Behind Act. The ability of today's American students to eventually become competitive workers in a global economy is often judged by their scholastic achievement today. In light of this view, student achievement has become of paramount importance to both the public and policymakers. Educational leadership, in turn, has been of particular interest for its ability to affect student achievement.

Unfortunately, multiple issues have negatively affected student achievement across the United States. Student poverty, or low socioeconomic status, has a well-established link to undesirable school outcomes, including lower student achievement (Johnson, Strange, & Madden, 2010; Aste, 2009; Paciotti, 2009). High teacher turnover and attrition have also been associated with lower student achievement; again, however, research has linked these latter two factors to high-poverty schools, so the link between high-poverty schools and lower student achievement remains intact (Aguilar, 2010; Keesler & Schneider, 2010; Reid, 2010; Smits, 2009; Heck, 2010).

In an attempt to aid high-poverty schools, the federal government created Title I as part of the 1965 Elementary and Secondary Education Act; through periodic reauthorization, the law remains in effect today. Schools defined as high-poverty by the federal government are therefore commonly referred to as Title I schools. Specifically,

schools in which at least 40 percent of the students enrolled are defined as “poor children” by the federal government can receive Title I funding for school-wide programs. Such programs at these Title I schools are targeted toward helping students meet state standards in core subjects, such as mathematics and reading. In 2006-2007, the most recent school year for which data was available, over 17 million students were served by Title I funds. Of these, 60 percent were students in kindergarten through fifth grade; 21 percent were in grades six through eight; and 16 percent were in grades nine through twelve (U.S. Department of Education, retrieved May 31, 2011 from <http://www2.ed.gov/programs/titleiparta/index.html>).

Just as there are multiple factors that negatively affect student achievement, there are also several factors which have been associated with high or improved student achievement. These include high teacher job satisfaction, strong perceptions of principal support of teachers, high levels of relational trust, and high levels of teachers’ collective efficacy (Robinson, 2010; Silman & Glazerman, 2009; Huysman, 2008; Tschannen-Moran, 2004; Tschannen-Moran & Barr, 2004; Hoy, Tarter, & Witkoskie, 1992). Leadership behaviors and organizational routines, specifically transformational leadership and systems thinking within the school, have also been associated with high or improved student achievement (Eck & Goodwin, 2010; Terrell, 2010; Richardson, 2009; Garrett & Roberson, 2008). In light of this, these factors will play a crucial role in this study. While chapter two of this study will cover each of these factors in greater detail, it is appropriate to briefly describe them here before proceeding further.

## Leadership Theory

Leadership has been defined in many ways throughout history, and history books are filled with the exploits of, and lessons to be learned from, those recognized as the great leaders of religion, politics, the military, and other fields. In the contemporary study of leadership theory, leadership has been defined as “a process whereby an individual influences a group of individuals to achieve a common goal” (Northouse, 2007, p. 3). This definition is in contrast to the common belief that leadership is a trait naturally present in some individuals but lacking in others; the view of leadership as a process suggests that anyone can learn how to be a leader. Among the various theories of leadership as a process, one theory that has gained widespread popularity in both the business and educational fields has been the theory of transformational leadership.

### Transformational Leadership

Northouse (2007) thoroughly summarized and described the history of transformational leadership theory. The theory originated in 1978 with the seminal work of James MacGregor Burns. Burns described transformational leadership as a process, by which the leader makes a connection that heightens the morality and motivation of both the followers and the leader. Transformational leaders are those that attend to their followers’ motives and needs to help them maximize their performance. Burns contrasted this with transactional leadership, in which the leader deals with followers on a *quid pro quo* basis by either rewarding or penalizing them for their performance.

Transformational leadership was further defined by Bernard M. Bass in 1985. Bass asserted that transformational leadership and transactional leadership actually exist

on the same continuum, with leadership being characterized by seven factors, which indicate leadership ranging from laissez-faire to transactional to transformational. Four of the seven factors were identified with transformational leadership, considered by Bass to yield the most positive results on the leadership continuum. The four factors of transformational leadership are idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Leaders who exhibit each of these, according to Bass, would be transformational leaders whose followers would achieve beyond expectations.

Also in 1985, Bennis and Nanus identified key strategies that were commonly used by transformational leaders, whom they referred to as transforming leaders. Specifically, they found that transforming leaders exhibited a clear vision for their organizations' futures; acted as social architects by creating shared meanings for their organizations' people; built trust within their organizations by consistently following their stated vision; and had a sense of positive self-regard that guided them in utilizing their own strengths to minimize their weaknesses.

Finally, in works published in 1987 and 2002, Kouzes and Posner developed a model of transformational leadership that consists of five basic leadership practices to achieve extraordinary results. These leadership practices are consistent with both Bass's transformational leadership factors and Bennis and Nanus's strategies of transforming leaders. Specifically, Kouzes and Posner found that transformational leaders model the way by clearly stating their own beliefs and following through with them; inspire a shared vision by communicating a vision of positive outcomes and encouraging their

followers' visions; challenge the process by pursuing growth and improvement; enable others to act by creating environments where their followers can see the quality and value of their work; and encourage the heart by honoring their followers' accomplishments. To measure transformational leadership according to these five leadership practices, Kouzes and Posner developed a questionnaire known as the Leadership Practices Inventory, or LPI, that has been used extensively over the past two decades (Kouzes & Posner, 2009).

While there has been limited research on the effects of transformational leadership in schools on student achievement, there is some evidence of a relationship between transformational leadership and higher student achievement. In 2006, John A. Ross and Peter Gray conducted a study on the effects of transformational leadership in Canadian schools. They found that schools with more transformational leadership qualities had higher teacher efficacy, more teacher commitment to school mission, and higher student achievement. These results indicated that principals who use transformational leadership were more likely to have a positive effect on teachers, making a "small but practically important contribution to overall student achievement" (Ross & Gray, 2006, p. 798). This finding supports the need for studying transformational leadership in Title I schools.

Trust plays a crucial role in successful transformational leadership. While transformational leadership has been found to improve organizational citizenship behaviors, there have been studies that indicate that it only does so if employees trust their leader. Therefore, an understanding of relational trust is essential (Tschannen-Moran 2004; Tschannen-Moran, 2003; Podsakoff, MacKenzie, Moorman, & Fetter, 1990).



### Relational Trust

According to Bryk and Schneider (2002), relational trust is vital to a school's livelihood because of the high degree of interdependency and vulnerability that all role groups in a school – principals, teachers, students, and parents – have in regard to each other. Individuals in each group look to those in other groups, and in their own group, for evidence of four facets of trustworthiness: respect, competence, personal regard for others, and integrity. If they are not mutually trustworthy, the school is likely to have problems, such as low morale and low student achievement. This conclusion was supported by similar findings by Julie Reed Kochanek (2005).

Tschannen-Moran and Hoy have also done extensive research on relational trust, with findings similar to those of Bryk and Schneider. Where Bryk and Schneider have identified the four criteria of trustworthiness described above, Tschannen-Moran and Hoy have identified five aspects of trust: benevolence, reliability, competence, honesty, and openness (2000). Note that one of these trust aspects, competence, is also one of Bryk and Schneider's four trust facets. Further, note the similarity between Tschannen-Moran and Hoy's other trust aspects and Bryk and Schneider's remaining trust facets.

Benevolence, for example, is highly similar to personal regard for others, while the combination of honesty and openness are similar to integrity. Tschannen-Moran and Hoy also echoed the role in relational trust played by vulnerability; if no one is vulnerable, there is no need for trust. Trust, then, is one's willingness to be vulnerable to another.

More so than transformational leadership, research has linked relational trust to student achievement (Tschannen-Moran, 2004; Bryk & Schneider, 2002). Bryk and

Schneider studied 400 elementary schools in Chicago in their research on relational trust and school improvement. They found that trust was a key factor in predicting both improved student achievement and maintaining high achievement in the schools they studied. In Tschannen-Moran's case studies of Chicago elementary schools, she noted that schools with higher levels of trust also had higher collective teacher efficacy. At one school in particular, Tschannen-Moran found that as trust increased, there was a subsequent rise in collective teacher efficacy and student achievement. This not only suggested that trust is related to student achievement, but also reinforced the established link between collective teacher efficacy and higher achievement (Bandura, 1993; Goddard, Hoy, & Hoy, 2000).

Although relational trust and transformational leadership bear similarities to one another, they may be distinguished as typically representing two different perspectives within schools. Transformational leadership is conducted from the perspective of the building principal; teachers' relational trust in the principal comes, of course, from the teachers' perspective. For transformational leadership behaviors carried out from the principal's point of view to have success, the principal's behaviors must be genuine and trustworthy when seen from the teachers' point of view.

### Organizational Theory

Organizational theory dates back as far as the philosopher Plato's writings on leadership in ancient Greece. More recent historical examples of organizational studies include Machiavelli's writings on politics in the 1500s, Adam Smith's contributions on the division of labor in the late 1700s, and Max Weber's studies of charismatic leadership

and rational organizations in the late 1800s. In the 20<sup>th</sup> century, psychologist Kurt Lewin's studies gave rise to systems theory within organizational theory (Ash, 1992). According to systems theory, the key to understanding organizations lies in understanding how different aspects within the organizations are interrelated. Understanding those interrelationships is more beneficial than merely understanding the individual aspects of an organization, because change occurs through the interrelationships. From systems theory, systems thinking developed as a means of understanding how these interrelationships work; how one thing can influence another within the same organization.

### Systems Thinking

As the titular fifth discipline of Peter Senge's 1990 seminal work, *The Fifth Discipline: The Art & Practice of The Learning Organization*, systems thinking is defined by Senge as "a conceptual framework... to make the full patterns clearer, and to help us see how to change them effectively" (1990, p. 7). Senge's other four disciplines, consisting of personal mastery, mental models, building shared vision, and team learning, are held together by systems thinking. Although Senge asserted that systems thinking can only reach its full potential through application of the other four disciplines, it must be understood that systems thinking functions as the glue which binds all of the disciplines together. As such, systems thinking can rightly be viewed as being of paramount importance.

### Professional Learning Communities

In schools, systems thinking is embodied in professional learning communities, or PLCs. The concept of learning communities originated from Senge's description of learning organizations as those that seek continual improvement to successfully prepare for the future; from this, Senge would later coin the similar term, "learning community" (Senge, 1990).

In 1997, Shirley Hord applied Senge's learning organization principle of systems thinking to describe and define the term, "professional learning community." According to Hord, a professional learning community existed in a school where the principal invited faculty input in decision making, a shared vision based on a commitment to student learning was developed and utilized, the staff learned collectively and applied that learning to meet students' needs, each teacher's work in the classroom was reviewed by peers to bolster both individual and collective staff improvement, and where physical and human resources were devoted to the support of the preceding conditions. More recently, Hord has refined this description into five attributes of professional learning communities: supportive and shared leadership; collective learning and its application; shared values and vision; supportive conditions; and shared personal practice (2007). In 2006, Hord and Patricia Roy submitted an even briefer working definition of the subject, describing "schools as PLCs where educators collectively engage in continual inquiry on behalf of student learning and where staff and students gain from this way of working" (p.499).

Richard DuFour (2007) has also done extensive work in the field of professional learning communities. Like Hord, DuFour stressed the importance of teachers focusing their collective efforts on elements crucial to student learning. Evidence of this can be seen in such factors as the development and use of common formative assessments within a school, and the use of data to assess the individual and collective effectiveness of the school's faculty. It is noteworthy that DuFour and others (Hord, 2007; Fullan, 2006) have expressed concern that the term "professional learning community" has been jeopardized in recent years. This, they say, is due to the fact that many schools call themselves professional learning communities but fail to adhere to the critical attributes of PLCs described above.

A link has been established between professional learning communities and higher student achievement (Richardson, 2009; Roy, 2006). Richardson conducted a quantitative dissertation study on 40 low-achieving and 40 high-achieving elementary schools in California. She found that the higher-achieving schools were both more aligned with Senge's (1990) principles of learning communities and more likely to be perceived by their principals as professional learning communities. Roy, working with Shirley Hord, reviewed studies of professional learning communities conducted by various researchers between 1989 and 2005. Among the positive outcomes they identified for professional learning communities was higher student achievement. This supports the value of studying professional learning communities in Title I schools. The most successful professional learning communities, however, will be those that possess a high degree of collective teacher efficacy.

### Collective Teacher Efficacy

Efficacy, as the term applies to an individual, refers to the individual's belief in his or her abilities. Overall, an individual with a strong sense of efficacy is confident that he or she is an effective person and can make a positive difference in the world. Of course, efficacy can also be situational and dependent on the individual's particular skills and knowledge. For example, a history teacher may have a very high sense of efficacy in his ability to teach students about World War II; but if required to fill in on short notice for an absent colleague who teaches a different subject, might in that situation feel a very low sense of efficacy.

Seminal work in the study of efficacy has been done by Albert Bandura (1977, 1993). Bandura found that self-efficacy is related to an individual's persistence in the face of challenging circumstances; the higher one's self-efficacy, the more likely he or she is to persist through initial difficulties and failures to achieve ultimate success. In teachers, Bandura found that these qualities of self-efficacy were related to higher math and reading achievement among their students. Bandura also noted that organizations develop efficacy as a collective trait. In the case of entire schools, Bandura referred to teachers' collective efficacy as crucial toward the overall achievement levels of a school's student body as a whole. He also noted that, despite the importance of this factor, it had not yet been studied in depth.

Roger Goddard, Wayne Hoy, and Anita Woolfolk Hoy subsequently filled this gap in efficacy research with their study of collective teacher efficacy, which was in turn followed by the work of Megan Tschannen-Moran and Marilyn Barr. Collective teacher

efficacy is defined as “the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students” (Goddard, Hoy, & Hoy, 2000, p. 480). Similarly, Tschannen-Moran and Barr (2004) have defined it as “the collective perception that teachers in a given school make an educational difference to their students over and above the educational impact of their homes and communities” (p. 190).

While individual and collective teacher efficacy can influence one another, it is important to distinguish the two. The former is a characteristic of individual teachers, whereas the latter is a property of the school as a whole. Further, it must be understood that collective teacher efficacy is not simply the mean level of individual teacher efficacy for a school’s entire faculty. Instead, collective teacher efficacy represents the ability of the school faculty as a whole to teach students and influence their achievement.

Collective teacher efficacy can be quantitatively measured by the Collective Teacher Efficacy Scale, originally developed by Goddard, Hoy, and Hoy (2000) and further utilized by Tschannen-Moran and Barr (2004).

An interesting finding from the above research about collective teacher efficacy is that it tends to hold steady as a component of school culture. Once a school’s collective teacher efficacy has been established, whether high or low, it is difficult to change; this is because it becomes a more or less fixed component of the school’s culture, and cultures are, by their nature, resistant to change (Goddard, Hoy, & Hoy, 2000). Therefore, schools that establish high collective teacher efficacy should be able to maintain it and enjoy its benefits over a long period of time.

Several school characteristics have been associated with high levels of collective teacher efficacy. These characteristics fall into three categories: school practices, teacher behaviors, and principal leadership behaviors.

School practices that have been associated with high collective teacher efficacy include staff collaboration, teacher ownership in school decisions, and teachers' commitment to community partnerships. Teacher behaviors that have been linked to high collective teacher efficacy include persistence in working with students who experience difficulty in improving their achievement, giving extra instruction to underachieving students, and carefully managing student behavior in the classroom. Principal leadership behaviors that have been associated with high collective teacher efficacy include listening to teachers and allowing teachers to share in decision-making for school improvement.

Collective teacher efficacy is an important factor to study in the research of student achievement in Title I schools. This point is affirmed by the strong link, established by multiple studies, between collective teacher efficacy and student achievement (Cybulski, Hoy, & Sweetland, 2005; Tschannen-Moran & Barr, 2004; Goddard, Hoy, & Hoy, 2000; Bandura, 1993). After Bandura's initial finding that collective teacher efficacy had a positive relationship to higher student achievement, Goddard, Hoy, and Hoy conducted a study of 452 teachers in 49 elementary schools to further study this relationship. Their results indicated a strong correlation between the two factors: for each one-unit increase in collective teacher efficacy, there was a corresponding increase of over 40 percent of a standard deviation in a school's math and reading achievement scores. Subsequent studies of collective teacher efficacy and student



achievement by Tschannen-Moran and Barr (2004) and Cybulski, Hoy, and Sweetland (2005) found similar results. All of these studies are further detailed in Chapter Two of this dissertation.

### Student Achievement in Title I Schools

High-poverty schools, commonly known as Title I schools, often fall short in student achievement. However, it is also true that some Title I schools display exceptional student achievement, relative to their fellow Title I schools. In Montana, as in the other states of the U.S., Title I schools that have exhibited such exceptional performance are recognized annually for their achievements. Since 2005, the Montana Office of Public Instruction has recognized two Title I schools each year as distinguished schools. One school is recognized annually for exceptional student achievement for two or more consecutive years, and one for closing the achievement gap between student groups. The population for this study was drawn from Montana Title I schools that had received the first of these two awards: the award for exceptional student achievement for two or more consecutive years.

Student achievement is of paramount importance for all American schools. Attaining high student achievement has been particularly challenging for those high-poverty schools designated by the federal government as Title I schools. It is therefore desirable to conduct research that aids in identifying and describing traits of Title I schools that have been more successful than their peers in meeting this challenge. The intended outcome of such research is to help facilitate improved student achievement in other Title I schools.

### Problem

Leadership and organizational routines have been linked to positive outcomes for schools, including high student achievement. Specifically, schools that exhibit transformational leadership and organizational systems, such as professional learning communities, have been found to have high student achievement (Eck & Goodwin, 2010; Terrell, 2010; Richardson, 2009; Garrett & Roberson, 2008). Therefore, transformational leadership and certain organizational system, such as professional learning communities, are considered likely to result in higher student achievement. Relational trust, which falls under the mantra of leadership behaviors, and collective teacher efficacy, which is indicative of organizational routines, have likewise been identified as factors associated with higher student achievement (Robinson, 2010; Cybulski, Hoy, & Sweetland, 2005; Tschannen-Moran, 2004; Tschannen-Moran & Barr, 2004; Goddard, 2002; Goddard, Hoy, & Hoy, 2000).

Title I schools that have won awards for high student achievement have, by definition, exhibited higher student achievement than other Title I schools. The problem in this case was that, while transformational leadership and organizational systems have been generally associated with high student achievement, it was not known if Montana's high-achieving Title I schools have practiced transformational leadership, developed relational trust, utilized professional learning communities, or built up collective teacher efficacy in the course of producing high student achievement.

A study directed toward the principal leadership and organizational routines of these award-winning Montana Title I schools was conceived to help determine the role, if

any, that transformational leadership and organizational systems have played in their success. The findings of this study could thus result in recommendations for other Title I schools to facilitate in improving their own student achievement. The study's findings could also yield recommendations for further research into the field.

### Purpose

The purpose of this study was to describe the role played by principal leadership behaviors and organizational routines in Montana's award-winning Title I schools. Specifically, the role of principals' transformational leadership behaviors, principals' leadership behaviors to build relational trust, school practices as professional learning communities, and collective teacher efficacy in these schools were studied. This study was conducted within those Title I schools annually recognized by the Montana Office of Public Instruction as Montana Distinguished Schools for Exceptional Student Performance for Two or More Consecutive Years during the period 2006 through 2010. Schools from this group that qualified for the study were those that still employed the same building principal that led the school during the year that it had won its distinguished school award.

### Assumptions

There is a well-documented body of research on the relationship of principal leadership behaviors and organizational routines to student achievement. Due to these established links, an underlying assumption of this study was that some degree of principal leadership behaviors, possibly consistent with transformational leadership

practices and relational trustworthiness, would be present in each case school. A second underlying assumption was that some type or degree of organizational routines, possibly embodied as professional learning communities and collective teacher efficacy, would also be present.

### Research Questions

In light of the need to learn how principal leadership and organizational routines may have contributed to the high achievement of Title I schools that have been recognized as Montana Distinguished Schools by the Office of Public Instruction, a study was proposed, guided by the research question, “How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana’s distinguished Title I Schools?” A supporting subquestion for principal leadership behaviors was, “How does relational trust contribute to the high achievement of Montana’s distinguished Title I schools?” A supporting subquestion for organizational routines was, “How does collective teacher efficacy contribute to the high achievement of Montana’s distinguished Title I schools?”

### Theoretical Lens: Organizational Theory and Transformational Leadership

As pertains to organizational theory, a professional learning community exists when a school practices supportive and shared leadership; when the faculty engages in and applies collective learning; when the administration and faculty share in common values and vision for the school; when a general culture of supportiveness pervades the school; and when faculty share their personal practices with one another (Hord, 2007).

These traits of professional learning communities share common ground with Kouzes and Posner's (2002) leadership practices of transformational leadership: modeling the way; inspiring a shared vision; challenging the process; enabling others to act; and encouraging the heart.

Transformational leadership has the moral effect of raising the consciousness of both the leader and the followers (Northouse, 2007). Similarly, in a professional learning community, the school culture values educators who continually learn together and apply their learned knowledge and skills toward student learning (Roy, 2006). This commitment could also be seen as a moral imperative on the part of educators, a notion that presents an intuitive fit between professional learning communities and transformational leadership. Therefore, a key outcome of the study proposed here was to learn whether transformational leadership and professional learning communities would be found together in any or all of the subject schools.

It has also been established that trust is vital to the successful practice of transformational leadership, and a strong relationship has been noted between teacher perceptions of principals' transformational leadership behaviors and teacher trust in principals (Northouse, 2007; Tschannen-Moran, 2003). The connection between transformational leadership and relational trust has actually sparked debate as to whether trust is an element of transformational leadership or transformational leadership is an element of trustworthy leadership (Tschannen-Moran, 2003). Regardless of one's opinion on the subject, it is evident that transformational leadership and relational trust are well-suited to one another. Therefore, both were investigated by this study.

Organizational theory, embodied in professional learning communities, also offers an appropriate theoretical lens through which to interpret this study's findings because of its relationship to this study's other key factor of interest: collective teacher efficacy. Just as a school may become a professional learning community, collective teacher efficacy is also a school-wide trait. In addition to this commonality, it stands to reason that a successful professional learning community will be one in which teachers' collective efficacy is strong. The trappings of a professional learning community, such as teacher committees, mean little if teachers do not believe that their work will make a positive difference, or if teachers lack the will to persist in the face of adversity. Finally, while collective teacher efficacy is viewed here in relation to professional learning communities, it is interesting to note that it has also been found that schools that practiced transformational leadership also had higher levels of collective teacher efficacy (Ross & Gray, 2006a).

The nature of this study, which sought to investigate the roles played by leadership behaviors and organizational routines in student achievement, necessitated that its data be interpreted through a lens of transformational leadership and organizational theory, as embodied by schools as professional learning communities. The respective relationship of these two factors to relational trust and collective teacher efficacy reinforced the appropriateness of this approach.

### Research Design

This study's design consists of an embedded multiple-case study that was conducted in Montana schools that have been recognized by the state's Office of Public

Instruction as distinguished Title I schools during the period, 2006 to 2010. This design's collection and analysis of data addressed the need to learn how principal leadership behaviors and organizational routines have contributed to the high levels of student achievement, relative to other Montana Title I schools, in schools that have been recognized for exceptional student achievement for two or more consecutive years. The findings of this study could thus result in recommendations for other Title I schools to facilitate in improving their own student achievement. The study's findings could also yield recommendations for further research into the field.

Qualitative data was gathered through interviews, focus groups, observations, and document analysis. Quantitative data was also gathered through the use of surveys designed to measure transformational leadership and collective teacher efficacy. These surveys are fully detailed in chapter three of this dissertation. To enhance the study's credibility, a pilot study was conducted prior to the final multiple-case study.

#### Rationale for Quantitative Data Collection Factors

Quantitative data was collected in regard to transformational leadership and collective teacher efficacy for very specific reasons. It should first be noted that the use of quantitative data in this embedded multiple-case study was not done in the interest of producing a mixed methods study. Although Yin (2009) acknowledged that "certain kinds of case studies already represent a form of mixed methods research" (p. 63), he also stated that "embedded case studies rely more on holistic data collection strategies" (Yin, 2009, p. 63). Mixed methods studies typically involve large amounts of quantitative data, intended to draw return rates sufficient to produce statistically significant results; this

quantitative data is then expanded upon by qualitative data. Also, Yin (2009) observed that mixed-methods research is often not case study research; for example, historical research is sometimes done using mixed methods, and “mixed methods research need not be limited to combinations of quantitative and qualitative methods. For instance, a study could employ a survey to describe certain conditions, complemented by an experiment that tried to manipulate some of those conditions” (p. 63).

In an embedded multiple-case study, on the other hand, quantitative data is used to provide additional perspectives on qualitative data, and statistical significance of the quantitative data may not be a major concern, as the holistic qualitative data constitutes the bulk of the study. In a mixed methods study, the opposite is true: quantitative data is the main feature, with qualitative data used in support. In this dissertation study, quantitative data was used to help the researcher form qualitative questions for focus group discussions that were subsequently conducted at each school; focus group questions were based on the highest and lowest scoring items from each survey at each case school. Mean scores for perceptions of transformational leadership and collective teacher efficacy at each school were also recorded to add perspective to the qualitative data on these respective issues.

As an overarching leadership theory, transformational leadership was a factor of primary interest to the central research question of this study, which asks how principal leadership behaviors have contributed to the relatively high student achievement of the schools in question. The quantitative data on teachers’ perceptions of transformational leadership behaviors by the principal at each school helped inform the qualitative



investigation of the principal leadership behaviors aspect of the central research question, by serving as a basis from which to formulate each school's focus group questions, in the interest of learning how transformational leadership had contributed to student achievement at each school. Mean scores for the principal's transformational leadership practices were also noted, both for the teacher-assessed questionnaires and for each principal's self-assessed questionnaire. This was done to add further perspective to the rich, thick qualitative data at each school, in keeping with Yin's (2009) advice that embedded multiple-case studies can use quantitative data for such purposes.

In the case of collective teacher efficacy, it is a factor that has been strongly linked to student achievement in previous studies, as noted above. Therefore, quantitative data on the level of collective teacher efficacy at each subject school was useful in answering the other aspect of this study's central research question, that of how organizational routines have contributed to the relatively high student achievement of the subject schools, as well as the related subquestion on the role specifically played by collective teacher efficacy. As with the quantitative data on transformational leadership, quantitative data on collective teacher efficacy was used to formulate questions for the focus group discussion at each case school; the purpose was to help the researcher learn how collective teacher efficacy had contributed to each school's student achievement.

Although it would have been possible to also administer quantitative questionnaires on relational trust, this study instead focused on relational trust through only qualitative methods. The qualitative nature of the study's research questions demanded that there not be an over-emphasis on the use of quantitative data. This

decision was also due in part to the likelihood that return rates of quantitative questionnaires would be higher if the number of questionnaires administered to each teacher included in the study was limited to no more than two. Administering three or more questionnaires to each participant might have resulted in lower return rates.

#### Rationale for Qualitative Data Collection Factors

All four factors of interest to this study – transformational leadership, relational trust, professional learning communities, and collective teacher efficacy – were the subject of qualitative research. Like transformational leadership, relational trust was of special interest in the study of principal leadership behaviors, both in its own right and as it pertained to transformational leadership. As pertained to organizational routines, professional learning communities were an essential point of research for this study, as was collective teacher efficacy.

#### Pilot Study

The chief advantage to conducting a pilot study is that it helps ensure that the final research study will be robust. This is due to the fact that the pilot study allows the researcher to practice data collection in a real-life setting. For example, interview questions and techniques may be refined during the trial run that is the pilot study. Inquiries and responses can aid in identifying whether the data collection methods are truly appropriate for the study's purpose and research questions. Moreover, the use of the pilot study allows the researcher to make any necessary adjustments toward this end prior

to beginning data collection for the final study. In this sense the pilot study is best understood as a formative process (Yin, 2009).

### Multiple-Case Study

Following the pilot study, data collection occurred at all eligible schools that had been recognized by the Montana Office of Public Instruction as distinguished Title I schools for Exceptional Student Performance for Two or More Consecutive Years, during the period 2006 to 2010. With one school honored each year, a total of five schools statewide met this criterion. To be included in the study, however, it was necessary that a school still employed the same principal it had during the year it won its award. After adjusting for this requirement, the number of eligible schools was three.

The fact that this design was a multiple-case study gave it an inherent advantage over a single-case study. It has been recommended by Yin (2009), that researchers who have the choice between selecting either a single-case or multiple-case design should opt for conducting a multiple-case study. This is because with even “a ‘two-case’ case study, your chances of doing a good case study will be better than using a single-case design” (Yin, 2009, pp. 60-61). Single case designs, as Yin puts it, require the researcher to put all of his or her eggs in one basket. Conditions unique to the single case may exist, making it impossible to generalize the results to a larger population. However, studying even two cases makes direct replication possible, resulting in more powerful analytic conclusions, just as two independent experiments that yield the same result represent more powerful evidence than the results of a single experiment.

The study proposed here may be best understood as an embedded multiple-case study. As noted by Yin, the use of quantitative surveys at individual sites is an acceptable research method for an embedded design multiple-case study. The reason for using such surveys in this study was to help the research form focus group questions directed toward how transformational leadership and collective teacher efficacy have contributed to each school's student achievement. Results of the surveys used in this study were not aggregated across all of the schools involved, as that would have fundamentally changed the nature of the study. Instead of being a multiple-case study, it would then have been a single-case study, with the case collectively consisting of all of the included schools. Instead, each school's survey data was analyzed only as part of the findings for that particular school. This is a hallmark of an embedded multiple-case study.

Only after each school's data had been analyzed individually would cross-case analysis of the data be conducted to determine whether there were common threads of how transformational leadership, relational trust, professional learning communities, and collective teacher efficacy had contributed to student achievement across schools. This was done in keeping with Yin's (2009) admonition that the strength of a multiple-case study lay in its potential for finding repeated patterns, much as how multiple experiments that produce similar results are more credible than the result of a single experiment.

### Analysis of Study

Prior to collecting and analyzing qualitative data for this multiple-case study, quantitative data was collected from each school's faculty to assess the mean levels of transformational leadership behaviors and collective teacher efficacy at each school. By

definition, the Title I schools selected for participation in this study were already known to have high student achievement, relative to other Montana Title I schools. This quantitative data provided a starting point in learning how transformational leadership and collective teacher efficacy had contributed to each school's high student achievement.

Analysis of qualitative case study data has suffered from a lack of attention, and there are few set protocols or formulas for such analysis. Typically, data analysis is the most difficult part of case study research (Yin, 2009). To address this difficulty, Yin recommends the development of a general data-analysis strategy, and the use of a specific analytic technique suited to that strategy.

A preferred strategy for data analysis is to follow the case study's original theoretical propositions. In this study, the general data-analysis strategy followed the study's theoretical lens of organizational theory and transformational leadership. These served as a data-analysis framework, which guided the researcher to ensure that the study's collected data aligned with its desired data.

As Kouzes and Posner's Leadership Practices Inventory (2001) was used to measure transformational leadership in each of the schools studied, analysis of the study's qualitative data was conducted with an eye toward Kouzes and Posner's five basic practices of transformational leaders: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. Also in regard to leadership behaviors, qualitative data was scrutinized for evidence of relational trust

factors: benevolence, competence, reliability, honesty, and openness (Hoy & Tschannen-Moran, 2000).

Qualitative analysis of organizational routines was based on Roy and Hord's (2006) description of a professional learning community as a school characterized by collegial relationships, in which teachers collaborate for the continual improvement of teaching and learning.

The analytic technique for this study involved the use of rival explanations as patterns, or pattern matching for independent variables. This technique has been recommended for studies in which several cases have had similar outcomes, and the study has focused on how this outcome occurred each time (Yin, 2009). In this case, several Title I schools have been identified as having high student achievement relative to their peers. This study investigated how the independent variables of principal leadership behaviors and organizational routines have contributed to the outcome of high student achievement. As data in this case was analyzed, the researcher considered and identified rival explanations as to how the outcome of high student achievement may have occurred at each school. These rival explanations were minimized by the results of data gathered in the study. Due to the fact that this was a multiple-case study, data analysis looked for repetition of results in multiple schools. This made the study's results more robust, and strengthened the argument against any rival explanations.

#### Limitations of the Study

There are limitations to every research study. In this case, the collection of qualitative data in real-life settings made it impossible to control variables which may

have affected the data. Also, the use of interviews and self-reported quantitative surveys opened the possibility of mistaken or biased responses by the study's participants. Finally, the collection and analysis of data by a single researcher presented a risk of researcher bias. Triangulation of data, to be discussed in chapter three, is one way of protecting the study's validity and reliability. Also, recognizing and stating the study's limitations helps to ensure the collection of robust data and valid, reliable results.

Limitations of this study are:

1. Self-report questionnaire responses, such as those that this study used to gather data on transformational leadership behaviors and collective teacher efficacy may be affected by participants' biases (Gliner & Morgan, 2000).
2. Similarly, individuals that were interviewed for this study may have had personal biases which affected their responses to interview questions.
3. Because all data collection and analysis was done by a single researcher, the possibility of researcher bias must be considered.
4. Results of case study research are not intended to be generalized to the larger population. Although the fact that this was a multiple-case study may mitigate this limitation, it must still be taken into account.

Several steps were taken to minimize validity threats that could arise from these limitations. Triangulation of data; respondent validation, also known as member checking; the use of only quantitative surveys which have been successfully tested for validity and reliability; and review of codes, categories, and findings by a critical colleague to address the possibility of researcher bias were all utilized. These methods, to

be detailed in Chapter Three, helped ensure that data collected in this study was rich and robust.

### Delimitations of the Study

Delimitations of this embedded multiple-case study are:

1. This study included only teachers, principals, and one former principal from Title I schools that have been recognized by the Montana Office of Public Instruction as Montana Distinguished Schools for Exceptional Student Performance for Two or More Consecutive Years during the period 2006 to 2010.
2. The data collection period for this study took place from approximately October 1 to November 15, 2011.
3. The principal and faculty of each participating school were asked to complete two quantitative questionnaires. The Collective Teacher Beliefs Scale (Tschannen-Moran & Barr, 2004), to measure collective teacher efficacy, was administered to the faculty of each school. A related questionnaire, the Principal Sense of Efficacy Scale (Tschannen-Moran & Gareis, 2004) was administered to each building principal. The Leadership Practices Inventory (Kouzes & Posner, 2001), to measure transformational leadership, was administered to the principal and faculty of each school. Principals completed the self-assessment version of this questionnaire; teachers completed the observer version.



4. Qualitative data collected consisted of interviews with the principal and selected teachers from each school, teacher focus groups, observations, and documents collected from the school.

### Significance of Study

This embedded multiple-case study investigated how principal leadership behaviors and organizational routines have contributed to the high achievement of Montana's distinguished Title I schools. Of specific interest were the roles that were played, if any, by transformational leadership and professional learning communities in each school's outcome of high student achievement relative to other Montana Title I schools. The roles of relational trust and collective teacher efficacy were similarly investigated.

It is hoped that the findings of this study will result in recommendations for other Title I schools to facilitate in improving their own student achievement. The multiple-case nature of the study was utilized to make its results more reliable and dependable for this purpose than those of a single-case study (Yin, 2009). The study's findings will add to the pool of research on the roles of transformational leadership, professional learning communities, relational trust, and collective teacher efficacy in student achievement. As such, this study may also be intended to yield recommendations for further research into the field.

### Definitions of Terms

The definitions of terms listed below were applied throughout this dissertation.

Any other relevant terms were defined as they were used hereafter.

1. Title I schools – Title I schools refers to schools designated as high-poverty schools by the federal government. Specifically, schools in which at least 40 percent of the students enrolled are defined as “poor children” by the federal government can receive Title I funding for school-wide programs. All schools included in this study are Title I schools.
2. High student achievement – In this study, schools defined as having high student achievement were Title I schools that have been recognized as having high student achievement, relative to other Montana Title I schools, during the period from 2006 to 2010. The Montana Office of Public Instruction formally refers to this award as the award for Exceptional Student Performance for Two or More Consecutive Years.
3. Transformational leadership – Kouzes and Posner (2007) used James MacGregor Burns’ 1978 definition of transformational leadership as leadership that “ultimately becomes moral in that it raises the level of human conduct and ethical aspiration of both the leader and the led, and thus it has a transforming effect on both” (p. 122). Kouzes and Posner’s questionnaire for measuring transformational leadership behaviors, the Leadership Practice Inventory, or LPI, was utilized in this study. It was administered to teachers at each school studied, who completed it in reference to their building principal.

Each building principal also completed a self-assessment version of the LPI. Qualitative data collected at each subject school was also analyzed for evidence of transformational leadership, based on Kouzes and Posner's five practices of transformational leadership: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart (2007).

4. Relational trust – Tschannen-Moran and Hoy define relational trust as one party's willingness to be vulnerable to another, based on the belief that the other is benevolent, reliable, competent, honest, and open (2000). Qualitative data collected at each school was analyzed for evidence of relational trust.
5. Organizational routines – In this study, organizational routines refer to characteristics and practices of the schools that were researched. Specific organizational routines that were of interest in these cases were those that indicated the existence of professional learning communities and collective teacher efficacy.
6. Professional learning communities – According to Roy (2006), a professional learning community is a school “where educators collectively engage in continual inquiry on behalf of student learning and where staff and students gain from this way of working” (2006, p. 499). Put another way, teachers in PLCs have collegial relationships with one another, and regularly collaborate to continually improve teaching and learning. In this study, qualitative data

was analyzed to discern the existence or lack of these organizational routines within each subject school.

7. Collective teacher efficacy – Collective teacher efficacy is defined as “the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students” (Goddard, Hoy, & Hoy; 2000; p. 480). In this study, collective teacher efficacy at each subject school was measured by administering to teachers the Collective Teacher Beliefs Scale (Tschannen-Moran, 2011). Qualitative data was also analyzed for evidence of collective teacher efficacy at each school studied.

### Summary

While transformational leadership and professional learning communities have been generally associated with high student achievement, it is not known whether this is true in the case of Title I schools. In particular, it is not known how Montana’s high-achieving Title I schools have practiced transformational leadership and functioned as professional learning communities in the course of producing high student achievement. The roles played by relational trust and collective teacher efficacy in these schools’ student achievement are also uncertain. This embedded multiple-case study addressed these gaps in the research.

This study was conducted at eligible Montana Title I schools that have been recognized by the Montana Office of Public Instruction as Montana Distinguished Schools for Exceptional Student Performance for Two or More Consecutive Years during

the period, 2006-2010. Quantitative data was collected from each school using questionnaires that have been proven valid and reliable for measuring transformational leadership and collective teacher efficacy. The highest and lowest scoring items on each survey, administered at each school, provided the basis for focus group discussion questions developed for each case school. Each school's mean scores for transformational leadership and collective teacher efficacy also added perspective to the qualitative data collection and analysis for that school.

Qualitative data was collected from each school through interviews, documents, observations, and focus group discussions. The qualitative data was analyzed through the theoretical lens of organizational theory and transformational leadership. Yin's (2009) analytic strategy of pattern matching for independent variables was utilized to investigate how the independent variables of principal leadership behaviors and organizational routines have contributed to the outcome of high student achievement at each school. This strategy was also used to account for any rival explanations as to how each school produced high student achievement, relative to other Montana Title I schools.

To produce a robust study, data triangulation, member checking, and collegial review of codes and findings were utilized. Also, the acknowledgement of the study's limitations was used to aid the researcher in avoiding misuse of the data. Using a multiple-case study design decreased the risk of results that do not apply to broader populations, a flaw common to single-case studies.

Ideally, this study's significance will be to result in recommendations for other Title I schools to facilitate in improving their own student achievement. At minimum, the

study's findings will add to the pool of research on the roles of transformational leadership, professional learning communities, relational trust, and collective teacher efficacy in student achievement. As such, this study may also yield recommendations for further research into the field.

## CHAPTER II

## REVIEW OF LITERATURE

Introduction

Historically, concerns over the academic achievement of America's students date back to the Soviet Union's 1957 launch of the Sputnik satellite. Amidst Cold War fears that this event implied the superiority of Soviet ballistic missile technology, a secondary fear emerged: that such seeming advantages held by the Soviets over the U.S. were the result of a superior Soviet educational system. Subsequently, the federal government passed the National Defense Education Act in 1958 to help American schools "catch up" to those in the Soviet Union, with a particular emphasis placed on mathematics and science education (Bankston, 2010). In light of the later accomplishments of the U.S. space program, and even more so of the eventual U.S. victory in the Cold War and the collapse of the Soviet Union, such fears may now seem ill-founded.

Nevertheless, the die had been cast. In the following decades, politicians, educators, and the public would continue to compare American students to those of foreign countries. Typically, these comparisons involved the performance of American students on international achievement tests. If American students' aggregate scores on these tests ranked nearer the middle of the pack, rather than at the top of the rankings of student achievement scores by country, concerns over the failure of the American educational system would again be raised.

These concerns, and their accompanying demands for educational change in the U.S., reached new levels following the 1983 publication of the federal government report, *A Nation at Risk*. According to this report, international and college admission test scores indicated a creeping growth of mediocrity among American students during the 1960s and 1970s. Among its many recommendations were calls for a lengthened school year, and that more English, math, and science classes be required in order for American students to graduate from high school (Bankston, 2010).

In the wake of *A Nation at Risk*, school reform efforts at multiple levels of government were launched across the U.S. At the federal level, these efforts would culminate in the 2002 passage of the No Child Left Behind Act, or NCLB. This law hinges largely on student academic achievement, as measured by standardized tests administered to public school students in each state. In 2009, the Department of Education announced a new program titled Race to the Top; this program also focuses on state standards and student achievement. Like No Child Left Behind, Race to the Top ties federal education funding for the states to factors that include student achievement. While there is debate as to the wisdom of placing so great a policy emphasis on student achievement as judged by test scores, it is an undeniable fact that student achievement continues to be a primary focus of the American educational system.

Considering the importance that has been ascribed to student achievement, it is natural to look both for factors that have been associated with higher student achievement, and for those associated with lower student achievement. Once identified, schools and policymakers can seek to maximize the former and minimize the latter;



successfully doing so could be reasonably expected to result in higher student achievement. Fortunately, critical factors of each type have already been identified.

Research has linked lower student achievement to higher levels of student poverty (Johnson, Strange, & Madden, 2010; Aste, 2009; Paciotti, 2009). Other factors related to lower student achievement, such as teacher turnover and attrition, have also been found to be more common in schools that serve high percentages of low-income students (Aguilar, 2010; Keesler & Schneider, 2010; Reid, 2010; Smits, 2009; Heck, 2010). Thus, student poverty has been identified as a primary factor in relation to lower student achievement.

From a national perspective, then, a logical solution for raising student achievement would be to simply reduce the number of Americans living in poverty. This, of course, has proven to be difficult if not impossible. President Lyndon Johnson declared a “War on Poverty” as the heart of his so-called Great Society programs in the mid-1960s. Despite this and subsequent anti-poverty programs in the decades since, the percentage of Americans living in poverty has remained practically unchanged. So, government efforts to decrease or end American poverty have, at present, been unsuccessful.

Another option for the federal government in aiding American students, and poor students in particular, addressed the issue by providing federal funding designated for the benefit of students that the government categorized as poor. Also created as part of President Johnson’s War on Poverty, this legislation passed as Title I of the Elementary and Secondary Education Act of 1965.

Title I distributes federal funds to local school districts throughout the U.S. that serve a high percentage of low-income students; schools designated as Title I schools usually serve student enrollments where at least 40 percent of the students come from families identified by the U.S. Census Bureau as low-income. In keeping with the government's mission of improving student achievement, Title I programs today are often dedicated to helping students meet state standards by providing extra instruction in such core subjects as reading and mathematics.

Just as factors related to low student achievement have been identified, so too have factors related to higher student achievement. Of course, just as high poverty is associated with lower student achievement, students whose families do not live in poverty are more likely to have higher student achievement. At the societal level, then, decreasing poverty could be expected to result in the added benefit of improved student achievement. As stated, however, the poverty problem has persisted in spite of decades of attempted government solutions. In the meantime, educators must look for solutions that they may enact for themselves. Fortunately, several school-related factors have been associated with higher student achievement.

These include both principal leadership behaviors and organizational routines. In the former category, transformational leadership behaviors and relational trust have both been linked to higher student achievement. In the latter category, professional learning communities have been theorized to improve student achievement, while collective teacher efficacy has been empirically related to higher student achievement.

If more schools exemplified these factors, then, it is reasonable to expect that higher student achievement could result. In light of the established link between poverty and lower student achievement, Title I schools, which by definition have higher percentages of low-income students and are thus more likely to suffer from low achievement, may stand to benefit greatly from the application of transformational leadership, relational trust, professional learning communities, and collective teacher efficacy. Since some Title I schools have been recognized for exceptional student achievement in comparison to their fellow Title I schools, it is of interest to explore whether these factors may have played a role in their success.

### Literature Review

This chapter reviews the literature on the five topics essential to this study. First, a review will be made of literature related to Title I and of efforts to recognize and learn from Title I schools in Montana and nearby states that have exhibited improved student achievement. The other four topics are related to this study's theory base, which incorporates both organizational routines, and leadership theory. Under leadership theory, transformational leadership and its importance to schools will be discussed. Also under leadership theory, relational trust will be thoroughly defined and explained as a crucial factor in school reform and improvement. Relevant literature on professional learning communities as pertaining to organizational routines will be defined and explained as well. Finally, collective teacher efficacy will be defined and explained as an organizational characteristic that is crucial to student achievement.

Title I

As stated, Title I was passed into law as part of the Elementary and Secondary Education Act of 1965. This law, in turn, was part of President Lyndon Johnson's War on Poverty, which was itself a centerpiece of the Great Society that President Johnson had promised to build in the United States.

Conceived at the peak of the 1960s Civil Rights Movement, Title I invoked civil rights in its function of granting federal funds to schools with high percentages of low-income students. Its goal of improving educational access for poor children has been rightly viewed as one of President Johnson's key steps in advancing the cause of civil rights in America.

Title I, however, followed in the wake of the 1958 National Defense Education Act, which had been passed as a result of Cold War anxieties raised by the Soviet Union's launch of the Sputnik satellite in 1957. Born of concern that the launch of Sputnik indicated the superiority of the Soviet educational system, this act appropriated \$900,000,000 for math and science education in U.S. public schools over the next four years (Bankston, 2010). Political and public anxiety over the performance of American schools versus those of foreign nations, however, would continue over the ensuing years and decades. This focus on educational performance and outcomes would eventually clash with Title I's original focus on educational access and inputs.

The contrasting priorities of educational inputs and educational outputs reached a day of reckoning with the 1983 publication of *A Nation at Risk*. Citing American students' decreasing scores on achievement tests and college entrance exams during the

1960s and 1970s, this report decried the squandering of student achievement gains that had been made in the years immediately following the Sputnik crisis. While Title I had provided federal monies for remedial instruction of poor children, the apparent rise of mediocre student achievement that followed its passage now rallied those who advocated for competitive outcomes for American students. Title I would subsequently be revised to reflect this renewed demand for higher achievement.

### Title I and Student Achievement

The 1988 reauthorization of the Elementary and Secondary Education Act created a dramatic change in Title I: for the first time, the academic achievement of Title I students would be a factor in identifying poorly performing schools in each state. In 1994, Title I was further changed with the reauthorization of ESEA as the Improving America's Schools Act. Combined with President Bill Clinton's "Goals 2000" program, this act required, for the first time, that achievement standards for Title I students had to be the same as those for non-Title I students. In 2002, the quest for equal results was taken to a new level by that year's reauthorization of ESEA, the No Child Left Behind Act, which tied federal education funding to school accountability and student achievement testing. In 2009, the Obama administration announced its Race to the Top grant program. This program offered \$4.35 billion in funds to be awarded to states on a competitive basis; once again, student achievement scores would be heavily emphasized in determining which states would "win the race" to receive additional federal monies (Wang, 2011).

Title I remains the largest investment of ESEA, as judged by federal expenditures. In 2006, for example Title I spending totaled \$12.7 billion, fully one-third of all federal spending on K-12 schools in the U.S. (Liu, 2008). As stated, however, its original mission of focusing funds for increased educational access for poor students has evolved over the past three decades to become one primarily focused on student outcomes, which are largely judged by student achievement.

#### Improving Achievement for Title I Students and Schools

In light of this evolution, it is to be expected that much value would be placed on research into the achievement of Title I schools. Unfortunately, relatively few studies have been conducted specifically to review the practices of Title I schools with exceptional student achievement. Examples of the available literature on factors associated with the achievement of Title I students and schools are detailed below.

In 2006, the Los Angeles Unified School District released a report on the practices and achievement of its Title I schools (Barela, 2006). This report was the result of a study of 12 Title I schools in the district: eight Academic Achievement Award schools and four Watch List schools. Academic Achievement Award, or AAA, schools earned that designation by meeting No Child Left Behind's Adequate Yearly Progress requirements for two or more consecutive years, as of 2004-05. Watch List, or WL, schools were those that had not made Adequate Yearly Progress that year. The study included classroom observations, teacher and administrator interviews, meeting observations, and analysis of school planning documents. Over a four-month period, 61

teachers and 37 administrators were interviewed, 66 meetings were observed, and each of the 12 schools' central planning documents was analyzed.

A few key differences were found between the higher-achieving AAA Title I schools and their lower-achieving WL counterparts. Analysis of each school's budget found that AAA schools typically spent more of their Title I funds on such classroom supports as paraprofessional pay, while WL schools were more likely to spend the same funds on school nurses, psychologists, and bilingual office staff. While teacher qualifications and experience were similar in both types of schools, it appeared that AAA schools experienced lower teacher turnover and higher staff stability than the WL schools: approximately 33 percent more of the observed teachers at AAA schools had taught at their current school for more than half of their career than those observed at WL schools. Instructionally, teachers at AAA schools were more likely to lead students in discussions of the subject matter, whereas teachers at WL schools more often drilled students with questions and assigned individual work. Teachers at AAA schools were also more likely to use differentiated instruction than those at WL schools, and more one-on-one assistance was given to students at AAA schools. One-on-one assistance at AAA schools was also more likely to be done by paraprofessionals; considering the fact that AAA schools spent more of their Title I monies to hire paraprofessionals, this finding was not surprising.

As for leadership, there were subtle differences between AAA and WL schools. Administrators in both types of schools were similar in experience, averaging between four and five years each. Teachers' reported perceptions of their administrators' feedback

were similarly positive at both types of schools as well. However, AAA schools were found to be more likely to have a collaborative culture, with teachers more likely to work together. Teachers at WL schools were less likely to collaborate and more likely to express that they had personality conflicts with one another. It was also observed that teachers at AAA schools were more likely to be focused and attentive during professional development time than those at WL schools. One possible explanation for this was that administrators at AAA schools were more likely to observe professional development activities, thus helping to hold teachers accountable (Barela, 2006).

Key recommendations from this study included that Title I schools use funds more explicitly toward supporting student subgroups, such as by use of paraprofessionals working one-on-one or with small groups of students; and that schools establish collaborative environments, where teachers work collegially with one another. Although this study's scope was limited to the Los Angeles Unified School District, its recommendations are logical based on its findings, and seem worthy of consideration for other Title I schools, particularly those in large urban districts.

A study of Title I schools in multiple urban school districts was the topic of a 2007 report prepared for the U.S. Department of Education by the RAND Corporation. Its focus was on the effects on student achievement of Title I school choice and supplemental educational services mandated by No Child Left Behind. The study collected data from nine large urban school districts, including Los Angeles, Chicago, Philadelphia, and Washington, D.C., during a period that began with the 2000-01 school year and continued through the 2004-05 school year. Although the authors acknowledged



that this was not a nationally representative sample, they also noted that the students studied were all from disadvantaged populations that qualified for Title I services and were targeted for help by No Child Left Behind.

The study's findings essentially were that students who took advantage of Title I supplemental educational services saw statistically significant improvement in both their math and reading achievement scores, while those who took advantage of the school choice option and transferred to other schools experienced no statistically significant change in their math and reading achievement. Specifically, students who participated in one year of supplemental educational services experienced an increase of 0.09 of a standard deviation above their district's mean scores for math, and an increase of 0.08 of a standard deviation above their district's mean scores for reading. Students who participated in supplemental education services for two or more years showed even more improvement, with gains of 0.17 of a standard deviation above the district mean in math scores, and 0.15 of a standard deviation above the district mean in reading achievement (U.S. Department of Education, 2007).

Despite the fact that these results cannot be taken as representative for the U.S. as a whole, they are at least indicative of the success of Title I supplemental educational services in improving student achievement in the districts that were studied. These services included both tutoring and enrichment programs. While some were conducted by the districts themselves, the majority were offered by community groups outside the control of their local school district.

Prior to this, the National Study of Effective Title I Schoolwide Programs was conducted, in part to learn how schoolwide Title I programs affect student outcomes (Wang & Wong, 2001). This study was done by the Laboratory for Student Success, in partnership with the Appalachia Educational Laboratory, North Central Regional Educational Laboratory, Northwest Regional Educational Laboratory, and Southeastern Regional Vision for Education. A total of 32 schools in nine urban and three countywide districts were included in the study. Of these, 16 were categorized as more effective schools, based on student achievement scores and income level; 14 schools were identified as less effective. Qualitative data, such as classroom observations and interviews with school staff, supplemented the achievement and income data provided by each school.

Characteristics of those Title I schools that the study defined as more effective included stronger implementation of academic standards and assessment, student performance goals, professional development, resource allocation, and parent involvement. Notably, teachers at the more effective Title I schools gave more positive feedback in regard to colleague relationships and teacher-student relationships than did teachers in the less effective Title I schools. This reported importance of strong relationships indicates a need for deeper study into the roles of principal leadership and organizational routines in Title I schools with exceptional student achievement, as advocated by this dissertation proposal.

More recently, a 2010 comparative case study researched the relationship between educational resources and school achievement in a large urban school district (Jimenez-

Castellanos, 2010). The study included an analysis of these factors between two Title I schools. The schools were similar in student demographics and in per-pupil funding, but differed in student achievement. One school had met all Adequate Yearly Progress benchmarks as prescribed by the No Child Left Behind Act, whereas the other school had failed to make Adequate Yearly Progress and had been categorized as a Program Improvement school by the district.

In comparing the two schools, three types of resources were studied: fiscal resources, personnel resources, and facility resources. Under fiscal resources, the higher-performing Title I school was found to receive fewer administrative and discretionary funds from the district than its lower-performing counterpart, but more instructional funds. It was also found that the higher-performing Title I school had a higher average teacher salary; this was directly related to the personnel resources data, which found that the higher-performing school also had more experienced teachers than the lower-performing school. As teacher salaries were largely based on experience, this finding was not surprising. Also under the heading of personnel resources, it was found that both schools had high teacher turnover. However, more of the higher-performing school's teacher turnover was accounted for by retirement, whereas more of the lower-performing school's teacher turnover was due to teachers leaving for other jobs. In regard to facility resources, the higher-performing school was less crowded and had more multipurpose space per student than the lower-performing school.

In discussing the results, the study's author stressed the importance of teachers and principals to higher student achievement in Title I schools. Specifically, he

recommended teachers who have served from five to 15 years, and possess a balance of enthusiasm and experience, as those most likely to guide students in Title I schools to higher achievement. The emphasis placed on the role of teachers and principals again supports the need for further study into leadership factors, such as transformational leadership and relational trust, and organizational routines, such as professional learning communities and collective teacher efficacy.

### Turnaround Schools

Discussion of improving achievement in Title I schools also relates to what are known as “turnaround schools” (Leithwood, 2009). Simply stated, these are schools that were previously low-performing, but have been able to turn themselves around and become high-achieving schools. Two facts must be considered when researching turnaround schools. First, the study of turnaround schools is a relatively new field. As such, much of the literature on turnaround schools has involved researching the more established field of studies on government, business, and non-profit entities that have succeeded in becoming turnaround organizations. Lessons from these turnaround organizations have subsequently been considered for their ramifications in efforts to turn schools around. Second, much of the research conducted at turnaround schools has been conducted in foreign countries, such as Great Britain and Canada. Because Title I is a program of the United States’ federal government, it naturally does not exist in these foreign school systems. Therefore, much research on turnaround schools has been conducted in schools that are not Title I schools, although it is likely that many of these have student poverty levels sufficient to categorize them as Title I schools if they were, in

fact, in the U.S. As such, lessons from the successes of turnaround schools may be helpful in the quest to improve Title I schools.

Michael Fullan (2006) examined the record of turnaround schools in England, which had been defined as failing schools by the government and subsequently required to take government-prescribed steps to turn themselves around. These steps generally fell into four categories: replacement of the building principal, typically referred to as the “head teacher” in England; engaging in capacity building to improve teaching; improving management of student behavior; and external support, including collaboration with other schools.

While many of these schools did show improvement, Fullan took issue with such reform efforts for three reasons. First, schools were only improving to adequate, not excellent, levels of achievement. Second, external controls were only temporarily improving these schools; once external controls and supports expired, schools reverted to lower achievement levels. Third, the coercive, external, and temporary nature of such turnaround efforts violated accepted principles for lasting change. In order for long-term, sustainable improvement to take place, Fullan argued that schools needed to develop internal accountability, cultures of collaboration among their own personnel, and initiative by building within teachers the belief that their contributions are important and make a real difference in student outcomes.

Citing the relatively small sample of studies on turnaround schools, Joseph Murphy and Coby Meyers (2009) studied capacity building in corporate, government, and non-profit sectors to learn the underlying categories behind successful turnaround

cases among these entities. They found that capacity building in such turnarounds fell into three categories: rallying and mobilizing people, growing people, and creating a productive culture (p. 9). They recommended that school leaders interested in producing turnaround changes focus their efforts on these three areas.

To rally and mobilize people, they cited evidence that employees need to first be motivated, and that motivation can be facilitated through the openness of leaders who take the time to both get to know employees and have the openness to let employees get to know them. Rallying and mobilizing people was further facilitated by building morale through leadership that exemplified openness, honesty, consistently expressing belief in the future of the company, and recognizing and rewarding employees' contributions. Communication was also key to this process, and it was found that frequent, systematic, and honest communication was necessary to instill and build the trustworthiness needed to begin effective turnaround changes.

Growing people was accomplished by empowering people, building teams, and training and developing people. The strategy of empowering people centered on the need for employees to actively participate in deciding upon and making the changes necessary for the turnaround process. Building teams was important because teamwork, involving people from all levels of an organization, was needed to make changes that the whole organization could believe in and support. Training and developing people was found to be a crucial investment, as the new skills acquired improved organizational learning and made the organization better able to make sustained improvements.

Finally, creating a productive culture was deemed critical by Murphy and Meyers. They found that successful turnarounds had occurred when an organization's values viewed change as an exciting challenge, and were embodied by enthusiasm and determination to succeed. In conclusion, they asserted that troubled schools would do well to attend to these underlying themes of successful turnarounds in other fields.

Also in 2009, Kenneth Leithwood detailed a study of turnaround schools that he had led in Ontario, Canada. The study was conducted in two phases. First, qualitative data was collected from 73 interviews, eight parent focus groups, and eight student focus groups in four elementary and four secondary schools. Second, quantitative data was collected from surveys sent to 472 teachers and 36 administrators in 11 elementary and three secondary schools. Schools defined as turnaround schools by the study were categorized by their performance over a three-year period on Ontario's standardized achievement tests for third, sixth, and tenth graders. They found three distinct stages in the turnaround process: first, declining performance, followed by crisis stabilization, and finally sustaining and improving performance. Eight key findings about turnaround schools emerged from the study.

First, effective school leadership was required to turn around low-performing schools. Second, the "core" leadership practices of direction setting, developing people, redesigning the organization, and managing the instructional program were keys to success, with three elements considered most important: providing resources, building a learning community with a collaborative culture, and professional development. Third, the four core leadership practices were found to be consistently important across schools;

whatever the school or its specific situation, these practices were always necessary for successful school turnarounds. Fourth, although the core leadership practices were always necessary, they were carried out differently as schools moved through different stages of the turnaround process, such as from the crisis stabilization stage to the sustaining and improving performance stage. Fifth, effective turnaround school leadership is narrowly distributed: it was found that the two most important sources of turnaround leadership were principals and formal teacher leaders. Sixth, it was found that the nature and number of leadership sources changes as the school turnaround process evolves. While change was initiated externally by the provincial government in the declining performance stage, school leadership with a focus on collaboration took on a greater role during the crisis stabilization stage, and would continue to grow in this role as the school entered the sustaining and improving performance stage. Seventh, it was found that the leadership challenges in beginning the turnaround process are predictable: during the first stage, declining performance, teachers typically felt helpless, denied responsibility for their school's problems, and resisted external intervention. Initiating turnaround began by taking steps to build up teacher efficacy and help them accept the need for change. Finally, the study's eighth finding was that leaders turn schools around by changing teacher attitudes and school cultures. As leaders in the crisis stabilization stage fostered teachers' belief that they could make a difference and successfully help students learn and achieve at high levels, teachers became more willing to collaborate with each other, and to develop a collective sense of responsibility for student success.



In 2010, Leithwood, Alma Harris, and Tiiu Strauss published the book, *Leading School Turnaround*. It revisited the findings of the Ontario study (Leithwood, 2009), and further detailed the turnaround process, the role of leadership in that process, and advice for school leaders in sustaining improvement and deciding which areas to focus on in school improvement efforts.

Key points from this book, relevant to the study proposed here, include the necessity of relational trust to the establishment of collaborative cultures and developing schools into professional learning communities with high levels of teacher efficacy. Specifically, it recommended that deprivatization of teacher practices, necessary to building a collaborative culture, depends greatly on relational trust between teachers and administrators, as well as among teachers. Without trust, it is unlikely that teachers will feel comfortable enough to engage in the open sharing exemplified in the collaborative cultures of professional learning communities. Relative to this, teachers' individual and collective efficacy must also be built up, through professional development and successful experiences. Teachers with higher levels of efficacy, in turn, are more likely to persist in their efforts to improve student learning.

Tenets of transformational leadership can also be seen in Leithwood, Harris, and Strauss's suggestions for redesigning schools as professional learning communities. In particular, they recommended that successful turnaround leaders nurture the development of norms and values that would encourage faculties to collaborate and work together to improve teaching and learning in their schools. Such efforts to create a shared vision,

challenge the status quo, and empower teachers to take action are central to transformational leadership.

In their advice for school leaders seeking to sustain high performance on a long-term basis, Leithwood, Harris, and Strauss recommended that schools must continually change and regenerate themselves. This can only take place in schools with cultural norms that value continuous improvement and change, so school leaders need to focus their efforts on cultivating these values. A premium was also placed on collaboration within and between schools to facilitate and support innovation and change. In particular, it was noted that schools with sustained improvement tend to collaborate with and learn from other schools, as well as within their own faculties. This kind of collaboration, both in its initial stages and in the long run, depends greatly on trust; only teachers and administrators who trust one another will commit to collaborating amongst themselves, and only schools that trust each other will collaborate between each other.

#### Exceptional Achievement in Montana Title I Schools

Considering the size and diversity of the United States as a whole, it may be difficult to draw valid conclusions from comparisons between Title I schools in northwestern, largely rural states like Montana, and those in large urban centers in other regions of the country. Studies of Title I schools' achievement in Montana, or in states and regions similar to it, could thus be preferable for Montana in identifying and sharing the best practices of those Title I schools that have exhibited higher student achievement. It is therefore fortunate that one study devoted expressly to this subject was actually conducted in the northwestern United States, and even included two Montana schools.

This study was the subject of a 2001 report by the Northwest Regional Educational Laboratory (Railsback, Reed, & Boss, 2001). The report studied twelve Title I schools in five northwestern states that had made significant improvement in student achievement. The two Montana schools included in the study were Bryant Elementary School in Helena, and Pablo Elementary School in Ronan. Their actions toward improving student achievement are detailed directly below.

At Bryant Elementary, chronically low test scores motivated the school's principal to apply for Title I schoolwide funds and focus its resources on improving achievement. An early step in this process was a comprehensive assessment of the school's existing programs; data from this assessment indicated that the school's academic mentoring program and looping of first and second grade students with the same teacher should be retained, with a schoolwide emphasis on improving student reading levels. As reading levels improved, but math scores continued to lag below the district average, new goals were developed in subsequent years. A group of teams was developed to improve math and reading scores, increase parent involvement, and improve school safety. In the years that followed, student achievement scores in both math and reading steadily improved.

Pablo Elementary School's improvement process also made early use of comprehensive needs assessment. Its findings were that the school needed to increase student achievement in math, reading, and language arts; improve student attendance; and to help students learn social skills that included nonviolent conflict resolution. After visits to other schools for examples of how to meet these goals, the staff voted to implement a

program titled Success For All, as it addressed all three goals that they had previously identified. Reviews of assessment data at eight-week intervals, small reading groups, one-on-one student tutoring, and individual plans for struggling students were utilized to reach the school's new student achievement goals. These measures proved to be effective, as the school's achievement scores rose sufficiently to move it off of the state's list of schools in need of improvement.

The overall results of this study indicated that the success of all twelve schools was heavily based in factors associated with transformational leadership, professional learning communities, and collective teacher efficacy. For example, the schools studied were found to exhibit a shared vision; one of Kouzes and Posner's (2002) five elements of transformational leadership is to inspire a shared vision. The report also noted that these schools had typically used committees to develop cultures of continuous learning and improvement, factors that are definitive of professional learning communities. Learning from other schools is an example of vicarious learning, which is viewed as a source of efficacy (Bandura, 1977). In the cases profiled in this report, then, we can see that transformational leadership, professional learning communities, and collective teacher efficacy appear to have been characteristics of Title I schools that were able to make significant improvements in student achievement. It remains to be seen whether these factors will have played a role in the achievement of Montana Title I schools that have more recently raised their achievement.

The Montana Office of Public Instruction has kept an annual record of Title I schools that have been recognized for outstanding student achievement since 2006. Along

with a separate award for Title I schools that have closed the achievement gap between student groups, schools that win the award for Outstanding Student Performance for Two or More Consecutive Years are designated by the Office of Public Instruction as Montana Distinguished Schools. At the time that this study commenced, five schools had won the award for outstanding student achievement. Of these five, three still employed the same building principal who had led the school during its award-winning year. Those three schools are the ones that will be asked to participate in this study.

To learn more about the background and standards of the Montana Distinguished Schools awards, interviews were conducted with Assistant Title I Director Jack O'Connor and Research and Analysis Manager Scott Furois of the Montana Office of Public Instruction (personal communication, June 24, 2011). O'Connor stated that the distinguished schools award program was established in 2004 by the National Title I Association as an opportunity for Title I schools in each state to be recognized for their positive educational achievements. The program is based on Section 117 of the No Child Left Behind Act, which calls for both public recognition and monetary rewards for Title I schools that exhibit exceptional student performance. The amount of money awarded to each year's winning school is over \$20,000, paid for by federal grants distributed to each state. In Montana, the Office of Public Instruction is charged with determining which Title I schools will be recognized as winners of each annual award, and distributing award monies accordingly. As a caveat to receiving this recognition and compensation, winning schools are required to send a team of teachers to that year's national Title I conference.

In Montana, annual winners of the award for Outstanding Student Performance for Two or More Consecutive Years are jointly selected by O'Connor and Title I Director B.J. Granbery, based on a review of data compiled by the Office of Public Instruction's Measurement and Accountability division. The process begins by identifying all of the state's Title I schools that have successfully met the Adequate Yearly Progress, or AYP, provisions of No Child Left Behind. Next, achievement data for each of these schools over the past five years is reviewed. As the differences in achievement scores for the respective schools are often relatively narrow, the need to review data accrued over the course of the past half-decade is warranted; schools with achievement scores that are virtually equal over the past two years may be distinguished from one another if earlier data reveal higher scores for one school in years prior.

While meeting AYP for two or more consecutive years is the only officially stated criterion for award recognition, O'Connor acknowledged that other factors, such as student enrollment size and student race and ethnicity, are also taken into consideration. For example, he stated, if two schools had the same achievement scores, but one school had a significantly larger and more diverse student body, that factor might tip the award in that school's favor. By far, though, the most important factors remain whether a school met AYP and by how wide a margin it did so.

The data that O'Connor and Granbery use in deciding which school wins the award each year is managed by Furois, whose position as Research and Analysis Manager is within the Measurement and Accountability division of the Montana Office of Public Instruction. To produce a list of candidate Title I schools for the Outstanding

Student Performance for Two or More Consecutive Years award, Furois identifies all schools that have both met AYP and have student enrollments with 35 percent or more of their students eligible for free and reduced lunch. To be eligible for distinguished school recognition, schools must also have tested a minimum of ten students on Montana's Criterion Referenced Test, or CRT; this is the test used by Montana to measure student achievement for AYP purposes per No Child Left Behind. Schools that have exceeded AYP by the widest margins are then identified and passed on to O'Connor and Granbery, who make the final decision as to which school will win the award.

Typically, most schools that reach this final stage of the award selection process will have had over 90 percent of their students achieve scores defined as either proficient or advanced on both the math and reading sections of the Criterion Referenced Test. As stated, the school with the highest scores is most likely to win the award. In 2010, for example, the winning school had met AYP with over 99 percent of its students scoring at proficient or advanced levels in both math and reading, when adjusted for a 95 percent confidence interval (Scott Furois, personal communication, June 24, 2011).

These results indicate that the Montana Distinguished Schools for Outstanding Student Performance for Two or More Consecutive Years have indeed shown exceptional student achievement, in comparison to their fellow Montana Title I schools. A study of the roles played by leadership and organizational routines in successful Title I schools should therefore provide valuable information for both future research and for similar schools that are looking to improve their own student achievement.

### Theory Base

This study's theory base is broadly divided into two categories: leadership theory and organizational routines. Under leadership theory, literature on transformational leadership and relational trust will be reviewed. Under organizational routines, literature on professional learning communities and collective teacher efficacy will be reviewed. Despite these separate categorizations, the literature occasionally links together factors from across the two categories; for example, schools that practice transformational leadership, a leadership theory factor, have been found to have higher levels of collective teacher efficacy, an organizational routines characteristic (Ross & Gray, 2006a). Keeping this in mind, let us begin by reviewing literature on the leadership theory of transformational leadership.

#### Leadership Theory: Transformational Leadership

The seminal source on transformational leadership, James MacGregor Burns, defined the term in 1978 as “the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower” (Northouse, 2007, p. 176). Transformational leaders are those that attend to their followers' motives and needs to help them maximize their performance. Burns contrasted this with transactional leadership, in which the leader deals with followers on a *quid pro quo* basis by either rewarding or penalizing them for their performance. Northouse (2007) went on to thoroughly summarize the major contributions to the historical development of transformational leadership as a pivotal leadership theory. The



works of Bernard M. Bass, Warren Bennis and Burt Nanus, and James Kouzes and Barry Posner, as summarized by Northouse, are reviewed below.

In 1985, Bass asserted that transformational leadership and transactional leadership actually exist on the same continuum, with leadership being characterized by seven factors, which indicate leadership ranging from laissez-faire to transactional to transformational. Four of the seven factors were identified with transformational leadership, considered by Bass to yield the most positive results on the leadership continuum. The four factors of transformational leadership are idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Leaders who exhibit each of these, according to Bass, would be transformational leaders whose followers would achieve beyond expectations.

Also in 1985, Bennis and Nanus identified key strategies that were commonly used by transformational leaders, whom they referred to as transforming leaders. Specifically, they found that transforming leaders exhibited a clear vision for their organizations' futures; acted as social architects by creating shared meanings for their organizations' people; built trust within their organizations by consistently following their stated vision; and had a sense of positive self-regard that guided them in utilizing their own strengths to minimize their weaknesses.

Finally, Northouse turned to Kouzes and Posner. In works published in 1987 and 2002, Kouzes and Posner developed a model of transformational leadership that consists of five basic leadership practices to achieve extraordinary results. These leadership practices are consistent with both Bass's transformational leadership factors and Bennis

and Nanus's strategies of transforming leaders. Specifically, Kouzes and Posner found that transformational leaders model the way by clearly stating their own beliefs and following through with them; inspire a shared vision by communicating a vision of positive outcomes and encouraging their followers' visions; challenge the process by pursuing growth and improvement; enable others to act by creating environments where their followers can see the quality and value of their work; and encourage the heart by honoring their followers' accomplishments.

To measure transformational leadership according to these five leadership practices, Kouzes and Posner developed a questionnaire known as the Leadership Practices Inventory, or LPI, that has been used extensively over the past two decades (Kouzes & Posner, 2001). This study will utilize the Leadership Practices Inventory to measure transformational leadership behaviors of the principals each subject school. The instrument itself will be detailed in Chapter Three of this dissertation.

In 2007, Kouzes and Posner published the fourth edition of their definitive work on transformational leadership, *The Leadership Challenge*, the first and third editions of which were the 1987 and 2002 works reviewed by Northouse (2007). At this point, Kouzes and Posner had been studying leadership for over two decades, and collected data from over 75,000 respondents. Their case studies of leadership had particularly focused on what leaders had described as their own "personal best" leadership experiences and how those experiences embodied Kouzes and Posner's five practices of exemplary leadership: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. The findings from the vast amount of data they had

collected affirmed Kouzes and Posner's assertion that each of the five exemplary practices of transformational leadership have embedded within them specific commitments of leadership. Leaders who carry out these commitments will truly conduct themselves according to the five practices, and thus become transformational leaders.

For example, to truly model the way, leaders must fulfill two commitments: they must clarify their own values, and set an example for their followers. Leaders first clarify their values by talking openly and honestly about what they really believe. To prove to followers that they really mean what they say, leaders must then set the example by living up to their word on a daily basis. For a school principal who has expressed a strong belief in preserving instructional time, for instance, this clarified value must be followed up by actually preserving instructional time. Interruptions to it must be minimized in order for the principal to set the example, lest teachers perceive that the principal is not trustworthy.

To inspire a shared vision, leaders must make the commitment to envision exciting and ennobling possibilities and the commitment to enlist others in a common vision. A principal at a school that struggles with low student achievement and high dropout rates may envision the possibility of it becoming a high-achieving school that is so warm and welcoming to students that most would never think of dropping out. However, if the principal does not share this vision and enlist the rest of the school community in helping the vision to become reality, the vision will remain the principal's alone. To fulfill the commitment of enlisting others, then, the principal must start by telling teachers, students, parents, and other stakeholders of his vision. He must also ask

them about their own visions for the school. Hopefully, their visions will be reconcilable with his. As a consensus, or shared vision, is reached, the principal must enthusiastically support and lead the stakeholders as they embark upon the process of realizing that vision.

Because even something that is already good cannot become better by keeping everything exactly the same, the third practice of exemplary leadership is to challenge the process. Leaders who challenge the process do so by making the commitments of searching for opportunities to innovate, grow, and improve, and experimenting and taking risks. A leader typically finds opportunities to innovate by listening to others; in the case of a school principal, this would involve asking teachers, parents, students, and other stakeholders for their ideas about what could possibly make the school better. When an opportunity to innovate or improve is identified, action can be taken. However, such changes may create uncertainty among stakeholders. Therefore, the commitment to experimenting and taking risks may best be dealt with by making changes in small increments that allow stakeholders to see results before proceeding further. If the results are positive, the leader can point to them as a small win. Each small win can be built upon by further incremental changes. It is worth noting that this strategy of leadership through small wins could also be described as giving followers mastery experiences as a means of building collective teacher efficacy. This will be discussed further in the section on collective teacher efficacy that appears later in this chapter.

The fourth practice of exemplary leadership, enable others to act, is accomplished by leaders who make the commitment to foster collaboration and build trust, and the

commitment to strengthen everyone's capacity to deliver on the promises they make. Kouzes and Posner realized the importance of enabling others to act as they found that leaders describing personal-best experiences used the word "we" far more often than the word "I." (2007). A commitment to foster collaboration and build trust is enacted by a leader who engages everyone who will work on a project and live with its results; for a school seeking to make changes, this means the principal must engage teachers and all other stakeholders in the change process. To strengthen others' capacity, the principal must keep them informed and involved in the process, and empower them to take action in carrying out changes. This shows followers that they are trusted, and leadership depends on trust: the leader's trust in the followers, and the followers' trust both in the leader and in each other. Followers in such a trusting environment are also more likely to innovate and take risks, which helps perpetuate Kouzes and Posner's third exemplary leadership practice of challenging the process.

The fifth exemplary leadership practice, encourage the heart, hinges on the leader's commitment to recognize contributions and celebrate values and victories. A principal who wanted to recognize the contributions of an individual teacher might do so via a personal thank-you note and a face-to-face word of appreciation. Recognizing the contributions of a group of faculty members, support staff, parents, or students might be done through an announcement or newsletter, possibly coupled with a ceremony or recognition at a meeting. It is important, however, that such recognition be in celebration of values or victories. This is because recognition must be authentic and genuine; it must be done purposefully, to reward actual performance and to celebrate those who uphold

the values and vision of the school. Recognition that has no connection to these will not encourage the heart; more likely, it will be seen as hollow and meaningless.

An overarching theme to Kouzes and Posner's exemplary practices and commitments of leadership is their belief that leadership is a relationship between those who lead and those who follow. Because leadership is a relationship, the leader's credibility is essential; it is the foundation of leadership. Kouzes and Posner thus developed two laws of leadership that reflect the importance of credibility.

The first law of leadership is: "If you don't believe in the messenger, you won't believe the message" (Kouzes & Posner, 2007, p. 38). The need for a successful leader to be someone who is believed in by his followers is self-evident. There are also two corollaries to this first law of leadership. The first corollary is "You can't believe in the messenger if you don't know what the messenger believes" (Kouzes & Posner, 2007, p. 47). Just as an exemplary leader can only model the way by clarifying his own values, followers can't believe in their leader unless the leader first shares his own beliefs. The second corollary is, "You can't be the messenger until you're clear about what you believe" (Kouzes & Posner, 2007, p. 47). This also goes back to modeling the way; a leader must clarify his values to himself before he can successfully clarify them to others.

Kouzes and Posner's second law of leadership is "Do What You Say You Will Do" (2007, p. 41). To have credibility, a leader must know what he believes and say so to others, then faithfully follow through on that commitment by actually doing what he said he would do. This is a simple concept; however, putting it into practice may not always be easy. For example, a principal who has pledged to uphold student discipline may be

confronted by parents who threaten legal action against the school if a particular school disciplinary action toward their child is not reversed. The principal must then confront a difficult choice: keep his word to the faculty about upholding student discipline and risk a lawsuit, which may be both expensive and accompanied by negative publicity; or, give in to the parents' demands and lose credibility with the faculty. Unless some compromise that will placate both parents and faculty can be reached, the principal who strives to be an exemplary transformational leader must likely choose the first option: uphold the student's disciplinary action and face the parents' response.

Kouzes and Posner closed with an interesting finding: that the secret to success in leadership, and in life, is love. Leaders must inspire hope and courage in their followers, especially in the face of difficulties. For a leader to keep up his own hope and courage, he must have love. Love for leading, love for the people he leads, love for what his organization does, and love for the people his organizations serves. For a leader, staying in love is the key to long-lasting success.

Throughout their writings on transformational leadership, Kouzes and Posner stressed that leadership can be learned, and that leadership is a relationship. In that relationship, trust, which was mentioned frequently by Kouzes and Posner, is of great importance. Leaders who are open, competent, respectful, reliable, benevolent, and honest will build trust and be credible leaders. Credible leaders, in turn, are likely to be successful leaders. With the importance of trusting relationships in mind, let us now turn to the leadership theory of relational trust.

### Leadership Theory: Relational Trust

In 2002, Anthony Bryk and Barbara Schneider published their seminal study, *Trust in Schools: A Core Resource for Improvement*. As they conducted a study of 400 elementary schools in Chicago, Illinois, Bryk and Schneider came to realize the importance and salience of trust in schools, which prompted them to study the existing literature on trust; in so doing, they found little extant research on the topic of trust in schools, which led them to explore trust literature on a wider scale. Combining their findings from the literature with their own field notes, they “developed an explicit focus on the distinctive qualities of interpersonal social exchanges in school communities, and how these cumulate in an organizational property that we term *relational trust*” (Bryk & Schneider, 2002, p. 12).

In relational trust, individuals in different roles within a school are mutually dependent on and vulnerable to each other. This is what makes trust necessary; if no one is dependent on or vulnerable to another, there is no real need for trust. Subordinates are more likely to experience a greater degree of vulnerability, so superiors can build trust by recognizing these feelings of vulnerability and taking action to reassure their subordinates that their contributions are valued.

However, those in authority remain dependent on and vulnerable to their subordinates, as well. For example, while principals have a formal position of authority over teachers, making teachers obviously dependent on and vulnerable to them, principals also depend on teachers to carry out their own duties to teach students and uphold the school’s status in the community. If the teachers fail in doing so, it exposes



the principal's vulnerability by reflecting negatively on him as their leader. So, since dependence and vulnerability run both ways, trust must be developed both ways as well.

In fact, relational trust recognizes all of the following as specific role relationships in schools: teachers with their principal, teachers with other teachers, teachers with students, and teachers with parents. In each relationship, both parties have some degree of dependence on and vulnerability to the other party, with an understanding of their own role obligations, as well as expectations of the other's role obligations. When expectations in these relationships are not met, the relationship will be weakened; in extreme cases, a failure to meet expectations may result in the failure or termination of the relationship as a whole.

Bryk and Schneider asserted that individuals continually attempt to discern others' intentions via daily interpersonal exchanges, paying attention to numerous and complex details. Furthermore, meeting expectations means "not only 'doing the right thing,' but also doing it in a respectful way, and for what are perceived to be the right reasons" (Bryk & Schneider, 2002, p. 21). Finally, each person's judgments in regard to how and why others' behavior meets or fails to meet expectations is based on his or her own experiences and beliefs, so perceptions of a leader's trustworthiness may vary among his or her followers. In short, for leaders to build trust, the key is not just what they do, but also how and why they do it. As an example, Bryk and Schneider stated teachers would be more likely to buy in to school reform if they perceived that their principal's motivation in making the change was truly to help students, but less likely if they perceived that the principal's motivation was to simply enhance his own reputation.

As individuals in a school try to learn whether they can trust others, Bryk and Schneider assert that they simultaneously judge trustworthiness by four criteria that they perceive in those others: respect, competence, personal regard for others, and integrity. Because all four criteria are used simultaneously, a failure to show trustworthiness in any one of them can compromise trust throughout an entire relationship. This rule applies to all types of relationships in schools, including the teacher-principal relationship. To be perceived as trustworthy, a principal must act in ways that teachers perceive as respectful, competent, exemplary of personal regard for others, and exemplary of the principal's integrity.

Respect in school relationships must be shown by all parties in order to build and maintain trust. Each person must be recognized as playing an important and interdependent part in educating children; a primary way of expressing this is to listen genuinely to what each person has to say. In regard to respect in teacher-principal relationships, teachers need to feel free to express their concerns and believe that those concerns will at least be considered, if not followed, in future decisions. Principals, on the other hand, need to feel that teachers share their priorities in leading the school and will give a fair hearing to their proposals for improving it.

The second criterion, competence, is judged by an individual's ability to produce desired outcomes in his or her formal role responsibilities. Those who are able to do so will be perceived as trustworthy in this regard. However, the complex and subjective nature of schooling often makes it difficult to objectively rate a principal or teacher's competence, so there may be many variations in individual strategies or behaviors that all

result in that person being perceived as competent. On the other hand, judgments of an individual's incompetence are made more readily and uniformly. For example, teachers whose classrooms are perceived as out of control due to unruly student behavior, or principals whose buildings are perceived as disorderly or unsafe, are often perceived as incompetent, and therefore, not worthy of trust.

Personal regard for others deepens trust as teachers perceive that the principal cares about them and is willing to go beyond what his role formally requires in showing teachers that they are valued and cared for. Teachers who sense that the principal has personal regard for them tend to place a high personal value on that feeling, and typically respond in kind, thus strengthening relational trust. Principals can show personal regard by supporting teachers in their career development, or by showing concern for teachers' personal lives.

The fourth criterion of relational trust, integrity, is judged by the consistency between what individuals say and do. If teachers believe that they can trust their principal to keep his word, that principal will be perceived as having integrity and being trustworthy. Beyond this basic tenet, integrity in schools is shown by acting in the children's best interests. Bryk and Schneider cited "principals... willing to speak out, for example, against a central office policy that they believe will not help the children. Behaviors of this sort publicly affirm an individual's commitment to the core purposes of the school community" (2002, p. 26).

Trust is key to teacher-principal relations because, as is typical of trust relationships, both parties are dependent on and vulnerable to one another. As

subordinates, teachers may be concerned that they will be exploited or treated unfairly by their principal; the principal, meanwhile, may be concerned that teachers will undermine his authority and the school's success by shirking their responsibilities. Further, the fact that a principal simply cannot be present to directly supervise all teachers at all times means that "principals largely have to trust that teachers will make good efforts at advancing student learning, will go the extra mile in helping to improve the school, and work to sustain positive relations with parents" (Bryk & Schneider, 2002, p. 29). Conversely, teachers must be able to trust that their principal will meet their expectations of maintaining a safe and orderly school, treating faculty with fairness, providing adequate resources, and generally supporting them as teachers.

Despite the mutual vulnerability and dependency of teachers and principals, Bryk and Schneider conceded that the power relationship between principals and teachers is top-heavy due to the position of authority that the principal holds over teachers' work conditions. The principal plays a decisive role in determining which students are assigned to which teacher, which classroom a teacher will be assigned to, and what materials and equipment will be provided. Such decisions can affect not only work quality, but may also signal a teacher's status in the eyes of the principal.

Because of the sensitive nature of these decisions, Bryk and Schneider recommended that principals establish decision-making procedures that include teachers, allowing them to raise their concerns, make their voices heard, and ultimately to see that they do, in fact, have the ability to influence important school decisions. Principals who follow such practices demonstrate integrity and are able to engage faculty in a shared

vision of the school community. Inspiring a shared vision is, of course, one of Kouzes and Posner's (2007) five exemplary practices of transformational leadership. This is but one of several overlaps between relational trust and transformational leadership that the reader may note when reviewing this chapter.

Although recognized as the seminal source on relational trust, Bryk and Schneider's study of the subject is rivaled by the work of Megan Tschannen-Moran and Wayne Hoy. In 2000, Tschannen-Moran and Hoy published research on four decades of trust literature, and applied their findings on trust to school settings. Their analysis was multidisciplinary, drawing from trust literature in the fields of psychology, sociology, philosophy, economics, organizational science, and education, as well as from several methodologies, including longitudinal case studies, experimental studies, surveys, and interviews. Articles included in their review were those "that helped clarify the meaning of trust in organizational settings and informed the practice of trust in the context of K-12 schools" (Tschannen-Moran & Hoy, 2000, p. 547). The review began with an examination of the importance of trust in schools, followed by the nature and meaning of trust, the dynamics of trust, and concluded by synthesizing the existing trust research as it related to such organizational processes as communication, collaboration, climate, organizational citizenship, efficacy, and effectiveness.

On the importance of trust, Tschannen-Moran and Hoy stated that trust is fundamental in all facets of life in our complex society, and that "trust is pivotal in efforts to improve education" (2000, p. 550). Building trust is crucial to counteract negative media attention, which has contributed to a costly increase in public distrust of schools.

Distrust within schools occurs also, with the result that administrators and teachers who do not trust one another depend instead on union contracts and administrative rules to ensure that the other party fulfills its obligations. Such formal sources of trust, they asserted, are often dysfunctional and can never take the place of genuine trust built through honest, open relationships between administrators and teachers.

As to the meaning of trust, the review touched on various conceptions and definitions of the term that have been espoused over the years, finally settling on this definition: “Trust is one party’s willingness to be vulnerable to another party based on the confidence that the latter party is (a) benevolent, (b) reliable, (c) competent, (d) honest, and (e) open” (Tschannen-Moran & Hoy, 2000, p. 556). It was further noted that, in regard to teacher-principal relationships, all five of these trust aspects come together with significant importance.

The dynamic nature of trust, combined with its multidimensionality, was acknowledged as the key reason why trust has traditionally been difficult to study. The dynamics of trust are rooted in the fact that relationships typically change: vulnerability and interdependence may increase or decrease over time; different social contexts affect trust relationships from one situation to another; and if trust is ever broken, the response of each party to that breach of trust will also change the trust relationship (Tschannen-Moran & Hoy, 2000).

When initiating and building trust, principals must pay attention to each aspect of it, taking care to prove that they are benevolent, reliable, competent, honest, and open in their support of teachers. To sustain trust, it was noted that teachers’ trust in principals

was based on kindness, friendliness, and integrity, and that “teachers looked for benevolence and openness on the part of their principals” (Tschannen-Moran & Hoy, 2000, p. 573). On the other hand, principals’ trust in teachers was rooted in teacher competence and commitment.

Interestingly, Tschannen-Moran and Hoy pointed out that studies have found that close supervision may actually drive down the level of trust in an organization.

Therefore, while principals have the power to take disciplinary actions against teachers, they must use that power judiciously if they are to build and maintain trust. Principals who depend on coercive behavior to pressure teachers into compliance are likely to alienate teachers, and a proliferation of rules in an attempt to control teachers was considered likely to result in distrust and resentment on the part of teachers toward administration. Meanwhile, principals whose leadership was collegial, rather than coercive, were found to have been highly trusted by their faculties. Principal visibility and accessibility were also found to be crucial in helping to build trust.

In conclusion, Tschannen-Moran and Hoy asserted that “if schools are to realize the kinds of positive transformations envisioned by leaders of reform efforts, attention must be paid to issues of trust” (2000, p. 585). However, they acknowledged that distrust of schools had increased in recent years, and that distrust has a tendency to perpetuate itself. In response, they called for more studies to improve understanding of trust in schools, recommending both the study of trust between principals and teachers and the usefulness of qualitative studies to explore the dynamics of trust in individual schools. These, of course, are characteristic of the study proposed by this dissertation.

Working independently in 2003, Tschannen-Moran challenged the common assumption that transformational leadership behaviors by principals will result in school faculty and staff going beyond their formal job requirements and giving their maximum effort, extra-role behaviors referred to as organizational citizenship behaviors, or OCBs. Further, Tschannen-Moran argued that trust was actually a more important factor in the development of organizational citizenship.

This was not to say that transformational leadership is not worthwhile, however; more accurately, Tschannen-Moran's contention was simply that the outward trappings of it are not enough by themselves. She asserted: "Transformational leaders must have the trust of their followers in order to be effective" (2003, p. 167). She also referred to a 1990 study led by Podsakoff, which had found that: "When workers trusted their superiors, transformation leadership behaviors were likely to be related to greater organizational citizenship. When trust was absent, however, those same behaviors were unlikely to kindle greater citizenship among workers" (Tschannen-Moran, 2003, p. 167).

In 2004, Tschannen-Moran reiterated this, reporting that transformational leadership behaviors only result in greater organizational citizenship by their followers if the followers trusted the leader. If they did not trust the leader, their organizational citizenship did not improve. Having found this evidence of the mediating role played by trust in the transformational leadership process, Tschannen-Moran sought to discover whether there was a similar link between trust and transformational leadership in schools. In schools, it must be understood that transformational leadership practices are carried out from the principal's perspective, while teachers' relational trust in the principal



naturally comes from the teachers' point of view; this is crucial to differentiating between the two, and helps explain the apparent influence of trust in the successfulness of transformational leadership practices.

Tschannen-Moran's 2003 study was conducted in a sample of 55 middle schools in the eastern U.S., roughly half of which were suburban schools, with the remaining half split almost evenly between urban and rural schools. A total of 3,066 middle school teachers participated. Three quantitative data collection instruments were used: one, based on Bass' Multifactor Leadership Questionnaire, was a measure of transformational leadership in schools; a second was designed to measure organizational citizenship behaviors in schools; and a third was designed to measure teachers' trust of their principal. All three measures were tested and found to have good reliability and validity (Tschannen-Moran, 2003).

The results of this study were as follows: no significant relationship was found between transformational leadership behaviors of the principal and organizational citizenship behaviors, nor even between transformational leadership mediated by trust and organizational citizenship behaviors; however, teacher trust in the principal had a significant, if moderate, correlation to organizational citizenship behaviors (Tschannen-Moran, 2003). This last finding supported the importance of teacher trust in the principal to the desirable goal of inspiring teachers to work beyond what is contractually required and truly maximize their abilities.

Another finding of the study was that there was a strong relationship between perceptions of principals' transformational leadership behaviors and teachers' trust in

principals. In reference to this relationship, it was noted that while trust is considered by some to be an aspect of transformational leadership, that “in light of the findings it may be more instructive to think of the competencies of transformational leadership as but one element of trustworthy leadership” (Tschannen-Moran, 2003, p. 174).

In closing, Tschannen-Moran asserted that, beyond playing a mediating role in the relationship between leadership and organizational citizenship, “we found that it was primarily trust alone that led to greater citizenship among teachers” (p. 175). Finally, she called for more research on trust in schools. The relationship between transformational leadership and relational trust also remains of interest. While the study proposed here does not intend to explore Tschannen-Moran’s assertion that transformational leadership is actually an element of relational trust, the close relationship between the two supports the proposition of studying these two factors in conjunction with one another.

Organizational Routines:  
Professional Learning Communities

The concept of schools as professional learning communities grew out of Peter Senge’s discipline of systems thinking in learning organizations (1990). Senge described systems thinking as a way of seeing the underlying structures in complicated situations, the wholes beneath the many parts. Learning organizations, he said, are those that seek to continually improve themselves in order to ensure their long-term success. At the time, Senge’s work was intended mainly for the business community. Eventually, he also used the term “learning community.” While it is a synonymous term to “learning organization,” it is perhaps easier to conceptualize a learning community as a structure that may be found in entities, such as schools, that are outside the business world.

In the educational world, systems thinking and learning communities would ultimately be embodied by the organizational routines of professional learning communities, a development noted by Shirley Hord in her seminal work on professional learning communities in 1997. Hord noted that the key to developing a school into a professional learning community was the principal, who must call for the staff to become a learning community, and then nurture them in building the necessary skills and habits to do so. According to Hord, there were five key attributes of schools as professional learning communities: supportive and shared leadership; collective creativity; shared values and vision; supportive conditions; and shared personal practice.

Supportive and shared leadership develops through the principal-teacher relationship, as the principal becomes an active participant in teachers' professional development. This leads to a view of leadership as collegial, with the principal and staff growing to view themselves as teammates, growing and working toward the common goal of building a better school. Here, Hord alluded to Senge, who believed that the principal's job was to create an environment where teachers can learn continuously. Also, with teachers and principals learning and working together toward common goals, the principal would further share leadership by giving teachers more influence in decision-making.

Collective creativity is embodied in a professional learning community when it becomes the norm for staff from all corners of the school to collaborate with each other so they can improve their abilities in the interest of helping each other achieve the

school's goals. Teachers, principals, and others in such a school have conversations about students, teaching, and learning that result in new ideas for solving the school's problems.

Shared values and vision are a key attribute of a professional learning community, Hord said, because the core of a professional community is a focus on student learning. While individual teachers' responsibilities and goals are important, these personal ambitions are equaled by the importance of the whole school's common good. In this setting, relationships based in care and trust are essential. The more that a school's faculty and administration engage each other in learning and developing everyone's talents, the more likely it is that students will see positive results.

Supportive conditions actually take two forms: the physical and structural setup of the school, and people capacities. Physical and structural factors refer to such things as time being set aside for teachers to meet and talk, staff that need frequent interaction being physically located in proximity to one another, and school autonomy. People capacities include respect and trust between colleagues, a willingness to give and accept feedback from each other, and appropriate content and pedagogical knowledge. Together, these support factors dictate when, where, and how the staff will come together as a professional learning community that learns, makes decisions, solves problems, and works creatively.

Shared personal practice is Hord's final attribute of the professional learning community. For a school to truly be a learning community, it is necessary for teachers to share their personal classroom practices with each other. This entails visiting each other's classroom and reviewing each other's work in a collegial, rather than evaluative, way. As

they visit each other's classrooms, teachers in professional learning communities observe one another and take notes of what they see, then meet to discuss their observations. It should be noted that the common human tendency to feel vulnerable and defensive under such circumstances makes mutual respect and trust a prerequisite for these types of interactions to be successful. Trust, then, is also a necessary attribute of a professional learning community.

Citing various sources, Hord identified several benefits of developing schools as professional learning communities. Compared to students at traditional schools, those who attended schools that had the attributes of professional learning communities had higher achievement gains, smaller achievement gaps between student groups, less absenteeism, and lower dropout rates. Teachers and staff tended to be more satisfied, have higher morale, felt less isolated, and were more committed to their work.

In 2003, Kristine Hipp, Louise Stoll, and several others presented a paper at the Annual Meeting of the American Educational Research Association, titled *An International Perspective on the Development of Learning Communities*. This paper described two research projects, one in England and one in the U.S., which studied professional learning communities in those respective countries. Citing evidence that professional learning communities, where teachers work collaboratively to improve teaching and learning, these projects were conducted to identify and describe examples of efforts to create professional learning communities, the characteristics of professional learning communities, and factors that helped or hindered their development. The theoretical framework of the study was based on Hord's (1997) literature review.

The project conducted in the U.S. found that “the most important element in the development of a professional learning community is the leadership and determination of the principal. Without strong and sustained direction from the lead administrator, the effort is often limited and inconclusive” (Hipp, Stoll, Bolam, Wallace, McMahon, Thomas, et al, 2003, p. 17). The principal, in turn, was found to need support from teacher leaders in order to develop a professional learning community. Although administrators and teachers were most important in forming a professional learning community, it was also concluded that such a community could only be sustained over the long run by involving as many stakeholders as possible, including other school staff, central office staff, parents, community members, and students.

A quantitative instrument for use in diagnosing and evaluating schools as professional learning communities was developed in the course of this study. Known as the Professional Learning Community Assessment, or PLCA, it contains items about school practices, and “serves as a more descriptive tool of those practices... relating to shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive conditions” (Hipp, Stoll, Bolam, Wallace, McMahon, Thomas, et al., 2003, p. 10). Construct validity tests conducted with a panel of 76 school and district level administrators, university professors, and educational researchers resulted in all 44 of the questionnaire’s items being retained for its initial field test. Subsequent factor analysis in the field test, with 247 respondents, concluded that the PLCA’s items represented the five dimensions of professional learning communities. Reliability tests, using Cronbach’s Alpha, found that the Alpha coefficients for the five

factored subscales ranged from 0.83 to 0.93; these results indicated satisfactory reliability for the PLCA. It was recommended that the PLCA be used by schools “to determine where they are in the progression from initiation to implementation to institutionalization (of a professional learning community) and develop plans to meet their goals” (Hipp, Stoll, Bolam, Wallace, McMahon, Thomas, et al., 2003, p. 20).

A key conclusion of the study was that Hord’s (1997) five dimensions were re-conceptualized. The dimension, collective learning and application, the study contended, should be merged with the dimension, shared personal practices, as the study’s data could not separate the two. Also, it was found that the dimension, supportive conditions, impacted all of the other dimensions of professional learning communities. The study’s findings also emphasized the importance of relational trust: “One attribute appeared in most every interview in the schools we studied. This attribute was trust. Developing relationships and a school culture based on trust is essential and the foundation on which all else is built” (Hipp, Stoll, Bolam, Wallace, McMahon, Thomas, et al., 2003, p. 19).

In 2006, Louise Stoll, Agnes McMahon, and Sally Thomas reported the findings of a subsequent mixed-methods study of the effectiveness of professional learning communities in England. After surveying 393 principals and professional development coordinators in English schools that ranged from preschool to high school levels, and carrying out case studies of 16 schools, they determined that there were three aspects of effectiveness to consider when judging PLCs: “impact on students’ learning; impact on the professional learning, work experience, and morale of the staff, and the extent to

which PLC characteristics were in place and leaders were using PLC processes” (Stoll, McMahon, & Thomas, 2006, p. 613).

In regard to the impact of PLCs on student learning, they found a weak, but positive correlation between PLCs and student outcomes on standardized tests. Also, qualitative data indicated teacher perceptions that PLCs had a positive impact on student interest in learning, attendance, and actual learning. Impacts on staff included perceptions that professional learning and collaboration had improved staff morale and teaching practices. A key conclusion about the impacts of PLCs on students and staff was that PLCs should be considered a means to an end, rather than an end in themselves; a school should not set itself a goal of “being” a professional learning community so much as it should seek to engage in the active practices, such as teacher collaboration and continuous professional learning, that characterize PLCs. Specifically, this study identified eight characteristics of schools as professional learning communities: shared values and vision; collective responsibility for pupil learning; collaboration focused on learning; reflective professional inquiry; individual and collective professional learning; openness, networks, and partnerships; inclusive membership; and mutual trust, respect, and support.

Working with Shirley Hord in 2006, Patricia Roy revisited the characteristics and outcomes of professional learning communities, or PLCs, and provided suggestions for how to develop schools into PLCs. Roy identified several characteristics of PLCs that had emerged as a consensus from various researchers’ findings, including those of Hord



(2004), DuFour, Eaker, and DuFour (2005), Louis and Kruse (1995), the National Association of Elementary School Principals (2004), and Rosenholtz (1989).

First, a strong emphasis on student learning and educators helping each other improve in their professional practice was seen throughout the research findings on PLCs. Precedence was given to students learning at high levels rather than on students being taught well, and educators helped each other as peers through such means as observation, feedback, and joint development of lessons. A second common finding was that principals in PLC schools practiced supportive and shared leadership. These principals collaborated with teachers and encouraged them to collaborate with and learn from each other, treating them with respect and building a culture of trust. A third common characteristic of PLCs that emerged from the research was the use of data to gauge the effectiveness of efforts to help students learn.

Outcomes of PLCs that were identified from the research included less isolation of teachers, with the result that teachers learned more from each other and tended to be better informed and more committed to helping students learn. Also, students in schools that were identified as PLCs were found to have positive outcomes. These included higher achievement gains than students at traditional schools in math, science, reading, and history; and smaller achievement gaps between student groups.

To create PLCs, Roy found that both structural features and human capacities were necessary components in achieving the collegiality and collaboration that are desired. As with Hord's 1997 work on PLCs, structural features conducive to the professional learning community included time during the school day for teachers to meet

and work together and involving faculty in school decision-making. Access to school and student data were also found to be vital structural features.

Human capacities included the strengthening of both administrator-teacher trust and teacher-teacher trust to facilitate high-risk interactions such as peer observations and reviews. Because teachers in a PLC have a collective responsibility for both their own learning and that of their students, Roy found, principals must build trust with the faculty by including teachers in decision-making and supporting teachers in carrying out the decisions that they helped make. Principals can also help by regularly reminding the faculty of the school's shared vision and values, so that their daily decisions and actions stay true to that vision. Principals in PLCs also participate in professional learning time and take an interest in not just observing as teachers learn from each other, but in learning from the teachers themselves as well. By showing themselves to be learners, and enabling teachers to participate in decision-making, principals can further build trust between themselves and their faculty.

In conclusion, Roy described "schools as PLCs where educators collectively engage in continual inquiry on behalf of student learning and where staff and students gain from this way of working" (2006, p. 499). In 2007, Richard DuFour further examined the characteristics of a professional learning community, and attempted to dispel some of the misconceptions about PLCs that had arisen in recent years.

DuFour noted that many schools that call themselves professional learning communities really are not, while many schools that possess the traits of PLCs, as described in the preceding pages, do not identify themselves as such. DuFour emphasized

that, regardless of titles or programs associated with a school, what really matters in terms of whether it is a true professional learning community may be seen in the daily actions of its faculty and administration. According to DuFour, educators in a professional learning community focus on specific practices that define them as PLCs.

First, PLCs clearly define the knowledge, skills, and dispositions that each student should learn in a particular class or unit. Second, they have agreed-upon criteria that are used consistently for assessing student work. Third, they develop common formative assessments to regularly monitor each student's learning. Fourth, those assessments are used to identify students in need of interventions to provide them with the extra help they need in order to be successful. Fifth, data are used to assess the effectiveness of individual teachers and the school as a whole in helping students meet their learning goals. Sixth, goals for individual teams or departments should be "SMART;" that is, they should be Strategic in that they are based on schoolwide goals; Measureable; Attainable; Results-oriented, meaning that they are based on student outcomes such as assessment results; and Time-bound, meaning that they are to be accomplished within a specified time frame (DuFour, 2007, p. 6). Seventh, it is necessary for a PLC to have processes for continuously improving itself built into its everyday practices. Eighth, decisions are made based on shared knowledge about best practices, not based only on individual opinions. Ninth, there is a collective effort on the part of the staff to help all students learn at high levels; and tenth, designated collaborative time in a PLC is spent focusing on the first nine practices.

Professional learning communities have been called the best hope for higher levels of learning, and there is evidence in the literature that associates PLCs with higher student achievement (Richardson, 2009; Roy, 2006; Hord, 1997). As the PLC is embodied in organizational routines intended to produce continuous improvement, this outcome should be desired, if not expected. However, the hallmarks of successful professional learning communities described in the previous pages, and their most ideal outcomes for students, depend on other factors as well. One of these is trust, which has already been discussed in detail and described as a vital factor in professional learning communities. Another, extremely important to schools and student achievement, is collective teacher efficacy.

Organizational Routines:  
Collective Teacher Efficacy

Collective teacher efficacy has its roots in Albert Bandura's research on self-efficacy, which began in the 1970s. Eventually, Bandura's work expanded from individual efficacy to collective efficacy, finally giving rise to the construct of collective teacher efficacy.

Efficacy is central to Bandura's social cognitive theory, which deals with the ways in which people exercise control over their own lives (Bandura, 1977). According to Bandura's theory, people's expectations of their own ability to succeed in a given situation – their efficacy – affected their likelihood of initiating or avoiding specific endeavors, as well as their persistence in seeing their efforts through to success. Those with higher efficacy would be more likely to take on challenges, and would work harder in coping in the face of any difficulties that arose. People with low efficacy would be less

likely to face a challenging situation in the first place, preferring to avoid it instead. Further, if a person with low efficacy did attempt a challenging task, he or she would be more likely to become defensive or quit if any difficulties subsequently developed. Efficacy beliefs can also become self-fulfilling, in that those who persist through difficulties due to their higher efficacy often lose more of their fears and develop even higher efficacy. On the other hand, those that quit due to low efficacy and accept failure are likely to have their self-efficacy decrease even further.

Bandura observed that individuals' self-efficacy varies in magnitude, generality, and strength. Magnitude refers to how easy or difficult a task is perceived to be; some people will only have strong self-efficacy toward tasks they perceive as easy, while others will have strong self-efficacy beliefs toward tasks they perceive to be much more difficult. Generality of self-efficacy refers to the variety of situations that one may encounter. Self-efficacy may be generalized for some individuals, strong in almost any situation, whereas others may only have strong self-efficacy in very specific, limited situations. Strength of self-efficacy beliefs is determined by how well an individual copes and persists in the face of difficulties; those who lose faith and give up more quickly have weaker self-efficacy beliefs, while those who keep the faith and continue in their efforts are considered to have stronger self-efficacy beliefs.

Bandura also noted different sources of self-efficacy beliefs. The strongest source of self-efficacy was performance accomplishments, also called mastery experiences. An individual has a mastery experience when he or she successfully completes a challenge; this experience of mastery raises self-efficacy beliefs. A second source of self-efficacy is

vicarious experience. In this case, a person's self-efficacy to successfully meet a challenge may increase by observing as someone else successfully completes a similar challenge. A third source of self-efficacy is verbal persuasion, also called social persuasion. This source of self-efficacy is based on the encouragement and persuasion of others, perhaps an authority figure or an admired peer, who has expressed belief in the individual's ability to succeed. Emotional arousal, or affective states, is the fourth source of self-efficacy beliefs noted by Bandura. This refers to a person's emotional feelings of anxiety or calmness and their effect on his or her self-efficacy beliefs; the more calm and confident a person feels emotionally, the stronger the self-efficacy beliefs. Of these four sources, mastery experiences are the strongest and most reliable. The positive effects of the others on personal self-efficacy, especially those of vicarious experiences and social persuasion, are likely to evaporate when difficulties occur.

The effect of self-efficacy beliefs on performance is quite strong. In Bandura's seminal study of self-efficacy in phobic individuals, he found that self-efficacy beliefs predicted future performance of his subjects in 92 percent of the tasks he gave them (1977). Most of those with strong self-efficacy persisted until they succeeded in dealing with their phobia, while those with weak self-efficacy typically gave up and accepted failure.

Over the next two decades, Bandura continued his studies on efficacy, eventually progressing from individual to group efficacy research. This led to his 1993 study of collective instructional efficacy, later known as collective teacher efficacy, or CTE. According to Bandura, three levels of efficacy contributed to students' academic

achievement. First, students' self-efficacy about their ability to learn and succeed academically shaped their goals and motivation levels, and thus their academic accomplishments. Teachers' self-efficacy about their ability to motivate and help students learn influenced their classroom environments; this also contributed to students' academic achievement. Third, a faculty's collective instructional efficacy had a significant effect on the school's overall academic achievement. Because it is a schoolwide trait, schools, rather than the mean average of teachers' self-efficacy scores, were the unit of analysis for collective instructional efficacy.

An important caveat to Bandura's findings was that efficacy is not based solely on skills: people with the same skill level tend to perform at different levels, depending on their levels of efficacy. In the course of his studies, he found that those with high efficacy tended to perform better; those with low efficacy tended to perform worse.

Returning to collective instructional efficacy and its effects on academic achievement, it was itself affected by characteristics of the student body. Bandura's path analysis findings showed that student socioeconomic status, or SES, had an effect of -0.47 on collective instructional efficacy. So, a higher percentage of low-SES students in a school, along with higher student turnover and absenteeism, was associated with lower collective instructional efficacy (1993). Also, students' prior achievement had a 0.32 effect on collective efficacy: the higher students' prior achievement, the higher the faculty's collective instructional efficacy tended to be.

Meanwhile, collective instructional efficacy had a positive effect on student academic achievement of 0.34; higher collective instructional efficacy was related to

higher academic achievement (Bandura, 1993). As stated, unfortunately, higher percentages of low-SES students are associated with lower collective instructional efficacy. However, Bandura also noted that when the faculty's collective instructional efficacy remained high, even when working with high proportions of low-SES and minority students, student achievement also remained high. The implied challenge for teachers and administrators in schools with large numbers of low-SES students, then, was to build and maintain high collective instructional efficacy in the interest of helping these students achieve at high levels.

In 2000, Roger Goddard, Wayne Hoy, and Anita Woolfolk Hoy expanded on Bandura's work with collective instructional efficacy by conducting a study on the meaning of collective teacher efficacy, and its impact on student achievement. They also developed a quantitative instrument to measure collective teacher efficacy, or CTE; this instrument was the basis for the Collective Teacher Beliefs Scale that will be used to measure CTE in the study proposed here. Its attributes will be detailed in Chapter Three.

Goddard, Hoy, and Hoy defined collective teacher efficacy as "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (2000, p. 480). Collective teacher efficacy is based on Bandura's social cognitive theory, of which self-efficacy is a central construct. Like Bandura, they noted that CTE is not merely the sum of individual teachers' self-efficacy; instead, it is an expression of an entire faculty's beliefs about the ability of the faculty as a whole.

They also found that there are two key elements of collective teacher efficacy: analysis of the teaching task and assessment of teaching competence. Analysis of the



teaching task is based on such factors as the abilities and motivations of students, the available teaching materials, and sufficient classroom space. For example, teachers in a school that had a severe shortage of current textbooks might feel a reduced sense of collective efficacy because the lack of textbooks had made the teaching task more difficult.

Assessment of teaching competence is an element of collective teacher efficacy based on the faculty's overall competence, as judged on the basis of their skills, training, and shared belief in students' ability to succeed. Analysis of the teaching task and assessment of teaching competence are difficult to separate because they happen simultaneously, and they are the basis of collective teacher efficacy. When teachers perceive that the difficulty of the teaching task is in proportion to their group competence, their level of CTE increases.

Goddard, Hoy, and Hoy's (2000) study of 452 teachers in 49 elementary schools in a large urban school district in the midwestern U.S. found that personal teacher efficacy, aggregated at the school level, was moderately related to collective teacher efficacy ( $r = 0.54, p < .01$ ). Also, there was a significant correlation between faculty trust in colleagues and collective teacher efficacy ( $r = 0.62, p < .01$ ). Perhaps most importantly, they found that CTE was positively related to student achievement, reinforcing the findings of Bandura (1993). Specifically, they found that a one-unit increase in a school's level of CTE was associated with an average gain of 8.62 points in student math achievement and an average gain of 8.49 points in student reading achievement. These achievement gains represented a change of more than 40 percent of a

standard deviation for each one-unit rise in CTE, showing that perceptions of collective teacher efficacy predicted student achievement (Goddard, Hoy, & Hoy, 2000, p. 502).

Goddard, Hoy, and Hoy also concluded that, once collective teacher efficacy becomes strong or weak in a school, it becomes a more or less fixed component of the school's culture and is difficult to change. This is good news for schools that already have strong CTE, but bad news for those with low CTE. However, difficult does not mean impossible; schools that currently have low collective teacher efficacy can still improve it. It was recommended that administrators who want to raise their school's collective teacher efficacy – which should also result in higher student achievement – try to do so by giving their faculty achievable tasks to create mastery experiences. If this is not possible, vicarious learning experiences via professional development and collaboration with successful schools could help increase CTE. The administrator could also employ social persuasion by verbal coaching and encouraging teachers in an attempt to raise their collective efficacy. As these experiences and persuasions continue, and teachers begin to see positive results for their efforts, their level of CTE could rise. They would then become more likely to persist in the face of future difficulties, experience more success, and further increase their collective teacher efficacy.

Megan Tschannen-Moran, whose research on relational trust is also reviewed in this dissertation, worked with Marilyn Barr in 2004 to conduct another study on the relationship between collective teacher efficacy and student achievement. They also reviewed previous studies of collective teacher efficacy.

In their review of the literature, Tschannen-Moran and Barr noted that, while different, CTE and individual teacher efficacy can influence one another; for example, a teacher with low individual efficacy might perform better in a school with high CTE, and worse in a school with low CTE. Like Goddard, Hoy, and Hoy (2000), Tschannen-Moran and Barr also observed that CTE, once established, becomes a stable part of a school's culture and is thus difficult to change. A key component of their literature review was a detailed description of school practices, teacher behaviors, and principal behaviors in schools with high collective teacher efficacy.

In schools with high CTE, they found, common practices include teacher collaboration, joint problem solving, and instructional experimentation. Importantly, an emphasis on teachers collaborating and solving problems together can also be found in the literature describing professional learning communities (Hord, 1997). Another PLC trait, teacher involvement in school decision-making, was also referenced by Tschannen-Moran and Barr as a common practice in high-CTE schools.

Teacher behaviors in schools with high collective teacher efficacy included resiliency and persistence when dealing with students who have difficulty in improving their achievement. Extra instruction, interactive lessons, and strong classroom management skills were typical of teachers in high-CTE schools. Principal leadership behaviors in these schools included facilitating collaboration amongst the faculty, encouraging the faculty to be creative, listening respectfully to teachers, and generally being supportive of teachers. These behaviors are also typical of those described in the literature on professional learning communities.

The study conducted by Tschannen-Moran and Barr included 66 middle schools in the state of Virginia. Its purpose was to determine whether there was a relationship between collective teacher efficacy and student achievement. It used the Collective Teacher Beliefs Scale to measure collective teacher efficacy, and the Virginia Standards of Learning, or SOL, tests to measure student achievement. Pearson's  $r$  was used to determine the relationship between the two factors (2004).

Just as Goddard, Hoy, and Hoy (2000) and Bandura (1993) had found that collective teacher efficacy was related to student achievement, so too did Tschannen-Moran and Barr. In this case, a significant positive relationship was found between CTE and student achievement on the 8<sup>th</sup> grade SOL tests for mathematics, writing, and English. Specifically, CTE accounted for 18% of the variance in math achievement, 28% of the variance in writing achievement, and 14% of the variance in English achievement (2004). It was also found that there was no correlation between CTE and student socioeconomic status; therefore, schools with either high or low student socioeconomic status should not be inherently predisposed toward either high or low collective teacher efficacy. In conclusion, Tschannen-Moran and Barr recommended that more research be done to help identify school characteristics associated with improved CTE. This, in turn, could aid the development of more effective schools.

In 2005, Cybulski, Hoy, and Sweetland conducted a study of 146 Ohio elementary schools to determine the effect of collective teacher efficacy on student reading and mathematics achievement. To measure CTE, they used a collective efficacy scale developed by Goddard in 2002. This scale was very similar to the Collective

Teacher Beliefs Scale used by Tschannen-Moran and Barr (2004); the main difference between the two scales was that the Collective Teacher Beliefs Scale used a nine-point Likert scale to score its responses, while Goddard's instrument used a six-point Likert scale. To measure student achievement, achievement data from the Ohio Department of Education was obtained for each school that participated in the study. Data was tested via a theoretical path model, using the statistical program LISREL 8.50.

The main finding of the study was that CTE did have a direct positive effect on student reading and math achievement, with significant standardized betas ranging from 0.21 to 0.27 (Cybulski, Hoy, & Sweetland, 2005). This finding was strengthened by the fact that they had controlled for student socioeconomic status and prior academic achievement. Although these factors had been suspected of contributing to students' achievement scores, the results of this study indicated that CTE affected achievement even when SES and prior achievement were taken into account.

A final study on collective teacher efficacy was conducted by John Ross and Peter Gray in 2006. Its purpose was to study the relationship between transformational leadership and collective teacher efficacy. The relationship between collective teacher efficacy and commitment to professional learning community was also examined. This study sampled teachers from all elementary schools in two large school districts in Ontario, Canada; a total of 218 teachers responded. Ross and Gray only included data from schools with five or more respondents; they cited that this figure was used because five respondents per school in a sample of 150 schools would yield a study power of .90.

Using a modified version of Goddard, Hoy, and Hoy's (2000) collective teacher efficacy instrument, Ross and Gray found that transformational leadership was correlated to collective teacher efficacy at a level of .45. Also, collective teacher efficacy was correlated to commitment to professional learning community at a level of .41 (2006a). These relationships support the appropriateness of studying collective teacher efficacy together with transformational leadership and professional learning communities, as this dissertation proposes to do.

### Summary

This chapter has reviewed selected literature relevant to the research questions of this proposed dissertation study. It is appropriate here to briefly revisit those questions. The central research question is, "How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana's distinguished Title I Schools?" A supporting subquestion for principal leadership behaviors is, "How does relational trust contribute to the high achievement of Montana's distinguished Title I schools?" A supporting subquestion for organizational routines is, "How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?"

Because this study deals with Title I schools and student achievement, this chapter has reviewed literature on both. Factors related to student achievement were identified. The evolution of the importance placed on student achievement has been examined, and the history of Title I schools in the U.S. has been reviewed as well. This section of the literature review details how Title I and student achievement became linked

to one another historically, and reviews the record of Title I and student achievement as it continues today. Of particular interest were studies that documented improvements in the achievement of Title I schools.

Much of this chapter was devoted to the twin theory base of this study: leadership theory and organizational theory. The overarching theory of transformational leadership, and the corresponding leadership theory of relational trust, have both been detailed, and their associations with student achievement have been noted. Organizational theory has been examined through a review of the literature on professional learning communities and collective teacher efficacy. Both have been detailed in this chapter, and their relationships to student achievement have been noted as well.

## CHAPTER III

## METHODOLOGY

Introduction

A relationship has been established between leadership and student achievement. So has a relationship between organizational structures and student achievement. In regard to leadership theories, transformational leadership has been proposed as a means of improving student achievement, while relational trust has been directly linked to higher achievement (Ross & Gray, 2006a; Bryk & Schneider, 2002). As for organizational routines, professional learning communities have been recommended as a promising pathway to higher student achievement, and a strong empirical link has been established between the organizational structure of collective teacher efficacy and student achievement (Hord, 1997; Goddard, Hoy, & Hoy, 2000). In a search of the available literature, however, a need has been found for qualitative studies that considered these principal leadership behaviors and organizational routines together. How they play a role in student achievement, especially in Montana's schools, has yet to be explained.

Also, student poverty has been strongly linked to lower student achievement. In an effort to help low-income children, the federal government established Title I of the Elementary and Secondary Education Act in 1965. As cited in Chapter Two, Title I provides additional federal funds for schools that serve enrollments with over 40% of students coming from families defined as low-income by the federal government. These Title I funds are used to finance extra educational services for the students. Attaining and



sustaining high achievement, however, has remained difficult for many Title I schools. Therefore, it seemed wise to learn from the examples of Title I schools that had successfully done so. For Title I schools in a rural, western state like Montana, examples of such schools within their home state may be particularly helpful.

This multiple-case study proposed to fill the needs for research in regard to principal leadership behaviors and organizational routines in Montana's Title I schools. Data was collected and analyzed to learn how the leadership factors of transformational leadership and relational trust had contributed to student achievement in the schools studied. Also, data was collected and analyzed to learn how the organizational routines of professional learning communities and collective teacher efficacy had contributed to student achievement in these schools. Because the schools studied were Montana Title I schools that had been honored for their exceptional student achievement, the need for research on Montana's higher-achieving Title I schools was also addressed.

### Population

The population to be studied was the group of 230 schools defined by the Montana Office of Public Instruction as having schoolwide Title I programs. The sample selected to study this population was composed of all schoolwide Title I program schools that had both won the Office of Public Instruction's Distinguished Title I School award for Exceptional Student Performance for Two or More Consecutive Years, and which still employed the same principal that had led the school during its award-winning year.

At the outset of this study, the Office of Public Instruction's records for this award dated from 2006 to 2010. Of the five schools that had won the award during that

period, three still employed the same principal as in the year for which they were recognized by the Office of Public Instruction. The sample size for this study was therefore three schools, each of which was studied as a separate case. Of these three Title I schools, one was a middle school located in southwestern Montana; one was an elementary school located in northwestern Montana; and one was an elementary school located in south-central Montana. Their enrollments ranged from approximately 200 to 400 students.

A second category of distinguished Montana Title I schools was also considered for this study, but rejected due to definition problems after conversations with officials at the Office of Public Instruction (personal communication, June 24, 2011). The award for this category recognized schools for closing academic achievement gaps between student groups. The key problem with studying these schools lay in the fact that this study was focused on schools that had produced high student achievement, relative to other Montana Title I schools. The schools that had been recognized for closing achievement gaps between student groups had succeeded in narrowing the differences in achievement levels between different groups of students within their own enrollments; however, they had not necessarily attained high levels of overall student achievement. Therefore, this category of schools was precluded from further consideration for this study.

#### Quantitative vs. Qualitative Methods

In choosing whether to take a quantitative or qualitative approach to a study, one must begin by assessing what one hopes to learn, as stated in the research questions. Research questions that ask “what” are best suited to quantitative methods, such as

survey questionnaires. To achieve statistical significance for their results, quantitative studies typically require large numbers of participants. Research questions that ask “how” or “why” call for qualitative methods, such as interviews and observations. Because quantitative statistical methods do not apply to qualitative data, qualitative studies are often unconcerned with attaining statistical significance and may be done with much smaller numbers of participants. In some cases, both quantitative and qualitative methods may be used to complement each other.

For example, a mixed methods study might use mainly quantitative data collected via survey instruments to find out what was perceived by the study’s participants. Qualitative interviews could then be used to learn why participants perceived things the way that they did, or how events had affected their perceptions. Mixed methods studies are often large in scale, dependent on achieving quantitative statistical significance, and necessitate the work of an entire team of researchers (Johnson & Onwuegbuzie, 2004). They are also often used in research that does not involve case studies, such as historical research (Yin, 2009).

Studies that are, on the whole, considered to be qualitative may also use some quantitative data. Specifically, embedded multiple-case studies involve the administration of quantitative surveys to participants, although a preponderance of qualitative data collected from such means as interviews, focus groups, observations, and document analysis categorizes them as qualitative studies (Yin, 2009). A key difference between mixed methods and embedded multiple-case studies is that mixed methods studies feature quantitative data, with qualitative data used in support of it, while embedded multiple-

case studies take the opposite approach: qualitative data plays the lead role, with quantitative data used to add depth and perspective in support. While embedded multiple-case studies can be large-scale projects that require multiple researchers, they can also be conducted on a scale that is manageable by a single researcher, such as a doctoral candidate. Again, in an embedded multiple-case study, quantitative data is used to provide additional perspectives on qualitative data, rather than as the main focus of the study; and statistical significance of the quantitative data may not be a major concern. In this dissertation study, quantitative data was collected first, and used to help the researcher form qualitative questions for focus group discussions that were subsequently conducted at each school. Mean scores for perceptions of transformational leadership and collective teacher efficacy at each school were also recorded to add perspective to the qualitative data on these issues.

For the study proposed here, the central research question was, “How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana’s distinguished Title I Schools?” A supporting subquestion for principal leadership behaviors was, “How does relational trust contribute to the high achievement of Montana’s distinguished Title I schools?” A supporting subquestion for organizational routines was, “How does collective teacher efficacy contribute to the high achievement of Montana’s distinguished Title I schools?”

Because all of these questions asked “how,” they were suited to qualitative research methods. Among qualitative approaches, case studies are recommended when “how” or “why” questions are being asked about contemporary events over which the

investigator has little or no control (Yin, 2009). Since that was the case here, a qualitative case study approach was used to address this study's research questions. This, however, did not preclude all use of quantitative data. As stated by Yin (2009), embedded multiple-case studies, while they use qualitative research questions, do employ quantitative surveys as well. This was the approach taken in the present study.

### Embedded Multiple-Case Study Approach

Multiple-case studies are generally considered preferable to single-case studies. This is due to the fact that multiple cases, like multiple experiments, offer the researcher a chance to look for replication of results. In a single case, as with a single experiment, one never knows if the results found were unique to only that special case, or if the lessons learned from them may be applied more broadly. With multiple cases, however, similar results from each case suggest more strongly that any lessons learned from the results could be applied to real-life cases similar to those studied.

According to Yin (2009), a simple multiple-case study would use two or more cases that appear to be literal replications of one another. The researcher must know in advance what the outcomes were for each case; most often, it is desired that the cases studied had achieved exemplary outcomes. The study then focuses on how or why each case was able to reach its exemplary outcome, and whether there are literal replications of those findings from each case to the next.

In the cases to be studied here, the exemplary outcome shared by each case school was that all were Title I schools that had been awarded the Montana Office of Public Instruction's award for Exceptional Student Performance for Two or More Consecutive

Years between 2006 and 2010. The research questions inquired as to how principal leadership behaviors and organizational routines had contributed to the high levels of student achievement, relative to other Montana Title I schools, which resulted in each of these schools winning that award. A stipulation of the study was that each case school must still have employed the same principal who led the school during its award-winning year. There were three schools from the population of award-winners that met that criterion. Therefore, this was a three-case study.

Multiple-case studies, such as this one, may have either a holistic or an embedded design. Holistic designs study multiple cases, respectively, in their individual context, using only qualitative data. An embedded design, so named for its use of embedded units of analysis to collect data about specific topics at each case site, is appropriate when research questions inquire about factors that may be measured quantitatively, and so “may call for the conduct of a survey at each case study site” (Yin, 2009, p. 59). In this study, valid and reliable questionnaires were available to measure both principal leadership behaviors and organizational routines of each case school. These questionnaires were administered to the faculty of each school.

The results of each survey were not pooled across cases, as that would have changed the nature of the study. Instead of a multiple-case study, it would then have become a single-case study, with all three schools collectively forming the single case. The actual process used here measured the survey results for each school separately. Therefore, these quantitative questionnaire results became embedded units of analysis

within the qualitative study of each case. This is the essence of an embedded multiple-case study.

It is important to note the difference between the terms, “unit of analysis” and “embedded units of analysis,” as they are used in this dissertation. Overall, the units of analysis for this study consisted of the three case schools that were studied. According to Yin, a case study’s unit of analysis “is related to the way you have defined your initial research questions” (2009, p. 30) and should be at the same level as the research questions. As this study’s research questions explored how principal leadership behaviors and organizational routines had contributed to student achievement in Montana’s distinguished Title I *schools*, the units of analysis were schools; each case school was one unit of analysis. Embedded units of analysis, on the other hand, were topics studied within each case school. Specifically, the principal’s transformational leadership practices, with data collected by the Leadership Practices Inventory, and collective teacher efficacy, with data collected by the Collective Teacher Beliefs Scale, were the embedded units of analysis *within* the overall units of analysis represented by each case school.

### Cross-Case Analysis

Only after each school’s data had been analyzed individually was cross-case analysis of the data conducted to determine whether there were common threads of how transformational leadership, relational trust, professional learning communities, and collective teacher efficacy had contributed to student achievement across schools. This was done in keeping with Yin’s (2009) admonition that the strength of a multiple-case

study lay in its potential for finding repeated patterns, much as how multiple experiments that produce similar results are more credible than the result of a single experiment. By using cross-case analysis, Yin stated, “analysis is likely to be easier and the findings likely to be more robust than having only a single case” (2009, p. 156). In the course of comparing the data from each case school, the researcher detected specific principal behaviors and organizational routines that had existed at each case school, but had not been noted in previous literature.

### Research Design

A study’s research design is fundamental in guiding the researcher from his initial research questions to the final conclusions of the study. Yin (2009) compared the research design to a blueprint for the researcher to follow in dealing with four key problems: what questions to study, what data is relevant, what data should be collected, and how to analyze the results. The research design also serves to keep the researcher focused on the research questions so as to avoid wasting time and resources collecting irrelevant data.

Yin (2009) also explained that there are five components of research design for case studies. First, a study’s questions: as stated above, case studies are most appropriate for research questions that ask “how” or “why,” and are concerned with contemporary events that the researcher cannot control. The research questions, growing out of the study’s problem statement, focus the study in collecting the desired data.

The second component of case study research design is the study’s propositions, by which the researcher calls attention to something that the study should examine. While



some case studies may be exploratory in nature and thus have good reason not to be based in any specific propositions, it is still necessary for the study to have a purpose. The purpose of this study was to describe the role played by principal leadership behaviors and organizational routines in Montana's award-winning Title I schools.

The third component of case study research design is the study's unit of analysis. This involves setting boundaries that define the case, and is based on the study's research questions. For the study proposed here, the units of analysis were each of the three schools that participated in the study: each school was a unit of analysis. As such, data was collected and analyzed for each school individually, in regard to the research questions of how principal leadership behaviors and organizational routines had contributed to each school's exceptional student achievement. The boundaries for this study's units of analysis also included parameters to define who was included in the study of each case school, and time boundaries to mark the beginning and end of data collection. These are detailed later in this chapter.

The fourth component of case study research design involves linking data to propositions. This involves choosing the appropriate data analysis techniques specific to a given study, and depends greatly on the propositions or purpose of the study. The data analysis techniques for this study are detailed later in this chapter.

The fifth and final component of case study research design is the criteria for interpreting a study's findings. In quantitative research, data is tested for statistical significance to help determine its value. Because case study research is qualitative and involves little or no use of statistics, other means are needed to interpret findings. Yin

(2009) suggests that case study researchers therefore rely upon identifying and addressing rival explanations for their findings, as opposed to the study's original propositions. By conceiving of rival explanations before starting data collection, a researcher may take them into account during the data collection process. They may then be considered during the data analysis process, and either rejected or accepted based on the study's collective findings. The criteria for interpreting this study's findings are detailed later in this chapter.

### Multiple-Case Study Design

This multiple-case study's design guided the researcher throughout the research project. Its goal was to ensure that this study was trustworthy and of high quality. It is detailed in the following sections: (1) Introduction, (2) Unit of Analysis, (3) Quantitative Instruments and Data Collection, (4) Principal Interviews, (5) Teacher Interviews, (6) Teacher Focus Groups, (7) Observations, (8) Document Analysis, (9) Analytic Strategy, (10) Analytic Techniques, (11) Final Data Analysis, and (12) Cross-Case Synthesis.

#### Multiple-Case Study Design: Introduction

This embedded multiple-case study was conceived based on previous studies that related principal leadership behaviors and organizational routines to student achievement. Specifically, transformational leadership and relational trust are leadership theory issues that had been linked to higher student achievement. The organizational routines of professional learning communities had been promoted as a means of improving student achievement, and the organizational beliefs of collective teacher efficacy had been

strongly linked to student achievement. Title I schools recognized by the Montana Office of Public Instruction as having Exceptional Student Performance for Two or More Consecutive Years had, by definition, higher levels of student academic achievement than other Title I schools in the state. As such, they were appropriate site schools for further study of the relationship of principal leadership behaviors and organizational routines to student achievement.

This study's intent was to collect thick, rich data to explain these relationships. The central research question that guided this study was: "How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana's distinguished Title I Schools?" A supporting subquestion for principal leadership behaviors was, "How does relational trust contribute to the high achievement of Montana's distinguished Title I schools?" A supporting subquestion for organizational routines was, "How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?"

The nature of these research questions as "how" rather than "what" questions indicated the appropriateness of a qualitative, rather than quantitative, research approach. Because the study of schools took place in contemporary times and in situations over which the researcher had little or no control, a case study design was called for. To make the study stronger and its findings more transferable for other schools, a multiple-case design was chosen. Data was collected through interviews of teachers and building principals, focus groups of teachers, observations, and document analysis. Use of these

differing data sources provided triangulation, which theoretically improved the study's construct validity, or confirmability, as well as its credibility.

#### Multiple-Case Study Design: Unit of Analysis and Boundaries of the Study

The boundaries of this study were set by the criteria described in this subsection. As stated, the units of analysis for this study were the three individual schools that participated; each case school was one unit of analysis. This unit of analysis was chosen on the basis that the research questions for this study sought to learn the contributions of principal leadership behaviors and organizational routines to high-achieving *schools*. According to Yin (2009), the main unit of analysis should normally be at the level addressed by the study's research questions. Schools, rather than individual administrators, faculty, or students, were therefore the units of analysis for this study.

The established links to student achievement that had been found for both principal leadership behaviors and organizational structures made it preferable that schools with an established record of high student achievement were selected for study. Montana Title I schools that received the Office of Public Instruction's award for Exceptional Student Performance for Two or More Consecutive Years had, by winning the award, been clearly established as having high student achievement relative to Montana's other Title I schools.

Because principal leadership behaviors were a key part of the study, it was also necessary to select only schools from this group that still employed the same principal who had led the school when it won this award. Of the five Montana Title I schools that

had won the award between 2006 and 2010, three still retained the same building principal. These three schools were asked to participate in the study.

Other boundaries of the study included which individuals at each case school were asked to participate in the data collection process, and the time span during which the study's data collection took place. As for the latter boundary, it was anticipated that data collection would begin on approximately October 1, 2011 and continue through approximately November 15, 2011. A more detailed timetable for this study is described near the end of this chapter.

Setting the boundary for whom to include in the study was the result of reflection by the researcher on the nature of the study, assisted by advice from the researcher's university committee chairperson. Single-case studies of individual schools often employ a "360-degree silo" strategy of data collection, which involves collecting data from teachers, administrators, students, trustees, parents, community members and others involved with the school. This breadth and depth of data collection allows readers of such a case study to come away with rather a full picture of everything about that individual school.

For this dissertation, multiple schools were studied, with a specific emphasis on principal leadership behaviors and organizational routines as they related to the school's academic achievement. It was not necessary for the researcher to learn everything about each participant school, but to instead focus attention on how the factors of principal leadership behaviors and organizational routines had contributed to the relatively high achievement of each school. As such, it was not necessary or even desirable to collect

data from individuals representing all of a school's stakeholder groups. Who, then, to include?

The researcher determined that the principal and teachers of each school were the individuals whose input was needed for this study's data collection process. Because principal leadership behaviors were a key factor of interest, it was necessary to interview each school's principal about his or her beliefs and behaviors. It was also necessary to survey and interview each school's teachers to learn their perceptions and insights about the principal's leadership behaviors. Because organizational routines were also integral to this study, the researcher also gathered data from teachers and the principal at each school about those factors.

It was not anticipated that other individuals affiliated with each school, such as students, the district superintendent, trustees, or community members, would have the knowledge or familiarity with these specific issues to contribute data more relevant than the teachers and building principals had provided. However, if in the data collection process it became apparent that there were others beyond the teachers and principal who could have provided needed information, it may have then become necessary to expand this data collection boundary to include them as well. This was actually done in the case of Musselshell Elementary School, in which the school's former principal was interviewed in addition to its current principal at the time that the study was conducted.

Multiple-Case Study Design:  
Quantitative Instruments

This research study was qualitative in its overall nature, as determined by the research questions, which asked "how" principal leadership behaviors and organizational

routines had contributed to each subject school's high achievement. However, use of quantitative surveys is often an essential part of even qualitative studies. Specifically, embedded multiple-case studies typically use quantitative questionnaires to add perspective to qualitative case study research; this is not to be confused with mixed methods research, which uses qualitative methods to explain the results of a quantitative study (Yin, 2009). Other researchers have also noted that use of quantitative measures in an otherwise qualitative study enhances the study's credibility (Maxwell, 2005; Weiss, 1994).

In this study, two quantitative surveys were administered to the teachers at each case school. The Leadership Practices Inventory, or LPI (Kouzes & Posner, 2001), was used to measure each school principal's transformational leadership behaviors. Results of the teacher-completed LPis for each school were tallied to determine each principal's mean scores for his or her transformational leadership behaviors per each of Kouzes and Posner's five practices of leadership, as perceived by the school's faculty. These scores helped inform the qualitative data analysis. A self-assessment version of the LPI was also completed by each school's principal. The Collective Teacher Beliefs Scale, or CTBS (Tschannen-Moran, 2011), was used to measure the collective teacher efficacy of each case school. It was administered to each school's faculty. A related instrument, the Principal Sense of Efficacy Scale (Tschannen-Moran & Gareis, 2004), was administered to each school's principal to measure his or her individual efficacy. The scores of all completed LPI and CTBS surveys for each school were summed and averaged to determine each school's mean level of collective teacher efficacy.

These scores served to help inform the study's qualitative analysis in two ways. First, the highest and lowest scoring items from the teacher-completed LPI questionnaires and CTBS questionnaires at each case school provided the basis for that school's focus group discussion questions. Second, knowledge of the overall levels at each school of both transformational leadership practices, as perceived by teachers, and collective teacher efficacy added perspective to the qualitative data collected at each school; knowledge of each principal's self-assessed LPI score also granted further perspective, making the study's data richer and thicker. This was consistent with Yin's (2009) rationale for using quantitative data in an embedded multiple-case study approach.

Once again, the researcher only aggregated quantitative survey scores within each case school, not across all three schools. This was because this research study was a multiple-case design, with each school being studied as an individual case. Combining the average survey scores for all three schools would have changed its fundamental nature to that of a single-case study, with all three schools aggregated to form the single case (Yin, 2009). The important attributes of each of these quantitative questionnaires, in turn, are related below.

The LPI measures the perceived leadership practices of an individual leader, with items based on Kouzes and Posner's (1987, 2002, & 2007) five key leadership practices: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. It was designed particularly for use by leaders to gather information from those who reported directly to them. Although originally conceived for the business world, with employees completing the LPI in reference to their immediate supervisor's



leadership behaviors, it is also useful for the similar dynamic of teachers completing the survey in reference to their principal.

The LPI has been widely used for over two decades, and has been found to be both reliable and valid. Its statistical internal reliability has been tested at levels above 0.80; since reliability levels of 0.50 and above are considered acceptable, the LPI is considered to have strong internal reliability (Kouzes & Posner, 2001). Its test-retest reliability has been measured at levels greater than 0.90 correlation, indicating high test-retest liability (Kouzes & Posner, 2001). The LPI's 30 items consist of six items per each of the five key leadership practices. This also makes it a more reliable instrument than a similar survey with fewer items per key practice would be (Kouzes & Posner, 2001). The face validity of the LPI is considered to be excellent in that it appears to measure what it is supposed to measure, that being leadership practices (Kouzes & Posner, 2011). Empirical studies have also found the LPI to be statistically valid, with factor analyses indicating that its items load onto five factors, each of which represents one of the five key leadership practices (Kouzes & Posner, 2001). This also indicates that the LPI does in fact measure key leadership practices, as intended.

The Collective Teacher Belief Scale, or CTBS, was developed in 2004 to measure a school's level of collective teacher efficacy (Tschannen-Moran & Barr, 2004). The CTBS is very similar to the Collective Teacher Efficacy Scale, used by Goddard, Hoy, and Hoy in 2000, and the Teacher Sense of Efficacy Scale developed by Tschannen-Moran and Woolfolk Hoy in 2001. However, while the Collective Teacher Efficacy Scale used a six-point Likert scale for respondents to rate their school's level of collective

teacher efficacy, the CTBS uses an expanded, nine-point Likert scale to rate collective teacher efficacy. Collective teacher efficacy as measured by the CTBS is divided into two subscales: instructional strategies and student discipline, each of which is represented by six of the 12 items on the CTBS.

Factor analysis tests found that the CTBS's 12 items loaded on one factor, with factor loadings that ranged from 0.79 to 0.58 per item (Tschannen-Moran & Barr, 2004). When two factors, instructional strategies and student discipline, were analyzed as subscales they were also found to have strong validity. The factor loadings for each six-item subscale ranged from 0.78 to 0.67 for instructional strategies and from 0.78 to 0.64 for the student discipline subscale (Tschannen-Moran & Barr, 2004). Reliability of the CTBS was also strong at 0.97 overall, with a rating of 0.96 for the instructional strategies subscale and 0.94 for the student discipline subscale (Tschannen-Moran & Barr, 2004).

The Principal Sense of Efficacy Scale, or PSES, is used to measure a principal's sense of self-efficacy. It was developed in 2004 by Megan Tschannen-Moran and Christopher Gareis, who developed the instrument in response to the lack of existing questionnaires for measuring this construct. Following the initial design of the instrument, it was administered to all public elementary, middle, and high school principals in the state of Virginia; a total of 544 responded.

Subsequent factor analysis resulted in the original 50-item scale being revised to an 18-item final version. Items for the final version loaded on three subscales. Six items loaded on the principal's self-efficacy in management duties, such as dealing with paperwork and prioritizing job demands. Factor loadings for this subscale varied from

0.53 to 0.82. A second subscale emerged in six items of self-efficacy for instruction duties of the principal, such as facilitating student learning and generating a shared vision, with factor loadings ranging from 0.45 to 0.81. The third subscale consisted of six items of self-efficacy for the principal's moral leadership, which included promoting school spirit in students and ethical behavior in school personnel. Factor loadings for this subscale ranged from 0.42 to 0.78. Construct validity of the PSES was supported as well. Principals' sense of efficacy was found to be significantly negatively correlated to work alienation ( $r = -0.45, p < 0.01$ ), and positively correlated to trust in teachers ( $r = 0.42, p < 0.01$ ) and trust in parents and students ( $r = 0.47, p < 0.01$ ). Tschannen-Moran and Gareis (2004) concluded that the PSES was a valid and reliable instrument for measuring the construct of principal self-efficacy.

Because this study investigated the contributions of principal leadership behaviors and collective teacher efficacy to each case school's relatively high student achievement, it was appropriate to employ quantitative measures of transformational leadership behaviors and collective teacher efficacy to help determine their respective roles. As the validity and reliability of both tools had been well-established, use of the LPI to measure each principal's transformational leadership behaviors and the CTBS to measure each school's collective teacher efficacy in this study was warranted.

#### Multiple-Case Study Design:

##### Principal Interviews

Data collection commenced as soon as possible following this study's approval by the researcher's university committee and the university's institutional review board. As stated, it was hoped that data collection could begin around October 1, 2011 and continue

until roughly November 15, 2011. This, in fact, was approximately the timetable that data collection did follow. The researcher spent two days visiting each case school, with one day spent at each school early in the data collection phase, and a second day spent at each school approximately one month later.

During the first visit to each school, the researcher met with the building principal at a location of the principal's choosing. As expected, each principal chose to conduct the meeting in his or her office. The researcher made every effort to build rapport and trust with the principal by beginning the meeting in a casual and relaxed manner.

During this meeting, the principal signed an informed consent document. Prior to the date of this meeting, the principal had also been sent the online version of the LPI self-assessment and an online version of the PSES, both of which were returned electronically upon completion. The main business conducted at this meeting was an interview of the principal. The interview protocol purposefully focused on the principal's perceptions of his or her own leadership behaviors, and the school's organizational routines. The researcher took margin notes on the interview protocol form in regard to each interviewee response, and reflected upon the interview as soon as possible afterward. The interview was also audio recorded and transcribed verbatim; the researcher subsequently analyzed the transcripts to identify prevailing themes from the data.

During the second visit to each school, the researcher again met with the principal. This meeting was spent in member-checking by the researcher, who reviewed his data from the prior interview with the principal. The principal's input at this meeting

had the potential to yield adjustments to the researcher's subsequent data analysis. This meeting was also audio-recorded, and researcher reflection and note-taking was done in regard to these meetings, as needed, to allow for subsequent data analysis.

Multiple-Case Study Design:  
Quantitative Data Collection

In addition to the PSES and LPI self-assessment for the school principal, an online version of both the LPI and CTBS, and instructions for completing each, was electronically delivered to all teachers at each case school prior to the researcher's first visit to each site. An informed consent document was also included with the surveys. All surveys were completed anonymously to relieve any anxiety that teachers might otherwise have felt.

Each school's mean scores on the results of these surveys were calculated, as noted in the above section on quantitative instruments. The mean score for each school on each of these surveys was reported to state whether that school had a high, average, or low score for Collective Teacher Efficacy, and whether its faculty gave the principal high, average, or low scores on each of the five leadership practices measured by the LPI; this added perspective, making the study's data thicker and richer. Items on either survey that generated exceptionally high or low scores from respondents were revisited as focus group questions.

Multiple-Case Study Design:  
Teacher Interviews

Teacher interviews were also conducted during the first visit to each school. Collecting data from teachers, as well as from the principal, was expected to possibly

give rise to rival explanations between the two sources. Examination of these rival explanations, as they emerged, theoretically enhanced this study's credibility (Yin, 2009).

Teachers were selected for an interview based on the criterion that they had also taught at the case school during the year that it won the award for Exceptional Student Performance for Two or More Consecutive Years. When calling each school's principal to schedule a date for his first visit to the school, the researcher communicated the need to identify all of the school's teachers who met this criterion. The names of each of these teachers were then drawn randomly to establish a contact order. The researcher then contacted each teacher in turn to request an interview during his first meeting to their school. Interviews were scheduled with each teacher who consented, at a time of their choosing, until the researcher's schedule for the day had been filled. It was anticipated that three to five teacher interviews would be possible at each school, with each interview lasting 30 to 60 minutes. Care was taken to schedule the principal and teacher interviews so that none overlapped. Informed consent was documented at the start of each interview.

As with the principal interview, the interview protocol was purposefully focused on perceptions of the principal's leadership behaviors and the school's organizational routines. Transformational leadership, relational trust, the concept of the school as a professional learning community, and collective teacher efficacy were addressed during the interview. The researcher took notes about each interview response in the margin of the interview protocol, and reflected upon each interview as soon as possible afterward. Each interview was also audio recorded and transcribed verbatim; the researcher

subsequently analyzed the transcripts verbatim to identify prevailing themes from the data.

During the second visit to each school, the researcher again met with each teacher who was interviewed. These meetings were spent in member-checking by the researcher, who reviewed the data from their prior interview. If responses from the previous interview had sparked new questions for the researcher, they were asked at this time. Each teacher's input at this meeting had the potential to result in adjustments to the researcher's subsequent data analysis. This meeting was also audio-recorded so as to be available for analysis. Researcher reflection and note-taking was also done, as needed, in regard to these meetings to allow for subsequent data analysis. If data saturation had not occurred at this point, further interviews, possibly to be conducted and recorded via telephone, would have been requested by the researcher; however, this did not prove necessary, as data saturation was deemed to have occurred.

**Multiple-Case Study Design:**  
**Teacher Focus Groups**

During the second visit to each case school, the researcher conducted a focus group meeting. The protocol again addressed topics of principal leadership behaviors and organizational routines at each school, with items generated from previous responses to the questionnaires and interviews that had been conducted. Specifically, the highest and lowest scoring items from the teacher-assessed LPI and CTBS questionnaires at each case school were converted into questions for that school's focus group discussion.

Focus groups typically consist of eight to ten people (Gliner & Morgan, 2000). Therefore, a group of another eight to ten teachers was to be asked to participate in the

focus groups at each school. The names of these focus group candidates were pulled from the same contact list used to enlist teachers for interviews. Focus group participants signed an informed consent waiver prior to commencement of the focus group session. Audio recordings were made of each focus group meeting, and the researcher transcribed each recording verbatim for data analysis purposes. Each focus group meeting was expected to last from 30 to 60 minutes, depending on the discussion generated by the participants in response to the researcher's prompts.

An advantage of focus groups is that this type of open sharing may stimulate participants' thinking and elicit new ideas; this is often done early in research to aid in developing interview questions for individuals (Gliner & Morgan, 2000). Here, it was proposed to do the opposite: the focus groups were used toward the end of data collection as a means of eliciting new insights and helping to confirm that saturation had been reached. As a separate method of data collection, the focus groups also helped support the validity of the study by means of triangulation (Yin, 2009).

#### Multiple-Case Study Design: Observations

Time visiting each case school was also spent on observation of interactions between the principal and teachers. As another method of data collection, this helped to further triangulate the evidence gathered by the study. As noted by Maxwell (2005), observations offer a useful balance to interview studies by allowing the researcher to note similarities or differences between beliefs espoused during interviews and subjects' actual behaviors. A protocol for noting principal leadership behaviors and organizational



routines was utilized during the observation process. Notes were taken during and after observations, and researcher reflection was used in the data-analysis process.

**Multiple-Case Study Design:**  
Document Analysis

Documents from each case school will also be collected and analyzed. These included the school handbook, schoolwide memos, faculty meeting agendas, department meeting agendas, school goal and mission statements, school planning documents, and teacher evaluation templates. The goal of this part of the data collection was to find evidence of the school's principal leadership behaviors and organizational routines. This helped determine whether a given school had functioned as a professional learning community, whether its principal had practiced transformational leadership behaviors, or whether there were expressions or implications of relational trust and collective teacher efficacy.

Multiple-Case Study Design: Analytic Strategy

Yin (2009) stated that the analysis phase is one of the most difficult aspects of case study research, due mainly to a lack of clear analytic formulas for researchers to follow. Yin did, however, identify four general strategies for case study analysis, three of which were used in this study: relying on theoretical propositions, using both qualitative and quantitative data, and examining rival explanations.

The first strategy, relying on theoretical propositions, calls for data analysis to be based on the theoretical propositions that led to the case study. For this project, the basic theoretical propositions were that principal leadership behaviors and organizational

routines contribute to a school's achievement levels. These propositions had shaped the problem, purpose, and research questions of this study; the questions, in turn, shaped the overall research design. Yin (2009) recommended relying on theoretical propositions for explanatory case studies with "how" questions. As this study sought to explain how principal leadership behaviors and organizational structures had contributed to the relatively high achievement of the case schools, Yin's advice was followed by utilizing this analytic strategy.

The second strategy, using both qualitative and quantitative data, was a natural fit for this project because of its nature as an embedded multiple-case study that collected some of its data through quantitative surveys. The quantitative data collected here dealt with both principal leadership behaviors and organizational routines. Knowledge of a school's mean level of collective teacher efficacy, or of the mean score for the perceptions that a faculty had of its principal's transformational leadership behaviors, helped guide the researcher in the data analysis process. Both of these were factors that the study sought to explain, and Yin recommended use of quantitative data for just such purposes (2009). Therefore, this analytic strategy was also used.

The third strategy, examining rival explanations, was mentioned previously and will now be discussed in detail. There are two types of rival explanations: craft rivals and real-life rivals (Yin, 2009).

The main craft rival to this study was investigator bias. Because only one person conducted the research, it was possible that the researcher's own beliefs could have affected his analysis of the data collected. This was countered by the researcher's

awareness and reflection upon the possibility of bias, and by careful note-taking and documentation of data. Another suggestion for avoiding bias is to report one's preliminary findings to critical colleagues, who will offer their suggestions and alternative explanations (Yin, 2009). This was done as well. One of the researcher's work colleagues is a veteran high school principal who holds a doctorate in educational administration; he reviewed the researcher's work, including the codes and categories the researcher applied to the qualitative data, which established a level of inter-rater reliability. Also, a primary function of the researcher's university graduate committee was to review this dissertation and to guide the researcher throughout the study's entirety.

Real-life rivals are created by variables beyond the researcher's control. Because so much of case study research is indeed beyond control, there is an inherent risk of real-life rivals for the researcher's explanations. In this study, for example, it was theorized that principal leadership behaviors and organizational routines contribute to a school's achievement level. Real-life rivals to this theory could have included that schoolwide achievement is more strongly predicted by student ethnicity or teacher experience, for example. During data analysis, care was taken to consider such rival explanations. Based on the data collected, these rivals were either rejected or accepted.

#### Multiple-Case Study Design: Analytic Techniques

Yin (2009) recommended five analytic techniques for case study research. The technique considered to be most appropriate for this research study is pattern matching. In an explanatory case study, such as this one, Yin stated that patterns may be related to the study's independent variables to strengthen its internal validity. Here, the researcher

looked for patterns related to principal leadership behaviors and organizational routines, which were the independent variables to the dependent variable of student achievement. As the researcher analyzed the data collected, he looked for recurring themes and patterns that indicated principal leadership behaviors and organizational routines in each case school. If these factors were not evident, or were rivaled by other factors that appeared in the collected data, the researcher noted these unanticipated patterns.

Often in research studies, one or more independent variables are used as treatments so that their effect on the dependent variable may be observed. A peculiar aspect of this study was that, since all case schools were defined by high achievement relative to other Montana Title I schools, the dependent variable was already known and unchangeable. It was the independent variables of principal leadership behaviors and organizational routines that remained less certain, until and unless they were confirmed by the study's results.

#### Multiple-Case Study Design: Final Data Analysis

Through a strong research design with solid analytic strategies and techniques, it was intended that this study's data analysis would be strong as well. Yin (2009) identified four principles of high-quality data analysis. First, the analysis should show that the researcher attended to all the evidence. Second, all major rival interpretations should be addressed. Third, the most significant aspect of the case study should be addressed. Fourth, the researcher should use his own prior, expert knowledge in the case study.

The design of this embedded multiple-case study addressed these four principles. For example, verbatim transcription of all interviews contributed toward attending to all

the evidence. Rival explanations were addressed by the researcher, through such means as personal reflection and sharing of preliminary findings with a critical colleague. Analysis focused on the main issue of the case study, the contributions of principal leadership behaviors and organizational routines to student achievement in the case schools. This addressed the most significant aspects of the study and kept the researcher from accidentally addressing peripheral issues instead. Finally, the knowledge that the researcher had acquired through studying the subjects of Title I schools, transformational leadership, relational trust, professional learning communities, and collective teacher efficacy helped inform this project's data analysis, thus attending to Yin's fourth principle of high-quality analysis.

Multiple-Case Study Design:  
Cross-Case Synthesis

As Yin (2009) stated, the advantage of multiple-case study research is that similar findings across cases produce more credible results than the results of a single case, much as similar results from multiple experiments are more credible than the results of a single experiment. To determine whether separate cases had in fact produced similar findings, cross-case analysis is necessary; as the data from each case are reviewed and compared, any similar findings noted increase the credibility of the study's results, as the results are then more robust. This process is referred to as cross-case synthesis, or cross-case analysis. After separate analysis of the data collected from each case school, the researcher in this dissertation study conducted cross-case analysis to determine whether similar principal leadership behaviors and organizational routines had existed across cases.

### Traditional Prejudices Against Case Study Research

Qualitative research in general, and case study research in particular, have been the subject of criticism due to various perceived limitations. Yin (2009) refers to these as “traditional prejudices against the case study method” (p. 14). The two most commonly-raised criticisms have dealt with questions about the rigor and generalizability of case study research.

#### Rigor

Concerns about the rigor of case study research have stemmed from incidents where researchers have done careless work, failed to follow a systematic research procedure, or allowed their own biases to influence their conclusions. Questions about rigor must be addressed through adherence to carefully-documented research procedures; rigor can also be improved by reporting research findings to critical colleagues to address the possibility of researcher bias (Yin, 2009). Both of these suggestions were followed in the conduct of this dissertation study.

#### Generalizability

A second prejudice against case study research has stemmed from the reasonable concern that generalizations cannot be based upon a single case. Yin (2009) countered this concern by pointing out that, just as generalizations should perhaps not be based upon one case study, scientific generalizations should also not be based upon a single experiment; and, in reality, most scientific facts are based upon multiple experiments regarding a given phenomenon under varying conditions. Just as the results of multiple

experiments are more credible and generalizable than the result of one experiment, so too are the results of a multiple-case study, such as that conducted here.

In summary, Yin stated that “case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a ‘sample,’ and in doing a case study, your goal will be to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization)” (2009, p. 15). While it was not possible to draw statistical generalizations from this dissertation’s findings, analytic generalization was possible, particularly due to the fact that it was a multiple-case study.

### Trustworthiness of Qualitative Research

The concept of whether a qualitative study’s findings may be trusted is referred to as trustworthiness. Trustworthiness in qualitative studies is established through a combination of strategies: credibility, transferability, dependability, and confirmability (Key, 1997).

#### Credibility

Credibility is important for studies, such as this one, that seek to explain how specific factors have contributed to a specific outcome. Maxwell (2005) and Key (1997) asserted that the use of multiple sources and methods of data collection, known as triangulation, greatly improves credibility. This study used a variety of data collection methods, including interviews, focus groups, observations, and document analysis. To further buttress credibility (Maxwell, 2005; Weiss, 1994), this embedded multiple-case

study collected quantitative as well as qualitative data. Key (1997) also recommended respondent validation, often known as member checking, to allow respondents to confirm or correct the researcher's initial data and helps ensure that the study's findings are accurate. In this study, respondent validations were conducted with all interview participants. The pilot study, conducted as part of this dissertation study, also supports the credibility of its findings.

Data analysis techniques, such as pattern matching, and the use of rival explanations when interpreting the study's findings, also contributed to this study's credibility. Pattern-matching was used to relate the collected data back to the study's theoretical propositions, with codes and categories reviewed by a critical colleague to verify a high level of inter-rater reliability. Rival explanations were identified and related to the collected data to determine whether they could possibly have made greater contributions to student achievement than the study's independent variables of principal leadership behaviors and organizational routines.

### Transferability

Transferability of qualitative findings refers to whether those findings may be generalized to a larger population, beyond the cases studied. This depends on factors such as the denseness of the researcher's descriptions and on the similarity of the sample group to the demographics of the larger population. As this study dealt with Title I schools in Montana, it was anticipated that its findings may be transferable to other Title I schools in the state. The fact that it was a multiple-case study, as previously discussed, increased the likelihood that the findings of this study may be transferable to similar schools.



### Dependability

Dependability of a qualitative study is drawn from triangulation and a “dense description of research methods” (Key, 1997). A highly dependable study is one that can be repeated by another researcher. In this study, the research design was carefully documented and followed; it will be possible for future research, if desired, to produce a similar study by following the details reported in this dissertation.

### Confirmability

A case study’s confirmability refers to whether it actually measures the phenomena or behaviors it was intended to measure. Because case study research takes place in contemporary settings that cannot be controlled by the researcher, it is important for the researcher to adhere to the study’s research questions and propositions, to avoid collecting and analyzing information that is not relevant to the study. In conducting this study, the researcher took great care to faithfully adhere to the research questions and propositions approved by his university graduate committee.

Confirmability can also be enhanced by data triangulation. In this study, for example, both interviews and focus groups were used in data collection. When data from both sources indicated similar evidence about the contributions of principal leadership behaviors and organizational routines, the confirmability of the study was supported.

### Pilot Study

A research study can be strengthened by experiences that improve the researcher’s knowledge and skills. A preliminary practice run can also help identify areas

for improvement in the design of a study, allowing for changes to be made before the study is finalized and conducted. For these reasons, it is wise to conduct a pilot study (Yin, 2009). As a pilot study offers an opportunity for the researcher to refine the data collection process, this researcher conducted a pilot study for the refinement of his interview and focus group questions and techniques.

Yin (2009) stated that access and convenience are among the main criteria for selecting a pilot study site. Considering the fact that Title I status was a shared trait with the schools to be studied in the final multiple-case study, a Title I school with proximity to the researcher's home therefore seemed an appropriate setting in which to conduct the pilot study. The access and convenience afforded by this selection also made it a desirable choice.

The design of the pilot study was similar to, but smaller and simpler than, that of the embedded multiple-case study. The Collective Teacher Belief Scale was administered to the faculty to assess the school's mean level of collective teacher efficacy. Two individual teachers were interviewed, and a focus group of eight teachers was conducted. Pattern-matching logic, as recommended by Yin (2009), was used to analyze the data collected from the interviews and the focus group.

Data collection for the pilot study consisted of quantitative data collection on collective teacher efficacy, collected via an electronic version of the Collective Teacher Beliefs Scale, or CTBS, and qualitative data collected via interviews with the school's principal and two teachers, as well as a focus group conducted with eight teachers from the school. Each interview consisted of 19 open-ended questions, and was conducted at a

time and place of convenience to the interviewee; each interview lasted approximately fifty minutes. The interviews were audio recorded and transcribed verbatim to enable full and detailed analysis. The focus group discussion consisted of four open-ended questions, and lasted approximately 35 minutes. All data collected from the interviews and focus group was pattern-matched (Yin, 2009) to determine whether it was evidentiary of transformational leadership, relational trust, a professional learning community, or collective teacher efficacy. Results of the CTBS were calculated to ascertain the mean level of collective teacher efficacy reported by the pilot school's teachers.

The pilot study served two purposes. First, it allowed the researcher to gain practical experience in collecting and analyzing data similar to that of the final study; this data was found to be relevant to the study's research questions. Second, the trial run provided by the pilot study revealed that slight modifications to the interview protocols were in order before conducting the final study, as some interview questions were found to be redundant and could therefore be merged or eliminated. These adjustments were made as needed.

#### The Embedded Multiple-Case Study

After the pilot study was completed, and necessary adjustments resulting from it had been made to the final research design, the embedded multiple-case study began. As stated, data collection began near October 1, 2011, and concluded near November 15, 2011. Data analysis continued afterward, culminating in the writing of the study's results and conclusions over the following months. A draft of the final version of the researcher's dissertation was submitted to his university committee on January 30, 2012.

The study was conducted at three case schools. All were designated as Title I schools, due to the percentage of their students who came from low-income households. All three had been recognized by the Montana Office of Public Instruction as Montana Distinguished Schools for Exceptional Student Performance for Two or More Consecutive Years during the period, 2006-2010. Each of the three schools still employed the same building principal who had served it during the year it won the award. Two of the schools were elementary schools; one was a middle school. One school was located in northwestern Montana; one in southwestern Montana; and one in south-central Montana. Their enrollments ranged from 233 to 387 students.

#### Sharing of Results

In the interest of providing each case school, as well as the pilot study school, with a tangible benefit for its accommodation of the researcher, results of the dissertation study were to be shared with each of them. After the study has been approved by the university, a summary of the study's conclusions will be submitted to the principal of each school, to be used within the school at his or her discretion. It is hoped that each school will gain from the insights derived from the data collected during this study.

#### Summary

This embedded multiple-case study collected explanatory data focused on the contributions of principal leadership behaviors and organizational routines on student achievement in Montana Title I schools that had been recognized by the Office of Public Instruction for exceptional student achievement. Specific issues in principal leadership

behaviors that were investigated are transformational leadership (Kouzes & Posner, 2007) and relational trust (Tschannen-Moran & Hoy, 2000). Organizational routines studied were professional learning communities (Hord, 1997) and collective teacher efficacy (Tschannen-Moran, 2009). The goal of this research was to yield findings that may be of use to similar schools in addressing their own student achievement, and to add to the body of research on Title I schools, principal leadership behaviors, and organizational routines in schools.

## CHAPTER IV

## THE MULTIPLE-CASE STUDY

Introduction

Principal leadership and organizational routines have been linked to positive outcomes for schools, including high student achievement. Specifically, schools that exhibit transformational leadership and systems thinking, which is represented in schools as professional learning communities, have often been found to have high student achievement (Eck & Goodwin, 2010; Terrell, 2010; Richardson, 2009; Garrett & Roberson, 2008). Therefore, transformational leadership and professional learning communities are considered likely to result in higher student achievement. Collective teacher efficacy and relational trust have likewise been identified as factors associated with higher student achievement (Robinson, 2010; Cybulski, Hoy, & Sweetland, 2005; Tschannen-Moran, 2004; Tschannen-Moran & Barr, 2004; Goddard, 2002; Goddard, Hoy, & Hoy, 2000).

Title I schools that had won awards for high student achievement had, by definition, exhibited higher student achievement than other Title I schools. The problem in this case was that, while transformational leadership and systems thinking had been generally associated with high student achievement, it was not known if Montana's high-achieving Title I schools had practiced transformational leadership, utilized professional learning communities, or built up relational trust and collective teacher efficacy in the course of producing high student achievement. Furthermore, the link between

professional learning communities and student achievement had not yet been as thoroughly researched as the other factors involved here, leaving a gap in the research that this study aimed to address.

Therefore, an embedded multiple-case study was proposed, guided by the research question, “How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana’s distinguished Title I Schools?” A supporting subquestion for principal leadership behaviors was, “How does relational trust contribute to the high achievement of Montana’s distinguished Title I schools?” A supporting subquestion for organizational routines was, “How does collective teacher efficacy contribute to the high achievement of Montana’s distinguished Title I schools?”

Montana Title I schools that had been recognized by the Montana Office of Public Instruction as Distinguished Schools for Exceptional Student Performance for Two or More Consecutive Years during the period 2006 through 2010 were considered for participation in the study. From this group of five schools, those that qualified for the study were those that still employed the same building principal who had led the school during the year that the school won its distinguished school award. Because two schools from the group no longer employed the same principal, the final number of schools eligible for participation in the study was three.

A defining trait of embedded multiple-case studies is that, although they are qualitative in nature, quantitative survey tools are used to provide supplementary data and buttress the study’s credibility. In this study, two quantitative questionnaires, the Collective Teacher Beliefs Scale (Tschannen-Moran & Barr, 2004), and the Leadership

Practices Inventory (Kouzes & Posner, 2009), were used, respectively, to provide additional data on the organizational routines of collective teacher efficacy and the principal leadership behaviors associated with transformational leadership. This was in keeping with Yin's recommendation that, in studies of multiple schools, "surveys... are needed to address research questions about... the schools.... These data may be highly quantitative" (2009, p. 59). This embedded multiple-case study should not be mistaken for a mixed methods study, however. The primary difference between the two is that, in mixed methods study, qualitative data is collected in support of quantitative data, whereas in an embedded multiple-case study, quantitative data is used in support of qualitative data, which plays the more prominent role in the study's findings and conclusions.

In this study, quantitative data helped answer the research questions about principal leadership behaviors and organizational routines by adding perspective to the qualitative data collection and analysis. For example, extreme high- and low-scoring items from each questionnaire were the basis for questions formulated for use in the focus group discussions held at each school. Also, mean scores for transformational leadership practices of each school's principal, and for each school's overall level of collective teacher efficacy, added perspective to the qualitative data, consistent with Yin's (2009) recommendations for the correct use of quantitative data in qualitative studies.

Qualitative data for this study was collected via a combination of interviews, focus group meetings, observations of each school's principal, and document analysis. The data was then analyzed by a pattern matching strategy. Kouzes and Posner's (2007) practices of transformational leadership, Tschannen-Moran and Hoy's (2000) aspects of



relational trust, Roy and Hord's (2006) definition of professional learning communities, and Tschannen-Moran and Barr's (2004) definition of collective teacher efficacy were used as patterns to be matched with qualitative data collected during the study.

At each of the three participant schools, the building principal and several teachers were interviewed, using an interview protocol of 16 open-ended questions based on transformational leadership, relational trust, professional learning communities, and collective teacher efficacy. Respondent validations for each interview were conducted to enhance the study's credibility. A focus group meeting with eight to 10 teachers was also conducted at each school, using a protocol based on extreme high or low mean scores for each respective school's responses to the Collective Teacher Beliefs Scale and Leadership Practices Inventory. Observations of each school's building principal were conducted using a protocol designed to note principal leadership behaviors and organizational routines that were evident during the observation period. Documents collected for analysis included a variety of school documents, such as teacher handbooks, planning documents, evaluation templates, and collective bargaining agreements. The data collection period of the study encompassed approximately six weeks in the fall of 2011, with two visits made to each participant school during that time.

### Pilot Study Outcomes

The pilot study served two purposes. First, it allowed the researcher to gain practical experience in collecting and analyzing data similar to that of the final study. Second, the trial run provided by the pilot study revealed that slight modifications to the interview protocols were in order before conducting the final study. Also, due to the

small-scale nature of the pilot study, some data collection and analysis methods to be used in the final study were not utilized during the pilot study; these exceptions are noted below.

#### Adjustments to Interview Protocols

During the pilot study, some questions from the interview protocol appeared to be either too similar to other questions, resulting in redundant answers, or simply drew insufficient responses from the interviewees to provide meaningful data for the researcher. Specifically, it appeared that two questions from the interview protocol section on organizational routines should be eliminated, and that two questions from the section on collective teacher efficacy should be combined. The researcher's graduate committee chairperson supported these changes.

The organizational routines interview question, "What practices for teacher collaboration are designed into your school's schedule?" received similar responses to the question, "How do teachers at your school work together to continually improve teaching and learning?" However, the latter question produced more robust data, leading the researcher to conclude that the former question could be eliminated. Also, the organizational routines interview question, "How would you describe the productivity of most time set aside for teacher collaboration in your school?" produced relatively little data, as teachers indicated that they could only speak to their personal collaborations, but not to that of the school as a whole. The researcher therefore considered that the overall interview protocol would be stronger with the elimination of this question.

The collective teacher efficacy interview questions, “How would you describe the ability of teachers in your school to help students master complex content?” and “How would you describe the ability of teachers in your school to help students learn to think critically?” generated similar responses from the interviewees. One interviewee prefaced his answer to the question on critical thinking by saying, “I’ll try not to give you the same answer I gave you twice already.” This indicated that either one of the two questions could be safely eliminated, or that the two could be combined. Not wanting to eliminate a question unnecessarily, the researcher decided to combine the two. The new interview question that took their place was: “How would you describe the ability of teachers in your school to help students learn to think critically and master complex content?”

#### Use of the Leadership Practices Inventory

Due to the compressed nature of the pilot study, only the Collective Teacher Beliefs Scale, or CTBS, was utilized for quantitative data collection to be embedded within the study. For the final study, the CTBS was again used to collect data about each school’s collective teacher efficacy, but the Leadership Practices Inventory, or LPI, was also used to gather data about the transformational leadership behaviors of the building principal.

#### Document Analysis

Another method of data collection not used in the pilot study due was document analysis. In the final study, document analysis was utilized for triangulation of data, which theoretically bolstered the study’s credibility.

### Respondent Validations

Time did not allow for respondent validations, also known as member-checking, to be conducted following the collection of qualitative interview data during the pilot study. During the final study, each interview was followed up by a subsequent respondent validation to further enhance the study's credibility.

### Inter-rater Reliability of Data Categories

To further enhance the validity of the final study, the code categories for a sample of the qualitative data collected was reviewed by a colleague of the researcher. This colleague had 30 years of experience as a high school principal in Montana, and held a Ph.D. in educational administration.

The process was as follows: first, the researcher labeled each section of the data as belonging to a specific category, such as "Model the Way" for data that he felt was evidentiary of modeling the way practices (Kouzes & Posner, 2011) of a principal included in the study. This was done in regard to a full transcript of an interview that had been approximately 35 minutes in length. In all, the researcher had identified a total of 15 different data categories from a total of 24 individual data statements. For example, some interviewee statements were noted as exemplary of transformational leadership practices: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, or Encourage the Heart, and thus coded to those data categories. Other statements were pattern-matched and coded to each of the five aspects of relational trust: benevolence, competence, openness, honesty, and reliability; some to professional learning community traits of teacher collaboration and collegial relationships; and still others to collective

teacher efficacy beliefs, such as the ability to manage student behavior, help students believe they can do well in school, or help students think critically and master complex content. Each statement was thus coded to one of the 15 data categories. The researcher's colleague then reviewed the data and its associated categories, noting points of agreement and disagreement in regard to which categories were applied to each individual piece of data.

When this review process was completed, Cohen's kappa was used to determine the level of inter-rater reliability between the researcher's judgments of which category to associate with each piece of data, as compared to the colleague's judgments in this regard. Using the *Online Kappa Calculator* (Randolph, 2008), it was determined that the percentage of overall agreement between the two was 0.96. Given the Online Kappa Calculator's statement that, "A rule of thumb is that a *kappa* of .70 or above indicates adequate interrater agreement," and the recommendation of one member of the researcher's university graduate committee that a kappa of more than 0.8 indicates strong agreement (Jayne Downey, personal communication, December 23, 2011), this 0.96 kappa rating indicated a high level of inter-rater reliability for the data categories identified by the researcher. This, in turn, enhanced the validity of the final study's findings.

### The Embedded Multiple-Case Study

The final study was an embedded multiple-case study, conducted at three Montana Title I schools. Each school had been recognized by the Montana Office of Public Instruction as a Distinguished Title I School for Exceptional Student Performance

for Two or More Consecutive Years during the period 2006 through 2010. Also, each school still employed the same building principal that had led the school during its award-winning year. For the purposes of this study, these schools were referred to as Cotton Memorial Middle School, Northwest Elementary School, and Musselshell Elementary School.

The units of analysis for this study were the three individual schools that participated; each case school was one unit of analysis. This unit of analysis was chosen on the basis that the research questions for this study had sought to learn the contributions of principal leadership behaviors and organizational routines to high-achieving *schools*. According to Yin (2009), the main unit of analysis should normally be at the level addressed by the study's research questions. Schools, rather than individual administrators, faculty, or students, were therefore the units of analysis for this study.

Data from each school was collected and analyzed separately. No data in this study, either quantitative or qualitative, was combined across cases, as that would have changed the fundamental nature of the study: it would then have become a single-case study, not a multiple-case study.

Following the completion of data analysis for each individual case school, however, cross-case synthesis (Yin, 2009) was done by analyzing the data from each case to determine whether similar qualitative statements were made across schools. This fulfilled the greatest potential advantage of multiple-case study research, according to Yin: just as similar findings from multiple experiments are more credible than the findings of a single experiment, similar findings from multiple cases are also more

credible and more robust than the findings of a single case study. For this reason, cross-case synthesis, sometimes called cross-case analysis, was conducted to determine whether similar principal leadership behaviors and organizational routines had occurred at each of the distinguished Title I schools researched in the course of this dissertation study.

#### The Collective Teacher Beliefs Scale

The Collective Teacher Beliefs Scale, or CTBS (Tschannen-Moran, 2011), was used to measure the collective teacher efficacy of each case school. It was administered to each school's faculty, excepting those teachers who were not employed by the school during the year that it had won its distinguished school award. The scores of all completed CTBS surveys for each school were summed and averaged to determine each school's mean level of collective teacher efficacy. These scores served to help formulate each school's focus group protocol and buttress the study's qualitative analysis by providing a mean score for each school's level of collective teacher efficacy; knowledge of this score added perspective to the thick and rich qualitative data collected in regard to collective teacher efficacy. Also crucial in support of the study's qualitative data collection, the highest and lowest scoring CTBS items at each school were used as the basis of questions for that school's focus group discussion. This use of quantitative data in support of the leading role played by the qualitative data was consistent with Yin's (2009) recommendations for embedded multiple-case studies.

### The Leadership Practices Inventory

The Leadership Practices Inventory, or LPI (Kouzes & Posner, 2001), was used to measure each school principal's transformational leadership behaviors. It was administered to all teachers at each school who had also been employed by the same school during the year it won its distinguished school award. Results of the teacher-completed LPIs for each school were tallied to determine each principal's mean scores for his or her transformational leadership behaviors per each of Kouzes and Posner's five practices of leadership, as perceived by the school's faculty: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. These scores helped formulate each school's focus group protocol: the highest and lowest scoring LPI items for each school were revisited by that school's focus group questions. Data from the LPI also buttressed the overall qualitative data analysis by identifying the perceived frequency of each principal's transformational leadership practices; this added perspective to the qualitative data collected on transformational leadership at each school. A self-assessment version of the LPI was also completed by each school's principal; this also added to each school's qualitative data on transformational leadership, lending greater credibility to the study by bolstering the thickness and richness of the data.

Both the CTBS and LPI were administered in the manner described above at each school that participated in this embedded multiple-case study. Qualitative data collection for the study, while similar for each unit of analysis, contained some variation from one school to the next. For example, variations in the responses to the CTBS and LPI in the three different schools resulted in each school having its own unique focus group



protocol questions. Data collected and analyzed from the three individual case schools that participated in this study are detailed below.

#### School A: Cotton Memorial Middle School

Cotton Memorial Middle School is a public middle school with a current enrollment of 233 students in grades six through eight, located in southwestern Montana. It had been designated as a schoolwide Title I program school since 2005; prior to that, it had received targeted Title I assistance since before the Office of Public Instruction's available records. The school's administration consisted of the building principal and one dean of students, and its faculty consisted of 18 teachers. The school was also defined as a Title I school because of its significant percentage of students defined as low-income by the federal government, with 71 percent of its students qualifying for free and reduced lunch status. Demographically, 90 percent of the school's students were of white ethnicity, and seven percent were Native American, with students of black, Hispanic, and Asian ethnicity composing the remaining three percent.

Academically, the school had exhibited high student achievement. It had made Adequate Yearly Progress, or AYP, under the federal government's No Child Left Behind standards, and won a Montana Office of Public Instruction Distinguished Title I School Award for Exceptional Student Performance for Two or More Consecutive Years during the period 2006 through 2010. During its award-winning year, 72 percent of its students earned proficient or advanced scores in math on Montana's Criterion Referenced Test, or CRT, and 86 percent were advanced or proficient in reading. In 2011, the most recent year for which records are available, 63 percent of its students were advanced or

proficient in math, and 84 percent in reading. The school had made AYP each year. This study sought to learn how principal leadership behaviors and organizational routines had contributed to Cotton Memorial Middle School's high levels of student achievement.

### Participants at Cotton Memorial Middle School

A total of 17 individuals at Cotton Memorial Middle School, or CMMS, consisting of the building principal and 16 teachers, were asked to participate in this study. The remaining teachers on the faculty were excluded from the study because they were not yet employed at CMMS in the year that it was recognized as a Distinguished Title I school. All teachers included in the study were asked to complete the Collective Teacher Beliefs Scale and Leadership Practices Inventory. The building principal completed the self-assessment version of the Leadership Practices Inventory, and the Principal Sense of Efficacy Scale. The principal and randomly selected teachers also participated in either interviews or the focus group meeting conducted at CMMS.

### Principal

The school's principal was currently serving her thirteenth year in that position. At 64 years of age, she was a native of the town in which Cotton Memorial Middle School is based. Prior to becoming the school's principal, she served there as a math teacher for a decade. Previous to that, she operated a preschool in the town for approximately 10 years. As many of her faculty and staff were also natives of the town, she had established relationships with most of them for many years prior to accepting her

role as middle school principal. For the purposes of this study, she was referred to as Patricia Martin.

### Teacher Interviewees

The first teacher interviewee at Cotton Memorial Middle School was an eighth grade mathematics teacher. At age 47, she had taught in Montana for 25 years, with the past 10 years in her position at CMMS. She was referred to here by the pseudonym, Tara Kendall.

The second teacher interviewee was a resource teacher for grades six through eight at CMMS. She was a native of the town, 38 years old, and had spent her entire 13-year career teaching in the town's various schools. She had been in her position at CMMS for the past seven years. For this study, she was referred to by the pseudonym, Annie Brooks.

The third teacher interviewee taught reading and mathematics in grades six through eight. He was also a native of the town, and had spent the entirety of his 10-year teaching career in his position at CMMS. For this study, he was referred to by the pseudonym, Mike Miller.

### Teacher Focus Group Participants

The focus group initially consisted of ten teachers from CMMS: three males and seven females. None of them had been previously interviewed. Their ages ranged from 37 to 61 years, and their level of experience varied from 10 to 37 years. All had taught in their current positions at the school from anywhere from five to 25 years. In this report, focus group members are referred to by pseudonyms as needed.

An eleventh teacher assisted the researcher during the focus group meeting by taking notes to keep track of which teacher was speaking at any given time. Although she was informed that she was only to observe and take notes, there were occasions during the meeting when she forgot this caveat and briefly inserted herself into the discussion. As she met the qualifications for participation in the study, and had not previously been interviewed, her input was also recorded, bringing the actual size of the focus group to 11 participants. This teacher was 42 years old and had been teaching for 21 years, including eight in her current position at CMMS.

#### Data Collection at Cotton Memorial Middle School

Data collection began with electronic distribution of the Collective Teacher Beliefs Scale and Leadership Practices Inventory to all teachers at CMMS who had been employed there during the year the school won its Distinguished Title I School award from the Montana Office of Public Instruction. A self-assessment version of the online Leadership Practices Inventory was also sent to Principal Martin, as was an electronic version of the Principal Sense of Efficacy Scale. During the researcher's subsequent first visit to the school, interviews were conducted with the principal and all teacher interviewees. The principal was also observed at work during the school day, and school documents were collected for analysis. During the second visit to the school, respondent validations were conducted with each interviewee, the principal was again observed at work, and the focus group meeting was conducted.

Data from the Collective Teacher Beliefs Scale

On September 23, an electronic version of the Collective Teacher Beliefs Scale, or CTBS, was sent to all teachers at CMMS who had also taught there during the year it had won its distinguished school award. This was approximately three weeks in advance of the researcher's first visit to the school on October 13, allowing teachers ample opportunity to respond to the CTBS. Those who did not respond by October 3 were sent an electronic mail message as a reminder, and a second electronic mail reminder was sent on October 11.

According to the electronic survey management site utilized by the researcher for distribution of the CTBS, 11 of the 16 qualified teachers at Cotton Memorial Middle School completed the CTBS. When asked by the researcher, the remaining five teachers stated that they had in fact completed the CTBS online, but that their transmission of the completed questionnaire must have failed to register. Although this may have been unlikely, the researcher did not want to jeopardize access to these individuals for subsequent qualitative data collection. They were informed that their results had not been received and sent new electronic links to access the CTBS with a polite request to complete it, but none did so.

However, due to the qualitative methodology of this study, quantitative analysis was never meant to be applied to it, other than for the basic purposes of formulating focus group questions and noting the school's overall mean score for collective teacher efficacy. The former of these purposes was carried out; the latter is discussed below.

The CTBS uses a nine-point Likert scale to rate responses, with a score of “1” representing the lowest possible collective teacher efficacy score for each of the 12 items, and a score of “9” representing the highest possible score. The CTBS results for Cotton Memorial Middle School ranged from a low item-mean score of 5.91 to a high item-mean score of 7.91. These two items served as the basis of subsequent focus group questions regarding collective teacher efficacy. This was the most important contribution of the CTBS to the data collection process. The highest scoring CTBS item from this school was, “To what extent can teachers in your school make expectations clear about appropriate student behavior?” The lowest scoring item was, “How well can adults in your school get students to follow school rules?” Each of these items was revisited during the focus group discussion to learn teachers’ perspectives as to why they drew the highest and lowest scores from this school.

Overall, the mean level of collective teacher efficacy at CMMS, taken as the average of all 12 CTBS items’ mean scores, was 6.75 out of a possible 9.00. The CTBS has not been norm-referenced, so a school’s collective teacher efficacy score on the CTBS cannot be categorically stated as being either high or low in comparison to other schools. At face value, therefore, it can only be stated that an overall score of 6.75 out of 9.00 may indicate a fairly high level of collective teacher efficacy at Cotton Memorial Middle School. Again, the main contribution of the CTBS to data collection in this case was its influence in helping the researcher to formulate questions for the focus group, based on the highest and lowest scoring items from the questionnaires that were completed by the faculty. In this regard, the CTBS served its purpose.

In correspondence with the CTBS, the school's principal completed the Principal Sense of Efficacy Scale, or PSES. The PSES differs from the CTBS in that it measures the principal's individual sense of efficacy in her ability to perform her duties as principal, whereas the CTBS measures a faculty's sense of collective teacher efficacy. The purpose of the PSES in this study was simply to gather information that might be useful to know when analyzing qualitative data collected from the principal. The principal in this case, Mrs. Martin, rated her sense of efficacy as a perfect 9.00 out of 9.00 on 12 of the PSES's 18 items, with an overall mean efficacy score of 8.11 out of 9.00. While the PSES has not been norm-referenced, this score appears to indicate that the principal has a high level of self-efficacy.

#### Data from the Leadership Practices Inventory

On September 30, all CMMS teachers who met this study's requirements for participation were electronically sent a copy of the online version of the Leadership Practices Inventory, or LPI, to be completed in regard to the principal, Mrs. Martin. On the same date, Principal Martin received a copy of the online version of the LPI self-assessment tool, which she completed in regard to her own leadership practices.

To allow ample time for completion, teachers received the LPI approximately two weeks before the researcher's first visit to Cotton Memorial Middle School on October 13. To remind teachers to complete the LPI before that date, electronic messages were sent to them on October 6 and October 11. Ultimately, 13 of the 16 teachers asked to participate completed the LPI, a return rate of 81 percent.

Once again, however, the purpose of using the LPI in this qualitative study was not to achieve a statistically significant quantitative result. Rather, the main purpose was to note LPI items that generated the highest and lowest scores from respondents in this case, and then formulate questions for the CMMS focus group meeting based on those items. This purpose was fulfilled. A secondary purpose for administering the LPI in this case was to record the mean scores, for each of the five transformational leadership practices defined by the LPI, as rated by both faculty respondents and from the principal's self-assessed LPI results. These mean scores are related below.

The LPI rates leadership practices according to Kouzes and Posner's (2001) five practices of transformational leadership: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. For each of the five practices, LPI scores can range from a minimum of six to a maximum of 60.

On her LPI self-assessment, Principal Martin rated herself a perfect 60.0 on the practices of inspire a shared vision, challenge the process, enable others to act, and encourage the heart. She assigned herself a score of 58.0 out of 60 on the remaining leadership practice, model the way. In contrast, the mean scores from the 13 teachers who completed the LPI in regard to Mrs. Martin's leadership practices were as follows: 41.8 out of 60 for modeling the way; 40.8 out of 60 for inspiring a shared vision; 37.9 for challenging the process; 47.1 for enabling others to act; and 46.2 for encouraging the heart.

Although the LPI has not been norm-referenced for educational leaders specifically, the results of the several thousand people who have taken this version of the



LPI indicated that Mrs. Martin's self-assessed LPI scores were very high, in the 97<sup>th</sup> to 99<sup>th</sup> percentiles for each of the five leadership practices (Kouzes & Posner, 2009).

Conversely, the direct report-rated LPI scores collected from the teachers at Cotton Memorial Middle School ranged from low to moderate, with percentile scores ranging from the 15<sup>th</sup> to 42<sup>nd</sup> percentiles. This disparity between Mrs. Martin's self-assessed scores, and the mean scores of the teacher ratings in regard to her behaviors as principal, was noteworthy, as it suggested that although Mrs. Martin viewed herself as almost always practicing transformational leadership behaviors, her faculty did not generally share this appraisal.

In regard to individual item scores from the teacher-scored LPI, the highest score assigned to Principal Martin was a rating of 8.8 out of 10.0 for the item, "Gives people choice about their work." This score approximated the LPI's score of 9.0 for leadership behaviors that are practiced "Very Frequently" (Kouzes & Posner, 2009). The lowest teacher-scored item was, "Asks for feedback on how his/her actions affect people's performance," which received a mean score of 4.2 out of 10.0. This approximated a score of 4.0, categorized by the LPI as a leadership behavior that is practiced "Once in a While" (Kouzes & Posner, 2009). As these items represented the extreme high and low scores, two questions for the focus group meeting at CMMS were subsequently based upon each one of them.

### Interview Process

Each interview at Cotton Memorial Middle School was conducted during the researcher's first visit to the school. The principal interview was conducted in her office;

two teacher interviews were conducted in each teacher's classroom during a free period; and the third teacher interview was conducted in a vacant conference room. Prior to each interview, the interviewees had been informed of the study's research topics and methods in a letter of invitation sent to them electronically by the researcher. As detailed above, the interview protocols consisted of 16 open-ended questions that reflected key practices, routines, and beliefs associated with transformational leadership, relational trust, professional learning communities, and collective teacher efficacy.

The principal interview was conducted the evening of October 12, which was the day before the researcher's first visit to CMMS, the researcher having traveled to the town that afternoon. Over the course of approximately 60 minutes, all 16 interview questions were completed. The respondent validation was conducted during the researcher's second visit to CMMS on November 2.

The first teacher interview was conducted in the teacher's classroom the morning of October 13, during her prep period. The 16 interview questions were answered over the course of approximately 35 minutes. The respondent validation was conducted the evening of November 1, prior to the researcher's second visit to CMMS. The second teacher interview was conducted later that morning in a vacant conference room, with all interview questions completed in approximately 30 minutes. The third teacher interview was conducted in the teacher's classroom during his prep period that afternoon, over a duration of approximately 35 minutes. Each of the four interviews conducted at CMMS was consistent in duration with the anticipated interview length of 30 to 60 minutes that was stated in the researcher's dissertation proposal. Respondent validations for the

second and third teacher interviews were conducted during the researcher's second visit to CMMS on November 2.

Yin's (2009) analytic strategy of pattern-matching was used to determine whether interviewee responses generated data relevant to the study's research questions. During each interview, the researcher took notes in the margin of his interview protocol copy; these margin notes were a first step in the data analysis process, allowing the researcher to notice trends and patterns in the various statements made by each interviewee. For example, if two interviewees gave highly similar answers or used the same phrase in response to the same interview question, the researcher was able to see those similarities when reviewing the protocol margin notes after the interviews were completed. Also, each interview was audio recorded and transcribed verbatim to allow the researcher to review the transcripts and conduct a deeper, more thorough review of the interview data as the data analysis process evolved. The subsequent respondent validations allowed the researcher to confirm that the data collected during the interview process was accurate. These practices enabled the researcher to detect and match the patterns present in the data to the factors represented in this study's research questions.

#### Focus Group Process

The focus group discussion was conducted in a vacant classroom during the school's weekly advisory hour on November 2. Twelve people were present: the researcher and the eleven teachers who had been selected for the focus group. As stated, one of the teachers in the group also served as an assistant to the researcher by keeping notes of which person was speaking at any given time during the discussion. The focus

group participants had general knowledge of the study's research topics and methods from the invitation letter that had been sent to the principal and all eligible teachers prior to the commencement of the study, and from having been introduced to the researcher during his first visit to CMMS in October.

The group was asked five broad, open-ended questions to generate discussion about the principal's leadership behaviors and the faculty's collective teacher efficacy. As stated, two questions about principal leadership behaviors were formulated from the highest and lowest mean-scored items on the LPI questionnaire completed by the teachers. These items were, "Gives people choice about their work," and, "Asks for feedback on how his/her actions affect people's performance." An additional focus group question on principal leadership behaviors had been formulated based on differing interview responses about the principal's practices in praising and recognizing teachers' contributions at the school. The two focus group questions related to collective teacher efficacy were formulated from the highest and lowest mean-scored items on the CTBS questionnaires completed by the teachers who had participated in the study. These items were, "To what extent can teachers in your school make expectations clear about appropriate student behavior," and "How well can adults in your school get students to follow school rules?" The focus group discussion lasted approximately 55 minutes, consistent with the anticipated duration of 30 to 60 minutes stated in the researcher's dissertation proposal, and exceeding the 45-minute minimum duration suggested by the researcher's graduate committee (Jayne Downey, personal communication, October 20, 2011).

As with the interview data, Yin's (2009) strategy of pattern-matching was used to analyze whether data collected from the focus group was consistent with the study's research questions. The focus group discussion was audio recorded and transcribed verbatim to allow the researcher to review the transcript and conduct a deeper, more thorough review of the focus group data as the data analysis process evolved. This enabled the researcher to detect and match the patterns present in the data to the factors of transformational leadership and collective teacher efficacy represented in this study's research questions.

#### Document Collection

During the researcher's first visit to CMMS on October 13, several school documents were collected from the principal for analysis. These consisted of copies of the following: the school's five-year comprehensive education plan, the schoolwide Title I program attachment to the comprehensive education plan, the revised plans for continuous school improvement attachment to the comprehensive education plan, the school's teacher handbook, the school's student handbook, the collective bargaining agreement between the school district and the local teachers' union, and the teacher evaluation form used by the school's principal.

As with the other qualitative data collected for this study, the strategy of pattern-matching (Yin, 2009) was used to analyze these documents. Each school document was carefully scrutinized for evidence of principal leadership behaviors and organizational routines that may have contributed to the school's high levels of student achievement.

### Data Analysis for Cotton Memorial Middle School

Data collected from Cotton Memorial Middle School was pattern-matched to determine which principal leadership behaviors or organizational routines it indicated at CMMS. Each piece of relevant data was found to match one of the following factors that may have contributed to the high student achievement levels attained by the school: the principal's transformational leadership, relational trust in the principal, the school as a professional learning community, or the school's collective teacher efficacy. Data that did not match any of these was analyzed as possible evidence of one or more rival explanations for the school's high student achievement.

#### Principal Leadership: Transformational Leadership

As stated, the results of Principal Martin's self-assessed LPI questionnaire indicated that she viewed herself as a leader who almost always exhibits transformational leadership practices in all five areas: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. The results of the observer-assessed LPI questionnaires, however, indicated that teachers at CMMS perceived these behaviors from Mrs. Martin in only low to moderate frequencies. This difference in opinion was also apparent in the qualitative data collected from the school, although there were specific practices of transformational leadership that both Mrs. Martin and the faculty stated she practiced in her role as principal.

In the transformational leadership practice of modeling the way, Principal Martin's self-assessed LPI score of 58 out of 60 ranked her in the 97<sup>th</sup> percentile among

several thousand leaders who have completed the questionnaire (Kouzes & Posner, 2009). However, the average teacher-assessed score for Mrs. Martin was 41.8, which ranked her in only the 24<sup>th</sup> percentile for modeling the way, as compared to the overall scores assigned to other leaders by their direct-report employees (Kouzes & Posner, 2009).

A particular area of weakness in modeling the way, as rated by teacher respondents to the LPI, related to whether Mrs. Martin asks for feedback on how her actions affected people's performance, as she received an overall rating of 4.2 out of 10. When this issue was raised by the researcher during the focus group discussion, one teacher replied that she had never heard Mrs. Martin ask for feedback of this type. This prompted comments from other teachers that Mrs. Martin was viewed as having a very detail-oriented, "Type A" personality that sometimes "might come across as abrasive," and that making AYP was seen as the school's main goal in recent years. Mrs. Martin's focused effort on improving specific academic areas, however, was credited with being a driving force behind the school's high academic achievement. Jasmine, a 60-year old English teacher who participated in the focus group, commented: "I really admire the way that she went after it (the goal of making AYP) the way she did... now I have focus, too, because of her focus and direction."

Further qualitative evidence in regard to Mrs. Martin as a leader who models the way was present in the data collected at CMMS. Mrs. Martin stated her belief that her values, a trait associated with modeling the way, were apparent to her faculty through her general personality, which she felt was well-known as both she and a majority of the

faculty were natives of the town and had known each other for many years. The value of high student achievement as a goal was consistently referred to by teachers, who uniformly reported that emphasis was placed on student achievement at staff meetings and in individual conversations with Mrs. Martin.

Mr. Miller, who teaches math and English at CMMS and is one of the many locals employed at the school, echoed this sentiment, stating that he had known Mrs. Martin his entire life, and thus understood her values and goals for the school through both personal and professional conversations with her. During the focus group discussion, Anna, a 43 year-old teacher of math and family and consumer science with 19 years of experience at CMMS, stated her opinion that high student achievement was clearly perceived to be a personal goal for Principal Martin, therefore, “we all should take it personal, but she really does... it’s *my* school.”

During the researcher’s two visits to CMMS on October 13 and November 2, observations of the school and of Mrs. Martin at work also revealed some evidence of modeling the way behaviors. Specifically, school goals relating to achievement were posted in common areas of the school, as well as in the student and teacher handbooks, and Mrs. Martin was observed reviewing the school’s achievement data. Goal statements in the student and teacher handbooks also emphasized the role of the middle school in developing each student’s potential and helping students successfully transition from elementary to high school.

The theme detected from the data related to modeling the way was that Mrs. Martin is a principal who values high student achievement scores and pushes her teachers



to focus on student achievement in order to make Adequate Yearly Progress as mandated by the federal No Child Left Behind Act. The faculty at CMMS reported perceiving this through statements made by Mrs. Martin, as well as by virtue of having known and worked with her for many years; even when not directly stated, her emphasis on high student achievement appeared to be implicitly understood by the faculty. A relative area of weakness for Principal Martin, in regard to modeling the way, was that she had rarely or never elicited feedback from her teachers to learn how her actions as principal affect their performance.

In regard to the transformational leadership practice of inspiring a shared vision, Principal Martin's LPI self-assessed score was 60 out of 60, in the 99<sup>th</sup> percentile (Kouzes & Posner, 2009). Her teacher-assessed LPI score, however, was 40.8 out of 60, placing her in the 35<sup>th</sup> percentile (Kouzes & Posner, 2009).

In her interview, Mrs. Martin made the following statement about developing a vision for the school:

When we wrote the five-year plan and made the vision-mission statements, they're all a part of that writing, and we were given time to do that and to have conversations and to discuss what we all wanted, and our philosophy here is that it takes a village to raise these children, and so everybody on staff is equally important, all the way down to the custodians, the engineer, and the cooks.... We all work together here to do whatever is best for the student, the community, the family, and there isn't anybody that gets more kudos than another.

In her interview, math teacher Tara Kendall described Mrs. Martin's approach to enlisting the faculty in developing a vision: "We meet collaboratively, as a group. We

kind of look at where we are; we look at the students we currently have... and where we'd like to be... I guess you'd call it a roundtable discussion, so that everyone has equal input and we all know where we're headed." Resource teacher Annie Brooks also stated in her interview that, in developing a vision for the school, Mrs. Martin "includes us all, she asks our input... she really does listen."

In his interview, Mike Miller also confirmed that Mrs. Martin would ask for input when developing a vision, typically during a weekly staff meeting or team meeting. He also stated that she showed enthusiasm for the vision, "Sometimes too much... sometimes she can be a little overwhelming." When asked to clarify this comment, Mr. Miller said that, while Mrs. Martin does ask for teacher input, her own opinions may differ from those of the teachers, and in those cases, "she can really push hard" to enforce her preferred vision for the school. On the other hand, Nicole, a 52-year old reading and social studies teacher, stated at least an occasional dissatisfaction with the way that Principal Martin perhaps too often asks for faculty input. She commented that "sometimes her choices, when she does it in staff meetings, it takes forever because then we have 20 different opinions.... Sometimes I wish she would just say, 'this is how we're doing it....' That would be a lot easier, but I do like having choices."

Although the school did not have a vision statement publicly displayed in common areas, both the student and teacher handbooks had statements that referred to the goals and vision of the school. Also, a key part of the school's vision was the OLWEUS anti-bullying program, which was evidenced by statements posted in classrooms, offices, and common areas throughout the school. Overall, the evidence from CMMS indicated

that Principal Martin does attempt to inspire a shared vision by asking for faculty input in developing a vision for the school, with the caveat that she sometimes pushes her own preferred vision, even if it is contrary to the faculty's preferences.

In her LPI self-assessment, Mrs. Martin assigned herself a rating of 60 out of 60 for her behaviors in challenging the process, which again placed her in Kouzes and Posner's 99<sup>th</sup> percentile. Again, however, there was a considerably different result from the teacher-assessed LPI, as faculty respondents rated her at 37.9 out of 60, a score that placed her in only the 15<sup>th</sup> percentile (Kouzes & Posner, 2009).

Principal Martin described herself as having made a variety of changes to the school, both in terms of daily practices and programs, and to the physical plant itself. She cited the fact that she had sent as many teachers as possible to the annual Nuts and Bolts Symposium in Denver, a conference designed specifically for middle school issues, because of her goal for CMMS "to be a true middle school." She also referred to the fact that CMMS participates in the Montana Behavioral Institute, or MBI, and has added the OLWEUS program in order to better deal with student discipline issues, particularly bullying, which she believes is prevalent due to the town's low-income demographics. As for the physical plant, she stated that the building was constructed in 1950, and that her predecessor had not allocated any funds for maintaining or improving the facility. Since she had become principal, the building had been largely remodeled, with new paint, tile, and carpeting; she also credited her engineer and custodial staff as being "the best in the district" at repairing and maintaining the building.

Mrs. Kendall stated that Principal Martin frequently sends teachers to in-service training for professional development, and mentioned that she has been able to attend professional development in Denver for the Nuts and Bolts Symposium, as well as in Washington, D.C. Mrs. Brooks also mentioned the Nuts and Bolts Symposium, although she had not personally attended it, as well as MBI and a reading conference in Wyoming, both of which she had attended, when discussing how Mrs. Martin has tried to change and improve the school. Mr. Miller stated that Mrs. Kendall has shared her ideas and asked teachers for input on how to improve the school academically, stating that her use of available funds to purchase Smart boards had facilitated improved teaching and learning. He also added, “aesthetically, she might as well be an interior decorator; she’s done all of the work around the building,” which confirmed Mrs. Martin’s statements about the improvements that had been made to the school’s physical plant during her tenure. During the focus group discussion, several teachers commented that Mrs. Martin’s ability to take advantage of available funds for the purchase of Smart boards, as well as professional development and the implementation of a new reading program, had improved the school and facilitated the improved student achievement that resulted in CMMS making AYP.

Another aspect of challenging the process is a leader’s ability to resist changes imposed from above when they might harm the efforts of the leader’s direct reports. Relevant to this point, during the focus group discussion Anna stated: “Things that have been put on the chopping block... the disruptive student room that I think should’ve been gone, financially, years ago, she keeps going... because it helps. I can send that student

out, it helps the education of the rest that stay in the room.... So things like that, they're still here because she fought for them.”

The overall theme that emerged regarding Principal Martin as a leader who challenges the process was that she is active in procuring funds to pay for professional development, technology to improve teaching, and making improvements to the school's physical plant. Despite the wide difference between her self-assessed LPI score for this practice and the teacher-assessed LPI questionnaire scores, the qualitative data collected from the school indicated that Mrs. Martin is perceived to engage in challenge the process behaviors, at least in regard to the issues stated above. One particularly telling comment about Mrs. Martin's ability to provide resources to change and improve the school came from the focus group. Wendi, a 45-year old social studies and English teacher with 12 years of experience, said:

When I first came to the school, somebody says to me, “So, you're hopping in the Barbie Van... going to Cotton Memorial.” And I said, “I have no idea what that means.” And they said, “the Barbie Van has everything, that school gets everything, Patty Martin gets everything she asks for.” And... now, being here, she pushes to get everything she wants.

As a leader whose practices enable others to act, Principal Martin's self-assessed LPI rating was again in the 99<sup>th</sup> percentile with a score of 60 out of 60 (Kouzes & Posner, 2009). Her teacher-assessed LPI score for enabling others to act was 47.1 out of 60, placing her in the 33<sup>rd</sup> percentile (Kouzes & Posner, 2009).

For a school principal, a key aspect of enabling others to act is to empower teachers. Mrs. Martin stated that the proliferation of technological teaching aids at

CMMS, such as Smart boards, occurred through the efforts of teachers: “I had very technologically savvy teachers who knew about Smart boards, who knew about Proximas, who knew about CPS units, and wanted to use them.” She then stated that by the fourth year of her principalship, every teacher who requested a Smart board had received one, and that Proximas (LCD projectors that can be connected to a computer and project images from the computer monitor onto a large screen) had been mounted in every classroom. She also mentioned that the school’s accelerated math and accelerated reading programs were added at the request of teachers who had learned of their potential benefits. She concluded, “I think those are the kinds of things that empower teachers, when they tell you, ‘these things are really good,’ and that will help them teaching and it will fire up the kids.”

Teacher interview and focus group data revealed that teachers perceived Mrs. Martin as a principal who delegates authority to teachers and allows teachers freedom in choosing which teaching methods to use in their own classrooms. One teacher in the focus group said, “I have never, ever been told, ‘this is what you have to teach,’” followed by another who said, “She gives you a lot of freedom to teach the way you want to teach, probably because she’s learned that when she does that, it works.” In her interview, Mrs. Kendall stated, “she’s very supportive when she comes in the classroom at all of the methods that we’re attempting.... And then on the flip side, if there’s any parental questions or a district question about why we’re trying the methods we are... she’s very good at backing you up, so you always feel secure.” Other teacher interview

and focus group comments also referred to the perception that Mrs. Martin consistently supported teachers.

In terms of enabling others to act, Principal Martin's daily practices appeared to be perceived by both teachers and herself as helping teachers carry out their duties by supporting them and giving them the tools they needed to be successful. Although there was a pronounced difference in the self-assessed and teacher-assessed LPI scores, the qualitative data collected from Mrs. Martin and from the teachers was similar in regard to her leadership practices in enabling others to act.

For the fifth practice of transformational leadership, encouraging the heart, Principal Martin's self-assessed LPI score was 60 out of 60, rating herself in the 99<sup>th</sup> percentile (Kouzes & Posner, 2009). Her teacher-assessed LPI score was 46.2 out of 60, a rating in the 42<sup>nd</sup> percentile (Kouzes & Posner, 2009).

Leaders that encourage the heart are characterized by the praise and recognition that they give others to show that their efforts are valued. In her interview, Mrs. Martin expressed that she tries to be "constantly praising the good things that they (teachers) do, because they do a lot of good things every single day." In terms of public recognition, both she and Mrs. Kendall mentioned that public recognition of teachers at CMMS includes articles published in the local newspaper, or aired on the radio, as Mrs. Martin brings items of interest to the media's attention. Privately, praise ranged from simple verbal or written thanks to tangible expressions of appreciation, such as food, drinks, and gift certificates. This was reiterated by Mrs. Brooks in her interview.

In Mr. Miller's interview, however, he expressed his belief that Mrs. Martin does not praise teachers often enough, or in a timely manner, and that he considered this to be an area of weakness for her. This response prompted the researcher to revisit Mrs. Martin's use of praise with the focus group. Several teachers in the focus group stated that Mrs. Martin's praise often falls on the same favored group of teachers, while others tend to go unrecognized. Phil, a 41-year old science teacher with 12 years of experience, offered comments characteristic of the focus group on this topic:

I think as far as, personally, I'm concerned, I'm her "A-plus, plus, plus, plus, plus, plus," because that's what she always tells me.... And then for Wendi, she does the same thing, but I don't think it's consistent, and then it makes me feel bad for everybody else. Because she doesn't consistently do it for everybody, and when she does it for me, it's embarrassing. I get email jokes from other teachers... "oh, you're the A-plus, plus, plus teacher, huh?" And you know, it's funny, but at the same time, I don't like it... I wish she would share that around with everybody....

And I'll tell you something else about this... award that we got that precipitated this whole thing you're doing, when we got that award... there were two teachers. There was a few that were asked, but only two that got to go to Washington, D.C., to get the award. And then we asked for some kind of dinner... so that everybody could celebrate this success... but Mrs. Martin and a couple of teachers went, and that was the end of it. And it takes a school-wide push to get something like that... and there were some teachers that were pretty upset, because they had just as much input on getting that award as others, and they weren't even considered to go to Washington, D.C., and they weren't even recognized when we talked about it in a faculty meeting.



The other members of the focus group concurred with Phil's statement, although it was noted that Mrs. Martin often thanked teachers privately for their efforts, as opposed to her inconsistency in extending public recognition.

Overall, they were not permanently offended by her discrepancies in public recognition, even describing them as somewhat comical. Also, the large number of locals on the faculty, who had known Mrs. Martin for most of their lifetimes, were willing to accept this as just typical of her personality and nothing to be surprised about or taken personally. Jasmine, who has known Mrs. Martin for several decades, said "It is interesting, when you know someone forever... everyone has a personality and character traits that they're going to bring.... And she just doesn't, isn't sensitive... but this focus, and keeping your eye on the prize, that's why we made AYP... as an administrator, she does a rockin' job."

In closing, the general theme of the data about Principal Martin as a leader who encourages the heart was that she is perceived as being at least satisfactory in extending individual praise, but as playing favorites when it comes to publicly recognizing the skills and contributions of her teachers. This shortcoming, however, seemed to be accepted by the faculty, the majority of whom have known her most of their lives, as a generally harmless quirk of her personality.

Taken together with the other data related to transformational leadership regarding Mrs. Martin, the theme that emerges is one of a principal who practices all five elements of transformational leadership to some extent, but not as often or consistently as she perceives herself as doing. The next subsection reviews data collected from Cotton

Memorial Middle School about Principal Martin's leadership behaviors pertaining to relational trust.

#### Principal Leadership: Relational Trust

Followers' relational trust in their leader is based on perceptions of the leader's benevolence, competence, openness, honesty, and reliability. The first aspect of relational trust, benevolence, is evident in principals who treat teachers with kindness, show a personal interest in their well-being, and encourage their professional growth (Hoy & Tschannen-Moran, 2000). Mrs. Martin stated that she expresses her care and concern for teachers through everyday interactions, such as asking if they feel well enough to be at work when they look physically worn down, and also by sponsoring social activities such as a back-to-school dinner in the fall and a luncheon on the last day of school in the spring.

Mrs. Kendall corroborated Principal Martin's statement about expressing care for her teachers, saying "she knows what goes on in everybody's home life.... Two years ago, when my oldest boy enlisted in the army after being an honors student at Tech, she knew that the next couple of days were pretty rough, and so she would come by and check on me, see how my classroom was and if I needed anything." Similarly, Mrs. Brooks stated that she appreciates the fact that, if her elementary school-age daughter is ill, Mrs. Martin is very flexible about letting her leave work for the day to take care of her family, a gesture that she considers a sign of caring on the principal's part. Mr. Miller also expressed a belief in Mrs. Martin's benevolence, saying that he feels comfortable

coming to her for advice on personal as well as professional matters, and that “whatever the problem is, she’s always had time for me.”

During observations of Principal Martin, it was noted that she typically interacted with teachers in a friendly manner, which was consistent with benevolence. Also, document analysis of the CMMS teacher handbook revealed two inserts from Mrs. Martin, titled *Only A Teacher?* and *Teachers Prayer*, both of which were motivational works underscoring the value and importance of teachers and their role in society; these were also taken as evidence of the principal’s benevolence.

Overall, the emergent theme from the data collected at CMMS was that Principal Martin often behaved in a benevolent manner. One comment from the focus group was that she sometimes comes across as abrasive because her personality is very detail-oriented, but on balance, she was mainly characterized as a principal who treats teachers with kindness.

The second aspect of relational trust, competence, is evident in principals who display a sound knowledge base, make wise decisions, handle difficult situations well, and have strong interpersonal skills (Hoy & Tschannen-Moran, 2000). Mrs. Martin stated that she demonstrates competence in her job by being well-organized, such as by having all of their back-to-school materials ready and waiting for them when they return to work at the end of summer vacation, including a detailed teacher handbook that teachers can refer to for necessary information about deadlines and expectations. Document analysis of the CMMS teacher handbook verified Mrs. Martin’s statements about its value as a reference for teachers needing to know basic information, such as deadline dates for

submitting student grades. She also mentioned her establishment of a “disruptive student room,” where students whose behavior disrupts a classroom can be sent until they are ready to act appropriately upon their return to the classroom, as an example of her competence as principal.

In her interview, Mrs. Kendall expressed respect for Mrs. Martin’s knowledge base, noting that she often attends teacher in-service training sessions even though she is not required to do so. Mrs. Brooks stated that, as a resource teacher, she has been in many difficult meetings where Mrs. Martin was able to bring the meeting to a successful conclusion, which impressed her as a sign of Mrs. Martin’s competence in handling difficult situations. As a math teacher, Mr. Miller respected Mrs. Martin’s instructional knowledge as a former math teacher, saying, “if I have to ask anything academically about math, I’ll go to her and I’ll ask her how she did it; she can demonstrate, she can teach me how to teach them.” He also stated that he considered her ability to obtain resources, such as Smart boards, to keep CMMS on the cutting edge of educational technology as a sign of Mrs. Martin’s competence.

In the focus group discussion, Phil and Wendi both mentioned that Mrs. Martin had put together a very strong faculty, a key competency for a principal as an instructional leader. This corroborated Mrs. Martin’s own comments about how she had developed the CMMS faculty. During her interview, she described her efforts during the first several years of her tenure to out-counsel several teachers who were resistant to the plans she and the faculty were making to improve the school, and her selectiveness in

hiring new teachers whose perspectives on education would mesh well with her own. The result, according to the data, was a stronger faculty.

Based on the data, the emergent theme regarding Mrs. Martin's competence as principal was that this is a particularly strong area of trustworthiness for her, as perceived by her teachers. The researcher did not discern any interview or focus group statements that suggested a perceived lack of competence on her part.

The third aspect of relational trust, openness, is exhibited in principals who invite teacher input, listen intently, and also share information to make teachers aware of events in the school. Based on Mrs. Martin's interview responses, she views her role in the sharing of ideas and information at CMMS to be primarily that of a facilitator, holding frequent team and faculty meetings so that teachers can collaborate with each other.

During Mrs. Kendall's interview, she spoke at length about her perceptions of Principal Martin's openness in inviting teacher input and letting teachers know of events and issues affecting the school:

Every Tuesday we have a faculty meeting so we know what's going on... not only in our building, but in our district. And if something pops up that she feels it warrants the entire school to know.... You're never the guy that stands up and says, "I didn't know," because we'll have a meeting, she'll follow up with an actual hard copy, and then you get an electronic copy. And so there's really no excuse for anyone to say, "I wasn't informed...."

She was very, very open when we would go in and discuss how we needed to do things.... She allowed us to create another math class to facilitate and nurture the areas that they were deficient in.... She was very open to sitting down... specifically for math and English, very, very good at listening.

Mrs. Brooks also stated that she frequently visits with Mrs. Martin, who is open to comments both privately and in faculty meetings, about her concerns as a special education teacher, and she and Mr. Miller both acknowledged that email messages and announcements at meetings keep the faculty at CMMS well-informed. In the focus group, Nicole expressed appreciation in her belief that Mrs. Martin keeps the faculty better-informed than teachers at other schools in the district: “we know what’s going on in the district; she forewarns us on some stuff... other buildings... they were blind-sided.”

The theme that emerged from the data regarding this aspect of relational trust was that Principal Martin is viewed by her faculty as a trustworthy principal in terms of openness. By allowing teachers to share their ideas and concerns, and in turn sharing information with them, the data indicated that openness was a perceived strength of Mrs. Martin among the faculty of CMMS.

The fourth aspect of relational trust, honesty, is perceived in principals who share accurate information, uphold confidentiality, and keep promises (Hoy & Tschannen-Moran, 2000). This aspect of relational trust bears some similarity to the fifth and final aspect, reliability. Reliability is perceived in principals who are highly visible in the school, do what they say they will do, handle things in a timely manner, and are there when teachers need them.

Perhaps not surprisingly, interview responses in this study sometimes mixed descriptions of honesty and reliability in describing principal behaviors. For example, when asked what she does to let teachers know they can believe what she tells them about events in the school, a question aimed at deriving data on honesty, Mrs. Martin stressed

her belief that through consistency in her actions on student discipline, “They know that what I’ll say is what I’ll do,” an answer more indicative of her reliability as principal.

Mrs. Kendall’s interview responses indicated that she had seen Mrs. Martin become more cautious about sharing sensitive information with the faculty, due to supposedly confidential information being leaked after she had shared it at faculty meetings in the past: “as she became a more seasoned principal, she became more disciplined. . . . But at the beginning she was way too trustworthy of what would come out of her mouth, because you are trusting of your staff.” She also expressed her opinion that Mrs. Martin is a reliable principal, saying, “Number one, she always backs her staff, O.K? Number two, she always follows through with what she says she’s going to do, like if she says she’s going to approach the superintendent about looking for funds, she really does.” This corroborated Mrs. Martin’s own statement about doing what she said she would do, a hallmark of reliability.

Mrs. Brooks and Mr. Miller also stated that Mrs. Martin shares accurate, truthful information, although Mr. Miller expressed that there have been a few occasions where miscommunication had taken place. Both also stated that Mrs. Martin was reliable in terms of availability and dealing with issues in a timely manner, although Mr. Miller commented that she is more often available in her office than visible in classrooms or common areas.

In regard to the relational trust aspects of honesty and reliability, the emergent theme from the data collected at CMMS was that Mrs. Martin is a principal who is generally regarded as honest and reliable, particularly in doing what she says she will do

and in supporting her faculty in contentious situations, such as student discipline and conflicts with parents. Collectively, the data from CMMS on all five aspects of relational trust indicated that Mrs. Martin is viewed as a trustworthy principal, particularly in the aspects of competence and openness.

Organizational Routines:  
Professional Learning Community

In 2006, Patricia Roy and Shirley Hord described professional learning communities as schools “where educators collectively engage in continual inquiry on behalf of student learning and where staff and students gain from this way of working” (p.499). Simply put, professional learning communities, or PLCs, are typified by teacher relationships and collaboration to continually improve teaching and learning. This can be facilitated within a school by setting aside regular times and places for teachers to meet with each other for the purpose of collaborating to improve teaching and learning.

In the study conducted at CMMS, qualitative research methods were applied to learn how teachers at the school worked together to continually improve teaching and learning. A second point of emphasis was to learn about the teacher to teacher relationships in the school.

In regard to teachers at CMMS working together to continually improve teaching and learning, interview and focus group data consistently referred to teacher collaboration. This collaboration took place during both formal meeting times set aside in the school’s schedule, and at informal times arranged by the teachers at their own convenience. Concerns were raised, however, about the perception that collaboration time had become somewhat limited, due to various reasons.



During her interview, Mrs. Martin gave several examples of teacher collaboration at CMMS. In particular, she stated that “the math team works together, because they are the curriculum-based community... we always have curriculum-based meetings.” She also mentioned that the school’s reading teachers meet regularly to discuss achievement goals and share ideas for helping students reach those goals. Mrs. Martin also discussed the regular meeting times in the school’s schedule: a regular faculty meeting was held every Tuesday, a point corroborated by document analysis of the school’s five-year plan submitted to the Office of Public Instruction. Regular team meetings had also been held every Thursday in previous years. Due to concerns that teachers were becoming overwhelmed with being required to attend too many meetings, however, she said that the team meetings had been reduced to a biweekly basis, held on alternating Thursdays.

Mrs. Kendall described collaborating with the other math teachers to review achievement data several times during the year, but also with science and English teachers to provide interdisciplinary lessons and units. Mrs. Brooks stated that collaboration typically occurred during the regular faculty meeting, held each Tuesday, but also that meeting times were set aside for grade-level teachers to meet with each other to collaborate; this collaboration was not limited to large-scale planning, as it often concerned how to work with individual students. Mr. Miller mentioned that team meetings for collaboration used to take place every Thursday, but had become less common recently, apparently in reference to Mrs. Martin’s decision to change team meetings from a weekly to a biweekly schedule. Teacher collaboration, he said, was still part of the normal routine at CMMS: “daily, on individual students... Mrs. Martin would

be a part of it, it would just be sixth grade teachers got together, seventh grade teachers got together, eighth grade teachers got together, and talk about either academics or even individual students, how best to handle a student... anything.”

The focus group discussion yielded more data on teachers’ perceptions that they frequently collaborate as a PLC, but also on the perception that opportunities for collaboration were less easily available in the school’s schedule than they had once been. Phil voiced his opinion that the need to make AYP has had a detrimental effect, as the need to achieve certain test scores has taken away opportunities for cooperative work between teachers. Ray, a 42-year old science teacher with 19 years’ experience, echoed this, saying “I agree with Phil, I think AYP’s taking over right now. I’m not concerned about what you’re doing in your class, because I’ve got so much to do in my class,” as several others murmured in agreement. Referring to scheduled collaboration time, he added: “There’s a lot of restrictions, too, with... our union. Other people in the union look at that and, you know, ‘you guys are having an advantage...’ so the union shuts it down.”

Sheila, a 42-year old English teacher with 15 years’ experience, said: “The first year I taught here, we... English teachers had the same prep period, and I think with losing teachers... the time to interact with other teachers and to develop lessons together is not there.” This prompted the following response from Jasmine: “There is a real cohesiveness in terms of staff, though. I find this staff, even though we wouldn’t maybe be able to plan as teams for our progress in English... but there’s positive support.... People seem to appreciate each other and value each other’s gifts, and... it makes a huge

difference... that there's a staff that's really effectively working together... as colleagues.”

Document analysis of revised school improvement plans attached to the school's five-year plan also revealed evidence of teacher collaboration, indicative of the presence of a professional learning community at CMMS. It detailed the school's efforts to improve student reading achievement in particular, describing the formation of a reading leadership team that would collaborate with teachers, and several professional development offerings geared toward improving student reading scores. The word “we” was used repeatedly in this document.

Overall, it seemed clear that teacher collaboration was commonplace at CMMS. This collaboration was likely to have made an important contribution to the school's high student achievement levels, as it was done with an emphasis on improving teaching and learning.

As stated, another key factor in professional learning communities is the state of the relationships between teachers within a school. At CMMS, interview data consistently indicated two things about teacher relationships within the school. First, while some teachers had close friendships that involved frequent socialization outside of the school day, most of the faculty typically went their separate ways outside of school, except for on special occasions such as the annual Christmas party. Second, and more importantly, it was reported that the faculty enjoy working with each other and are very willing to cooperate with and help each other. Mrs. Martin referred to the faculty as “one

great big family;” Mrs. Kendall, Mrs. Brooks, and Mr. Miller all spoke of the comfort level that teachers at CMMS have in communicating with and asking each other for help.

The overall theme that emerged from data collection at CMMS was that teachers do collaborate with the goal of continually improving teaching and learning, and that teachers have collegial working relationships, both hallmarks of professional learning communities. Although officially scheduled time for collaboration had been reduced from previous years, such time was still available and utilized in the form of faculty, team, and grade level meetings. Further, many teachers at CMMS were willing to meet with each other informally to collaborate about unit and lesson planning, as well as how best to work with individual students.

Organizational Routines:  
Collective Teacher Efficacy

Qualitative data collected at CMMS was pattern-matched as representative of collective teacher efficacy if it reflected Goddard, Hoy, and Hoy’s (2000) description of collective teacher efficacy stemming from “the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students” (p. 480). This definition of collective teacher efficacy was also used by Tschannen-Moran and Barr (2004) in their development of the Collective Teacher Belief Scale, or CTBS.

As stated, the CTBS was used in this case to collect quantitative data on the collective teacher efficacy of the faculty at Cotton Memorial Middle School. The CTBS uses a nine-point Likert scale to rate responses, with a score of “1” or “None at all” representing the lowest possible collective teacher efficacy score for each of the 12 items, and a score of “9” or “A Great Deal” representing the highest possible score. The CTBS

results for this case ranged from a low item-mean score of 5.91 for the item, “How well can adults in your school get students to follow school rules?” to a high item-mean score of 7.91 for the item, “To what extent can teachers in your school make expectations clear about appropriate student behavior?” As they represented the extreme high and low scores, each of these items later became the basis for respective questions used in the protocol for the focus group discussion at CMMS.

Overall, the level of collective teacher efficacy, or CTE, reported by teacher respondents in this case was a mean score of 6.75 out of a possible 9.00. The CTBS has not been norm-referenced, so it was not possible to judge where a particular school’s overall mean level of CTE might rank as a percentile from a larger group of schools. Taken at face value, it appears that a score of 6.75 out of 9.00 indicated a fairly high level of CTE at Cotton Memorial Middle School, as a score of 5.00 is identified on the scale as “Some Degree,” and a score of 7.00 is identified as “Quite A Bit.”

Turning to the qualitative data on collective teacher efficacy collected from CMMS, interview questions inquired about the perceived ability of teachers at the school to produce meaningful student learning, manage student behavior, help students learn to think critically and master complex content, and to get students to believe they can do well in schoolwork. Focus group items on CTE, as stated, dealt with teachers’ ability to make expectations clear about student behavior and the ability of adults in the school to get students to follow school rules.

In her interview, Principal Martin expressed her belief that the teachers at CMMS have a strong ability to produce meaningful student learning, due in part to their skill in

using educational technology and hands-on activities, saying “the old-fashioned, take the textbook, read Chapter One, do the questions... those type of teachers, for the most part, do not exist here.” Mrs. Kendall echoed this theme, saying “we look for different ways to engage kids so that it’s not just some dry textbook thing; that they understand what they’re learning and where it’s going to take them in life.” Mrs. Brooks also referred to the ubiquity of hands-on learning at CMMS in stating her belief in the high ability of teachers at the school to produce meaningful student learning, and Mr. Miller stated both his opinion that a wide variety of teaching strategies are used by teachers in the school to produce meaningful student learning, and that “as far as technology, ours rivals that of any school district, probably any school in the nation.”

The overall ability of teachers at CMMS to manage student behavior was rated strongly by those interviewed, with the caveat that individual teachers varied in this ability. Mrs. Martin described her teachers as doing an “excellent job” in managing student behavior, while Mrs. Kendall said, “there are some of us that manage it very, very well, and there are others that... and the principal does her best to talk to teachers and say, ‘is that really something you would want to kick a kid out of class for?’” Referring to the ability to manage student behavior of the faculty as a group, however, Mrs. Kendall said, “As a whole, it’s very good.” Mrs. Brooks noted that managing student behavior sometimes depends on factors beyond teachers’ control, saying, “sometimes when you don’t have the parent backing, we just try to, as a group, ‘how are we going to handle this? What are we going to do, and all be consistent with how we’re dealing with it?’” Again, Mrs. Brooks gave the CMMS faculty as a whole high marks for its ability to

manage student behavior, saying it was “about an eight” out of ten. Mr. Miller described the faculty’s ability to manage student behavior as very good, noting that “we all stick together.”

The focus group meeting generated a nuanced discussion around the topic of managing student behavior, as the researcher pointed out to the group that the CTBS item with the highest mean score was based on the ability of teachers to set clear expectations for student behavior, while a seemingly similar item about the ability of teachers to get students to follow school rules had generated the lowest mean item score. In the end, the source of this paradox turned out to be that, while teachers believed the faculty did a good job of making expectations clear about appropriate student behavior, students sometimes simply chose not to follow those rules and expectations. Similar to Mrs. Brooks’ interview statement, Anna noted the role that parents sometimes played in undermining student discipline: “They know their parents will come after you and back them, no matter how wrong they’ve behaved.... Even if they know their kid did something wrong, they will look at you and say, ‘well, it wasn’t that bad....’ And that’s what we’re up against, we’re up against parents ‘saving’ their kids.”

The focus group also expressed a consensus that students mostly followed the rules within any given teacher’s classroom, but were more likely to violate the rules in common areas, such as the hallways and cafeteria. This sentiment was stated concisely by Kevin, who said, “we do a good job in our classroom, to set the rules, they follow the rules, but when they leave that door, they’re in that hallway... they go to lunch... after

school... that's when they go nuts." Phil attributed this to inconsistency in the enforcement of school rules in common areas:

I can't stand inconsistency, and I see some of it, so much of it this year. Two staff meetings ago, we addressed the hallway behavior. And we were gonna march these kids up and down the hall in advisory for a month, that's what was decided... and we did it for two days, and it hasn't been done since. And so, you get inconsistency in that direction, and... it doesn't teach the kids anything, so how can you hold them accountable if you don't... stick to what you say you're going to do?

At this point, Wendi interjected her opinion that this is a shortcoming on the teachers' behalf, not the principal's, an opinion that Phil agreed with, asserting that he was talking about inconsistency from the faculty as a whole in dealing with student behavior in common areas, rather than any shortcomings of the principal.

In the interviews, sentiments about the ability of teachers at CMMS to help students learn to think critically and master complex content were similar to those about teachers' ability to produce meaningful student learning. Mrs. Martin referred again to her belief that the use of educational technology was helpful in this area, as well as that the English classes promote critical thinking through writing and that hands-on activities in the science program also helped students learn critical thinking and master complex content. Mrs. Kendall's opinion was that "everybody works to those critical thinking skills," but acknowledged the challenges of doing so with this age group, saying, "middle school kids are a unique group of cats; they only want to learn what they think is enough for the test, not how it's gonna affect me later on down the road or in life." Mrs. Brooks commented that Principal Martin makes an effort to keep classroom sizes small, which



she believed aided in teaching critical thinking and complex content; like Mrs. Martin, she also stated the opinion that educational technology tools, such as Smart boards, helped promote critical thinking and mastery of complex content. Mr. Miller, who teaches reading as well as math, noted that the reading program used by CMMS for the past several years had implemented critical thinking strategies on a daily basis.

The final interview topic about collective teacher efficacy at CMMS dealt with how much the school can do to get students to believe they can do well in schoolwork. Overall, the responses to this item were very positive. Mrs. Martin said, “I think we do everything in our power to make students, or help students to learn,” citing the school’s counseling program, a special program for students with emotional issues called Altacare, programs to reward students for both academic improvement and good behavior, the counseling techniques of the dean of students and disruptive student room supervisor, and even the rapport between students and the school’s main office secretary. Mrs. Kendall also mentioned the importance of celebrating student success, in particular the program that rewards students for academic improvement, known as BUG, or Bring Up Grades: “you could’ve been a straight-D student and the next quarter get a C... and you’ll get a show ticket or something, and so the teachers, we’ve let other faculty know who that kid is that’s really working hard... every kid’s gotta believe in themselves, and if they don’t, then teachers have got to believe in them.” Mrs. Brooks had a similar opinion about how much the school can do to help students believe they can do well: “We can do a lot. We can be positive with them, reinforce them... work with them when they’re struggling.” As examples, she specifically mentioned an after-school tutoring program, the Altacare

program, and different group sessions, led by the counselor, designed to help struggling students at CMMS. In his interview, Mr. Miller also mentioned Altacare and the after-school tutoring program, known as Homework Opportunity, as examples of programs that help CMMS students believe they can do well in schoolwork.

Based on the qualitative data, buttressed by the findings of the Collective Teacher Beliefs Scale, collective teacher efficacy at Cotton Memorial Middle School appeared strong. The emergent theme taken from the interview and focus group data was that, other than some concerns over student behavior and inconsistency of rule enforcement in common areas, teachers and the principal at CMMS were confident in the ability of the faculty as a whole to manage student behavior and help students learn.

### Rival Explanations

The main craft rival to this study was investigator bias. Because only one person conducted the research, it is possible that the researcher's own beliefs could have affected data analysis. This was countered by the researcher's awareness and reflection upon the possibility of bias, and by careful note-taking and documentation of data, triangulation of data-collection methods, and by conducting respondent validations to verify interview data. Another suggestion for avoiding bias is to report one's preliminary findings to critical colleagues, who can offer their suggestions and alternative explanations (Yin, 2009). This was done as well. One of the researcher's work colleagues is a veteran high school principal who holds a doctorate in educational administration; he reviewed the researcher's work, including the codes and categories the researcher applied to the qualitative data.

The main real-life rivals to the contributions made by principal leadership behaviors and organizational routines at Cotton Memorial Middle School were teacher experience, student ethnicity, and the use of “turnaround” strategies, in which low-performing schools are required to make government-mandated changes, such as replacing teachers and the principal, in order to improve their performance (Fullan, 2006). Each of these potential rivals was examined in turn, based on the data produced by the study.

The first rival, teacher experience, appeared at first to have been a potential candidate for having made greater contributions than principal behaviors or organizational routines. Based on the teachers who participated in the interviews and focus group, CMMS had a veteran teaching staff. Of the 14 teachers included in the qualitative data collection, three were age 35 to 39; five were age 40 to 44; two were age 45 to 49; two were age 50 to 54; and two were age 60 to 64. Six had 10 to 14 years of teaching experience; four had 15 to 19 years; one had 20 to 25 years; two had 25 to 29 years; and one had 35 to 39 years.

These figures make it impossible to dismiss out of hand the possibility that teacher experience may have contributed to the academic achievement of students at CMMS. However, the abundance of data that indicated the presence of transformational leadership behaviors by the principal, relational trust in the principal, professional learning community characteristics within the school, and strong collective teacher efficacy, also make it impossible to deem teacher experience at CMMS to have been the overriding factor in the school’s high level of student achievement. Therefore, this rival

explanation could not deny the contributions of principal leadership behaviors and organizational routines at CMMS.

The second rival explanation, student ethnicity, also appeared at face value to have possibly made a significant contribution to student achievement at CMMS, as 90 percent of the school's students are of white ethnicity. As with the rival explanation of teacher experience, however, the abundance of data indicating the contributions of principal leadership behaviors and organizational routines could not be overruled by student ethnicity demographics. Furthermore, of the five schools that had won Montana Distinguished Title I School awards for student achievement during the period 2006 to 2010, two schools from the group were located on Indian reservations and had student enrollments composed almost entirely of Native Americans. These two schools were excluded from the study on the basis that the principals who had led each school during its award-winning year were no longer employed there at the time that this study was proposed. The fact that the award-winning schools included those with both predominantly Native American and predominantly white enrollments suggests that student ethnicity had not played an overwhelming role in student achievement.

There also appeared to be little support in the data for the final rival explanation, that positive outcomes in the pilot school might have been the result of turnaround strategies. Although the school had failed to make AYP prior to improving its academic achievement and ultimately winning recognition as a Distinguished Title I School, no examples of the extreme types of external interventions associated with turnaround schools appeared to have taken place. The principal had not been removed, as Mrs.

Martin had been the school's principal since before the No Child Left Behind law and its AYP mandates were established; teachers had not been dismissed or reassigned under any external mandates; and there was no mention of mandates to restructure the school.

#### Summary of Findings for Cotton Memorial Middle School

The data collected from Cotton Memorial Middle School, overall, supported the theoretical propositions that the principal practiced transformational leadership and was perceived by teachers as a trustworthy leader. It also indicated that the school functioned as a professional learning community, with strong relationships between teachers and effective teacher collaboration, in regard to both academic lessons and strategies, and for dealing with individual students. Finally, the collective teacher efficacy of the school appeared strong, with teachers demonstrating a strong belief in the abilities of the faculty as a whole. Based on these findings, it appears that principal leadership behaviors and organizational routines have made important contributions to the high student achievement of this Distinguished Title I school.

#### School B: Northwest Elementary School

Northwest Elementary School is a public elementary school with an enrollment of 387 students in kindergarten through fifth grade at the time of this study, located in northwestern Montana. It had been designated as a schoolwide Title I program school since 2005; prior to that, it had received targeted Title I assistance since before the Office of Public Instruction's available records. The school's administration consisted of the building principal, and its faculty consisted of 22 teachers. The school was also defined

as a Title I school because of its significant percentage of students categorized as low-income by the federal government, with 48 percent of its students qualifying for free and reduced lunch status. Demographically, 93 percent of the school's students were of white ethnicity, three percent were Asian, three percent were Hispanic, and one percent were Native American.

Academically, the school had exhibited high student achievement. It had made Adequate Yearly Progress, or AYP, under the federal government's No Child Left Behind standards, and won a Montana Office of Public Instruction Distinguished Title I School Award for Exceptional Student Performance for Two or More Consecutive Years during the period 2006 through 2010. During its award-winning year, 91 percent of its students earned proficient or advanced CRT scores in math, and 97 percent were proficient or advanced in reading. In 2011, the most recent year for which data was available, 92 percent of the school's students were advanced or proficient in math, and 98 percent in reading. The school had made AYP each year. This study sought to learn how principal leadership behaviors and organizational routines had contributed to Northwest Elementary School's high levels of student achievement.

#### Participants at Northwest Elementary School

A total of 19 individuals at Northwest Elementary School, or NES, consisting of the building principal and 18 teachers, were asked to participate in this study. The remaining teachers on the faculty were excluded from the study, as they were not yet employed at NES during the year it was recognized as a Distinguished Title I school. All teachers included in the study group were asked to complete the Collective Teacher

Beliefs Scale and Leadership Practices Inventory. The building principal completed the self-assessment version of the Leadership Practices Inventory, and the Principal Sense of Efficacy Scale. The principal and randomly selected teachers also participated in either interviews or the focus group meeting conducted at NES.

### Principal

For the purposes of this study, the school's principal was referred to by the pseudonym, Chris Barnes. Mr. Barnes was 33 years old, and had been the principal at NES for the past five years. Prior to this, he had been a dean of students, then an assistant principal at another elementary school in the same district, serving for one year in each capacity; during that time, he had also served as a physical education teacher for the school. Still earlier, he had been a fifth-grade teacher in the district for three years. He is a local, having been born and raised in the town where NES is located.

### Teacher Interviewees

The first teacher interviewee at NES was a 35-year old resource teacher with 11 years of experience, 10 in his current position. For the purposes of this study, he was known by the pseudonym, Gary Zimmerman.

The second teacher interviewee at the school was a 38-year old first grade teacher, who was known by the pseudonym, Jenna Morgan. She had been teaching for 14 years, the past four at NES.

The third teacher interviewee at NES was a 54-year old kindergarten teacher with 34 years of experience, the past 26 years in her current position. For the purposes of this study, she was known as Lucy McClane.

### Teacher Focus Group Participants

The focus group consisted of nine teachers at NES, none of whom had participated in an interview. All of them were female; Mr. Zimmerman and one other teacher, who was not included in this study due to not meeting the qualifications, are the only male faculty members at NES. The focus group members' ages ranged from 27 to 64 years old, while their years of teaching experience ranged from five to 43 years. All had taught in their current positions at the school anywhere from five to 24 years. In this report, focus group members will be referred to by pseudonyms as needed.

To assist the researcher in conducting the focus group discussion, Mrs. Morgan, who had already been interviewed, observed and took notes so that the researcher would be able to identify who was speaking at any given time when later transcribing the audio recording of the session. Mrs. Morgan did not otherwise participate in the focus group discussion.

### Data Collection at Northwest Elementary School

Data collection began with electronic distribution of the Collective Teacher Beliefs Scale and Leadership Practices Inventory to all teachers at Northwest Elementary School who had been employed there during the year the school won its Distinguished Title I School award from the Montana Office of Public Instruction. A self-assessment version of the online Leadership Practices Inventory was also sent to Principal Barnes, as was an electronic version of the Principal Sense of Efficacy Scale. During the researcher's subsequent first visit to the school, interviews were conducted with the



principal and all teacher interviewees. The principal was also observed at work during the school day, and school documents were collected for analysis. During the second visit to the school, respondent validations were conducted with each interviewee, the principal was again observed at work, and the focus group meeting was conducted.

#### Data from the Collective Teacher Beliefs Scale

On September 23, an electronic version of the Collective Teacher Beliefs Scale, or CTBS, was sent to all teachers at Northwest Elementary School who had also taught there during the year it had won its distinguished school award. This was over two weeks in advance of the researcher's first visit to the school on October 10, allowing teachers ample opportunity to respond to the CTBS. Those who did not respond by October 3 were sent an electronic mail message as a reminder, and a second electronic mail reminder was sent on October 6.

According to the electronic survey management site utilized by the researcher for distribution of the CTBS, 15 of the 18 qualified teachers at NES completed the CTBS. Those who had not completed it when the researcher first visited the school on October 10 were hand-delivered a paper copy of the survey to complete and return during his second visit to the school on November 7. Of these three teachers, one completed the CTBS and returned it to the researcher as planned, bringing the total number of CTBS respondents at Northwest Elementary School to 16 of 18 eligible teachers. This represented a return rate of 89 percent.

Due to the qualitative methodology of this study, quantitative analysis was never meant to be applied to it, other than for the basic purposes of formulating focus group

questions and noting the school's overall mean score for collective teacher efficacy. The former of these purposes was carried out; the latter are discussed below.

The CTBS uses a nine-point Likert scale to rate responses, with a score of "1" representing the lowest possible collective teacher efficacy score for each of the 12 items, and a score of "9" representing the highest possible score. The CTBS results for Northwest Elementary School ranged from a low item-mean score of 7.37 to a high item-mean score of 8.87, a score registered for two different items. These three items served as the basis of subsequent focus group questions regarding collective teacher efficacy. This was the most important contribution of the CTBS to the data collection process. The highest scoring CTBS items from this school were, "To what extent can teachers in your school make expectations clear about appropriate student behavior" and, "How much can teachers in your school do to produce meaningful student learning?" The lowest scoring item was, "How much can your school do to foster student creativity?" Each of these items was revisited during the focus group discussion to learn teachers' perspectives as to why they drew the highest and lowest scores from this school.

Overall, the mean level of collective teacher efficacy at NES, taken as the average of all 12 CTBS items' mean scores, was 8.31 out of a possible 9.00. At face value, an overall score of 8.31 out of 9.00 may indicate a high level of collective teacher efficacy at Northwest Elementary School, based on the fact that the questionnaire's rating scale assigns a value of "Quite A Bit" to a score of 7 and a value of "A Great Deal" to a score of 9 (Tschannen-Moran & Barr, 2004).

Again, the main contribution of the CTBS to data collection in this case was its influence in helping the researcher to formulate questions for the focus group, based on the highest and lowest scoring items from the questionnaires that were completed by the faculty. In this regard, the CTBS served its purpose.

In correspondence with the CTBS, the school's principal completed the Principal Sense of Efficacy Scale, or PSES. The PSES differs from the CTBS in that it measures the principal's individual sense of efficacy in her ability to perform her duties as principal, whereas the CTBS measures a faculty's sense of collective teacher efficacy. The purpose of the PSES in this study was simply to gather information that might be useful to know when analyzing qualitative data collected from the principal. The principal in this case, Mr. Barnes, rated his sense of efficacy as an average of 6.66 out of 9.00 on 12 of the PSES's 18 items. While the PSES has not been norm-referenced, this score appears to indicate that the principal has a somewhat high level of self-efficacy, as the questionnaire places a value of "Quite A Bit" on a score of 7, which is only slightly higher than Mr. Barnes' mean self-efficacy score (Tschannen-Moran & Gareis, 2004).

#### Data from the Leadership Practices Inventory

On September 30, all CMMS teachers who met this study's requirements for participation were electronically sent a copy of the online version of the Leadership Practices Inventory, or LPI, to be completed in regard to the principal, Mr. Barnes. On the same date, Principal Barnes received a copy of the online version of the LPI self-assessment tool, which he completed in regard to his own leadership practices.

To allow ample time for completion, teachers received the LPI ten days before the researcher's first visit to Northwest Elementary School on October 10. To remind teachers to complete the LPI before that date, an electronic message was sent to them on October 6. Ultimately, 16 of the 18 teachers asked to participate completed the LPI, a return rate of 89 percent.

Once again, however, the purpose of using the LPI in this qualitative study was not to achieve a statistically significant quantitative result. Rather, the main purpose was to note LPI items that generated the highest and lowest scores from respondents in this case, and then formulate questions for the Northwest Elementary School focus group meeting based on those items. This purpose was fulfilled. A secondary purpose for administering the LPI in this case was to record the mean scores, for each of the five transformational leadership practices defined by the LPI, as rated by both faculty respondents and from the principal's self-assessed LPI results. These mean scores are related below.

The LPI rates leadership practices according to Kouzes and Posner's (2009) five practices of transformational leadership: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. For each of the five practices, LPI scores can range from a minimum of six to a maximum of 60.

On his LPI self-assessment, Principal Barnes assigned himself the following mean scores: 45 out of 60 for modeling the way; 44 out of 60 for inspiring a shared vision; 43 out of 60 for challenging the process; 45 out of 60 for enabling others to act; and 37 out of 60 for encouraging the heart. In contrast, the mean scores from the 16 teachers who

completed the LPI in regard to Mr. Barnes' leadership practices were as follows: 54.1 out of 60 for modeling the way; 54.3 out of 60 for inspiring a shared vision; 53.3 out of 60 for challenging the process; 55.0 out of 60 for enabling others to act; and 48.8 out of 60 for encouraging the heart.

Although the LPI has not been norm-referenced for educational leaders specifically, the results of the several thousand people who have taken this version of the LPI indicate that Mr. Barnes' self-assessed LPI scores were low to moderate, in the 12<sup>th</sup> to 47<sup>th</sup> percentiles for each of the five leadership practices (Kouzes & Posner, 2009). Conversely, the direct report-rated LPI scores for Mr. Barnes, collected from the teachers at Northwest Elementary School, ranged from moderate to high, with percentile scores ranging from the 58<sup>th</sup> to 88<sup>th</sup> percentiles. Of these, only Mr. Barnes' teacher-assessed score for Encourage the Heart was in the moderate range, at the 58<sup>th</sup> percentile. His teacher-assigned scores for the other four practices of transformational leadership were all high, ranging from the 84<sup>th</sup> percentile to the 88<sup>th</sup> percentile.

Despite the fact that the LPI results for NES were not statistically significant based on the percentage of teachers that responded to the questionnaire, this disparity between Mr. Barnes' self-assessed scores, and the much higher mean scores of the teacher ratings in regard to his behaviors as principal was striking. The results suggested that although Mr. Barnes appears to see room for a good deal of improvement in his practice of transformational leadership behaviors, his faculty already viewed him as frequently engaging in such practices.

In regard to individual item scores from the teacher-scored LPI, the highest scores assigned to Principal Barnes were ratings of 9.8 out of 10.0 for the items, “Treats people with dignity and respect,” and “Sets a personal example of what is expected.” These scores were nearest to the LPI’s description of a leadership behavior that was practiced “Almost Always,” represented by a score of 10.0 out of 10.0 (Kouzes & Posner, 2009). The lowest teacher-scored item was, “Asks for feedback on how his/her actions affect people’s performance,” which received a mean score of 7.4 out of 10.0; although this was the lowest-scored item, it is worth mentioning that a score of 7.4 falls between “Fairly Often” and “Usually” on the range of possible scores for the LPI (Kouzes & Posner, 2009), so Principal Barnes was still perceived as engaging in these practices fairly often. As these items did represent the extreme high and low scores from the LPI results at Northwest Elementary School, three respective questions for the focus group meeting at NES were subsequently based upon each one of them.

### Interview Process

Each interview at Northwest Elementary School was conducted during the researcher’s first visit to the school on October 10. The principal interview was conducted in his office; one teacher interview was conducted in the principal’s office, which was otherwise vacant at the time; one teacher interview was conducted in the teacher’s classroom during a free period; and the third teacher interview, which had to be conducted in two segments to accommodate the teacher’s schedule, was conducted in the teacher’s classroom for the first segment, and in a vacant conference room for the second segment. Prior to each interview, the interviewees had been informed of the study’s

research topics and methods in a letter of invitation sent to them electronically by the researcher. As stated earlier in this chapter, the interview protocols consisted of 16 open-ended questions that reflected key practices, routines, and beliefs associated with transformational leadership, relational trust, professional learning communities, and collective teacher efficacy.

The principal interview was conducted the morning of October 10. Over the course of approximately 35 minutes, all 16 interview questions were completed. The respondent validation was conducted during the researcher's second visit to NES on November 7.

The first teacher interview was conducted in two parts, the first occurring in the teacher's classroom the morning of October 10, before students arrived. Approximately half of the 16 interview questions were answered over the course of approximately 25 minutes. The second part of the interview was conducted in a conference room during the teacher's prep period that afternoon; the remaining questions were completed in approximately 25 minutes, placing the total interview length at approximately 50 minutes. The second teacher interview was conducted in the principal's office the morning of October 10, with all interview questions completed in approximately 30 minutes. The third teacher interview was conducted in the teacher's classroom during her prep period that afternoon, over the course of approximately 30 minutes. Each of the four interviews conducted at NES was consistent in duration with the anticipated interview length of 30 to 60 minutes that was stated in the researcher's dissertation proposal.

Respondent validations for all teacher interviews were conducted during the researcher's second visit to NES on November 7.

Yin's (2009) analytic strategy of pattern-matching was used to determine whether interviewee responses generated data relevant to the study's research questions. During each interview, the researcher took notes in the margin of his interview protocol copy; these margin notes were a first step in the data analysis process, allowing the researcher to notice trends and patterns in the various statements made by each interviewee. For example, if two interviewees gave highly similar answers or used the same phrase in response to the same interview question, the researcher was able to see those similarities when reviewing the protocol margin notes after the interviews were completed. Also, each interview was audio recorded and transcribed verbatim to allow the researcher to review the transcripts and conduct a deeper, more thorough review of the interview data as the data analysis process evolved. The subsequent respondent validations allowed the researcher to confirm that the data collected during the interview process was accurate. These practices enabled the researcher to detect and match the patterns present in the data to the factors represented in this study's research questions.

#### Focus Group Process

The focus group discussion was conducted in the school library, after school during the researcher's second visit to Northwest Elementary School on November 7. Eleven people were present: the researcher; Mrs. Morgan, who served as his assistant; and the nine teachers who had been randomly selected for the focus group. The focus group participants had general knowledge of the study's research topics and methods



from the invitation letter that had been sent to the principal and all eligible teachers prior to the commencement of the study, and from having been introduced to the researcher during his first visit to NES in October.

The group was asked six broad, open-ended questions to generate discussion about the principal's leadership behaviors and the faculty's collective teacher efficacy. As stated, three questions about principal leadership behaviors were formulated from the highest and lowest mean-scored items on the LPI questionnaire completed by the teachers. These items were, "Treats people with dignity and respect," "Sets a personal example of what is expected," and "Asks for feedback on how his/her actions affect people's performance." Also, three focus group questions related to collective teacher efficacy were formulated from the highest and lowest mean-scored items on the CTBS questionnaires completed by the teachers that who participated in the study. These items were, "How much can teachers in your school do to produce meaningful student learning," "To what extent can teachers in your school make expectations clear about appropriate student behavior," and "How much can your school do to foster student creativity?" The focus group discussion lasted approximately 47 minutes, consistent with the anticipated duration of 30 to 60 minutes stated in the researcher's dissertation proposal, and exceeding the 45-minute minimum duration suggested by the researcher's graduate committee (Jayne Downey, personal communication, October 20, 2011).

As with the interview data, Yin's (2009) strategy of pattern-matching was used to analyze whether data collected from the focus group was consistent with the study's research questions. The focus group discussion was audio recorded and transcribed

verbatim to allow the researcher to review the transcript and conduct a deeper, more thorough review of the focus group data as the data analysis process evolved. This enabled the researcher to detect and match the patterns present in the data to the factors of transformational leadership and collective teacher efficacy represented in this study's research questions.

### Document Collection

During the researcher's first visit to NES on October 10, several school documents were collected from the principal for analysis. These consisted of copies of the following: the school's staff handbook; the school's detailed achievement goals for math and reading on Montana's Criterion Referenced Test, or CRT; a copy of the collective bargaining agreement between the school district and the local teachers' union; a document outlining the school's annual goals; a training memo for teachers on improving student engagement and vocabulary; an agenda for a teacher in-service training session; a poster listing essential questions for students and teachers to be able to answer about every lesson; a description of the school's leveled behavior system; a packet detailing updates to the school's Title I plan; and a copy of the teacher evaluation tool used by the district.

As with the other qualitative data collected for this study, the strategy of pattern-matching (Yin, 2009) was used to analyze these documents. Each school document was carefully scrutinized for evidence of principal leadership behaviors and organizational routines that may have contributed to the school's high levels of student achievement.

### Data Analysis for Northwest Elementary School

Data collected from Northwest Elementary School was pattern-matched to determine which principal leadership behaviors or organizational routines it indicated at the school. Each piece of relevant data was found to match one of the following factors that may have contributed to the high student achievement levels attained by the school: the principal's transformational leadership, relational trust in the principal, the school as a professional learning community, or the school's collective teacher efficacy. Data that did not match any of these was analyzed as possible evidence of one or more rival explanations for the school's high student achievement.

#### Principal Leadership: Transformational Leadership

Analysis of Mr. Barnes' transformational leadership practices as principal of Northwest Elementary School began with careful scrutiny of evidence of behaviors relating to the practice of modeling the way. According to his teacher-assessed LPI scores, Mr. Barnes' rating was 54.1 out of 60 for modeling the way practices. This placed him in Kouzes and Posner's (2009) 87<sup>th</sup> percentile, in regard to the accumulated ratings of the thousands of leaders whose practices have been assessed using the LPI, indicating that teachers at NES strongly perceived that he practices leadership behaviors that model the way.

In his interview, Mr. Barnes stated that he models consistency for his faculty by completing an annual goals form for himself as principal, just as all teachers in the school must complete their own annual goals forms, saying that this practice "gives them some

buy-in that... I'm working towards those same goals as well." Mr. Zimmerman expressed his opinion that Principal Barnes has credibility in modeling goals and behaviors because, "being a dad himself, being an educator himself, you see the emotional tie to it... I think that all teachers here can relate to that, because we don't want to see bullying happen.... Or if we see a kid that's not proficient, we put our child in that spot... and he does the same thing. Would he want his girls... to not be proficient in math? No way." Mrs. Morgan emphasized that Mr. Barnes continually revisits school goals established at the beginning of the year, and regularly asks students about learning goals during his classroom visitations. Mrs. McClane also stated her agreement that his actions as principal are "very much" consistent with his goals for the school. Several teachers in the focus group discussion made comments that indicated their perception that Principal Barnes engages in modeling the way behaviors, with the following statement from Mary, a 60 year-old fourth grade teacher, being the most descriptive:

His first year, he walked in and basically said he was going to kind of watch and see how the school was run; he let us know he was not coming in to change things. But that first week of school, he was out digging in the front lawn, because all of our landscaping had died.... And we walked out, here was our principal putting in the landscaping with... the rest of the staff. He gets down into doing whatever it takes to make the school work, and I think... that one time, you know, set the pace... that he's willing to get down and dirty and work... in the trenches with the rest of us.

During the researcher's observations of Principal Barnes at work on October 10 and November 7, other examples of model the way behaviors were noted. For instance, the school's goals were posted in classrooms and common areas throughout the school,

as well as in a goals document distributed to the faculty. Also, Mr. Barnes was repeatedly observed talking to individual students about their lessons and learning goals during classroom visits, and even installing LCD projectors to be used with teachers' classroom computers; he explained that the district had cut back on technical support, so he and other principals now often do such technical support work themselves.

The overall theme that emerged from the data at NES was that Principal Barnes is a leader who typically practices leadership behaviors associated with modeling the way. Based on both the LPI results and the qualitative data gathered at the school, he was strongly perceived by the faculty as a principal whose values are both communicated and consistently acted upon.

In regard to leadership practices that inspire a shared vision, Mr. Barnes' teacher-assessed score on the LPI was 54.3 out of 60, as rating that placed him in the 88<sup>th</sup> percentile (Kouzes & Posner, 2009). Qualitative data also provided clear evidence of his leadership behaviors in this area of transformational leadership.

During his interview, Principal Barnes related how he had worked with the faculty to formulate a vision for the school: "When I came to Northwest, they already had a 'learning for all' mission, vision, in place... so my initial goal was to embrace what they have. They believe that all kids can be successful, but our data wasn't showing that, and so I was connecting them back to the data and then putting in some real actions steps so... that vision could become a reality." He went on to say that, after five years the school had achieved results of up to 100 percent of its students scoring at proficiency levels on math and reading tests.

In forming this vision for the school, Mr. Barnes' emphasized that, as a new principal, he had inherited a faculty that valued communication and diversity of opinions in its school culture. He described his main task in formulating the school's vision as primarily one of making sure that communication and follow-through were ongoing: "I have to spend hours gathering their input and then formulating some plans, putting their input into those plans so they can see they've been a part of it, and then following up to make sure that those things are actually happening."

Mr. Zimmerman's interview comments were consistent with those of Principal Barnes. "He is pretty masterful in how he gets his school goals out... he's not the kind of principal that comes in and says, 'this is what needs to be done, we're doing it now,' and I've seen principals that do that, and it puts off a lot of staff." He went on to explain that Mr. Barnes gathers and shares information, often via electronic mail, for extended periods before making changes at NES, with the result of this approach being that, "it feels like the staff has taken ownership of it... rather than a principal, top-down... it feels like he's given us ownership, and we're gonna make it work." Again, the vision itself was associated with student achievement: "What we want is, we want to say to parents, 'if you enroll your kid in kindergarten here at Northwest, by the time they exit fifth grade, special ed or not... they're gonna be proficient in math and reading skills.'"

Mrs. Morgan and Mrs. McClane's interview statements also reflected perceptions of Mr. Barnes as a principal who inspires a shared vision. Mrs. Morgan noted that every year, Mr. Barnes leads teachers at NES in a book study, which prompts discussions that help shape the vision of the school. She also repeated Mr. Barnes' and Mr.

Zimmerman's sentiments about the use of student achievement data to guide teachers in helping their students achieve academic proficiency. Mrs. McClane emphasized that, "the biggest thing is, he includes us, wants to know what we think... so he doesn't just tell us something's gonna happen and expect us to follow through; he really wants teachers, staff, all staff, involved."

Document analysis confirmed that student achievement data for the school's results on the Montana Criterion Referenced Test, or CRT, was shared with all teachers to enable discussion of the school's vision and goals in helping all of its students achieve proficiency in reading and mathematics. Overall, the emergent theme from the data collected at Northwest Elementary School was that Mr. Barnes is a principal who consistently practices transformational leadership practices that inspire a shared vision among the faculty.

In regard to the transformational leadership practice of challenging the process, Mr. Barnes' teacher-assessed LPI score was 53.3 out of 60, a score that placed him in the 85<sup>th</sup> percentile (Kouzes & Posner, 2009). Qualitative data collected from NES indicated that Principal Barnes is perceived as a principal who challenges the process to improve the school. In so doing, he has valued his teachers' input, as he described in his interview:

We've let data drive our decisions... so my role is to pick that data apart and try to find some areas where I can show some grade level teams... that this is a place we could grow, and then I've supported them in finding creative ways to approach that. For example, I have some grade levels that are... wanting to change our reading model a bit, and right now our reading model has every student, every

day in a small level reading group, which is a great model. However, you can't duplicate that in math, and so I've had some grade levels go out on a limb and try to do some reading and some math at the same time, and that... kind of went against some of the culture, things that are set in place, but I've supported that and clearly communicated to everyone around them that... I'm gonna support that... and I think that's helped them to do that without fear of repercussions from their peers.

Mr. Zimmerman's description of Mr. Barnes as a principal was nuanced. On one hand, he stressed that, "he's laid-back... he's really a collaborative principal" in terms of how he tries to change and improve the school. However, "when change has to come, and it has to come quickly, say a behavior student in a classroom where a teacher isn't willing to draw a hard line and ask for support... He is really good at drawing a line and saying, 'Listen, this has to happen.'" Similar to Mr. Barnes' statements about NES being a data-driven school, Mr. Zimmerman also stated that Mr. Barnes is "very good at trying to give us ownership of that change, giving us the data and kind of pulling at our heartstrings" to help effect change in teacher practices.

Mrs. McClane's interview statements concurred with this sentiment, as she noted, "he's always reading... looking into things that need to be changed.... If he sees something that's not working, he figures out what needs to be done and then he gets us on board." She also noted that "he encourages input on how to improve the school, pretty much all the staff, parents, and students; just isn't a top-down kind of a thing, he gets everybody involved as best he can." She also commented on the book studies that Mr. Barnes conducts with the staff, stating her belief that those studies help the faculty and principal learn how to improve the school.



In her interview, Mrs. Morgan focused on specific programs that represented changes to the school, such as Mr. Barnes' implementation of Response to Intervention, or RTI. She also mentioned the role of teachers in bringing about such change, noting that it had been implemented through the efforts of teacher leaders who met, learned, and made plans with Principal Barnes, and then gradually put the change into effect by training other teachers to do so. In the focus group discussion, Mary observed that Mr. Barnes is astute at knowing and utilizing individual teachers' strengths, but also at challenging them to try new things; this also indicated his role in changing the status quo and challenging the process within the school.

Overall, the data collected at NES indicated that Mr. Barnes is a principal who was perceived to be dedicated to improving the school, but also makes a concerted effort to gather input from and use the talents of the faculty in effecting change. This emergent theme supported the proposition that he is a principal who challenges the process.

On the teacher-assessed LPI, the highest average score Mr. Barnes received was in regard to leadership practices that enable others to act. For this aspect of transformational leadership, his average rating was 55.0 out of 60, a score that placed him in the 84<sup>th</sup> percentile (Kouzes & Posner, 2009).

When asked how he empowers and shows trust in teachers, which are two key aspects of enabling others to act, Mr. Barnes emphasized the strategic nature of his delegation of authority at Northwest Elementary School. As he put it:

I've always been kind of collaborative leadership bent, and so I've valued other people helping me make decisions, because I clearly told them at the beginning, I can't be the leader of every area, or it just won't... get done. I've tried

to be real careful about how I put teams together, so my teachers that have some leadership capability are leveraged into positions that I can use them to lead... I have some good teacher leaders that have helped me with some professional development initiatives, or... in their areas of expertise, whether it's Indian Ed for All, RTI, and over time I've been able to let some of those things go.

Principals who value teamwork are also considered to be representative of enabling others to act. In Mr. Barnes interview, he stated his belief that teachers at NES “think that there’s definitely not a ‘me vs. them,’ and so they see this as Team Northwest, and they feel like they’re part of that team.” This statement was consistent with the proposition that Mr. Barnes is a principal who seeks to enable his teachers to act.

Mr. Zimmerman asserted that Principal Barnes “doesn’t micromanage,” and “delegates authority really well,” both statements consistent with leadership behaviors that enable others to act. Mrs. Morgan’s interview statements were also consistent with Mr. Barnes’ description of how he utilized teachers’ leadership skills, as well as with Mr. Zimmerman’s statement about how the principal delegates authority: “He definitely encourages. He’ll delegate responsibility, as far as people taking over leadership teams... the RTI team, or the gifted and talented, discipline... he can’t do all of them, so he’ll delegate responsibility.” In her interview, Mrs. McClane made similar statements, mentioning teacher leadership on committees for Indian Education for All, the OLWEUS anti-bullying program, and RTI. She also related her appreciation for this type of teacher empowerment, saying, “just being part of the decision-making makes you feel valued.”

The focus group discussion also yielded data that indicated perceptions of Mr. Barnes as a leader who enables others to act by delegating authority through teacher

leadership roles in professional development and on committees. Another aspect of enabling others to act is the removal of barriers to their work. For example, they said that Mr. Barnes made sure that teachers in need of technology tools, such as CPS units, were provided with them in a timely manner.

Members of the focus group also used the events of a recent half-day in-service session for teachers as an example of how Mr. Barnes had enabled them to use that time more productively. Teri, a fifth grade teacher, said, “When we had so much going on... he immediately changed the early-out to make it so that we even had more time to work on what we needed.” This was echoed by second grade teacher Sherri: “I had asked him about that early-out on the 16<sup>th</sup>, and he immediately made phone calls around the district with the other administrators, and then came back and said, ‘you know, we’re not going to do the math, you can use that time for conferences or whatever you need to.’ So, that tells me he was listening to our needs.”

The emergent theme from this data was that Mr. Barnes enabled teachers at NES to act by delegating authority to them in teacher leadership areas, as well as by providing them with time and material resources to help them do their jobs. Overall, the data supported the proposition that Principal Barnes’ is a leader who enables others to act.

In his interview, Mr. Barnes confessed his belief that the final aspect of transformational leadership practices, encouraging the heart, “is probably an area of weakness for me.” This was reflected by his self-assessed LPI score of 37.0 out of 60 for encouraging the heart practices, a score that placed him in the low range, at only the 12<sup>th</sup> percentile of Kouzes and Posner’s (2009) aggregate leadership scores. Teachers at NES

also ranked this as Mr. Barnes' lowest-scoring leadership practice, but with a mean rating of 48.8 out of 60, a score that placed him in the moderate range at the 58<sup>th</sup> percentile (Kouzes & Posner, 2009); it seems noteworthy that this teacher-assessed score was considerably higher than Mr. Barnes' own self-assessed score.

Encouraging the heart is typified by practices that praise and recognize followers' contributions. Despite his low self-assessment score in this area, Mr. Barnes identified several practices that actually did involve his praise and recognition of teachers, as well as students. One such item was the "Data Nerd Award," given to teachers whose student data indicated outstanding student achievement during benchmark assessment periods. In their respective interviews, Mr. Zimmerman and Mrs. Morgan also specifically mentioned the Data Nerd Award as an example of a fun way that Principal Barnes had recognized the contributions of individual teachers. Mr. Barnes also described holding an assembly each fall to celebrate positive news about CRT scores from the end of the previous school year; both Lucy McClane and Shanda, a music teacher who participated in the focus group discussion, independently referred to Mr. Barnes sharing CRT results and congratulating the faculty for a job well done.

Not all praise was given publicly. Mr. Zimmerman and Mrs. Morgan both stated that Mr. Barnes often thanks or praises them discretely; Mr. Zimmerman cited the most meaningful praise as when "he just comes down and he says thanks, he says good job." One of Mr. Barnes' practices for praising teachers, described in his interview, was to send a postcard with a note of thanks to the home address of a teacher whose positive contributions he wanted to recognize.

While the data did indicate that the encouraging the heart may have been the transformational leadership practice least utilized by Principal Barnes, it did not indicate a dearth of such practices. The overall theme appeared to be that he practiced such behaviors more moderately than the other aspects of transformational leadership, but that his teachers still perceived that he usually recognizes and praises them for their work.

Taking the transformational leadership data from Northwest Elementary School as a whole, there was an abundance of evidence to support the proposition that Mr. Barnes was strongly perceived as a transformational leader. The emergent theme was that transformational leadership existed at NES as the school demonstrated the high student achievement that resulted in its recognition as a Distinguished Title I School.

#### Principal Leadership: Relational Trust

Followers' relational trust in their leader is based on perceptions of the leader's benevolence, competence, openness, honesty, and reliability. The first aspect of relational trust, benevolence, is evident in principals who treat teachers with kindness, show a personal interest in their well-being, and encourage their professional growth (Hoy & Tschannen-Moran, 2000).

During qualitative data collection at NES, one of the most frequently-mentioned opinions about Principal Barnes was that he values family above work-related concerns, and supports teachers in family issues as much as possible; teachers appreciate this, and in turn, some have expressed that they feel more loyalty and devotion to their jobs. In his interview, Mr. Barnes said, "I clearly let them know that I have certain hills that I will die on... but trumping all of that is family first, and so I am very flexible in terms of teachers

needing to stay home with their sick kids, or get to funerals, or leave early for doctors' appointments. . . . I think they appreciate that, and because of that, I can hold them accountable in other areas a little more," for example, by asking teachers to stay beyond the regular work day for meetings.

In Mr. Zimmerman's interview, he repeatedly emphasized the family-first nature of Mr. Barnes' approach to leadership, and its effect on him as an employee. For example, he said, "my dad had a heart attack, and I was at school. He (Mr. Barnes) was just like, yeah, you gotta go, just leave. And granted, that's a big thing, but when small things happen and you have to be there for your family, (he) will say, 'Go. Just go, I'll cover your class...' and... that makes you loyal to your school. . . . Loyal to your principal."

Mrs. Morgan also said that Mr. Barnes "allows us to put our families first," and specifically mentioned that teachers who need to leave during the school day for family reasons will have their classes covered by either Mr. Barnes himself, or by another teacher whom Mr. Barnes has arranged to fill in for them. Mrs. McClane, who had an adult son who was critically ill, also said that Mr. Barnes does "let us know that family comes first. . . . I've missed like 70 days of work in the last two years taking care of (my son), and he's been real supportive of that."

Other statements about Mr. Barnes also described his perceived benevolence. While he was referred to as being soft-spoken, with a tendency to keep conversations short, he was also described as having a good sense of humor by focus group participants, one of whom also expressed that, "He never speaks down to you; speaks like you're an

equal.” Mrs. McClane also described an annual teacher appreciation meal, provided for the entire faculty by Mr. Barnes at his personal expense; she explained that this gesture meant a lot to her because she realized the sacrifice of both time and money that he put into providing it. During the interviews and focus group discussion, different teachers also stated Mr. Barnes’ benevolence toward students, describing how he clearly believed that all students can succeed and was devoted to helping them do so.

Overall, the data collected at NES indicated that Mr. Barnes consistently treats both teachers and students with a good deal of kindness and respect. The emergent theme was that he is strongly perceived to be a benevolent leader.

The second aspect of relational trust, competence, is evident in principals who display a sound knowledge base, make wise decisions, handle difficult situations well, and have strong interpersonal skills (Hoy & Tschannen-Moran, 2000). Qualitative data collection at Northwest Elementary School indicated strong teacher perceptions of Mr. Barnes’ competence as principal.

For his part, Mr. Barnes described himself as a perfectionist with high standards for himself as well as his staff. He emphasized that he tries to model excellence: “in our early releases and our staff meetings, they’re very organized and protocol-driven.... Then I expect my teachers to embrace technology, so I’ve become proficient in technology and help them find ways to incorporate it.”

Teachers expressed the view that Mr. Barnes’ experience and work ethic were responsible for his high competence. According to Mr. Zimmerman, “The thing that demonstrated his competence, even before he came here, was the fact that he was... a

good teacher.... And so, he's a competent principal because he understands the other end of it... he's not the authoritarian principal." He went on to describe how he relies on Mr. Barnes for advice on curriculum questions, and on which academic and behavioral interventions may work best with individual students. Mrs. Morgan and Mrs. McClane both observed that Mr. Barnes reads constantly and is always "on top of" new technology and teaching methods, with Mrs. McClane saying, "staff meetings are amazing, because you can't keep up with him; he's always got new things that he's learned that he wants us to know about... he's just a very, very bright man." As Mrs. Morgan put it, "He's a learning leader, for sure." Teachers in the focus group also acknowledged his skill in dealing with difficult students, as well as his ability to put the student body at ease in the days prior to CRT testing; his strategy is to visit each class, explain the test and testing procedures to the students, and reassure them by admonishing them to "just do your best."

Mr. Barnes also stated that his faculty was dedicated to professional development to improve their skills, and that he had "been very careful in hires since I've been here, so I feel like I've hired staff... that are learners." This aptitude for building a strong faculty was another example of Mr. Barnes' competence

During observation of Mr. Barnes at work on October 10 and November 7, his competence in dealing with students in difficult situations was noted. In these cases, two students had been sent to his office for behavior problems in class, including striking other students. Meeting with each of them in turn, Mr. Barnes began in a benevolent manner, asking the students how they were doing, then employed a questioning strategy



to get each student to admit what he had done wrong, and describe the events that had led up to it. Mr. Barnes then continued his questioning strategy, prompting each student to state why his behavior was inappropriate, what he should do differently next time, and what his consequence should be this time; if the student gave an incorrect answer at any point during this line of questioning, Mr. Barnes would either guide him to the correct response, or simply tell him what needed to happen next. In the end, each student was assigned one day of in-school suspension, but from the researcher's perspective, the manner in which Mr. Barnes dealt with each student demonstrated both competence and benevolence toward the students in question.

As stated, high student achievement levels had been attained at Northwest Elementary School. Combined with the teachers' descriptions of Mr. Barnes, as well as his own statements, the emergent theme for this area was that he is a principal who demonstrates a high level of competence.

The third aspect of relational trust, openness, is exhibited in principals who invite teacher input, listen intently, and also share information to make teachers aware of events in the school. Qualitative data taken from Northwest Elementary School was analyzed for evidence that Principal Barnes was perceived as trustworthy in the aspect of openness.

During his interview, Mr. Barnes described how he facilitates mutual sharing of ideas and information with his teaching staff:

Prior to any major changes, or even small changes, I try to allow people to have input, whether that's through email, or whether I just have an open door policy so that they can come in and share their two cents with me, I know that they know that I value their input. However, there are times when I'm just gonna make a decision and they're gonna

have to deal with that. But other areas, bigger areas that affect more people, and curriculum and instruction, I value their input and so we do a lot of those things in teams.

This account was corroborated by Mrs. McClane during her interview: “He’s really good about hearing what you have to say. But if he doesn’t agree (laughter), he puts his heels in, you know, he’s the boss, but... he’s pretty good about listening to what you have to say.”

Mr. Barnes’ statement about having an open door policy was also corroborated by the teacher interviews. Mr. Zimmerman said that Mr. Barnes is “Definitely an open door principal... I knock on the door, he stops what he’s doing and he’ll take your input... if things aren’t rolling smooth and I need to change some things up, I run it by him... he definitely invites it. He’s not top-down, he knows how the school is run... that the teachers have the best ideas, they’ll see them (the students) in class the most.” During the focus group discussion, Mary also stated that, “he makes himself available, and when you walk in he’ll stop what he’s doing,” to listen to teachers. Mrs. Morgan, too, specifically stated in her interview that Mr. Barnes “has the open door policy, where we can walk in and talk with him and he listens, always listens first, and just very approachable.”

During the focus group discussion, it was emphasized that Mr. Barnes often asks for input both in face-to-face situations, and via electronic mail; this was consistent with his interview statements. Specifically, it was stated that he often uses an electronic survey tool called “Google Docs” to allow teachers to vote for their preferences in regard to any changes being considered at the school. Some of the older teachers on the focus group voiced their opinion that they did not always feel comfortable using only technological

means to communicate; one referred to herself as a “digital immigrant.” These teachers, however, also stated that Mr. Barnes is open and available for face-to-face interactions that they feel more comfortable with, and that he is very supportive in teaching them how to use technology so that they eventually become more comfortable with it as well.

During the researchers’ visits to NES, Mr. Barnes was also repeatedly observed meeting with teachers who approached him with concerns in common areas or in his office. In all of these interactions, Mr. Barnes appeared to listen intently and respond thoughtfully and respectfully to the teacher who had approached him; these conversations may best be described as having been collegial in nature.

Overall, the data collected at Northwest Elementary School supported the proposition that Mr. Barnes is a principal who invites teacher input and listens intently to them. The emergent theme was that he is perceived by the school’s teachers as a trustworthy principal in regard to openness.

The fourth aspect of relational trust is honesty (Hoy & Tschannen-Moran, 2000). Principals can exhibit honesty by sharing accurate information and upholding confidentiality. The data collected at Northwest Elementary School indicated that Principal Barnes is perceived as an honest leader.

In his interview, Mr. Barnes stated that he tries to communicate accurately about plans at NES, but “there are times we have the best-laid plans and then something doesn’t work out, and so I try to communicate that clearly, as to why we didn’t go that way and why we had to switch gears, and so I try to keep no surprises.” Mrs. McClane’s interview statements supported this claim. She described Mr. Barnes as “Very careful. He thinks

everything through, he doesn't just say something... if he has something that he wants us to know and he hasn't had a chance to really think it through, he'll say, 'I'm gonna get back to you on this, I'm thinking about it and I'll get back to you.'"

Most of the comments about Mr. Barnes' honesty dealt with issues of confidentiality. Both Mr. Zimmerman and Mrs. Morgan stated that Mr. Barnes had never broken confidentiality in their experience with him. Mrs. McClane also expressed such faith in Mr. Barnes, saying, "if we share with him, we know that it never goes anywhere... it doesn't leak out. People trust him with private information, or go to him and talk about issues... because he never does leak it out."

The overall theme that emerged from the data regarding Mr. Barnes' honesty was that he is perceived to be a very honest individual, which helps make him more trustworthy as a principal. Mrs. McClane perhaps summed this up best, when she said that one of his best qualities is "his character... you can trust him, he's kind, he's thoughtful, he's considerate, he's honest. I think just his character makes you feel very confident in having him lead all of us."

The final aspect of relational trust is reliability (Hoy & Tschannen-Moran, 2000). Principals who are viewed as reliable by their teachers are known for being visible, being ready to support teachers when needed, handling things in a timely manner, and doing what they say they will do.

Mr. Barnes gave a detailed account of how he helps his teachers to perceive him as a reliable leader:

If I say I'm gonna do something, I do it... I'm kind of a slave to email and I'm a slave to my calendar... I use

technology to make sure I show up when I'm supposed to be there. If they have a tough parent meeting and they ask for me to be there, they can depend on me to be there.

I try my best to be visible. I know there's a lot of things that come up and prevent me from being as visible as I'd like to be, so I'm not in the lunchroom or on the playground as much as I'd like to be, but I am in the classrooms. I think they know that is my focus, student achievement, and so that's where I spend the bulk of my time.

Mrs. Morgan, Mrs. McClane and Mr. Zimmerman all stated their perceptions that Mr. Barnes is a highly visible principal. Mrs. Morgan commented that he is often visible in the hallways, while Mrs. McClane said, "He's really good with just kind of being around in the school, gets on top of things before they become big issues," Mr. Zimmerman commented that "he is very visible within the school... day to day, depending on what he has to handle." Chrissy, a special education teacher who participated in the focus group, actually contradicted Mr. Barnes' self-perception that he doesn't spend enough time on the playground or in the cafeteria during lunch time, saying, "he's in the classrooms a lot, he's in the lunchroom, he's on the playground; not just sitting in his office all day." Also, during the researcher's observations of Mr. Barnes, he frequently visited classrooms and went outside during recess to help supervise the playground. It seemed clear that visibility is one of Mr. Barnes' perceived strengths among the faculty at NES.

Mr. Zimmerman also addressed Principal Barnes' general reliability, saying "he's never, never given us a reason to think that he's not reliable.... He's never not come through on anything that we've asked, or talked about." Overall, the theme that emerged

from the data regarding Mr. Barnes' reliability was that his teachers considered him to be highly trustworthy in this regard.

In viewing the full range of relational trust data collected from Northwest Elementary School, it was evident that the faculty perceived Mr. Barnes very positively in all five aspects of relational trust: benevolence, competence, openness, honesty, and reliability. Therefore, the emergent theme about his overall relational trustworthiness was that it is perceived very strongly by the faculty. Relational trust in the principal appears to have made an important contribution to the high student achievement attained at this school.

Organizational Routines:  
Professional Learning Community

Based on the research of Roy and Hord (2006), professional learning communities, or PLCs, are typified by teacher relationships and collaboration to continually improve teaching and learning. This can be facilitated within a school by setting aside regular times and places for teachers to meet with each other for the purpose of collaborating to improve teaching and learning.

In the study conducted at Northwest Elementary School, qualitative research methods were applied to learn how teachers at the school worked together to continually improve teaching and learning. A second point of emphasis was to learn about the teacher to teacher relationships in the school.

In regard to teachers at NES working together to continually improve teaching and learning, interview and focus group data consistently referred to teacher collaboration. This collaboration took place during both formal meeting times set aside in

the school's schedule, and at informal times arranged by the teachers at their own convenience. The overall culture of the school appeared to be one dedicated to continual improvement, both of student achievement and the knowledge and skills of the faculty.

In Mr. Barnes' interview, he stated: "I have a group of teachers that are learners... even my very veteran teachers that have a year or two left, or are going to retire this year, they're still engrossed in professional development... it's just the way my staff is." He also commented on teacher collaboration at NES, noting that much professional development has followed a professional learning communities model known as CASA, or Collaborating Around Student Achievement. In this model, the school uses four essential questions for students and teachers; every lesson taught at NES must be based on these four questions, which include the lesson's learning goals, what assignment or activity students will do, and how learning from the lesson will be assessed. According to Mr. Barnes, "those four essential planning questions can't happen in isolation, so that planning needs to be done collaboratively," adding that his teachers have found different times to collaborate, with some teaching teams meeting during the week and others on Saturdays. He also added that teachers frequently collaborate informally through email and hallway conversations, as well as formally at scheduled meetings.

Mrs. McClane noted Mr. Barnes' influence on teacher collaboration at NES, saying, "He's one of the few principals that lets us get together as grade levels or as reading groups, and he and the counselor, psychologist, will take our classes so we can have this time to work together. We do that once a month so we can collaborate on our reading groups." Mrs Morgan also described Mr. Barnes as helping drive teacher

collaboration: “For my team, we meet once a week just to plan, and we meet once a week just to go over achievement data so we can improve our instruction if we’re seeing the data is low in a certain area,” adding that Mr. Barnes had instructed her team to meet twice a week; once for team planning time and once for Collaborating Around Student Instruction time.

Both the teacher interviews and the focus group discussion produced a good deal of data describing teacher collaboration at NES. Mr. Zimmerman described collaboration between both grade level teachers and through the school’s Title program. The difference, he noted, was that grade level teachers would collaborate about pedagogy regarding the curriculum taught by teachers at the same grade level, whereas the Title program collaborates on the vertical alignment of skills, from one grade level to the next. He also mentioned collaboration through the school’s RTI program, with teachers and the principal meeting to determine where individual students belonged on the continuum of interventions in the RTI program.

During the focus group discussion, Mary described collaboration as crucial to the school’s efforts to produce meaningful student learning: “I think collaboration’s a huge part of it. Teachers collaborate at grade levels, they collaborate with specialists, they collaborate across grade levels. You may have a student that you have concerns about, and it’s very easy to walk into someone else’s classroom and say, ‘What have you done? What’s worked, what hasn’t?’” This statement prompted Teri to add that regular education teachers at NES also collaborate with the special education department, mentioning that she had come to the focus group meeting directly from a collaboration



session with resource teachers about a student who needed extra help with spelling and math.

During the researcher's observations at the school, teachers were frequently witnessed collaborating informally about students during common prep times, lunch time, and in common areas. Among the documents analyzed from the school, several displayed achievement data used in teacher collaboration; another document was an in-service meeting agenda, which clearly delineated time in the day's schedule for teachers to collaborate about the topics of student motivation and helping students succeed in mathematics.

The theme that emerged in regard to teacher collaboration at this school was that collaboration takes place on a daily basis within the school. It appears that teacher collaboration played an important role in the attainment of the high student achievement levels present at NES.

As stated, another key factor in professional learning communities is the state of the relationships between teachers within a school. Based on the interview data collected at NES, teachers at the school enjoy working together and have strong collegial relationships at work. Social activities, such as Christmas and birthday parties, also occur regularly. While the interview data indicated that, other than a few close friendships, most staff members go their separate ways and do not often fraternize outside the workday, statements such as "this is my family away from home," and "it's a very positive environment," were typical among the descriptions of teacher relationships at NES.

The overall theme that emerged in regard to Northwest Elementary School as a professional learning community was that the school is typified by regular teacher collaboration to continually improve teaching and learning, and that the working relationships between teachers are very positive. On the whole, the professional learning community at NES seemed likely to have made a strong contribution to the school's high student achievement levels.

**Organizational Routines:**  
Collective Teacher Efficacy

Qualitative data collected at Northwest Elementary School was pattern-matched as representative of collective teacher efficacy, or CTE, if it reflected Goddard, Hoy, and Hoy's (2000) description of collective teacher efficacy stemming from "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (p. 480). This definition of collective teacher efficacy was also used by Tschannen-Moran and Barr (2004) in their development of the Collective Teacher Belief Scale, or CTBS.

As stated previously, the mean level of collective teacher efficacy at NES was 8.31 out of a possible 9.00. The CTBS has not been norm-referenced, so a school's collective teacher efficacy score on the CTBS cannot be categorically stated as being either high or low in comparison to other schools. At face value, therefore, it can only be stated that an overall score of 8.31 out of 9.00 may indicate a high level of collective teacher efficacy at Northwest Elementary School, based on the fact that the questionnaire's rating scale assigns a value of "Quite A Bit" to a score of 7 and a value of "A Great Deal" to a score of 9 (Tschannen-Moran & Barr, 2004).

Turning to the qualitative data on collective teacher efficacy collected from NES, interview questions inquired about the perceived ability of teachers at the school to produce meaningful student learning, manage student behavior, help students learn to think critically and master complex content, and to get students to believe they can do well in schoolwork. Focus group items on CTE, as stated, dealt with teachers' ability to make expectations clear about student behavior and the ability of adults in the school to get students to follow school rules.

Mr. Barnes cited the school's achievement data as evidentiary that teachers at NES do well in producing meaningful student learning, saying, "I feel very confident that the instruction happening in the classroom, especially in core instruction areas, math and reading, has good assessment tied to it, and has activities and instructional strategies that are appropriate."

Both Mr. Zimmerman and Mrs. Morgan emphasized the belief that the schoolwide use of the four essential learning questions for all lessons was very effective in making learning meaningful for students, with Mrs. Morgan also citing this year's faculty book study of the book, *The Highly Engaged Student* as helping teachers at NES to produce meaningful student learning.

Mrs. McClane expressed her opinion that "everybody stays... up on new teaching methods and has a really good understanding of how children learn best... a lot of these people are here for hours in the evening and come back on the weekends," a work ethic that helps bolster meaningful student learning. The focus group discussion yielded similar comments: Shanda mentioned the high level of dedication and extra time spent by

teachers, and Teri also noted that teachers come in to work earlier than the regular duty day each morning, as well as on weekends. This level of dedication was seen as instrumental to producing meaningful student learning.

The data collected at NES consistently referred to the strong ability of the faculty to produce meaningful student learning. This indicated that teachers there felt a strong sense of collective efficacy in this area.

Another aspect of collective teacher efficacy, the ability to manage student behavior, was also viewed as a strength of the faculty at Northwest Elementary School. While Mr. Barnes acknowledged variations in individual teachers' ability to manage student behavior, his assessment of the school's overall ability to do so was strong: "We have kind of a systemwide approach to discipline and student behavior that works for 80 percent of our kids, and so I'm really only dealing with a small population... all of the general day to day misbehaviors are handled by the classroom teacher, and they do that very effectively." Mr. Zimmerman voiced a similar opinion, saying "teachers are... really great at managing student behavior; they've got tons of accommodations... they're very flexible," although he also noted that "teachers' ability to manage kids' behavior gets trumped by parents... a parent can throw a big enough fit to where the teacher can't hold the student accountable."

Mrs. Morgan and Mrs. McClane both described how student discipline is managed through a systemic approach, with the use of a schoolwide behavior guidelines rubric. During document analysis, these statements were supported: one of the documents collected from NES was the school's leveled behavior plan document, which described a

wide variety of student misbehaviors across three progressive levels, with different school interventions for each level of behavior.

Contrary to Mr. Zimmerman's statement about parents interfering with school discipline of students, Mrs. McClane cited parent involvement as being generally helpful in managing student behaviors. She also gave credit to Mr. Barnes for supporting teachers in the area of student discipline, saying, "I think our behavior issues have really settled down over years before Chris came, you know, we don't have the fighting in the halls or on the playground that you might see in other schools."

The focus group discussed expectations for student behavior at length. The group agreed that the faculty consistently teaches and reteaches students on proper behavior not only in classroom settings, but also in regard to behavioral expectations for students in common areas, such as the hallways and on the playground. Teri, who teaches fifth grade, added, "I think all the staff is responsible for all the students. I mean, I've turned fourth graders around in the halls, sent them back out when they weren't supposed to be in at recess." Shanda followed this statement, saying "we all think, if you see somebody doing something that's inappropriate, to not respond is tacit approval. So, we respond." The only note of concern from the focus group about this topic came from Mary, who said that she has noticed a small degree of inconsistency creeping into the school's student discipline, a change she attributed the fact that the newer teachers, who have joined the faculty within the last few years, have not had the same discipline training as the rest of the faculty, all of whom had been trained using the "Time to Teach" program. Thus, the

newer teachers, who have not been trained in Time to Teach, do not always deal with student behavior issues in the same manner as other teachers at NES.

Despite the concerns raised about newer teachers not having the same discipline training, and parents sometimes undermining student discipline, the bulk of the data on managing student behavior indicated that it is perceived as an area of strength for the faculty. Collective teacher efficacy at the school in managing student behavior appears to be high.

Teacher beliefs about a faculty's ability to help students learn to think critically and master complex content is also indicative of collective teacher efficacy. At NES, the data indicated that this was viewed as a challenging area, but that the faculty is perceived as capable of successfully meeting that challenge.

The main challenge to helping students learn to think critically and master complex content was the mandate to achieve high standardized test scores. As Mr. Barnes said, "we've spent so much of our time getting kids to proficient levels on basic math and reading skills... that the ability to take those learning goals and expand on them and help kids think critically... is a goal that we have, but we don't always get there with all kids." When the focus group was asked why fostering student creativity received a relatively low score on the faculty's CTBS results, Ellen, the school counselor, said, "Time. Time is huge," to which Shanda added, "Pressured by the curriculum and to meet the CRT standards." This prompted Teri to say, "We have first dose reading, and second dose reading, third dose reading, and first dose math, second dose math for the CRT...." It seems clear that the faculty and principal viewed the need to meet these demands as

taking time away from helping students learn to think critically; Mr. Barnes did express hope that future standardized tests for the national common core standards would incorporate critical thinking, something that he said the current CRT exams lack. As he put it: “I’ve seen that if I put a target in front of my staff, they’re very good at hitting that target... we almost need that assessment in place to create the impetus to, ‘Oops, we’ve really got to do this, because they’re measuring it!’”

Mrs. Morgan credited Principal Barnes’ support as critical to teachers’ ability to help students learn to think critically and master complex content. “When Casey would come in and do evaluations, he will tell you if you’re asking only literal questions, and he enforces us to go with the Bloom’s taxonomy and make sure we’re asking higher level questions.” She added that the current book study also provides ideas for teachers to improve their questioning strategies and help students to master complex content.

Mrs. McClane opined that teachers at NES “keep the kids really engaged; they break into small groups where the kids are really having to work through problems and see all angles.” Teachers in the focus group cited several specific examples of the faculty’s ability to help students think creatively. In addition to art and music projects, Shanda pointed out that students “do some very creative science projects... kids are creating their own bridges... the solar-powered cars, I mean, they’re not following an exact formula... that’s what fosters creativity, is the ability to discover.”

The data indicated an interesting dichotomy: on the one hand, teachers at NES perceived that curricular demands created time constraints that limited their opportunity to help students learn to think critically and master complex content; on the other hand,

they perceived that such learning still happened at the school, and that teachers' ability to do so was strong. The overall theme was that teachers had a strong sense of collective teacher efficacy about their *ability* in this area, even if they did not always have as much time for this type of student learning as they wished.

The final point of collective teacher efficacy at NES dealt with the school's ability to get students to believe they can do well in schoolwork. This was consistently described as an area of strength.

When Mr. Barnes was asked how much the school could do to get students to believe they can do well in school, he replied, "I think we can do a great deal to affect that... when I talk about those four essential questions, I think our teachers do a good job of putting that in student language, and so our students embrace those learning goals and see that they have a role in that... school's not happening to them, they are a part of getting where they want to be." He went on to describe this in greater detail:

I think just by... the systematic nature of things, we have kids feel supported, particularly in reading. If they are a struggling reader, there is a whole barrage of supports that come their way, and they can find success.

Our third through fifth grade students take the MAP assessment... fall, winter, spring in math, reading, language arts, and many of those classroom teachers take that fall score and have students... set a spring target for themselves, and then put a plan in place, and then they check in the winter... and see if they're on par for their goal, and then celebrate it in the spring if they get there, or reevaluate if they didn't get there. RTI's helped us as well... where we show kids their progress... and their data trends, so they see that if they stay on the trajectory that they're currently on, that they're gonna get there.



Both Mr. Zimmerman and Mrs. Morgan described various tools and techniques used to help students feel that they can do well in school, including a strategy called “Four to One,” which entailed using a ratio of four positive statements to one negative statement when discussing classroom issues with a student. The reading program that Mr. Barnes had described was also mentioned, as was an after-school tutoring program. Mrs. McClane also cited these types of support structures, and emphasized that the school is good at “putting the kids in work that’s at their own level... the kids don’t work at a frustration level here, and I think that, in itself, makes them feel like they’re succeeding.... A child that has maybe a kindergarten reading level in a second grade class, for example, will feel pretty good about it because they’re put in the groups that they need to be in, and there’s a lot of positive reinforcement.”

Another factor that Mr. Zimmerman cited as helping students believe they can do well was the use of CPS units in many classrooms. These were used as part of a strategy called “No Hand Raising.” This strategy, which was also detailed in the documents collected from the school, had been instituted on the theory that a small number of students in each classroom typically raise their hands to be called upon by the teacher, thereby allowing the rest of the class to become disengaged. The CPS units, with one unit assigned to each student, allow teachers to check that all students have correctly responded to a prompt before moving on, thus ensuring that all students must participate. Mr. Zimmerman, who is a resource teacher, also noted that special education students often feel self-conscious when called upon to respond verbally, but that the use of CPS units allows them to respond quietly and helps alleviate such anxiety.

The data indicated that teachers at NES believed that the school has a variety of ways to effectively help students believe they can do well in school. The emergent theme was that collective teacher efficacy in this area is strong.

The overriding theme about collective teacher efficacy at Northwest Elementary School was also that, overall, the school's faculty possessed a strong sense of CTE. Belief in the collective abilities of teachers in the school was high, as judged by the data collected. It appeared that collective teacher efficacy had made an important contribution to the high level of student achievement at NES.

#### Rival Explanations

The main craft rival to this study was investigator bias. Because only one person conducted the research, it was possible that the researcher's own beliefs could have affected data analysis. This was countered by the researcher's awareness and reflection upon the possibility of bias, by careful note-taking and documentation of data, triangulation of data-collection methods, and by conducting respondent validations to verify interview data. Another suggestion for avoiding bias is to report one's preliminary findings to critical colleagues, who can offer their suggestions and alternative explanations (Yin, 2009). This was done as well. One of the researcher's work colleagues is a veteran high school principal who holds a doctorate in educational administration; he reviewed the researcher's work, particularly the codes and categories the researcher applied to the qualitative data. This also helped to minimize the chance that the study's findings may have been attributed to a craft rival.

The main real-life rivals to the contributions made by principal leadership behaviors and organizational routines at Northwest Elementary School were teacher experience and student ethnicity. Teacher experience appeared at first to have had the potential to have made greater contributions than principal behaviors or organizational routines. Based on the teachers who participated in the interviews and focus group, NES has a veteran teaching staff. Of the 11 teachers included in the qualitative data collection, one was age 25 to 29; two were age 35 to 39; two were age 50 to 54; three were age 55 to 59; and three were age 60 to 64. One had five to nine years of teaching experience; two had ten to 14 years; three had 20 to 25 years; two had 25 to 29 years; two had 30 to 34 years; and one had 40 to 45 years.

These figures made it impossible to dismiss out of hand the possibility that teacher experience may have contributed to the academic achievement of students at Northwest Elementary School. However, the abundance of data that indicated the presence of transformational leadership behaviors by the principal, relational trust in the principal, professional learning community characteristics within the school, and strong collective teacher efficacy, also made it impossible to deem teacher experience at NES to have been the overriding factor in the school's high level of student achievement. Therefore, this rival explanation could not deny the importance of the contributions of principal leadership behaviors and organizational routines at NES.

The second rival explanation, student ethnicity, also appeared at face value to have possibly made a significant contribution to student achievement at NMS, as 93 percent of the school's students were of white ethnicity. As with the rival explanation of

teacher experience, however, the abundance of data indicating the contributions of principal leadership behaviors and organizational routines could not be overruled by student ethnicity demographics. Furthermore, of the five schools that had won Montana Distinguished Title I School awards for student achievement during the period 2006 to 2010, two schools from the group were located on Indian reservations and had student enrollments composed almost entirely of Native Americans. These two schools were excluded from the study on the basis that the principals who had led each school during its award-winning year were no longer employed there at the time that this study was proposed. Still, the fact that two of the five award-winning schools had predominantly Native American enrollments suggested that student ethnicity had not played an overwhelming role in attaining high student achievement.

#### Summary of Findings for Northwest Elementary School

The data collected from Northwest Elementary School supported the theoretical propositions that the principal commonly practiced transformational leadership and was perceived by teachers as a very trustworthy leader. It also indicated that the school functions as a professional learning community, with strong relationships between teachers and widespread teacher collaboration to continually improve teaching and learning. Finally, the collective teacher efficacy of the school appeared to be very strong, with teachers demonstrating a strong belief in the abilities of the faculty as a whole. Based on these findings, it appeared that principal leadership behaviors and organizational routines have made important contributions to the high student achievement of this Distinguished Title I school.

School C: Musselshell Elementary School

Musselshell Elementary School is a public elementary school, located in south-central Montana; at the time this study was conducted, it had an enrollment of 330 students in kindergarten through sixth grade. It has been designated as a schoolwide Title I program school since 2009; prior to that, it had received targeted Title I assistance since before the Office of Public Instruction's available records. At the time of this study, the school's administration consisted of the building principal, and its faculty consisted of 22 teachers. The school was also defined as a Title I school because of its significant percentage of students defined as low-income by the federal government, with 62 percent of its students qualifying for free and reduced lunch status. Demographically, 95 percent of the school's students were of white ethnicity, two percent were African American, two percent were Native American, and one percent were Hispanic.

Academically, the school had exhibited high student achievement. It had made Adequate Yearly Progress, or AYP, under the federal government's No Child Left Behind standards, and won a Montana Office of Public Instruction Distinguished Title I School Award for Exceptional Student Performance for Two or More Consecutive Years during the period 2006 through 2010. During its award-winning year, 68 percent of its students earned proficient or advanced CRT scores in math, and 86 percent were proficient or advanced in reading. In 2011, the most recent year for which data is available, 65 percent of the school's students were advanced or proficient in math, and 89 percent in reading. The school had made AYP each year. This study sought to learn how

principal leadership behaviors and organizational routines had contributed to Musselshell Elementary School's high levels of student achievement.

#### Participants at Musselshell Elementary School

A total of 17 individuals at Musselshell Elementary School, consisting of the building principal and 16 teachers, were asked to participate in this study. The remaining teachers on the faculty were excluded from the study, as they were not yet employed at the school during the year it was recognized as a Distinguished Title I School. All teachers included in the study group were asked to complete the Collective Teacher Beliefs Scale and Leadership Practices Inventory. The building principal completed the self-assessment version of the Leadership Practices Inventory, and the Principal Sense of Efficacy Scale. The principal and randomly selected teachers also participated in either interviews or the focus group meeting.

During the researcher's first visit to the school on October 18, some teachers expressed their opinion that the school's previous principal had been more responsible than the current principal for the school's high achievement and status as a Distinguished Title I School. These teachers said that, although the award had been bestowed upon the school at the end of the current principal's first year, the groundwork for success had been laid during the tenure of the previous principal, who had led the school for over a decade prior; they perceived that the current principal had received credit that was actually more due to her predecessor.

When this information was related to the researcher's committee chairperson, she suggested that, if possible, the previous principal should be interviewed to collect data

about the principal leadership behaviors he had practiced while at Musselshell Elementary School (Joanne Erickson, personal communication, October 20, 2011). This principal, who had since moved to Wyoming, was subsequently located and interviewed as well, bringing the total number of participants in the study of Musselshell Elementary School to 18.

#### Principal

For the purposes of this study, the school's principal was referred to by the pseudonym, Vivian Bennett. Mrs. Bennett was 50 years old, and had been the principal at Musselshell Elementary for the past five years at the time this study was conducted. Prior to this, she had been a music teacher for 17 years at various schools, most recently in a central Montana town approximately 75 miles from the town that is home to Musselshell Elementary.

#### Former Principal

The former principal of Musselshell Elementary School was referred to by the pseudonym, Jacob Wilder. Mr. Wilder had served as principal of Musselshell Elementary School from 1994 to 2007. He was age 47 at the time that this study was conducted, but had begun his tenure as principal of Musselshell Elementary at the age of 30.

#### Teacher Interviewees

The first teacher interviewee at Musselshell Elementary was the school's counselor, who had served in that capacity for the past five years. At 32 years of age, she

was a native of the town. For the purposes of this study, she was referred to by the pseudonym, Alexandra Godwin.

The second teacher interviewee was a 54-year old first grade teacher with 31 years of experience, the past 28 years as a teacher at Musselshell Elementary, where she has also taught second grade in previous years. She was referred to in this report by the pseudonym, Randi Jones.

The third teacher interviewee was a 38-year old kindergarten teacher with 16 years of experience, all at Musselshell Elementary. For the past 14 years, she had taught kindergarten; prior to that, she had taught first grade and third grade, respectively, during her first two years at the school. In this report, she was referred to by the pseudonym, Erin Silva.

#### Teacher Focus Group Participants

The focus group consisted of nine teachers at Musselshell Elementary School, none of whom had participated in an interview. All of them were female, as were the rest of the teachers at the school. The focus group members' ages ranged from 27 to 61 years old, while their years of teaching experience ranged from five to 32 years. All had taught in their current positions at the school anywhere from four to 29 years. In this report, focus group members were referred to by pseudonyms as needed.

To assist the researcher in conducting the focus group discussion, one teacher volunteer observed and took notes so that the researcher would be able to identify who was speaking at any given time when later transcribing the audio recording of the session. This volunteer did not otherwise participate in the focus group discussion.



### Data Collection at Musselshell Elementary School

Data collection began with electronic distribution of the Collective Teacher Beliefs Scale and Leadership Practices Inventory to all teachers at Musselshell Elementary School who had been employed there during the year the school had won its Distinguished Title I School award from the Montana Office of Public Instruction. A self-assessment version of the online Leadership Practices Inventory was also sent to Principal Bennett, as was an electronic version of the Principal Sense of Efficacy Scale. During the researcher's subsequent first visit to the school, interviews were conducted with the principal and all teacher interviewees. The principal was also observed at work during the school day, and school documents were collected for analysis. During the second visit to the school, respondent validations were conducted with each interviewee, the principal was again observed at work, and the focus group meeting was conducted.

#### Data from the Collective Teacher Beliefs Scale

On September 23, an electronic version of the Collective Teacher Beliefs Scale, or CTBS, was sent to all teachers at Musselshell Elementary School who had also taught there during the year it had won its distinguished school award. This was over three weeks in advance of the researcher's first visit to the school on October 18, allowing teachers ample opportunity to respond to the CTBS. Those who did not respond by October 6 were sent an electronic mail message as a reminder, and a second electronic mail reminder was sent on October 14.

According to the electronic survey management site utilized by the researcher for distribution of the CTBS, nine of the 16 eligible teachers at Musselshell Elementary

completed the CTBS electronically. Those who had not completed it when the researcher first visited the school on October 18 were hand-delivered a paper copy of the survey to complete and return during his second visit to the school on November 14. Of these seven teachers, four completed the CTBS and returned it to the researcher as planned, bringing the total number of CTBS respondents at Musselshell Elementary School to 13 of 16 eligible teachers.

Due to the qualitative methodology of this study, quantitative analysis was never meant to be applied to it, other than for the basic purposes of formulating focus group questions and noting the school's overall mean score for collective teacher efficacy. The former of these purposes was carried out; the latter is discussed below.

The CTBS uses a nine-point Likert scale to rate responses, with a score of "1" representing the lowest possible collective teacher efficacy score for each of the 12 items, and a score of "9" representing the highest possible score. The CTBS results for Musselshell Elementary School ranged from a low item-mean score of 6.38 to a high item-mean score of 8.00, a score registered for three different items. These four items served as the basis of subsequent focus group questions regarding collective teacher efficacy. This was the most important contribution of the CTBS to the data collection process. The highest scoring CTBS items from this school were, "To what extent can teachers in your school make expectations clear about appropriate student behavior," "To what extent can school personnel in your school establish rules and procedures that facilitate learning," and, "How much can your school do to help students feel safe while they are at school?" The lowest scoring item was, "How well can adults in your school

get students to follow school rules?” Each of these items was revisited during the focus group discussion to learn teachers’ perspectives as to why they drew the highest and lowest scores from this school.

Overall, the mean level of collective teacher efficacy at Musselshell Elementary, taken as the average of all 12 CTBS items’ mean scores, was 7.29 out of a possible 9.00. The CTBS has not been norm-referenced, so a school’s collective teacher efficacy score on the CTBS cannot be categorically stated as being either high or low in comparison to other schools. At face value, therefore, it can only be stated that an overall score of 7.29 out of 9.00 may indicate a high level of collective teacher efficacy at Musselshell Elementary School, based on the fact that the questionnaire’s rating scale assigns a value of “Quite A Bit” to a score of 7 and a value of “A Great Deal” to a score of 9 (Tschannen-Moran & Barr, 2004).

Again, the main contribution of the CTBS to data collection in this case was its influence in helping the researcher to formulate questions for the focus group, based on the highest and lowest scoring items from the questionnaires that were completed by the faculty. In this regard, the CTBS served its purpose.

In correspondence with the CTBS, the school’s principal completed the Principal Sense of Efficacy Scale, or PSES. The PSES differs from the CTBS in that it measures the principal’s individual sense of efficacy in her ability to perform her duties as principal, whereas the CTBS measures a faculty’s sense of collective teacher efficacy. The purpose of the PSES in this study was simply to gather information that might be useful to know when analyzing qualitative data collected from the principal. The

principal in this case, Mrs. Bennett, rated her sense of efficacy as an average of 6.44 out of 9.00 on 12 of the PSES's 18 items. While the PSES has not been norm-referenced, this score appears to indicate that the principal has a moderate-to-high level of self-efficacy, as the questionnaire places a value of "Some Degree" on a score of 5, which is lower than Mrs. Bennett's self-efficacy score, and a value of "Quite A Bit" on a score of 7, which is slightly higher than Mrs. Bennett's mean self-efficacy score (Tschannen-Moran & Gareis, 2004).

#### Data from the Leadership Practices Inventory

On September 30, all Musselshell Elementary School teachers who met this study's requirements for participation were electronically sent a copy of the online version of the Leadership Practices Inventory, or LPI, to be completed in regard to the principal, Mrs. Bennett. On the same date, Principal Bennett received a copy of the online version of the LPI self-assessment tool, which she completed in regard to her own leadership practices.

To allow ample time for completion, teachers had received the LPI over two weeks before the researcher's first visit to Musselshell Elementary School on October 18. To remind teachers to complete the LPI before that date, an electronic message was sent to them on October 6. A second reminder message was sent on October 14. Ultimately, 14 of the 16 teachers asked to participate completed the LPI, a return rate of 88 percent.

Once again, however, the purpose of using the LPI in this qualitative study was not to achieve a statistically significant quantitative result. Rather, the main purpose was to note LPI items that had generated the highest and lowest scores from respondents in

this case, and then formulate questions for the Musselshell Elementary School focus group meeting based on those items. This purpose was fulfilled. A secondary purpose for administering the LPI in this case was to record the mean scores, for each of the five transformational leadership practices defined by the LPI, as rated by both faculty respondents and from the principal's self-assessed LPI results. These mean scores are related below.

The LPI rates leadership practices according to Kouzes and Posner's (2009) five practices of transformational leadership: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. For each of the five practices, LPI scores can range from a minimum of six to a maximum of 60.

On her LPI self-assessment, Principal Bennett assigned herself the following mean scores: 50 out of 60 for modeling the way; 37 out of 60 for inspiring a shared vision; 43 out of 60 for challenging the process; 44 out of 60 for enabling others to act; and 26 out of 60 for encouraging the heart. In contrast, the mean scores from the 14 teachers who completed the LPI in regard to Mrs. Bennett's leadership practices were as follows: 35.2 out of 60 for modeling the way; 39.4 out of 60 for inspiring a shared vision; 39.9 out of 60 for challenging the process; 30.3 out of 60 for enabling others to act; and 29.7 out of 60 for encouraging the heart.

Although the LPI has not been norm-referenced for educational leaders specifically, the results of the several thousand people who have taken this version of the LPI indicate that Mrs. Bennett's self-assessed LPI scores were low to moderate, ranging from the second to 66<sup>th</sup> percentiles for each of the five leadership practices (Kouzes &

Posner, 2009). Conversely, the direct report-rated LPI scores for Mrs. Bennett, collected from the teachers at Musselshell Elementary School, were all in the low range, with percentile scores ranging from the first to 29<sup>th</sup> percentiles.

Despite the fact that the LPI results for Musselshell Elementary School were not statistically significant based on the percentage of teachers that responded to the questionnaire, they suggested teacher perceptions that Mrs. Bennett rarely or seldom practices transformational leadership behaviors. For her part, Mrs. Bennett's self-assessed scores indicated that she also perceived herself as practicing the various transformational leadership behaviors on a spectrum ranging from rarely to occasionally.

In regard to individual item scores from the teacher-scored LPI, the highest score assigned to Principal Bennett was a mean score of 8.1 out of 10.0 for the item, "Talks about future trends influencing our work." This score approximated the label, "Usually," (Kouzes & Posner, 2009) in terms of how often she was perceived by teachers to have engaged in this practice. The lowest teacher-scored items were, "Asks for feedback on how his/her actions affect people's performance," and "Gives people choice about how to do their work," which both received a mean score of 3.9 out of 10.0, a score which approximated the label, "Once in a While" for a score of 4.0 (Kouzes & Posner, 2009). As these items represented the extreme high and low scores from the LPI results at Musselshell Elementary School, three respective questions for the school's focus group meeting were subsequently based upon each of them.

### Interview Process

Each interview at Musselshell Elementary School was conducted during the researcher's first visit to the school on October 18, with the exception of the principal interview, which was conducted the evening of October 17. The principal interview was conducted in her office; one teacher interview was actually conducted with the school counselor, as the school district defined her job as a teaching position, and was conducted in her office; the remaining two teacher interviews were conducted in each teacher's classroom during a free period. Prior to each interview, the interviewees had been informed of the study's research topics and methods in a letter of invitation sent to them electronically by the researcher. As stated earlier in this chapter, the interview protocols consisted of 16 open-ended questions that reflected key practices, routines, and beliefs associated with transformational leadership, relational trust, professional learning communities, and collective teacher efficacy.

The principal interview was completed over the course of approximately 45 minutes. The respondent validation was conducted during the researcher's second visit to Musselshell Elementary on November 14.

The first teacher interview was conducted in her counseling office the morning of October 18, over a duration of approximately 35 minutes. The second teacher interview was conducted in the teacher's classroom during her prep period the afternoon of October 18, with all interview questions completed in approximately 35 minutes. The third teacher interview was also conducted in the teacher's classroom during her prep period that afternoon, over the course of approximately 35 minutes. Each of the four interviews

was consistent in duration with the anticipated interview length of 30 to 60 minutes that was stated in the researcher's dissertation proposal. Respondent validations for all teacher interviews were conducted during the researcher's second visit to Musselshell Elementary School on November 14.

The interview with Mr. Wilder, Musselshell Elementary School's former principal, was conducted by telephone on November 30, over a duration of approximately 40 minutes. This interview focused solely on principal leadership behaviors practiced by Mr. Wilder during his tenure as the school's principal from 1994 to 2007; as such, only the questions relating to transformational leadership and relational trust were included in the interview protocol. Respondent validation for this interview was conducted by telephone on December 18.

Yin's (2009) analytic strategy of pattern-matching was used to determine whether interviewee responses generated data relevant to the study's research questions. During each interview, the researcher took notes in the margin of his interview protocol copy; these margin notes were a first step in the data analysis process, allowing the researcher to notice trends and patterns in the various statements made by each interviewee. For example, if two interviewees gave highly similar answers or used the same phrase in response to the same interview question, the researcher was able to see those similarities when reviewing the protocol margin notes after the interviews were completed. Also, each interview was audio recorded and transcribed verbatim to allow the researcher to review the transcripts and conduct a deeper, more thorough review of the interview data as the data analysis process evolved. The subsequent respondent validations allowed the



researcher to confirm that the data collected during the interview process was accurate. These practices enabled the researcher to detect and match the patterns present in the data to the factors represented in this study's research questions.

### Focus Group Process

The focus group discussion was conducted in the school library, after school during the researcher's second visit to Musselshell Elementary School on November 14. Eleven people were present: the researcher; the nine teachers who had been randomly selected for the focus group; and a teacher volunteer known by the pseudonym, Kelby Joyce, who assisted the researcher by taking notes to aid in identifying various speakers when later transcribing the audio recording of the focus group discussion. The focus group participants had general knowledge of the study's research topics and methods from the invitation letter that had been sent to the principal and all eligible teachers prior to the commencement of the study, and from having been introduced to the researcher during his first visit to the school in October.

The group was asked seven broad, open-ended questions to generate discussion about the principal's leadership behaviors and the faculty's collective teacher efficacy. As stated, three questions about principal leadership behaviors were formulated from the highest and lowest mean-scored items on the LPI questionnaire completed by the teachers. These items were, "Talks about future trends influencing our work," "Asks for feedback on how his/her actions affect people's performance," and "Gives people choice about how to do their work." Also, four focus group questions related to collective teacher efficacy were formulated from the highest and lowest mean-scored items on the

CTBS questionnaires completed by the teachers who had participated in the study. These items were, “To what extent can teachers in your school make expectations clear about appropriate student behavior,” “To what extent can school personnel in your school establish rules and procedures that facilitate learning,” “How much can your school do to help students feel safe while they are at school,” and, “How well can adults in your school get students to follow school rules?” The focus group discussion lasted approximately 55 minutes, consistent with the anticipated duration of 30 to 60 minutes stated in the researcher’s dissertation proposal, and exceeding the 45-minute minimum duration suggested by the researcher’s graduate committee (Jayne Downey, personal communication, October 20, 2011).

As with the interview data, Yin’s (2009) strategy of pattern-matching was used to analyze whether data collected from the focus group was consistent with the study’s research questions. The focus group discussion was audio recorded and transcribed verbatim to allow the researcher to review the transcript and conduct a deeper, more thorough review of the focus group data as the data analysis process evolved. This enabled the researcher to detect and match the patterns present in the data to the factors of transformational leadership and collective teacher efficacy that were represented in this study’s research questions.

### Document Collection

During the researcher’s first visit to Musselshell Elementary School on October 18, several school documents were collected from the principal for analysis. These consisted of copies of the following: the school district’s staff handbook; a copy of a

school calendar; a copy of the proactive schoolwide discipline plan; the school's student behavior expectations matrix; a copy of the rubric used by the principal in conducting informal walk-through classroom visitations; a copy of one of two of the school's weekly staff bulletins; a copy of the schedule for all of the school's Response to Intervention, or RTI, meetings to be held during the academic year; a list of voluntary professional development webinars recommended to teachers by the principal; a copy of the school's policies, practices, and procedures for staff, and a similar document for substitute staff; a copy of the school's August staff orientation schedule from 2010; copies of staff meeting and school in-service agendas conducted between October 2010 and September 2011; and a copy of the school district's formal teacher evaluation rubric. Another document, submitted by the school's former principal in conjunction with his interview, was an educational journal article about the achievement gains made by Musselshell Elementary School that had led to its recognition as a Distinguished Title I School.

As with the other qualitative data collected for this study, the strategy of pattern-matching (Yin, 2009) was used to analyze these documents. Each school document was carefully scrutinized for evidence of principal leadership behaviors and organizational routines that may have contributed to the school's high levels of student achievement.

#### Data Analysis for Musselshell Elementary School

Data collected from Musselshell Elementary School was pattern-matched to determine which principal leadership behaviors or organizational routines it indicated at the school. Each piece of relevant data was found to match one of the following factors that may have contributed to the high student achievement levels attained by the school:

the principal's transformational leadership, relational trust in the principal, the school as a professional learning community, or the school's collective teacher efficacy. Data that did not match any of these was analyzed as possible evidence of one or more rival explanations for the school's high student achievement.

Principal Leadership:  
Transformational Leadership

Analysis of Mrs. Bennett's transformational leadership practices as principal of Musselshell Elementary School began with careful scrutiny of evidence of behaviors relating to the practice of modeling the way. According to her teacher-assessed LPI scores, Mrs. Bennett's rating was 35.2 out of 60 for modeling the way practices. This placed her in Kouzes and Posner's (2009) seventh percentile, in regard to the accumulated ratings of the thousands of leaders whose practices have been assessed using the LPI. As the LPI defines scores in the 30<sup>th</sup> percentile or lower as in the "low" range, this score in the seventh percentile clearly indicated that Mrs. Bennett was perceived as relatively weak in her practice of leadership behaviors that model the way.

During her interview, Mrs. Bennett made no explicit statements about her leadership behaviors that appeared consistent with leadership practices that model the way. Although stated values and behaviors consistent with those values are indicators of a leader's practices that model the way, Mrs. Bennett did not clarify these, even when prompted to discuss what she did to make sure her actions were consistent with her goals. She did state that her school is primarily guided in its goals by test data, and described how the frequency of skills tests, such as Northwest Evaluation Association, or NWEA, and Dynamic Indicators of Basic Early Literacy Skills, or DIBELS, has increased in

recent years. Her predominant value as a principal, as implied by her response, appeared to be a belief that school goals should be reactive in nature, as based upon test results.

During the October 18 visit to Musselshell Elementary School, Mrs. Bennett was observed working with an RTI (Response to Intervention) group of five students to improve their skills in segmenting, or sounding out words. Like all of the teachers, including the counselor, Mrs. Bennett works with an RTI group daily. This practice, with the principal sharing in the same educational interventions as the teachers, was one that appeared consistent with modeling the way.

In the interview with Mrs. Godwin, she stated that, in her role as the school's counselor, she has a close working relationship with Mrs. Bennett, allowing her to know the principal from a different perspective than classroom teachers. She expressed some belief that Mrs. Bennett is a principal whose leadership practices model the way, noting that she verbalizes her goals and that her intent is often clear. She also referred to the school's new discipline model, called Love and Logic, and stated that she has been impressed with Mrs. Bennett's skill in applying this model: "every time I see her with a kid in her office, it's 'to the T' what Love and Logic actions" are supposed to be. As teachers were also implementing these disciplinary strategies, it would seem that Mrs. Bennett's skill in utilizing them would have qualified as a leadership practice that models the way. It must be noted, however, that Mrs. Godwin had perhaps had more opportunity to observe Mrs. Bennett in such situations due to her role as the school's counselor; classroom teachers may not have done so. In any event, none of the classroom teachers

that the researcher met or interviewed during his visits to the school ever referred to Mrs. Bennett's use of Love and Logic strategies.

Mrs. Jones' interview produced a description of Mrs. Bennett's method of facilitating her goals for the school, as she stated, "she presents them at meetings. She makes it pretty clear that that's the direction she wants the school and the teachers to go. She's pretty strong-willed, putting forth her ideas. She's an avid reader of research and bases much of her way of doing things on research." This comment appeared consistent with Mrs. Bennett's statement about the school's goals being driven by test data. It was also observed that Mrs. Jones appeared somewhat tense and uncomfortable when discussing Principal Bennett throughout her interview.

Mrs. Silva's interview comments regarding practices that model the way, such as the principal's facilitation of school goals, also focused on the pivotal role of testing data in developing school goals. In relating this, however, she did not refer directly to the principal's role in facilitating the goals; instead, she referred to the faculty as a whole. For example: "Throughout the year... we have looked at our school, made up our goals, looked at our data from our different testing... we've seen where the areas are low, and we've made a schoolwide academic goal." Although she mentioned Principal Bennett in her description of this process, saying, "at the beginning of the year, she reiterates what we decided our goal was going to be for the year, and we discuss that, and what ways we can meet the goal through RTI groups," she followed this statement by saying, "As far as her goals, I'm not really sure, to be honest, what her goals are." This comment indicated

that, from Mrs. Silva's perspective, Mrs. Bennett had not modeled the way by communicating her own goals and values in a way that was clear to the faculty.

As stated, the researcher had decided to also interview former Musselshell Elementary School Principal Jacob Wilder. This decision was based on the fact that Mr. Wilder had served a long tenure at the school, which had ended only one year prior to its recognition as a Distinguished Title I School; during the researcher's October 18 visit to the school, some teachers had opined that they considered Mr. Wilder to have been the administrator most responsible for the school's high achievement, which had led to its having won the award.

The interview with Mr. Wilder, regarding his tenure at Musselshell Elementary, produced more direct statements in reference to leadership practices that model the way. He emphasized the importance of following through on school goals: "I think one of the things that many times happens in schools is you go through a mission or vision process, and then it sits on a shelf, and one of the things that I continually reminded our staff is that this process is not something that's going to sit on a shelf. My goal was that it was institutionalized... in our way of thinking, and the things we did." This statement suggested that it was important to Mr. Wilder that he and the faculty acted in a way consistent with their stated values; that, in turn, is characteristic of leadership practices that model the way.

In general, the theme that emerged in regard to principal behaviors in this aspect of transformational leadership was that Mrs. Bennett was occasionally perceived as engaging in practices that model the way. Both her own statements, and those of her

teachers, did not seem to indicate that she is a principal who is strongly perceived to have clear values that are supported by her actions, a key indicator of leadership practices that model the way. However, Mr. Wilder's interview statements indicated that, when principal at Musselshell Elementary School, he had placed a good deal of emphasis on making sure that he and the faculty acted in ways overtly consistent with the values he and the school's stakeholders had espoused in the school's mission and vision statements.

Based on the data, it appeared that leadership practices that modeled the way were more common at the school during Mr. Wilder's tenure than they have been since Mrs. Bennett assumed the principalship. Thus, transformational leadership practices that model the way may have made an important contribution to the school's improved academic achievement while Mr. Wilder was principal; however, with the decreased frequency of these practices under Mrs. Bennett, the impact of their contribution had also been diminished.

The second aspect of transformational leadership involved leadership practices that inspire a shared vision. According to her teacher-assessed LPI scores, Mrs. Bennett's rating as a leader who inspires a shared vision was 39.4 out of 60. This placed her in Kouzes and Posner's (2009) 29<sup>th</sup> percentile. Although this score placed her in the low range of the LPI's percentile scores, it represented the highest teacher-assessed percentile score that Mrs. Bennett received.

Mrs. Bennett acknowledged her difficulty in enlisting the faculty's support in developing a vision for the school: "That's been a really tough one. When I first came here five years ago, we had a very veteran staff. . . . They had already gone through the



process of building a vision. We're still there, trying to put in pieces... NCLB is coming in and pushing you... sometimes it feels like you just can't even get enough momentum going." Mrs. Godwin had similar thoughts on this issue. While she credited Mrs. Bennett for her diligence in learning and sharing research to guide the staff in new directions, she expressed concerns about the development of a shared vision for the school, saying "One of the areas that we struggle in at this school is being one united staff."

Mrs. Jones did not perceive that Principal Bennett had enlisted the faculty in developing a vision. In her opinion, the vision was Mrs. Bennett's alone: "She pretty much presents her way and expects it to be done. I personally don't think she always asks for input. I think she bases her decisions purely on her reading and her research." Mrs. Silva had similar comments, about the principal's efforts to enlist the faculty in developing a shared vision: "I think that's an area that is a little bit weak.... A lot of times, I feel it's more top-down... rather than discussing it with us; it's sometimes like a micromanagement-type system... instead of just trusting us and our professionalism." She also expressed concern that "it seems like we have these lofty goals, and we start for one meeting and we work on them, and nothing is ever followed through."

The concerns raised by Mrs. Jones and Mrs. Silva were echoed during the focus group discussion. Tina, a fourth grade teacher, said, "She, I think, shares a lot of future trends with us, and where we need to be going. But as for staff input, I don't think we are given a lot of decision... we're kind of told where we're going, instead of asking our input." Louise, a sixth grade teacher, replied: "I concur, it's a top-down philosophy.... One thing I don't think we do is, we don't ever work through anything fully. We just go

from one thing to another.” Kimberly, a special education teacher, added: “She provides a lot of good information... but it’s sometimes, like Louise said, we don’t always get time to sort through it and get it all put together.... We don’t have a chance to say, O.K., let’s just take this one thing and process it through and see, ‘Well, is this gonna work?’”

Sarah, a fourth grade teacher, also commented that, “I agree, there’s too much... it’s everything all at once, and you get overwhelmed.”

Mr. Wilder, the former principal of the school, made markedly different statements in his interview. As opposed to the top-down descriptions of Mrs. Bennett’s vision process, he described his past efforts to enlist faculty support in developing a vision at Musselshell Elementary as a shared endeavor:

We made it something that was alive, and it was theirs. It wasn’t an idea I brought in with me. We shared, first and foremost, what a vision statement was, what it was supposed to be, what it was meant to be. So, the development of that process was that it was their vision. It wasn’t mine, it wasn’t the school board’s, it was the staff and learning community... it really became something that was meaningful to us, rather than something that was just a requirement to do. My hope would be that today, if people were asked, they would say a similar thing, that the vision for the school wasn’t a top-down, it was more of a bottom-up kind of vision structure.

Document analysis of the article on Musselshell Elementary School’s improved academic achievement also produced evidence of Mr. Wilder’s practices that inspired a shared vision. In the article, Mrs. Bennett was quoted as saying, “(Jake) and the staff developed a vision of where they wanted to be and that was part of the vision – the teachers had to be involved. Everyone had to take a piece of it and communicate with

each other and share ownership” (Reed, 2009, p. 27). The article continued: “If there is a single theme that runs through (Musselshell) Elementary’s decade-plus of hard work, it is that unity of vision” (Reed, 2009, p. 27). It went on to describe how the resulting vision was one that viewed the school as a team, rather than a collection of individual teachers, working toward the cause of “academic progress for each and every student in our school” (Reed, 2009, p. 27).

Based on the contrast between the statements about the vision process at Musselshell Elementary today as a largely top-down process dictated by Mrs. Bennett, with a staff that struggles to find unity, as opposed to the unity of vision and shared vision process described in regard to the school during Mr. Wilder’s tenure, the overriding theme was that the school’s vision process has changed dramatically during Mrs. Bennett’s tenure. The data suggested that practices that had inspired a shared vision were typical of Mr. Wilder, but had become much less common under Mrs. Bennett. It appeared that these leadership practices likely played an important role in the school’s academic improvement as it rose to the status of a Distinguished Title I School; however, these practices had since been largely discontinued.

The third aspect of transformational leadership involved leadership practices that challenge the process. According to her teacher-assessed LPI scores, Mrs. Bennett’s rating as a leader who challenges the process was 39.9 out of 60. Although this was the highest mean score received by Mrs. Bennett from her faculty, it placed her frequency of challenge the process practices in the low range, at Kouzes and Posner’s (2009) 21st percentile.

When asked what she does to change and improve the school, factors that are often indicative of challenging the process, Mrs. Bennett said, “We jump in and we go... it’s always hard to get things going in the right direction, you throw pieces out and you say, ‘This is best practice.’ We go back to the research a lot, and you say, ‘This is best practice.’ You get a lot of resistance. There’s always a group that is with you, and you get moving.” When asked if she does anything to encourage teacher input in the change process, she cited the shift of the school’s RTI program to a grade level basis, rather than focusing on individual students at all grade levels. This change, she said, was brought about through discussions of the school’s RTI team, which had gradually concluded that interventions on a whole grade level basis would be more efficient than intervening with individual students one by one.

This account was corroborated by Mrs. Godwin in her interview, as she also used the changes in the schools RTI program as an example of how Mrs. Bennett had changed and improved the school. She also reiterated her belief that Mrs. Bennett’s knowledge of educational research is impressive, and stated that this knowledge often drives Mrs. Bennett’s ideas for school change. She also stated that, while she believes that Mrs. Bennett is open to faculty input regarding change, “I also think that that’s something that our staff struggles with, is thinking that she does. Vivian is very strong and opinionated, and some teachers feel intimidated by that... and there are some things that she’s passionate about, and ‘I don’t care what your input is, I’m the principal, and I’m gonna make that decision,’ and as a leader, she has to.”

Mrs. Jones also related her observation that Mrs. Bennett depends on research to direct her efforts toward school improvement: “It goes back to her reading and her research. That is her way of improvement.... She’s changed many procedures, many successful practices.” When asked if Mrs. Bennett encourages experimentation or learning from mistakes, Mrs. Jones replied, “No. She pretty much wants things done the way she wants them done, and does not encourage diversity from that.”

Mrs. Silva also commented that Mrs. Bennett’s change efforts are “very data-driven,” and that “she does do a good job of finding the research to teach us certain skills.” Like Mrs. Bennett and Mrs. Godfrey, she also cited the changes to the RTI program as an example of the use of staff committees to change and improve the school.

The focus group discussion produced many comments related to Mrs. Bennett’s efforts to change and improve the school. One teacher noted the recent implementation of the Love and Logic program for dealing with student behavior problems as an example of a positive change initiated by the principal. Most of the focus group comments, though, focused on flaws in Mrs. Bennett’s efforts to challenge the process at Musselshell Elementary School.

Shauna, a fifth grade teacher, repeated the opinion that Mrs. Bennett is a principal driven by research and data, but criticized the lack of real-life examples to support her theories: “It’s a lot of... the latest trends that she’s read about. No experience practical to where, ‘This school’s done this, and it’s worked, and this has done that, and it hasn’t...’ And so then we find ourselves flailing around with not a lot of good leadership on how to

actually put it into practice.” Dianne, a third grade teacher, agreed: “We get a lot of theory, but to go put it into practice is difficult for me.”

Another concern from the focus group was that changes are often implemented too quickly, or abruptly discontinued. Harlene, a physical education teacher, said: “When she presented professional learning communities, that is a system that has been... very successful.... It just wasn’t presented to us as thoroughly as it should be, and it’s a step process, it’s not, ‘Throw it at us and now let’s do it.’ It takes a long time to figure out... and it takes a lot of cooperation.” Louise concurred, saying, “Sometimes, it’s like we get the elephant, we try to eat the elephant before we get the pieces, and it seems so overwhelming, I think a lot of us just shut down.” Sarah added, “And if we do start putting it into practice, then we kind of back off... just don’t stay with it.” Angie, a kindergarten teacher, agreed: “Sometimes, it just seems like we don’t finish something before we jump into something else.” Shauna added, “So we never get a real good handle on what we’re supposed to be doing,” which prompted Kimberley to comment that, “We learn about something, we’ll practice it for a while, and then, it’s like something better comes along, ‘So we have to do this!’ We never get to fully go through and see if it’s gonna work.”

By contrast, the approach to school change and improvement described by Mr. Wilder in regard to his tenure as the school’s principal was based on staff input as the driving factor in initiating change. He described his approach as follows:

In each building that I’ve been in, I met with every staff member. That includes every cook, every custodian, every teacher, every person who is an employee of our school, and I asked them a series of questions to get to know who

they are. One of the things is to get to know the history of where we're at, and how we got to be where we're at... history plays a vital role... in the change process.

I try and identify from each staff member what they felt the strengths in the school were at present, and then try to build upon that; what areas of challenge, try to find some patterns within that, and from there, begin to really identify those and build them into that improvement process. Really what it begins to do is bring that community and vision... trying to gain a better understanding, instead of coming in with a preconceived idea, "O.K., these were things I learned in my program of study, and so therefore that's what needs to happen..." My philosophy is, "change so slowly that people think that's the way they've always done it." I think the best comment that one can hear is, "Oh, yeah, we've done that for years," when in fact you know that that was something that was implemented when you were there at the school.

Again, Mr. Wilder's approach to change was noticeably different than Mrs. Bennett's. Whereas the data indicated that Mrs. Bennett had been perceived to have made relatively sudden changes to the school, often without teacher input, and has just as suddenly dropped programs and strategies before teachers had a chance to fully incorporate them, Mr. Wilder reported an approach that was much more calculated, and based largely on staff input. Of the two approaches, Mr. Wilder's was more consistent with leadership practices that challenge the process. Once more, it appeared that this is a transformational leadership practice that was practiced frequently while the school improved its academic achievement under Mr. Wilder's leadership, but which had been less utilized under Mrs. Bennett.

Mrs. Bennett's teacher-assessed mean LPI score for the fourth practice of transformational leadership, enabling others to act, was 30.3 out of 60. This score

represented the first percentile of Kouzes & Posner's (2009) LPI rankings, so it was categorized at the bottom of the low range of scores.

Despite this low score, Mrs. Bennett reported that she had been able to delegate authority to some of her staff; delegating authority is a leadership practice identified with enabling others to act. Specifically, she mentioned the school counselor, Mrs. Godwin, and the school's Title I coordinator as individuals to whom she had delegated authority, adding that teachers are also beginning to take leadership of their grade level meetings. To facilitate teachers in their work, she said, "I kind of took charge of the schedule, and I built all the core classes, and the lunch schedules, and all the recesses, and I put in RTI time for all of them," to allow teachers to have time to work together. In describing the celebrations committee that was recently formed to plan staff events, she acknowledged that, "you can't do it all, so if you find people who are really good at that stuff... let 'em take off with it."

Consistent with Mrs. Bennett's mention of her as an individual to whom authority had been delegated, Mrs. Godwin stated, "personally, I feel like she's probably my number one supporter in school... definitely open conversations all the time, which makes me feel like I'm doing things right and empowered at school... and gives me a feeling like I am integral to our school." Empowering teachers is another leadership trait consistent with the practice of enabling others to act.

Mrs. Jones had a different perspective on Mrs. Bennett's willingness to trust teachers. She stated that Mrs. Bennett encourages teachers to participate in committees,



but added: “She has a hard time delegating decision-making.... We’re encouraged to meet and exchange ideas often, but decisions are made by her.”

Mrs. Silva described her perception that Mrs. Bennett does not typically empower or show trust in teachers:

I would say that’s kind of a weak area, because I feel sometimes we go to a meeting... someone did something wrong; well, instead of going and talking to that person individually, it’s a blanket, “You need to use the ‘P’ card and ask me first before purchasing something....” I am kind of put off by that. I’d rather someone, if I am doing something wrong, come and tell me, and I think that happens a lot. Even when we get into our group meetings, it will be one blanket, “here’s what we need to do.” Well, who are you talking to? That’s not even really showing trust, and I think it’s a weaker area. Showing trust is also, I think, stepping back, instead of micromanaging us, let us do our job.... I’ve been trained to teach kindergarten, I’ve done this for many years, I have my Master’s in reading, please let me do my job. And sometimes, I don’t feel like that happens; I feel like I’ve lost a lot of respect for our principal in that way.

During the focus group discussion, Louise also commented that Mrs. Bennett needs to a better job of making direct statements to individual teachers about any concerns she may have: “I don’t think it should be a blanket statement to the staff.” The focus group discussion also yielded a number of comments about Mrs. Bennett’s actions in empowering teachers and delegating authority. Teachers in the group expressed appreciation for having academic freedom in their teaching methods, and for the schedule changes Mrs. Bennett enacted to build in meeting time for teacher RTI groups. They were critical, however, of what they perceived as Mrs. Bennett’s attempt to micromanage the

structure and content of those teacher meetings. In-service meetings were described as having minutely detailed agendas, described as “overscheduled.” This also raised concerns about the principal’s trust in her teachers, as described by Shauna: “Too much in control of every minute of our (time), and it almost turns into, ‘Does she trust us?’ It almost turns into a trust issue, that she doesn’t think we can utilize this 20 minutes in an effective way, and that we might actually take a break.... I don’t know if that’s what she’s really trying to do, but that’s the way it’s perceived.”

When interviewed about his former practices as the school’s principal, Mr. Wilder stated that teachers had been empowered through committees, which he preferred to call teams. He had required all teachers to participate on at least one team of their choice, so that they did not have the option of not being involved in the workings of the school. He also described how a teacher comment at a staff meeting had led to a schoolwide investigation of the issue the comment had raised. The comment was “a shoot-from-the-hip kind of thing, ‘Well, I don’t think kids are prepared....’ How do we determine whether or not kids are prepared? So... we sat down... we could find what teachers thought was ‘preparedness,’ and then we defined it, and then we checked it off for a month.” Ultimately, the teachers’ finding was that “about 98 percent of our kids came prepared every day.” This example illustrated how Mr. Wilder had helped teachers resolve an area of concern through their own efforts; this action was consistent with the empowerment of followers as characterized by leadership practices that enable others to act.

The emergent theme about principal behaviors that enable others to act at Musselshell Elementary School was that these practices had been carried out to some degree by the current principal, but that Mrs. Bennett's perceived lack of trust in teachers to manage their own affairs in certain settings had often undercut the chances of her being perceived as a principal who enables others to act. It appeared that Mr. Wilder showed more trust in empowering teachers during his tenure as the school's principal, and was therefore more identified with practices that enabled others to act.

The fifth, and final, leadership practice of transformational leadership consists of leadership behaviors that encourage the heart. Mrs. Bennett's teacher-assessed LPI score for practices that encourage the heart was 29.7 out of 60. This mean score placed her in the low range of Kouzes & Posner's percentile scores, at the fourth percentile to be precise.

Encourage the heart practices are embodied in leaders who praise, encourage, and recognize the contributions of their followers. In her interview, Mrs. Bennett expressed reluctance to praise individual teachers due to negative experiences when having done so in the past: "That's gonna be a really hard one.... When I first started, I would hold up positive examples of things that had happened, either from grade levels or from teachers, and there was a lot of resistance. And so I've learned that I don't hold anyone or any grade level as an example of what we do or want to be." She said that when she wants to praise or thank a teacher now, she does it by electronic mail, "keeping it really private," so as not to offend the rest of the faculty by singling one teacher out for praise.

Mrs. Godwin also said that Mrs. Bennett preferred to praise her privately for a job well-done. She also mentioned a practice at the school of public praise at faculty meetings: at the beginning of every meeting, the first item on the agenda is referred to as “Positive Notes.” This was confirmed by the meeting agendas collected by the researcher for document analysis. During positive notes time, anyone at the meeting has the opportunity to praise anybody else whom they want to recognize at that time. Mrs. Godwin stated that Principal Bennett sometimes uses this opportunity to praise individual teachers. In her interview, Mrs. Jones and Mrs. Silva both also mentioned that Mrs. Bennett will recognize individual contributions during this time, and Mrs. Silva stated that Mrs. Bennett has privately praised her for her work. During her respondent validation, however, Mrs. Jones added that praise from Mrs. Bennett, “doesn’t always feel sincere; she just goes through the motions.” She explained that she believes that Mrs. Bennett gives praise because she has read that she should praise people, but isn’t really sincere in her praise.

During his interview, former principal Jacob Wilder stated that he tried to praise teachers frequently. Although he expressed no specific negative experiences with praising teachers in public as Mrs. Bennett had, he did state his belief that “the most effective praise is done in private. Sometimes, I think we get caught up in things like Teacher of the Month, and in some ways that can almost have a negative impact.” He also explained that he believed praise should be specific, and should be done “as close as possible to whatever happened that I was praising... to let them know how much I did appreciate them.” As for group recognition, he recalled schoolwide writing assessment

sessions at Musselshell Elementary that had entailed the principal and faculty spending a day assessing student writing through a common rubric; part of the day's agenda included a celebration of the progress students had made. Overall, he stressed the importance of praising teachers, as he noted that, "having been in education... we're definitely not in it for all the dollars that they're paying us, and so it's nice to hear from somebody that they do appreciate and recognize what you're doing."

The emergent theme in regard to leadership practices that encourage the heart was that Mrs. Bennett was hesitant to praise teachers in public, but more willing to do so in private due to concern that other teachers would be offended if she praised an individual publicly. Based on Mr. Wilder's interview statements, he considered it important to frequently praise teachers. He, too, preferred to do so in private, for similar reasons: he expressed a belief that formal, public praise could have had a negative effect on those teachers not singled out for such recognition. If Mr. Wilder's statement about giving frequent praise is taken at face value, it appears likely that he praised teachers at the school more often than Mrs. Bennett had since assuming the principalship. Overall, the data suggested that leadership practices to encourage the heart had made a limited contribution to the school's high student achievement under Mrs. Bennett, but had perhaps played a larger role during Mr. Wilder's tenure as principal.

On the whole, the transformational leadership data collected from Musselshell Elementary School suggested that Principal Bennett was perceived to engage in practices identified with transformational leadership on a limited basis. Her predecessor, Mr. Wilder, appeared to have practiced transformational leadership behaviors much more

frequently. The emergent theme was that transformational leadership had likely made an important contribution at the school as it had improved during Mr. Wilder's term as principal, eventually reaching the high student achievement levels that resulted in its recognition as a Distinguished Title I School a year after his departure. During Mrs. Bennett's tenure as principal, the frequency of transformational leadership behaviors by the principal appeared to be considerably lower. As a result, the contribution made by such behaviors was also lower than it had been in the past.

#### Principal Leadership: Relational Trust

Followers' relational trust in their leader is based on perceptions of the leader's benevolence, competence, openness, honesty, and reliability. The first aspect of relational trust, benevolence, is evident in principals who treat teachers with kindness, show a personal interest in their well-being, and encourage their professional growth (Hoy & Tschannen-Moran, 2000).

During her interview, Mrs. Bennett stated that she shows teachers that she cares about them as individuals through the conversations she has with them. When asked if she did anything to show a personal interest in her teachers' well-being, or to encourage their professional growth, she acknowledged that she does not do anything specific in these areas: "I can't say, with each teacher individually... no."

When asked what the principal did to show teachers that she cares about them as individuals, Mrs. Godwin cited examples of Mrs. Bennett leaving notes that wished teachers good luck on the upcoming school year, as well as sharing research and data

with the faculty. She also said, however, “a lot of teachers find that that’s too much... data, and maybe it’s all about that and a little less relationship.”

Mrs. Jones was very pointed in her opinion that Mrs. Bennett does little to show teachers that she cares about them as individuals:

She makes very little gestures in the personal area.... She’s very driven, and almost to the point that sometimes she can’t see beyond that. She very rarely greets you in the hallway. I don’t think she means any disrespect or personal affront to you, but she does not interact well in a one to one, personal basis with her staff.... I don’t feel that she’s tried to interact at all, personally, with me. You don’t see her in public very much, and small town Montana, it’s noticed.

Mrs. Silva expressed similar feelings, and specifically mentioned, “you can walk right by her in the hallway, and it’ll be just you and her, and she won’t even say hello to you. It’s a little cold.” Although she conceded that Mrs. Bennett had expressed condolences for the recent loss of one of her family members, she felt that this was not generally one of Mrs. Bennett’s strong points. She also compared her, unfavorably, to her predecessor, Mr. Wilder: “I was sick last year, I had the stomach flu and was hospitalized, and I didn’t hear from her, it was probably a week after I’d been back, and then she finally said something... I guess I was used to my old principal, who’s like, ‘Erin, how is your family doing? Good morning!,’ you know, and was very personable, but that’s not the case with her.”

In his interview, Mr. Wilder explained that he had often used notes to praise teachers for doing something well, a behavior more identifiable with transformational leadership theory’s practices that encourage the heart. He found, however, that these also

had the effect of showing teachers that he cared about them as individuals, and were thus much-appreciated, saying “You know that when you walk into their classroom and it’s pinned up to their wall, and then you go back and two months later, it’s still pinned up to the wall.... When they get something like that, it’s something that they cherish.”

The overall theme that emerged in regard to benevolence was that Mrs. Bennett was generally perceived to be weak in this area; even her own self-reported accounts about showing care for teachers as individuals indicated that she did not perceive this as one of her personal strengths. Mr. Wilder, conversely, appeared to have behaved in a much more benevolent fashion, expressing genuine interest in teachers’ well-being. Based on the data, it appeared that the principal’s benevolence had been a strong point at Musselshell Elementary School as it improved academically during Mr. Wilder’s tenure as principal, but had become an area of relative weakness under Mrs. Bennett.

The second aspect of relational trust, competence, is evident in principals who display a sound knowledge base, make wise decisions, handle difficult situations well, and have strong interpersonal skills (Hoy & Tschannen-Moran, 2000). Qualitative data collection at Musselshell Elementary School indicated mixed teacher perceptions of Mrs. Bennett’s competence as principal.

The main evidence in favor of Mrs. Bennett’s competence was her knowledge of educational research. When asked what she does to demonstrate her competence, she said, “I try to know what the research says. I don’t try to pretend to know everything.” She stated that, although she trusts her teachers to be experts in the curriculum they teach, there are times when they do not agree with her, “and then we need to go back to the



research.” She described one incident as an example of her own competence, but which also related teacher concerns that she may have lacked competence:

I’ve been immersed in research for a long time.... And I know, in looking at the RTI process and what moves schools forward, you have to have fidelity of teaching within the reading curriculum, and in the math curriculum as well. I had a grade level of teachers that did not want to teach the reading curriculum with fidelity, they were pulling away to another curriculum, which we now primarily use for RTI. I mean, it’s a good piece, it’s one I used in another school that I was at... it was a real big fight. I actually had a staff member say, “I’m sure that you just don’t know this because you’re young.” It was really hard, that was about a two-year fight.... I think the toughest part of this job is being able to see the whole picture not just the parts. And teachers see the parts.... There’s some really hard feelings here. People are passionate about those things, and it’s hard to get them to see... that isn’t a part of what we’re doing.

When asked about Mrs. Bennett’s competence, Mrs. Godwin also based her response in Mrs. Bennett’s knowledge of research and data, saying “I know she’s researched... trying to do what’s best, based on the past, and on data results.” She also stated that she was impressed with Mrs. Bennett’s skill in applying principles of the Love and Logic program that the school had recently adopted in dealing with student discipline situations.

In Mrs. Silva’s interview, she questioned Mrs. Bennett’s competence, saying “She’s low on interpersonal skills. I think she tries to do instructional leadership... it’s just the way she comes across... she gets very emotional, you can see the tone, her face... she wears her emotions right on her shoulder.... I think she needs to continue working on

it... because right now, I just don't feel like we have a good leader." She stated her concern that a rift had developed within the school's faculty, a problem that she attributed partly to the principal's lack of competence:

We're not really connected between our teachers like we had been in the past, and I know that's been a while... a few years since we've had a good principal, but I think that's what a good principal does, is bring K through six teachers together.... Some people on the staff have been here so long and they're so set in their ways and they're not willing to work together.... But I think she could lead us past that. I think a good leader would bring us all together.

One source of teachers' doubts about Mrs. Bennett's competence was her perceived lack of teaching experience. Although Mrs. Bennett had been a teacher for nearly two decades, all of her experience was as a music teacher, not as an elementary grade level teacher. Mrs. Godwin described teachers' concerns over this point: "I think a lot of teachers feel like she isn't sympathetic towards their situation because she hasn't been in what teachers classify as a real classroom." During the focus group discussion, Gwen, a second grade teacher, said:

I think sometimes, because she comes from a music instructor background, she has a lot of good book learning about teaching reading, math, etcetera, but having not actually done it, sometimes it's hard for her to understand where we're coming from, and for us to understand what in the world she wants done. And sometimes that causes a little resentment, I think. Because we feel like we've taught that particular subject... for quite a while, and she hasn't.

During his interview, former principal Mr. Wilder also referred to his knowledge base as having played a key role in demonstrating his competence to teachers at

Musselshell Elementary:

As I continued to work toward my doctoral degree, many times I would bring back ideas and share them, bring back research... place them in boxes, share in my weekly bulletin... I tried to make sure that I was up on a lot of those things. I tried to always find my ability to teach, so that when I gave a new piece, that it was something that they felt was credible, and have a conversation around additional research, around something that I may have suggested.... I think, over time, that that probably did more for me to demonstrate my competence as a leader, to show them that I have faith in them, as well as that I was a lifelong learner, because I didn't think that I knew everything just because I had a Master's degree, that I do need to be learning each and every day.

As well, I was not and am not afraid to admit that I make mistakes. And to openly admit that in a meeting can be hard the first time, but I think that that adds credibility to who you are as a leader, and I think, when you've made a mistake, admit it. Just move on, the staff's gonna be pretty forgiving of you... far more than if you try to hide that, or try to put blame on somebody else.

Another factor in Mr. Wilder's competence, according to his interview data, was his recognition of the abilities of the veteran faculty he had inherited upon his arrival at Musselshell Elementary. As he put it, "I recognized right away, the school that I was in, probably a third of those ladies could've been my mother. And when I arrived there, I felt that I can learn something from those people, and spent a lot of time what I call 'one-legged conferencing.'" He also stated that he had recognized teacher leaders on the staff, and enlisted them in developing strategies and plans to improve the school.

The main difference between Mrs. Bennett's and Mr. Wilder's accounts of how they each demonstrated their competence to teachers was that Mr. Wilder appeared more inclined to admit mistakes and listen to his teachers' concerns. Although Mrs. Bennett had acknowledged that she did not know everything, and that her teachers sometimes disagreed with her, her response indicated that she saw her subsequent task as one of using her superior knowledge to show teachers that she was correct and they needed to follow her lead. On the other hand, Mr. Wilder had used his knowledge of research to introduce topics for discussion with his teaching staff and gradually build a consensus for change; he also saw value in admitting his own mistakes as a way of gaining trust from the faculty.

The emergent theme from the data on the principal's competence was that Mrs. Bennett was perceived to have competent knowledge of educational research, but as lacking in practical experience as an elementary grade level teacher. Mr. Wilder also perceived himself to have been knowledgeable in regard to research findings. The primary difference between the two was that it appeared that Mr. Wilder was more willing to dialog with teachers to reach consensus, whereas Mrs. Bennett was inclined toward trying to convince the faculty to agree with her point of view.

Overall, the data seemed to indicate that teachers at the school had concerns about Mrs. Bennett's competence, although they did respect her knowledge of educational research. It also appeared that Mr. Wilder may have been viewed as a more trustworthy leader in terms of competence. Therefore, it may be that the principal's competence had made an important contribution to the school's improved performance during Mr.

Wilder's tenure. During Mrs. Bennett's tenure, it seemed that the principal's perceived competence, and thus its contribution to the school's performance, had diminished.

The third aspect of relational trust, openness, is exhibited in principals who invite teacher input, listen intently, and also share information to make teachers aware of events in the school. Qualitative data taken from Musselshell Elementary School was analyzed for evidence that Principal Bennett was perceived as trustworthy in the aspect of openness.

During her interview, Mrs. Bennett did not make any references to inviting teacher input or listening intently to teacher concerns. Mrs. Godwin noted that information about the school is shared at staff meetings, and that teacher concerns and input may be raised at the meetings as well; additionally, she said, Mrs. Bennett often shares information via electronic mail messages. Document analysis of meeting agendas, orientation schedules, and the school's policies and procedures also provided evidence that Mrs. Bennett had provided teachers with information about events in the school.

Mrs. Jones expressed her perception that Mrs. Bennett was a poor listener, but often gave teachers advice; however, that advice was not always well-delivered or received: "She's quick to jump on, 'If I were you,' or... 'You should try this, you should do that.' No, I don't think she's a good listener. I think she always wants to have it done her way. She isn't willing to say, 'This is the problem, how are you gonna fix it?'"

During her respondent validation, Mrs. Jones related a recent incident in which Mrs. Bennett had "observed something she liked in a kindergarten class and pulled one or two teachers aside and advised them to go observe the kindergarten teachers because they

are doing such a great job.” The first grade teachers who had received this advice had perceived it as a sign of favoritism toward the kindergarten teachers, and were offended by it. This echoed prior comments by Mrs. Silva. In her interview, she had attributed some of the disharmony in the school’s faculty to similar statements by Mrs. Bennett: “We’re trying to work between grade levels, and sometimes it doesn’t happen, and I feel it’s partly because of some of the things, you know, she’ll say, ‘Well, the kindergarten teachers are doing a really good job,’ and then the first grade teachers don’t hear that, and so they feel like we’re the ones on, ‘her list,’ so to say.”

The focus group also expressed perceptions that Mrs. Bennett was not a good listener, not necessarily by choice, but because she simply is unable to appreciate their point of view, while they may also have difficulty understanding hers. As Angie described it, “I think sometimes what happens is that we have our own agendas.... As individuals, or as a group, we have our own agendas, and sometimes they don’t mesh.”

Kimberley and Louise both stated that they felt comfortable approaching Mrs. Bennett individually, and that she was receptive to their input. Louise stated her belief that Mrs. Bennett is less open to input and discussion when dealing with groups of teachers, “and maybe it’s that need for the structure, and the fear that we’re gonna go 40 ways but loose,” that causes her to be less open with larger groups.

In his interview, Mr. Wilder stated that he had shared information with the faculty through a weekly bulletin, which had included an instructional memo generally based on things he had seen in the school, or questions that he had been asked. He also said, “I’ve always had what I call an open-door policy,” for teachers to approach him with their

input. Beyond that, he expressed a strong belief in talking directly with individual teachers: “It’s always important that if I had something that needed to be said, that I went directly to that person, and we talked it through. If there was a student issue, I’d try to go to that person as quickly as I can,” to communicate how he had dealt with the situation, saying, “it’ll sure save a lot of heartache and a lot of headache on both ends,” by dealing with such issues promptly.

He also expressed his belief in the value of teacher input in school improvement, saying that “Probably some of the greatest things that came in as interventions came about from... sending people to workshops. One of the things I asked them to do was bring back that information and how they’re going to implement it.” As an example, he said that the school’s implementation of the Read Well program had been initiated by teachers who had brought back information from a workshop to share with the faculty. He said that he placed great value on “the willingness to listen, to know that I didn’t have all the answers.”

The emergent theme from the data on openness indicated that Mrs. Bennett was open to individual teachers who approached her with questions or concerns, but was not generally viewed as a good listener or as dealing openly with groups of teachers. She also was not widely perceived as inviting teacher input. Based on Mr. Wilder’s interview data, he was likely a better listener and more likely to invite teacher input, as well as being open to teachers who approached him on their own initiative. The overall conception from the data was that the principal’s openness contributed to improvements in the school’s performance during Mr. Wilder’s tenure, but that with a less open principal in

Mrs. Bennett, this aspect of relational trust had come to play a lesser role at Musselshell Elementary School.

The fourth aspect of relational trust is honesty (Hoy & Tschannen-Moran, 2000). Principals can exhibit honesty by sharing accurate information and upholding confidentiality. At Musselshell Elementary, some doubts were raised about issues relating to Mrs. Bennett's perceived honesty.

When asked what she does to let teachers know that they can believe what she tells them about events in the school, Mrs. Bennett said, "I don't know that they always believe it. I'm learning, painfully, that you have to give it to them in small bites. The problem with being so immersed in research is that you have a very, very clear picture of all of the pieces. And you might be ready for it, but teachers are not."

Mrs. Godwin and Mrs. Silva both expressed the belief that Mrs. Bennett is good at upholding confidentiality, but Mrs. Godwin echoed Mrs. Bennett's statement that the teachers don't always believe her, saying that Mrs. Bennett is "probably not as strong at the teacher buy-in." Mrs. Jones said, "I think what she believes she does to allow us to do that (believe what she tells them) is to base the information on reading and research," but added "I'm not always sure that is the best way. I think she would do better to base it on common sense, talking to other staff members. I think it would... make her more approachable." This response also referred to Mrs. Jones' negative perception of Mrs. Bennett's openness.

Mr. Wilder described his efforts in letting teachers know that they could believe what he told them while principal of Musselshell Elementary by saying, "data was



collected and shared openly... there weren't secrets.... We laid that on the table and we all analyzed it for patterns." He also emphasized the importance of confidentiality, saying, "If a teacher came and told me something, it stayed with me. It wouldn't be heard someplace else. I think it's important that they know we have someplace that we can go to, and what we're saying is not going to be openly shared with others."

Based on the data, it appeared that Mrs. Bennett was perceived as honest in regard to issues of confidentiality, but was not as well-trusted by her faculty as an instructional leader. It may be that her emphasis on outside research in favor of gathering teacher input, a characteristic of openness, had contributed to the perception that her honesty also left something to be desired. Mr. Wilder's statements indicated that he also placed a premium on confidentiality, but was more inclined to use research and data as something to be shared with teachers in the process of making a decision as colleagues, rather than as evidence to persuade teachers to follow his own plans for the school. The emergent theme from the data was that Mr. Wilder was more likely to be perceived as a trustworthy leader in terms of honesty than Mrs. Bennett; as a result, it may be that the principal's perceived honesty also had made an important contribution to the school's academic improvement when Mr. Wilder was principal, but had contributed less since Mrs. Bennett assumed the principalship.

The final aspect of relational trust is reliability (Hoy & Tschannen-Moran, 2000). Principals who are viewed as reliable by their teachers are known for being visible, being ready to support teachers when needed, handling things in a timely manner, and doing what they say they will do.

Mrs. Bennett stated that, in trying to help teachers perceive her as a reliable leader, she tries to be faithful about responding to their electronic mail messages within 24 to 48 hours, and to do walk-through visitations of every classroom at least once a week. She acknowledged, however, that sometimes issues arise, such as dealing with student discipline problems, which prevent her from meeting these goals. In those cases, she said, teachers may perceive her as being less reliable.

During observation of Mrs. Bennett at work on October 18 and November 14, the researcher witnessed several examples of behavior that demonstrated her reliability as principal. On October 18, she spent approximately 30 minutes doing classroom walk-through visitations; on November 14, she spent approximately 60 minutes doing so. She also spent approximately 60 minutes supervising students in the cafeteria during lunch periods on October 18, and was available in her office on both dates to deal with students referred to the office for disciplinary reasons. On both dates, she also assisted a teacher in need of information to deal with, respectively, a parent complaint and a student behavior problem in the classroom.

Mrs. Godwin, the counselor, stated that the long hours she observes Mrs. Bennett working helps her perceive Mrs. Bennett as a reliable principal: "If you look at her commitment to this school, and the fact that she's not an eight to four principal... if she needs to be a six o'clock in the morning until 10 o'clock at night kind of principal... I bet you she's only used three sick days in the five years that she's been here." She also said, "I can count on her... I've just built up a relationship with her enough that I know I can trust her, that she's reliable, I know if I say, 'I need this done,' it's gonna get done."

Classroom teachers, on the other hand, had varying perceptions of Mrs. Bennett's reliability. While Mrs. Jones acknowledged that the principal is visible within the school, she was critical of Mrs. Bennett's reliability in responding to teacher issues and concerns: "She is not always timely in getting back to us... I think she has a lot of balls in the air at one time... and it doesn't always happen that she gets back to you in a timely manner, or anything is done about it at all." This comment was consistent with Mrs. Bennett's admission that events sometimes prevented her from responding to teachers as quickly as intended. Mrs. Jones also expressed her criticism of Mrs. Bennett's reliability in dealing with parent concerns, saying, "She's just not as supportive of teachers with parents as teachers would like her to be. We... just sometimes feel thrown under the bus when it comes to working with parents."

Mrs. Silva described herself as having mixed perceptions of Mrs. Bennett's reliability. On one hand, she said that when she has had a discipline problem with a student in her classroom and sent the student in question to Mrs. Bennett's office, the problem is usually dealt with promptly. On the other hand, she said, "Now, do I always agree with how she handles it? Not always. For example... I sent a couple boys to the principal's office, and they came back smiling and giggling, and I just thought, 'you guys look like you went and had fun at recess time,' instead of, I felt like they should've come back feeling upset that they got in trouble."

Another area of concern about Mrs. Bennett's reliability stemmed from perceptions of student misbehavior in common areas. In the focus group discussion,

Louise expressed her opinion that student behavior in the hallways could be improved if Mrs. Bennett spent more time there while students were transitioning between classes.

Mr. Wilder stressed that, when he was principal at Musselshell Elementary, he had considered his open-door policy to be instrumental in demonstrating his reliability, as well as his openness. He said that, when teachers had come to him with a problem or to vent their frustrations, “I’m not gonna be judgmental, I’m not gonna be critical of you. But, I just need first for you to define for me what the conversation is going to be. And... I’ve found that when teachers need to talk, they need to talk to me at that moment.” He also stated that, as principal, he had established “what we considered social agreements, and those things that are agreed upon by our staff, we will live by... by holding myself to those same social agreements, I think that adds to some level of reliability in what I’m saying... and I’m not talking this way in one instance, and in another instance talking another way.”

The data on Mrs. Bennett’s reliability indicated that she was perceived as somewhat reliable by her faculty, although there were criticisms made of her timeliness in responding to teacher concerns and her effectiveness in dealing with student discipline. Based on the data from Mr. Wilder, he had placed great emphasis on responding immediately and consistently to teachers who needed him, and so may have been strongly perceived by the faculty as a reliable principal.

In viewing the full range of relational trust data collected from Musselshell Elementary School, it appeared that the faculty had serious concerns about Mrs. Bennett in four of the five aspects of relational trust: benevolence, competence, openness, and

honesty. She seemed to be perceived as somewhat trustworthy in the fifth aspect, reliability, but even in this aspect, teachers expressed some criticism of her trustworthiness. The more limited amount of data regarding her predecessor, Mr. Wilder, indicated that he was likely perceived as a trustworthy leader in all five aspects of relational trust. Relational trust in the principal may have thus made an important contribution to the high student achievement attained at this school during Mr. Wilder's tenure, but had apparently diminished after he was succeeded by Mrs. Bennett.

Organizational Routines:  
Professional Learning Community

Based on the research of Roy and Hord (2006), professional learning communities, or PLCs, are typified by teacher relationships and collaboration to continually improve teaching and learning. This can be facilitated within a school by setting aside regular times and places for teachers to meet with each other for the purpose of collaborating to improve teaching and learning.

In the study conducted at Musselshell Elementary School, qualitative research methods were applied to learn how teachers at the school worked together to continually improve teaching and learning. A second point of emphasis was to learn about the teacher to teacher relationships in the school.

Mrs. Bennett was enthusiastic in her description of teacher collaboration at her school, saying, "they've just taken off this last year." In particular, she described a good deal of collaboration taking place over testing data: "Those test scores come out and they're up there like kids with trading cards, and they want to see where the growth is, they want to see where the problems are... they are constantly looking at what they can

do, they're hammering me with it, saying, 'Well, could you disaggregate it (the data) this way?'" She also stated that RTI meetings and informal teacher conversations often involve collaboration about individual students to plan academic interventions for them.

Mrs. Godwin also stated that "grade level and cross-grade level collaboration meetings are great," and that she conducts a Love and Logic meeting each Wednesday for teachers to collaborate about how to effectively manage individual students' behavior. She also credited the school's RTI program as having improved teacher communication within the school, as she believes it has helped create a culture of teachers "not being islands and being one big team."

Mrs. Jones said that "the teachers in our school are very eager to work together and have begged for time in which to do that, and we are constantly looking for ways to get together." She acknowledged some tension due to differing teaching philosophies, but added, "We care about each other as individuals, and if we have disagreements, it's something that we find ways to work out. I think the staff is fabulous." She also commented on the various opportunities for teachers to collaborate, including two early-release days each month and common planning times for teachers at the same grade level, saying, "it's rare that you won't find a group of us doing those things (collaborating)." Her statements about the frequency of early-release teacher meetings and common planning times for teachers were verified by document analysis of the school calendar and schedule.

Mrs. Silva also described teacher collaboration as professional development during teacher meetings on early-release days. She also described collaboration over

student test data at grade level and RTI meetings: “Right now, we’re looking at our NWEA scores... the next meeting, we’re gonna look at our scores, see where they’re low, and go back and look at essential skills,” to identify specific areas, such as number sense, in need of improvement, and then discuss how to help students improve in those areas.

Teachers in the focus group discussion also reported widespread collaboration to improve teaching and learning. Tina said, “We’re constantly going to each other and saying, ‘What do you do for this, how does this work for you,’ or ‘Hey, this really worked great for me....’ So I think we share ideas really well in intermediate.” Kimberley added, “I think we also share across intermediate and primary... I share with the primary sped (special education) down here, and we’re all working together... we bounce ideas back and forth.” Louise and Gwen also stated their belief that the school has a mixture of older and younger teachers that work very well together.

The article about Musselshell Elementary School’s improvement to distinguished school status (Reed, 2009) also described how widespread teacher collaboration had begun during Mr. Wilder’s tenure as principal, and how that collaboration had been crucial to improving student achievement. Once teachers began collaborating, for example, it was learned that some skills that fourth grade teachers had assumed were learned by students in third grade had not actually been taught at that time. Such holes in the curriculum contributed to lower achievement scores; once they were identified, teachers could coordinate their efforts to ensure that any missing skills would be taught to all students in the future. At the time that the article was published, it stated that teachers

“are now in constant dialogue about student data, instructional strategies, interventions, curriculum, and everything else going on in each other’s classrooms” (Reed, 2009, p. 27).

Overall, the emergent theme in regard to teacher collaboration as a professional learning community at Musselshell Elementary School was that collaboration to improve teaching and learning is typical of the school’s routine operations. Although Mrs. Silva’s previous statements about divisions within the faculty may have indicated some disharmony, the preponderance of evidence supported the proposition that the faculty regularly collaborates in its efforts to improve teaching and learning. It is evident that this collaboration had made an important contribution to the school’s high levels of student achievement.

As stated, another key factor in professional learning communities is the state of the relationships between teachers within a school. Based on the interview data collected at Musselshell Elementary School, it appeared that teacher relationships at the school are mixed. While teachers in and between some grade levels get along and work well together, there appeared to be some tension and distrust among others.

According to Mrs. Bennett, “we definitely see that we’ve got two schools. We’ve got a primary building, and we’ve got an intermediate staff. Some of that is schedules... they’ve been together for a lot of years, a lot of them, so there’s relationships that are old relationships.... I think as a staff, they get along pretty well together.” Mrs. Godwin had similar thoughts, as she stated that, “our professional relationships work well... there’s a lot of emotion that gets in the way... I know that we’re able to have those professional conversations... but that doesn’t stop our staff from going and complaining about other



grade levels. So, we do unfortunately have a lot of conflict when it comes to self-interest and what's best for 'my' class."

Mrs. Jones stated her belief that "the relationships are good... but I do think sometimes a leader, or a lack of leader, can cause tension and misunderstanding within a group, and I think at times the last few years, we've had those issues, where one group will be pitted against another, based on conversations within the leadership." She elaborated further, citing conflicts between teachers at different grade levels, primarily over student achievement results: "the primary were teaching students to read, and intermediate, the kids read to learn. And that's a real difference.... I think testing has put forth a lot of tension, grade-wise.... The third grade goes and they take their test, and they don't do very well in math, so all the pressure falls on that first and second grade teacher, saying, 'you guys didn't do your job.'" She also stated that there are philosophical tensions between kindergarten, first grade, and second grade teachers, and that "making each of us an island has created that." However, she also expressed her belief that the recent changes to the RTI program seemed to be easing tensions between grade level teachers as it brings them together to collaborate about strategies to improve student achievement.

Mrs. Silva expressed positive perceptions of the teacher relationships within the school, focused mainly on social activities, such as baby showers. She also alluded to staff tensions, saying that teachers at the school do not always "see eye to eye," but downplayed the importance of these disagreements by laughing and explaining, "But, for the most part, we're here to help kids learn, I think that's our main goal."

The overall theme that emerged in regard to Musselshell Elementary School as a professional learning community was that teacher collaboration to improve teaching and learning was a common practice throughout the school. Some of the relationships between teachers in the school were marked by tension, primarily when student achievement falls short and some teachers feel that they are being blamed for it; but teachers in the school seemed generally to put these tensions aside and continue to cooperate with each other in their work. Based on document analysis of the journal article about the school's improved academic performance, teacher collaboration as a professional learning community made an important contribution to the high student achievement that resulted in its recognition as a Distinguished Title I School. The new qualitative data collected in this study supported the proposition that Musselshell Elementary School had continued to function as a professional learning community.

#### Organizational Routines:

##### Collective Teacher Efficacy

Qualitative data collected at Musselshell Elementary School was pattern-matched as representative of collective teacher efficacy, or CTE, if it reflected Goddard, Hoy, and Hoy's (2000) description of collective teacher efficacy stemming from "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (p. 480). This definition of collective teacher efficacy was also used by Tschannen-Moran and Barr (2004) in their development of the Collective Teacher Belief Scale, or CTBS.

As stated previously, the mean level of collective teacher efficacy at Musselshell Elementary was 7.29 out of a possible 9.00. The CTBS has not been norm-referenced, so

a school's collective teacher efficacy score on the CTBS cannot be categorically stated as being either high or low in comparison to other schools. At face value, therefore, it can only be stated that an overall score of 7.29 out of 9.00 may have indicated a fairly high level of collective teacher efficacy at Musselshell Elementary School, based on the fact that the questionnaire's rating scale assigns a value of "Quite A Bit" to a score of 7 and a value of "A Great Deal" to a score of 9 (Tschannen-Moran & Barr, 2004).

Four items from the CTBS became the basis for questions directed to the focus group. Three of these were tied for the highest mean score, 8.00 out of 9.00, registered for any CTBS item from the questionnaires completed by teachers at this school. These items were: "To what extent can teachers in your school make expectations clear about appropriate student behavior;" "To what extent can school personnel in your school establish rules and procedures that facilitate learning;" and "How much can your school do to help students feel safe while they are at school?" The remaining item, "How well can adults in your school get students to follow school rules," received the lowest mean score, at 6.38 out of 9.00.

Turning to the qualitative data on collective teacher efficacy collected from the school, interview questions inquired about the perceived ability of teachers at the school to produce meaningful student learning, manage student behavior, help students learn to think critically and master complex content, and to get students to believe they can do well in schoolwork. Focus group items on CTE, as stated, dealt with teachers' ability to make expectations clear about student behavior, to establish rules and procedures that

facilitate learning, how much the school can do to help students feel safe at school, and the ability of adults in the school to get students to follow school rules.

Mrs. Bennett stated her belief that worksheet-driven texts, and the need to make AYP, had made it more difficult for teachers to focus on what she would consider meaningful student learning. Mrs. Godwin said that the combination of veteran teachers and younger teachers in the school was advantageous: “With the older knowledge mixed in with the younger knowledge, we’re able to provide more things that students can really relate to.... Every teacher here is definitely capable of meaningful work, and sometimes it’s just that rebooting that some of the younger staff has really helped with.” Mrs. Jones also described the ability of teachers to produce meaningful student learning as a strength, citing the fact that the staff has many veteran teachers, many teachers with Master’s degrees, and newer teachers who are skilled in using educational technology. Mrs. Silva described teacher collaboration at the school as integral to the level of collective teacher efficacy in producing meaningful student learning, as well as professional development to help teachers learn how to differentiate instruction for students at different knowledge and skill levels.

The emergent theme from the data on this aspect of collective teacher efficacy at Musselshell Elementary School was that teachers at the school were perceived as having strong ability to produce meaningful student learning. This ability was challenged by the need to focus on basic skills, however.

In describing the ability of teachers in the school to manage student behavior, Mrs. Bennett said, “This year, I would say it’s pretty awesome. In the past, it’s been a

little challenging.” She attributed the school’s past struggles with managing student behavior to the fact that the town has a somewhat transient population, noting an estimated 40 percent turnover rate in one class between seventh grade and high school graduation. She said that the staff had become more positive about managing student behaviors this year, a change she attributed to the implementation of the Love and Logic program.

Mrs. Godwin also stated that managing student behavior had been more challenging in the past; she believed that the town’s relatively high poverty levels, and the number of students with little parental supervision, had contributed to student behavior problems at school. She also credited the implementation of Love and Logic as the reason for her perception that the school is now better able to manage student behavior: “It’s just made a huge difference... and now our teachers are able to say, ‘this student is disrupting my class.’ And that student will leave, so that the whole class can continue learning, has been huge, since the teachers have taken student behavior and put it back on the students.”

Mrs. Jones further corroborated Mrs. Bennett’s and Mrs. Godwin’s statements, saying that “Student behavior has been an issue over the last couple years, and it just seemed to grow and grow,” but that the implementation of the Love and Logic program had resulted in improvements to teachers’ ability to manage student behavior. She explained, “We’re... bouncing ideas off... so I think behavior is an issue, but we’re aware of it, and we’re trying to find common ground to manage it and work in a positive way.... I think we’ve come a long way in just the last year.” Mrs. Silva made similar

comments about managing student behavior: “I would say most of the teachers have good classroom management... we’re using Love and Logic, so I think as far as the discipline, we’re on the same plan schoolwide.”

Managing student behavior was a major topic of the focus group discussion. Teachers in the focus group were confident in their ability to set expectations for student behavior, but described various challenges to getting students to follow school rules.

Consistency was a common theme in the focus group statements about setting clear expectations for student behavior. Louise, Sarah, Shauna, and Dianne all commented that they saw consistency in stated expectations, across the faculty, as crucial to making those expectations clear to students. Sarah described the implementation of Love and Logic as having improved consistency in teachers’ stated behavioral expectations for students across the school.

The school’s physical plant was described as a hindrance to enforcing student behavioral expectations. Due to limited space, students needed to walk across the street to attend music classes, and needed to walk over a block to reach the building that housed the school’s gymnasium to attend physical education classes. This situation, they said, was conducive to student misbehavior, regardless of teacher supervision. As Shauna said, “most of us are trained on, to handle classroom behaviors and student behaviors... but I don’t think any of us are going to sign up for trailing 75 kids... regardless of how much training they have.... That’s a tough call; they’re a block long!”

Teachers in the focus group also conceded that, even when clear expectations for student behavior have been established, teachers sometimes fail to enforce those

expectations. Shauna described this issue, saying “sometimes you’re clear what our expectations are... but we get lax. We get lax in those, and before we know it, it’s like, ‘Oh, I didn’t do it yesterday, everything’s O.K. I won’t do it again today.’”

Another challenge to managing student behaviors, as described by the focus group, was the lack of parental support or a stable home life for too many of the school’s students. As Tina put it, “Sometimes, the kids, you threaten to keep them after school and they really don’t care, because they’re going home alone, so nobody’s gonna know they had to stay, or there’s not the parent support to say, ‘Why were you late?’ You know, they get in trouble at school, there’s not a lot of problem at home.” Dianne added, “If you go back and look, it’s the same ones... the same few students year after year, and it seems like they never get it... Today, one spit on another on the playground,” and that apparently, this student’s parents had taught him “that to spit on someone, that’s O.K.”

When asked about the seeming paradox in CTBS scores, with one of the highest scores recorded for an item about teachers’ ability to set expectations for appropriate student behavior, and the lowest score for an item on teachers’ ability to get students to follow school rules, Angie said, “I don’t think there is a paradox. I think we do have very high expectations, and I think we work really hard to try to meet those expectations. But I think there will always be students that will challenge that... What I see is that we’re realistic: that we have the high expectations, but we also know that we have the kids that will challenge us.”

Overall, the emergent theme was that the collective teacher efficacy of teachers at Musselshell Elementary in managing student behavior was strong. The reported

perception was that teachers were skilled in setting expectations for appropriate student behavior, and that the Love and Logic strategies that have been adopted this year have helped teachers become more effective in dealing with student misbehavior. Challenges to managing student behavior came primarily from the layout of the school's physical plant, and from a lack of parental supervision in students' home lives.

In terms of teachers' ability to help students learn to think critically and master complex content, Mrs. Bennett again cited the scripted teaching methods required by the school's textbooks, just as she had when asked about teachers' ability to produce meaningful student learning. She also stated that her school often receives new students who are far behind in basic skills, and so must first learn those, before critical thinking and complex content can be incorporated by her teachers: "what these folks are thrown on a daily basis, kids moving in and kids moving out, you get a fourth grader coming in reading at kindergarten level. That happens a lot here."

Mrs. Godwin stated that RTI helps teachers address students' basic skills deficiencies so that they can then move on to critical thinking and complex content. She also said that teachers at Musselshell Elementary "do a really good job as well with our gifted students and giving them challenges... I think we utilize a lot of techniques... our teachers go above and beyond to just not be worksheet teachers, to actually do a lot more hands-on learning.... And so I think that's one thing we're excelling at is finding other ways to teach and not just going by the book."

Mrs. Jones also emphasized the need to address basic skills as a prerequisite, before moving on to critical thinking and complex content. As a first grade teacher, she



said that “those of us who are in the primary, our goal is to make sure that they can learn, that they know basic math so that by the time they reach intermediate grades, that they’re not spending time learning the basics, that they can stretch that into the problem-solving.” Mrs. Silva also stated her belief that the school stresses mastery of basic skills in primary grades, including use of a computerized math testing program to assess math skills in the early grades. She also asserted that “a lot of the teachers are looking at Bloom’s (taxonomy) and making sure that we are asking all of those, from low to higher level thinking questions.

The emergent theme in regard to teachers’ ability to help students learn to think critically and master complex content was that teachers at Musselshell Elementary School were perceived to have strong ability in this area. It appeared, however, that an emphasis on mastery of basic skills takes precedence, particularly in the primary grades. As a result, critical thinking and complex content often received less attention than the teaching and learning of basic skills.

In regard to how much the school can do to get students to believe they can do well in schoolwork, Mrs. Bennett described a variety of strategies used at Musselshell Elementary. Working with parents is crucial, she said, “because you have to have a working relationship with parents... that’s a hard piece for teachers, because it takes more time at the end of the day to make those positive communications. Not just when Johnny’s bad, but to keep parents constantly on board.” She also cited the use of teacher webpages that can be accessed by students, and the use of feedback and formative assessment, as means of helping students see their own progress.

Mrs. Godwin stated her belief that “it’s really important that students find success in order for them to feel like they’re appreciated here and that they’re able to do their work, and I think RTI does that, because instead of sitting in class and not getting this concept, we’re able to pull those kids out in the RTI process and really work on things. And all of a sudden, they’re seeing success... and they like it.” Mrs. Jones also stressed that teachers at the school work with students at their individual skill levels, so that they won’t “come away feeling that they’re never gonna progress.”

Mrs. Silva cited the use of reinforcement to help build students’ self-efficacy in regard to schoolwork. She also said that the school uses goal-setting strategies, having “students write up their goals for math, or their reading goals, and once they set that goal, they can see themselves improve. We use the NWEA, the students get to see where their score is and then they make a goal for themselves... I think that’s been huge for them, because they get to see where they’re at, the growth I’ve made.”

Helping students feel safe was also seen as integral to helping them believe that they can succeed in schoolwork. Mrs. Jones had mentioned this during her interview, but the focus group spent a good deal of time discussing this topic. Teachers in the focus group described several things that they think help students feel safe while at school: the use of nametags for staff and volunteers; locking of most of the school’s outside doors; practicing of lockdown procedures; the use of anti-bullying training; the availability of the school counselor; before- and after-school programs in the school cafeteria; and the benevolence of the students themselves. Louise said, “I think, for the most part, our kids look out for our special needs kids... they’re pretty good to them.” Kimberly, who

teaches special education, agreed: “The kids are also very good at making other kids feel safe, and taking ownership of that... and I think that’s part of, as a staff, we show that to the kids, and they show that to those kids, so it’s kind of a top-down effect.”

The emergent theme about Musselshell Elementary School’s ability to get students to believe they can do well in schoolwork was that this was an area of perceived strength among the faculty. The variety of support structures and strategies, and the priority placed on school safety, were perceived as factors that helped students feel capable of succeeding academically and comfortable emotionally.

The emergent theme about overall collective teacher efficacy at Musselshell Elementary School was that the school’s faculty possesses a fairly strong sense of CTE. Belief in the collective abilities of teachers in the school was high, as judged by the data collected, although it was reported that teachers’ ability to help students learn to think critically and master complex content has been compromised by the emphasis on teaching the kinds of basic skills that are measured by standardized achievement tests. On the whole, the data indicated that strong collective teacher efficacy existed at Musselshell Elementary School, and had contributed to the school’s high levels of student achievement.

### Rival Explanations

The main craft rival to this study was investigator bias. Because only one person conducted the research, it is possible that the researcher’s own beliefs could have affected data analysis. This was countered by the researcher’s awareness and reflection upon the possibility of bias, and by careful note-taking and documentation of data, triangulation of

data-collection methods, and by conducting respondent validations to verify interview data. Another suggestion for avoiding bias is to report one's preliminary findings to critical colleagues, who can offer their suggestions and alternative explanations (Yin, 2009). This was done as well. One of the researcher's work colleagues is a veteran high school principal who holds a doctorate in educational administration; he reviewed the researcher's work, particularly the codes and categories the researcher applied to the qualitative data. This also helped to minimize the chance that the study's findings may be attributed to a craft rival.

The main real-life rivals to the contributions made by principal leadership behaviors and organizational routines at Musselshell Elementary School were teacher experience, student ethnicity, and the use of turnaround strategies. Based on the teachers who participated in the interviews and focus group, the school had several veteran teachers, but also several younger, less experienced faculty members. Of the 12 teachers included in the qualitative data collection, one was age 25 to 29; two were age 30 to 34; two were age 35 to 39; one was age 40 to 44; one was age 45 to 49; one was age 50 to 54; three were age 55 to 59; and one was age 60 to 64. Four had five to nine years of teaching experience; two had ten to 14 years; one had 15 to 19 years; three had 25 to 29 years; and two had 30 to 34 years. These figures do not make it clear that teacher experience was a universal factor in producing high student achievement at the school.

The second rival explanation, student ethnicity, appeared at face value to have possibly made a significant contribution to student achievement at Musselshell Elementary, as 95 percent of the school's students were of white ethnicity. As with the

rival explanation of teacher experience, however, the abundance of data indicating the contributions of principal leadership behaviors and organizational routines could not be overruled by student ethnicity demographics. Furthermore, of the five schools that had won Montana Distinguished Title I School awards for student achievement during the period 2006 to 2010, two schools from the group were located on Indian reservations and had student enrollments composed almost entirely of Native Americans. These two schools were excluded from the study on the basis that the principals who led each school during its award-winning year were no longer employed there at the time that this study was proposed. The fact that two of the five award-winning schools had predominantly Native American enrollments, while three had overwhelmingly white student bodies, suggested that student ethnicity had not played an overwhelming role in attaining high student achievement.

Turnaround strategies, such as the removal of teachers or the school principal, had not been implemented at Musselshell Elementary School. Prior to Mrs. Bennett's arrival, Mr. Wilder was the school's principal for 13 years, during which time the school had gradually evolved as a professional learning community and student achievement had improved over time. There had been no punitive actions or mandated overhauls to the school's curriculum or personnel, as is typical of turnaround strategies (Fullan, 2006). Therefore, turnaround strategies may be dismissed as a real-life rival to the proposition that principal leadership behaviors and organizational routines had contributed to the school's high levels of student achievement.

Summary of Findings for  
Musselshell Elementary School

Overall, the data indicated that transformational leadership, relational trust, the presence of a professional learning community, and collective teacher efficacy contributed to the high student achievement attained by Musselshell Elementary School. It was noteworthy, however, that principal leadership behaviors at the school appeared to have changed significantly in recent years.

Under the former principal, who had led the school from 1994 to 2007, the data suggested that transformational leadership behaviors were consistently practiced, and teachers' relational trust in the principal was high. Since 2007, it appeared that the current principal has engaged in the practices of transformational leadership much less frequently than her predecessor did, and teachers at the school do not appear to have had strong relational trust in her as their principal. When the school won recognition as a Distinguished Title I School, however, the previous principal had only departed following the year immediately prior; it seemed likely that the faculty at that time may have still benefited from his leadership behaviors over the course of the previous 13 years.

In terms of organizational routines, the frequent teacher collaboration at the school indicated that it functioned as a professional learning community. The qualitative data on the faculty's collective teacher efficacy, as well as the results of the CTBS, also indicated a strong level of collective teacher efficacy.

The data from Musselshell Elementary School supported the proposition that principal leadership behaviors and organizational routines had made important contributions to the school's high levels of student achievement.

### Conclusion of the Multiple-Case Study

During the period 2006 to 2010, Cotton Memorial Middle School, Northwest Elementary School, and Musselshell Elementary School were each recognized for high student achievement, as compared to other Montana Title I schools. The research problem addressed by this multiple-case study was that, while transformational leadership and systems thinking have been generally associated with high student achievement, it was not known if Montana's high-achieving Title I schools had practiced transformational leadership, utilized professional learning communities, or developed collective teacher efficacy and teachers' relational trust in the principal. Furthermore, the link between professional learning communities and student achievement had not yet been as thoroughly researched as the respective relationships of transformational leadership, relational trust, and collective teacher efficacy to student achievement, leaving a gap in the research that this study aimed to address.

This embedded multiple-case study was guided by the research question, "How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana's distinguished Title I Schools?" A supporting subquestion for principal leadership behaviors was, "How does relational trust contribute to the high achievement of Montana's distinguished Title I schools?" A supporting subquestion for

organizational routines was, “How does collective teacher efficacy contribute to the high achievement of Montana’s distinguished Title I schools?”

The data collected from Cotton Memorial Middle School, Northwest Elementary School, and Musselshell Elementary School was analyzed using Yin’s strategy of pattern-matching (2009). This data supported the propositions that principal leadership behaviors and organizational routines have made important contributions to the high levels of student achievement that resulted in each school being recognized as a Distinguished Title I School. Practices of transformational leadership were evident in the principals (or in the case of Musselshell Elementary School, the former principal) of all three schools. Teachers’ relational trust in the principal (or former principal) was also strong in all three schools. In all three schools, teachers collaborated regularly to improve teaching and learning, and generally worked well together; these traits were indicative of schools that functioned as professional learning communities. Finally, the data indicated that collective teacher efficacy at all three schools was strong.

The findings of the existence of a principal who commonly practiced transformational leadership behaviors, strong relational trust in the principal, a professional learning community of teachers, and high collective teacher efficacy in each of these high-achieving schools supported the proposition that each factor had contributed to these schools’ high student achievement. The fact that similar results were found in all three independent cases lends greater credibility to this conclusion than would have been possible if only a single case school had been studied (Yin, 2009).



Both craft and real-life rival explanations were accounted for in the analysis of the data from each of the three schools. In each case, it appeared unlikely that the high student achievement of the case school was the result of any of the rival explanations. This further supported the finding that transformational leadership by the principal, teachers' relational trust in the principal, a professional learning community of teachers, and high collective teacher efficacy had each made important contributions to the high student achievement of Montana's Distinguished Title I Schools.

## CHAPTER V

## FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

This embedded multiple-case study addressed the lack of data on how transformational leadership, relational trust, professional learning communities, and collective teacher efficacy have contributed to the high achievement of Montana's Distinguished Title I Schools. This gap in the literature, as well as the need for more studies to address the general relationship between professional learning communities and student achievement, provided the basis for the study. The data analyzed in this study will add to the existing body of knowledge on these topics and prove useful to school practitioners. The central research question for this study was "How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana's distinguished Title I Schools?" A supporting subquestion for principal leadership behaviors was, "How does relational trust contribute to the high achievement of Montana's distinguished Title I schools?" A supporting subquestion for organizational routines was, "How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?"

This chapter consists of analysis of principal leadership and organizational routines, their relationship to student achievement, the contributions of this study to the existing body of literature, and recommendations for further research.

### Principal Leadership

The overarching leadership theory in regard to this study's research of principal leadership behaviors is transformational leadership. Transformational leaders are those who model the way by clearly stating their own beliefs and following through with them; inspire a shared vision by communicating a vision of positive outcomes and encouraging their followers' visions; challenge the process by pursuing growth and improvement; enable others to act by creating environments where their followers can see the quality and value of their work; and encourage the heart by honoring their followers' accomplishments. These practices of transformational leadership provided the basis for pattern-matching this study's qualitative data as evidence of principals' transformational leadership behaviors.

While there has been limited research on the effects of transformational leadership in schools on student achievement, there is some evidence of a relationship between transformational leadership and higher student achievement. A key goal of this study was to add to the body of literature investigating the relationship between transformational leadership and student achievement.

Along with transformational leadership, another key factor in principals' leadership behaviors is relational trust. Relational trust is vital to a school's livelihood because of the high degree of interdependency and vulnerability that all role groups in a school – principals, teachers, students, and parents – have in regard to each other. If they are not mutually trustworthy, the school is likely to have problems, such as low morale and low student achievement. Leaders' trustworthiness, as studied here, was based on

followers' perceptions of the leader's benevolence, reliability, competence, honesty, and openness. These five aspects of trust provided a basis for this study to utilize in pattern-matching qualitative data as representative of relational trust. More so than transformational leadership, research has linked relational trust to student achievement.

The purpose of this study, in regard to principal leadership, was to describe the role played by principal leadership behaviors in Montana's award-winning Title I schools. Specifically, the roles of principals' transformational leadership behaviors and principals' leadership behaviors to build relational trust in these schools were studied.

#### Organizational Routines

In addition to principal leadership behavior, organizational routines at each case school were researched. A link has been established between professional learning communities and higher student achievement. This supported the value of studying professional learning communities in Title I schools. This dissertation study added to the body of research on PLCs and their relationship to student achievement.

The review of the literature indicated that the most successful professional learning communities were those that possessed a high degree of collective teacher efficacy. Several school characteristics have been associated with high levels of collective teacher efficacy. These characteristics fall into three categories: school practices, teacher behaviors, and principal leadership behaviors. School practices that have been associated with high collective teacher efficacy include staff collaboration, teacher ownership in school decisions, and teachers' commitment to community partnerships; these are traits associated with professional learning communities. Teacher

behaviors that have been linked to high collective teacher efficacy include persistence in working with students who experience difficulty in improving their achievement, giving extra instruction to underachieving students, and carefully managing student behavior in the classroom. Principal leadership behaviors that have been associated with high collective teacher efficacy include listening to teachers and allowing teachers to share in decision-making for school improvement; such principal behaviors have been associated with transformational leadership and relational trust.

Collective teacher efficacy is an important factor to study in the research of student achievement in Title I schools. This point is affirmed by the strong link, established by multiple studies, between collective teacher efficacy and student achievement.

### Methodology

This embedded multiple-case study was proposed to fill the need for research to learn more about how principal leadership behaviors and organizational routines contribute to student achievement. Yin (2009) recommended that qualitative case studies are ideal for research questions that ask “how,” and where the study is conducted in a real-life context, over which the researcher has little or no control; and that multiple-case study research is preferable to single-case study research, in that similar results from multiple cases are less attributable to coincidence than the results of a single case, and are thus likely to have greater external validity.

The boundaries of this study set the units of analysis as the three individual schools that were asked to participate; each case school was one unit of analysis. This

unit of analysis was chosen on the basis that the research questions for this study sought to learn the contributions of principal leadership behaviors and organizational routines to high-achieving *schools*. According to Yin (2009), the main unit of analysis should normally be at the level addressed by the study's research questions. Schools, rather than individual administrators, faculty, or students, were therefore the units of analysis for this study.

The established links to student achievement that have been found for both principal leadership behaviors and organizational routines made it preferable that schools with an established record of high student achievement be selected for study. Montana Title I schools that received the Office of Public Instruction's award for Exceptional Student Performance for Two or More Consecutive Years had, by winning the award, been clearly established as having high student achievement relative to Montana's other Title I schools.

Because principal leadership behaviors were essential to the study, it was also necessary to select only schools from this group that still employed the same principal who had led the school when it won this award. Of the five Montana Title I schools that had won the award between 2006 and 2010, three still retained the same building principal. These three schools consented to participate in the study.

Another important boundary of the study dealt with which individuals at each case school were asked to participate in the data collection process. Setting the boundary for whom to include in the study was the result of reflection by the researcher on the nature of the study, assisted by advice from the researcher's university committee

chairperson. For this dissertation, multiple schools were studied, with a specific emphasis on principal leadership behaviors and organizational routines, as they related to the school's academic achievement. The researcher ultimately determined that the principal and teachers of each school were the individuals whose input was needed for the study's data collection process. Because principal leadership behaviors were a key factor of interest, it was necessary to interview each school's principal. It was also necessary to survey and interview each school's teachers to learn their perceptions and insights about the principal's leadership behaviors. Because organizational routines were also integral to this study, the researcher also gathered data on these factors from teachers and the principal at each school.

If in the data collection process it became apparent that there were others beyond the teachers and principal who could provide needed information, it was necessary to expand this data collection boundary to include them as well. This was done in one case: at the school referred to as Musselshell Elementary School, the former principal was located and interviewed on his leadership behaviors while principal of the school. This was done in response to teacher comments that he had been integral to the school's recognition as a Distinguished Title I School, an award received the year following his departure.

The embedded multiple-case study design collected qualitative data from each school, with quantitative data also collected to help form focus group questions for each school, and to generally add depth and perspective to the study's thick, rich data. The data was collected and analyzed as three separate cases. Quantitative data on the principal

at each school was collected via the online version of the Leadership Practices Inventory, or LPI (Kouzes & Posner, 2009), while quantitative data on each school's collective teacher efficacy was collected using an online version of the Collective Teacher Beliefs Scale (Tschannen-Moran & Barr, 2004). Qualitative data at each school included interviews of the principal and randomly selected faculty members, a focus group discussion with randomly selected faculty members, observations of the principal at work, and document analysis.

Prior to conduct of the final dissertation study, a pilot study was conducted to help ensure that the final study would be robust. The pilot study provided the researcher with a formative process by inviting responses from individual interviewees, as well as a focus group, and by allowing the researcher to practice his qualitative research skills. As a result of the pilot study, adjustments were made to improve the interview protocols prior to their use in the final study. The pilot study was also detailed in Chapter Three of this dissertation, and can be read in its entirety in the dissertation appendices.

The final, embedded multiple-case study was then conducted. Embedded multiple-case studies, while qualitative, also use fine-grained quantitative data in a supporting role (Yin, 2009). This differs from mixed methods research, which consists of quantitative research, with the findings explained by supporting qualitative data. In this study, data collection began with distribution of electronic versions of the LPI and CTBS. The LPI self-assessment was completed by the principal of each case school, while teachers who met the study's requirements for participation completed the observer form of the LPI, in regard to the principal. The CTBS was completed by the same group of



teachers at each school. Qualitative data collection was done through interviews, focus group discussions, observations, and document analysis. Yin's (2009) strategy of pattern-matching was used to analyze the data to Kouzes and Posner's (2007) five practices of transformational leadership, Hoy and Tschannen-Moran's (2000) five aspects of relational trust, Roy and Hord's (2006) definition of professional learning communities, and Tschannen-Moran and Barr's (2004) aspects of collective teacher efficacy.

At each case school, a minimum of four interviews were to be conducted: one with the principal, and three with randomly selected eligible faculty members. If data saturation was not achieved, more teacher interviews were to have been added. This plan was followed at each school; as stated, a fifth interview was added at Musselshell Elementary School. This interview was conducted with the school's former principal. Each principal and teacher interview consisted of 16 open-ended questions on transformational leadership, relational trust, professional learning communities, and collective teacher efficacy; the exception was the interview with Musselshell Elementary School's former principal, which consisted of 10 open-ended questions on transformational leadership and relational trust only. The focus group discussions at each school consisted of varying numbers of open-ended questions on transformational leadership and collective teacher efficacy, based on the extreme high and low mean scores registered for that school's LPI and CTBS results. Document analysis used documents collected from each school, including teacher handbooks, meeting agendas, and planning documents. The researcher conducted observations of each principal at

work during the school day to gather evidence relating to each principal's leadership behaviors. Data collection took place from late September through mid-November 2011.

### Summary of Individual Case School Findings

The purpose of this study was to describe the role played by principal leadership behaviors and organizational routines in Montana's award-winning Title I schools. Specifically, the role of principals' transformational leadership behaviors, principals' leadership behaviors to build relational trust, school practices as professional learning communities, and collective teacher efficacy in these schools were studied. Data was collected through a variety of qualitative methods, consisting of interviews, focus group discussions, observations, and document analysis to achieve saturation of data. As expected of an embedded multiple-case study, this qualitative data was also supported by fine-grained quantitative data on each school principal's transformational leadership practices and each school's collective teacher efficacy; this differed from mixed methods research, which would have conducted a quantitative study that used qualitative methods in a supporting role to explain the study's quantitative findings. The data was then analyzed using the strategy of pattern-matching the data to the study's theoretical propositions. The triangulation of data collection methods resulted in a thick, rich description of principal leadership behaviors and organizational routines at each of the three schools that participated in this embedded multiple-case study.

Cotton Memorial Middle School

Data collected from Cotton Memorial Middle School, also known as CMMS, provided detailed accounts of principal leadership behaviors and organizational routines within the school, which generally supported the proposition that these behaviors, practices, and routines had made important contributions to the school's high student achievement. Data for principal leadership behaviors dealt with transformational leadership and relational trust in the principal, while data for organizational routines dealt with perceptions of the school as a professional learning community and collective teacher efficacy.

In regard to transformational leadership, Patricia Martin, the school's principal, was found to engage in transformational leadership practices, particularly in the practices of inspiring a shared vision and challenging the process. In regard to teachers' relational trust in Mrs. Martin as the principal, the data supported the proposition that she was viewed as a trustworthy principal. In particular, she was described as competent, open, and reliable.

In regard to CMMS as a professional learning community, interview and focus group data consistently referred to teacher collaboration. This collaboration took place during both formal meeting times set aside in the school's schedule, and at informal times arranged by the teachers at their own convenience. All interviewees also confirmed that teacher relationships were friendly and collegial, a sign of the presence of a professional learning community.

Data on collective teacher efficacy collected from CMMS inquired about the perceived ability of teachers at the school to produce meaningful student learning, manage student behavior, help students learn to think critically and master complex content, and to get students to believe they can do well in schoolwork. The emergent theme taken from the interview and focus group data was that teachers and the principal at CMMS were confident in the ability of the faculty as a whole; the school's collective teacher efficacy, then, appeared strong.

In conclusion, the data supported the proposition that principal leadership behaviors and organizational routines at CMMS had played an important role in the school's high student achievement. Transformational leadership practices by the principal, strong teacher relational trust in the principal, the nature of the faculty as a professional learning community, and a healthy level of collective teacher efficacy were all present in this school as it attained student achievement levels that earned it recognition as a Distinguished Title I School.

#### Northwest Elementary School

Data collected from Northwest Elementary School, or NES, provided detailed accounts of principal leadership behaviors and organizational routines within the school, which strongly supported the proposition that these behaviors, practices, and routines had made important contributions to the school's high student achievement.

Data on the transformational leadership practices of the school's principal, Chris Barnes, strongly supported the proposition that he was perceived as a transformational leader in all five practices: modeling the way, inspiring a shared vision, challenging the

process, enabling others to act, and encouraging the heart. Mr. Barnes was also strongly viewed as a trustworthy principal by teachers at NES; the data made it evident that the faculty viewed Mr. Barnes very positively in all five aspects of relational trust: benevolence, competence, openness, honesty, and reliability.

The data also indicated that Northwest Elementary School's faculty typically worked together as a professional learning community. In regard to teachers at NES working together to continually improve teaching and learning, interview and focus group data consistently referred to teacher collaboration. The overall culture of the school appeared to be one dedicated to continual improvement, and characterized by collegial teacher relationships. On the whole, the data supported the proposition that the faculty at NES functioned as a professional learning community.

The data also indicated that collective teacher efficacy was strong at Northwest Elementary School. Both interviewees and the focus group discussed how the faculty was strong in its ability to enforce standards of appropriate student behavior. The focus group discussed expectations for student behavior at length, and agreed that the faculty consistently teaches and reteaches students on proper behavior not only in classroom settings, but also in regard to behavioral expectations for students in common areas, such as the hallways and on the playground.

In conclusion, the data clearly supported the proposition that principal leadership behaviors and organizational routines at Northwest Elementary School had played an important role in the school's high student achievement. Transformational leadership practices by the principal, strong teacher relational trust in the principal, the nature of the

faculty as a professional learning community, and a high level of collective teacher efficacy were all present in this school as it attained student achievement levels that earned it recognition as a Distinguished Title I School.

#### Musselshell Elementary School

Data collected from Musselshell Elementary School provided detailed accounts of principal leadership behaviors and organizational routines within the school. The data supported the proposition that organizational routines had made important contributions to the school's high student achievement. Data in regard to the school's current principal, Vivian Bennett, did not support the proposition that she had commonly engaged in transformational leadership practices. In regard to the previous principal, however, data indicated that transformational leadership practices had been commonly utilized, and several teachers attributed the school's recognition as a Distinguished Title I School to the work of the previous principal over the thirteen years prior to Mrs. Bennett's arrival; the award had been bestowed upon the school at the conclusion of Mrs. Bennett's first year as principal.

The data in regard to relational trust in the principal also did not support the proposition that Mrs. Bennett was perceived as highly trustworthy by the school's faculty, with a perceived lack of benevolence having been most notable. In regard to former principal Jacob Wilder, however, the available data indicated that he had been perceived as a trustworthy principal by the school's faculty; a particular strength of his trustworthiness was his perceived benevolence.

Data supported the proposition that the faculty at Musselshell Elementary School functioned as a professional learning community, or PLC, characterized by widespread teacher collaboration and collegial relationships among the faculty. The data at Musselshell Elementary School also revealed strong sentiments of collective teacher efficacy, with many positive statements about teacher beliefs in the ability of the faculty as a whole.

In conclusion, the data supported the proposition that principal leadership behaviors and organizational routines at Musselshell Elementary School had played an important role in the school's high student achievement. Transformational leadership practices by the former principal, strong teacher relational trust in the former principal, the nature of the faculty as a professional learning community, and a high level of collective teacher efficacy had all been present in this school as it attained student achievement levels that earned it recognition as a Distinguished Title I School.

### Conclusions Across Cases

The central research question for this study was "How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana's distinguished Title I Schools?" A supporting subquestion for principal leadership behaviors was, "How does relational trust contribute to the high achievement of Montana's distinguished Title I schools?" A supporting subquestion for organizational routines was, "How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?"

The collected data from Cotton Memorial Middle School, Northwest Elementary School, and Musselshell Elementary School revealed similar patterns between schools in regard to transformational leadership practices, relational trust, professional learning communities, and collective teacher efficacy. Much of the data confirmed prior research on these topics.

Importantly, however, this study also yielded findings in regard to transformational leadership practices, relational trust, and collective teacher efficacy that were not found in the review of each topic's previous literature. In each of the subsections below, new findings from this study's cross-case analysis are detailed first, followed by findings that confirmed the previous research on that subsection's topic.

#### Transformational Leadership

The cross-case analysis of the three case schools' data revealed an interesting finding on the transformational leadership practice, encourage the heart. Although Kouzes and Posner (2007) had detailed the importance of praise and encouragement by leaders, both privately and in formal celebrations of accomplishment, this study's findings indicated that school leaders may need to proceed with caution when praising teachers publicly. Public recognition of teachers in two of the schools studied here had resulted in hard feelings among other teachers, who felt slighted by a lack of recognition for their own efforts, and feelings of awkwardness among teachers who were frequently recognized but noticed that many of their colleagues had not received such praise. No references to this type of potential backlash were noted in the previous research on encouraging the heart.



At Cotton Memorial Middle School, for example, several teachers in the focus group stated that the principal's praise often fell on the same favored group of teachers, while others tended to go unrecognized. Phil, a 41-year old science teacher with 12 years of experience, offered comments characteristic of the focus group on this topic: "I think as far as, personally, I'm concerned, I'm her "A-plus, plus, plus, plus, plus," because that's what she always tells me.... And then for Wendi, she does the same thing, but I don't think it's consistent, and then it makes me feel bad for everybody else." He continued, stating his belief that more teachers should have been recognized for their contributions to the Distinguished Title I School award that the school had received: "Mrs. Martin and a couple of teachers went (to Washington, D.C.), and that was the end of it... and there were some teachers that were pretty upset, because they had just as much input... and they weren't even recognized when we talked about it in a faculty meeting."

At Musselshell Elementary School, Principal Vivian Bennett expressed reluctance to praise individual teachers due to negative experiences when having done so in the past: "When I first started, I would hold up positive examples of things that had happened, either from grade levels or from teachers, and there was a lot of resistance. And so I've learned that I don't hold anyone or any grade level as an example of what we do or want to be." Kindergarten teacher Erin Silva independently referred to this point in blaming hard feelings about public praise for incidents of envy among the staff: "She'll say, 'well, the kindergarten teachers are doing a really good job,' and then the first grade teachers don't hear that, and so they feel like we're the ones on 'her list,' so to say." Former

Musselshell Elementary principal Jacob Wilder also alluded to the risk of offending teachers who were not singled out for public recognition, saying “the most effective praise is done in private. Sometimes, I think we get caught up in things like Teacher of the Month, and in some ways that can almost have a negative impact.”

Aside from this new finding, and in overall terms of how principals’ transformational leadership practices contributed to student achievement, five themes emerged across the three case schools. Consistent with the previous literature, these themes corresponded with the five practices of transformational leadership: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. At Cotton Memorial Middle School and Northwest Elementary school, these themes were associated with their current principals at the time of this study; at Musselshell Elementary School, however, they were more often associated with the school’s former principal. In regard to how principal leadership behaviors contributed to the high achievement in Montana’s distinguished Title I schools, the data indicated that these transformational leadership practices had played a pivotal role. It appeared that by engaging in these practices, principals were able to help teachers focus on the objective of continually seeking to improve student achievement, and to help them maintain their motivation and focus on this objective over time.

First, each of the three high-achieving schools in this study had been led by a principal whose stated beliefs and actions emphasized the importance of goals tied to improved student achievement; this was consistent with transformational leadership practices that modeled the way. At Cotton Memorial Middle School, the data clearly

related that teachers had recognized improved student achievement as a primary goal for the school, as promoted by the principal, Patricia Martin. At Northwest Elementary School, Principal Chris Barnes consistently reinforced the importance of goals throughout the school; learning goals were ever-present in classrooms, and both he and his teachers routinely set and followed up on goals for themselves. At Musselshell Elementary School, former principal Jacob Wilder emphasized the importance of following through on school goals: “one of the things that I continually reminded our staff is that this process is not something that’s going to sit on a shelf. My goal was that it was institutionalized... in our way of thinking, and the things we did.”

Second, each school had had a principal who gathered faculty input to build a consensus that high student achievement was important, and to develop plans for how to improve student achievement; this was consistent with transformational leadership practices that inspired a shared vision. Principal Martin at Cotton Memorial Middle School was described as typically asking for input from her faculty in forming the school’s vision, which emphasized achievement and citizenship. At Northwest Elementary School, Principal Barnes described his efforts to actively involve the faculty in developing and carrying out the school’s vision: “I have to spend hours gathering their input and then formulating some plans, putting their input into those plans so they can see they’ve been a part of it, and then following up to make sure that those things are actually happening.” Former Musselshell Elementary Principal Jacob Wilder also described the vision process he had used during his tenure there as a shared endeavor: “We made it something that was alive, and it was theirs. It wasn’t an idea I brought in with me. We

shared, first and foremost, what a vision statement was, what it was supposed to be, what it was meant to be. So, the development of that process was that it was their vision.”

Third, each school had been led by a principal who had worked with faculty to change previous practices in order to improve student achievement; this was consistent with transformational leadership practices that challenged the process. Patricia Martin was active in procuring funds to pay for professional development, technology to improve teaching, and make improvements to the physical plant at Cotton Memorial Middle School. Chris Barnes was described as both conducting diligent research to learn how to improve student achievement at Northwest Elementary School, and as routinely eliciting input from teachers for the same purpose. At Musselshell Elementary School, former principal Jacob Wilder had approached change in a calculated manner and with much input from the faculty: “I try and identify from each staff member what they felt the strengths in the school were at present... what areas of challenge... and from there, begin to really identify those and build them into that improvement process.... My philosophy is, ‘change so slowly that people think that’s the way they’ve always done it.’”

Fourth, each school had had a principal who supported and empowered teachers in the process of improving student achievement; this was consistent with transformational leadership practices that enabled others to act. Patricia Martin at Cotton Memorial Middle School was described as being very supportive of teachers, both in their teaching methods and by providing them with a wealth of educational technology for use in their classrooms. At Northwest Elementary School, the data indicated that Principal Barnes empowered teachers by delegating responsibility to them in leadership

roles, and also enabled them to act by making sure that they had the best educational technology resources available in their classrooms. During Mr. Wilder's tenure as principal of Musselshell Elementary School, teachers were empowered in school decision-making as committee members; every teacher served on a committee of his or her choice.

Fifth, each school had been led by a principal who praised and recognized teachers for their efforts; this was consistent with transformational leadership practices that encouraged the heart. Principal Martin was recognized by the faculty at Cotton Memorial Middle School for consistently thanking teachers individually, although she was reported to be inconsistent in publicly recognizing them, a shortcoming which had resulted in some disenchantment among the faculty. Overall, it was found that private praise from principals was more common than public recognition, as Mr. Barnes at Northwest Elementary School, Musselshell Elementary School principal Vivian Bennett, and former Musselshell Elementary principal Jacob Wilder all engaged more often in private, individual praise. Mr. Wilder and Mrs. Bennett each stated a belief that public recognition can at times be counterproductive, which explained their preference to praise teachers privately.

### Relational Trust

Cross-case analysis of the three schools studied found principal characteristics that the researcher associated with relational trust, but that had not been noted in the previous trust research literature. Specifically, new themes in regard to principal competence and reliability, as perceived by teachers, emerged from this study.

At all three schools, perceptions of the principal's competence hinged partly on the principal's perceived credibility as a former teacher; this had not been noted in the previous literature on competence. The principals of Cotton Memorial Middle School and Northwest Elementary School were described by teachers as competent, partly in light of the perception that each of them had been a successful classroom teacher in a core curricular area in the local school district; before they became principals, teachers at each school already knew of them as successful classroom teachers. At Cotton Memorial Middle School, math teacher Mr. Miller expressed his respect for Mrs. Martin's instructional knowledge as a former math teacher, saying, "If I have to ask anything academically about math, I'll go to her and I'll ask her how she did it; she can demonstrate, she can teach me how to teach them." At Northwest Elementary School, teacher Gary Zimmerman opened his interview response about principal Chris Barnes' competence by saying, "The thing that demonstrated his competence, even before he came here, was the fact that he was... a good teacher.... And so, he's a competent principal because he understands the other end of it." This was in reference to Mr. Barnes' prior experience in the district as both a fifth grade teacher and an elementary physical education teacher.

At Musselshell Elementary School, teacher perceptions that principal Vivian Bennett lacked competence were partly based on the knowledge that her classroom experience had been entirely as a music teacher, which was typically discounted as not applicable to core curricular classrooms. For example, Mrs. Godwin, the school counselor, described teachers' concerns over this point: "I think a lot of teachers feel like

she isn't sympathetic towards their situation because she hasn't been in what teachers classify as a real classroom." During the focus group discussion, Gwen, a second grade teacher, said, "Because she comes from a music instructor background, she has a lot of good book learning about teaching reading, math, etcetera, but having not actually done it... sometimes that causes a little resentment, I think. Because we feel like we've taught that particular subject... for quite a while, and she hasn't." These perceptions of Mrs. Bennett's lack of competence may have been further compounded by the fact that her experience as a music teacher had occurred in another community, so that none of the teachers at Musselshell Elementary had direct knowledge of her teaching skills, even if she had been successful in that role.

Cross-case analysis of teacher perceptions of principals' reliability also revealed a finding not mentioned in the previous literature. While principal visibility was already considered to be a key element of perceived reliability, this study's data found that teachers placed a higher premium on the principal's presence in common areas, such as the hallways and cafeteria, than in classrooms. For example, teachers at both Cotton Memorial Middle School and Musselshell Elementary School noted that student behavior, while well-managed in classrooms, was much more likely to become problematic in common areas. This led teachers to conclude that student behavior issues in these areas could be improved by the steady, consistent presence of the principal. Louise, a sixth grade teacher at Musselshell Elementary, captured these feelings with this statement: "I do think from an administrative standpoint... there does need to be more of a presence in those places, in those common areas... I'm sure the administrator's busy,

but I think being a little more present in the halls might help.” At Northwest Elementary School, Principal Barnes stated that he spent time in both classrooms and common areas, but wished he had spent more time in common areas. Teachers at the school expressed their perceptions that he was highly visible in common areas as well as classrooms, which bolstered their perceptions of his reliability. A typical comment in this regard was made by Chrissy, a special education teacher who participated in the focus group, who praised him for his reliability, saying, “he’s in the classrooms a lot, he’s in the lunchroom, he’s on the playground; not just sitting in his office all day.” The nuanced data on reliability produced in this study, which emphasized the importance of principal visibility in common areas as well as in classrooms, had not been noted in the previous literature on relational trust.

Moving beyond this study’s new findings, much data was generated by this study that corroborated previous research. Overall, in regard to the subquestion, “How does relational trust contribute to the high achievement of Montana’s distinguished Title I schools?” several common themes emerged from the data collected from the three case schools. These themes generally matched the five trust facets of benevolence, competence, openness, honesty, and reliability. As with principals’ transformational leadership practices, these themes were noted in regard to the principals who led Northwest Elementary School and Cotton Memorial Middle School at the time that this study was conducted, but at Musselshell Elementary School, they more often emerged in data related to the school’s previous principal. Overall, in regard to how relational trust had contributed to these schools’ high student achievement, it appeared that the



principals' transformational leadership practices had been reinforced by principal behaviors that conveyed trustworthiness to each school's faculty.

First, it was noted that teachers generally wanted to perform well and were willing to put in extra effort for principals whom they felt showed genuine care and interest in them as both people and professionals; this was consistent with the trust facet of benevolence. At Northwest Elementary School, for example, Principal Barnes strongly emphasized a "family first" approach, encouraging his teachers to give their families priority over work when special events or medical issues were involved. He stated his belief that this made teachers more willing to work late or otherwise give extra effort for him when needed. Teachers' comments collected at NES confirmed that they appreciated his benevolence in allowing them to put their families first, and that they felt greater loyalty to their school and their principal because of it. Similarly, teachers at Cotton Memorial Middle School expressed appreciation that their principal showed concern for them as individuals and was understanding of their need to take care of their families. At Musselshell Elementary School, teachers expressed disappointment that the current principal sometimes appeared cold toward them, and missed the previous principal, who had shown great benevolence toward themselves and their families as the school had improved its achievement in the years prior to its recognition as a distinguished Title I school.

Second, the data revealed that principals at each school had been respected for their knowledge, instructional leadership, and aptitude in hiring and maintaining skilled and dedicated teachers; this was consistent with the trust facet of competence. At

Musselshell Elementary School, both Principal Bennett and former principal Jacob Wilder were viewed as competent in their knowledge of educational research, although Mrs. Bennett's tendency to impose research-based change upon teachers, instead of using the research as a vehicle for discussion and consensus-building for change was criticized. At Cotton Memorial Middle School, Principal Martin was viewed as a principal whose competence was evident in the changes she had made to the faculty by hiring highly competent and motivated teachers, as well as in the physical improvements she had made to the school and in classrooms. At Northwest Elementary School, teachers were deeply impressed by Principal Barnes' competence in poring over educational research and sharing it with them as they worked to improve teaching and learning; he also had been "very careful in hires" to ensure that new teachers at the school would fit in well.

Third, it was found that principals at all three of these distinguished Title I schools had invited teacher input and shared openly with teachers; this was consistent with the trust facet, openness. Principal Martin at Cotton Memorial Middle School was noted for both sharing as much information as possible with teachers, and inviting extensive teacher input in decision-making. Principal Barnes at Northwest Elementary School was also widely perceived as a principal dedicated to gathering input from teachers, whose door was always open to them, and who listened intently to their opinions. At Musselshell Elementary School, it was reported that the current principal did not invite teacher input, but was open to teachers who approached her on their own initiative; data gathered from the school's previous principal indicated that he had been

more proactive in inviting teacher input, often by approaching teachers to discuss issues of concern with them.

Fourth, all three schools had been led by principals who were considered to have shared full, accurate information and upheld confidentiality with teachers; this was consistent with the trust facet of honesty. Principal Martin at Cotton Memorial Middle School and Principal Barnes at Northwest Elementary School were both described as upholding confidentiality and sharing accurate information about the school with teachers. At Musselshell Elementary School, both the current and previous principals were viewed as trustworthy in terms of maintaining confidentiality. Although the current principal, Mrs. Bennett, was sometimes viewed skeptically by teachers due to her tendency to use research information to justify changes that they felt she was imposing upon them, the previous principal, Mr. Wilder, appeared to have been viewed as more honest in sharing information to facilitate discussion and gather faculty input as part of the change process.

Fifth, each school had been led by a principal who placed a high priority on honoring his or her commitments, and on supporting teachers; this was consistent with the trust facet, reliability. Principal Martin at Cotton Memorial Middle School asserted that her staff knew that she would do what she had said she would do, an assertion supported by data collected from the school's teachers; it was also noted that she consistently supported teachers. At Northwest Elementary School, Principal Barnes was perceived as a highly visible principal who could be depended upon to fulfill his commitments and be present when teachers needed him. Principal Bennett at Musselshell

Elementary School was perceived to be reliable in terms of her visibility in the school, but less so in her timeliness of response and supportiveness of teachers. Based on the data from former principal Mr. Wilder, however, he had placed a high priority on being supportive of teachers and responding to their needs in a timely manner during his tenure as the school's principal.

### Professional Learning Communities

In terms of how organizational routines contributed to the high achievement of Montana's distinguished Title I schools, the following themes emerged across the three case schools that were studied. In all three schools, teachers collaborated regularly; teacher relationships were positive; and the school principal facilitated teacher collaboration by designing collaboration time into the school's schedule.

The topics of collaboration varied, but in general, collaboration was carried out in regard to achievement data and strategies for improving student achievement; and about individuals or groups of students, and strategies for working with them. Student achievement data was reviewed and discussed by teachers at each school as they tried to develop strategies to further improve student learning; this often happened between teachers who taught the same subjects or grade level. Another common topic of teacher collaboration in each school was management of student behavior.

In each school, this collaboration was facilitated by positive working relationships between teachers, who were comfortable with one another and valued communication. At all three schools, teachers typically enjoyed working together and were open to discussion of teaching content and strategies with one another. They also enjoyed

socializing with each other; while a few teachers at each school had close friendships that extended beyond the workplace, most teachers at all three schools had friendly relations with their colleagues.

Collaboration was also enabled by building principals, who designed regular meeting times into the schools' schedules. Teachers who taught the same grade level or subject were often scheduled to have common preparation times so that they would have the opportunity to work together. Additionally, teaching teams had formal meeting times for collaboration designated in the schools' schedules, and regular faculty meetings were likewise described as forums for collaboration. Teachers also routinely met on their own time, but at each school, opportunities for collaboration were facilitated by the principal's decision to designate times in the school schedule for them to do so.

In regard to how organizational routines contributed to the high achievement of Montana's distinguished Title I schools, the data indicated that these professional learning community traits were of great importance. Teachers collaborated regularly, sharing their ideas and best practices for the purpose of improving student learning. This was facilitated by their positive relationships with one another, and by the time set aside in each school's schedule to allow teachers to more easily meet.

### Collective Teacher Efficacy

An interesting new finding from the cross-case analysis of data collected by this study in regard to collective teacher efficacy was that teachers had nuanced beliefs about their ability to manage student behavior. In general, teachers at each case school were highly confident in teachers' overall ability to set expectations for student behavior in

their classrooms, and to hold students accountable in behaving according to those expectations. In common areas, however, teachers at Cotton Memorial Middle School and Musselshell Elementary School had much less confidence in the ability of school personnel to successfully manage student behavior. This had not been noted in previous research on collective teacher efficacy. At Northwest Elementary School, teachers did not express a lack of confidence in the school's ability to manage student behavior in common areas, but did note a variety of school measures in place to help successfully manage student behaviors in common areas.

Several teacher statements supported the proposition that collective teacher efficacy was lower when dealing with students in such common areas as hallways, cafeterias, and playgrounds. This sentiment was stated concisely by Kevin, a social studies and art teacher at Cotton Memorial Middle School, who said, "we do a good job in our classroom, to set the rules, they follow the rules, but when they leave that door, they're in that hallway... they go to lunch... after school... that's when they go nuts." At Musselshell Elementary School, fifth grade teacher Shauna noted, "most of us are trained on, to handle classroom behaviors and student behaviors... but I don't think any of us are going to sign up for trailing 75 kids." Other Musselshell Elementary teachers in the same focus group discussion agreed that student misbehavior was more likely to occur in the hallways or cafeteria.

At Northwest Elementary School, where the data did not indicate that teachers lacked confidence in the faculty's ability to manage student behavior in common areas, teacher statements described a school culture that conscientiously attended to standards

for student behavior in common areas. They described a pattern of teaching, and regularly re-teaching, appropriate behavior in common areas; common expectations for how students should behave; and consistency in enforcing those expectations. As one teacher said during the school's focus group discussion, "If you see somebody doing something that's inappropriate, to not respond is tacit approval. So, we respond."

Coincidentally, the collective teacher efficacy data on managing student behavior also corresponded to this study's new finding in regard to principal visibility as a basis for reliability in relational trust. In the two schools where collective teacher efficacy was weaker in regard to managing student behavior in common areas, teachers also expressed a desire for greater principal visibility in common areas. At Northwest Elementary School, where collective teacher efficacy did not appear lower in regard to managing student behavior in common areas, it was noted that the principal was already often visible in the school's common areas.

Beyond the new finding on collective teacher efficacy in regard to teacher beliefs in their ability to manage student behavior, other data for the organizational routines subquestion, "How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?" was consistent with findings from previous literature on the topic. Based on this study's data, this is how collective teacher efficacy contributed to the high achievement of these distinguished Title I schools: teachers in each school believed that they could make a difference, and persisted in their efforts to improve teaching and learning when faced with such challenges as time limitations and parents who did not support them in student discipline. As teachers at each school

persisted in their efforts to engage students in meaningful learning, teach critical thinking and complex content, manage student behavior, and help students believe that they could do well in school, student achievement in each school had improved to higher levels.

In each case school, the data indicated that teachers did believe that the faculty's efforts as a whole had a positive effect on students. At all three schools, teachers reported differentiation of instruction, use of educational technology, and hands-on activities to produce meaningful student learning and promote critical thinking and mastery of complex content. The NCLB-driven emphasis on basic skills and test scores to make AYP was cited as a hindrance to teachers' ability to make time for creative teaching strategies, but teachers at each school nonetheless reported that such strategies were used as much as possible and were among their faculties' strengths.

Collective teacher efficacy at each school was also strong in regard to teachers' classroom management skills, although teachers at all three schools reported that parents sometimes undermined their efforts at student discipline. Overall, teachers at each school reported strong beliefs that their teaching staffs were skilled in classroom management.

Also at all three schools, teachers reported confidence in the faculty's ability to help students believe they could do well in school through use of Response to Intervention and tutoring programs for students in need of extra help. Differentiated instruction was also described as helping students to believe they could do well, by helping them avoid working at a frustration level. At the two elementary schools, student goal-setting was also utilized as a means of helping students believe they could do well in school, as they saw success in achieving academic goals over the course of the year.



When teachers in each school encountered difficulties, such as a perceived lack of parental support, they still persisted in their efforts to improve student learning. Often, teachers collaborated with each other as professional learning communities to overcome challenges and improve student achievement.

### Implications

The purpose of this dissertation study was to investigate how principal leadership behaviors and organizational routines had contributed to high student achievement at Montana's distinguished Title I schools, a topic that had not been studied in the existing body of educational research literature. The boundaries for this study called for an embedded multiple-case study of three Montana Title I schools, each of which had been recognized as a Montana Distinguished School for Exceptional Student Performance for Two or More Consecutive Years during the period 2006 through 2010.

The literature on principal leadership behaviors and organizational routines had previously linked these factors to student achievement. Specifically, schools that exhibited transformational leadership and systems thinking, represented in schools as professional learning communities, had been found to have high student achievement. Therefore, transformational leadership and professional learning communities had been considered likely to result in higher student achievement. Collective teacher efficacy and relational trust had likewise been identified as factors associated with higher student achievement.

Title I schools that had won awards for high student achievement had, by definition, exhibited higher student achievement than other Title I schools. The problem

in this case was that, while transformational leadership and systems thinking had been generally associated with high student achievement, it was not known if Montana's high-achieving Title I schools had practiced transformational leadership, utilized professional learning communities, or built up relational trust and collective teacher efficacy in the course of producing high student achievement. Furthermore, the link between professional learning communities and student achievement had not yet been as thoroughly researched as that of transformational leadership, relational trust, and collective teacher efficacy, leaving an additional gap in the research.

This embedded multiple-case study's contribution to the body of literature in educational research was to provide new research to fill these gaps. Both principal leadership behaviors and organizational routines were found to have contributed to the academic achievement of Montana's distinguished Title I schools.

Analysis of the study's triangulated data found new insights regarding transformational leadership practices that encourage the heart, and about the relational trust facets of competence and reliability. Generally, it was found that principal leadership behaviors that exemplified transformational leadership practices and engendered the faculty's relational trust in the principal had existed at each of the three case schools as they respectively attained the high student achievement levels that resulted in each one's recognition by the Office of Public Instruction as a Montana Distinguished School for Exceptional Student Performance for Two or More Consecutive Years. This supported the proposition that these principal leadership behaviors had contributed to each school's high student achievement.

Data on organizational routines found that the faculty at each respective school commonly worked together as a professional learning community; this supported the proposition that professional learning communities had made important contributions to student achievement at each school. The data on organizational routines also found new insights about teachers' collective efficacy beliefs on managing student behavior. Overall, it indicated strong perceptions of collective teacher efficacy at each school, which further supported the previously documented link between CTE and each case school's high student achievement.

The implication of these findings is that student achievement, particularly in other Montana Title I schools, may be improved if similar principal leadership behaviors and organizational routines are implemented. Specifically, school principals would be well-advised to: (1) Practice transformational leadership; (2) Engage in leadership behaviors that exemplify relational trust; and (3) Promote teacher collaboration with an emphasis on continually improving teaching and learning as a professional learning community. Principals should take care to hire and retain teachers who are dedicated to collaboration, cooperation, and continual improvement. Current teachers who are not dedicated to these practices and beliefs may need to be removed from the faculty, although principals should use discretion in doing so, because of the risk that removing teachers may cause teachers to question the principal's benevolence, thus weakening their relational trust in the principal; if certain faculty members are to be removed, it is important that the remaining teachers can understand and support such decisions. Superintendents may also facilitate the growth of transformational leadership, relational trust, and professional

learning communities by hiring principals who have strong knowledge of, and are committed to, these three areas; and by providing professional development to instill or improve such knowledge and values in principals already employed.

The first point, practicing transformational leadership, was exemplified by the successful schools studied here. A new finding from this study, not noted in the previous literature, came in regard to the transformational leadership practice of encouraging the heart. While it is important for principals to frequently praise teachers, this study found that principals should use caution in publicly recognizing teachers, as other teachers who are not recognized may become disenchanted with the principal or envious of perceived “favored” teachers; conversely, teachers who perceive that they themselves are favored by the principal may feel self-conscious and awkward as a result. This does not mean that principals should avoid praising teachers publicly; genuine public recognition is still an important aspect of encourage the heart practices. It does mean, however, that principals should be cognizant of the possibility for misunderstandings and hard feelings among their teachers, and so be as judicious and even-handed as possible in their use of public recognition.

Data also confirmed previous literature on transformational leadership. At Northwest Elementary School, for example, Mr. Barnes’ willingness to work “in the trenches with the rest of us” modeled the way for his teachers to follow in their pursuit of improved student achievement. At Cotton Memorial Middle School, Mrs. Martin had enabled her teachers to act by responding to their requests for new teaching tools to help improve student learning. The data also found that principals at each school had

encouraged their teachers' hearts by praising them and recognizing their contributions, with private, individual expressions of thanks being more common and effective.

The second point, engaging in leadership behaviors that exemplify relational trust, calls for principals to consciously behave in ways that teachers will perceive as benevolent, competent, open, honest, and reliable. Two new findings on relational trust emerged from this study: first, that teacher perceptions of the principal's competence depended in part on their perception that the principal had been a successful teacher in a core content area; second, that teacher perceptions of the principal's reliability depended on not just the principal's visibility within the school in general, but in common areas in particular.

Principals of course cannot retroactively alter their prior careers as teachers, but superintendents may be wise to consider the finding about perceived principal competence when hiring new principals. If a principal candidate was already known by teachers for having been a successful core area teacher, he or she would seem to have an inside track on earning teachers' trust in at least this one aspect of the individual trust facet of competence.

As to the finding on reliability, the data indicated that principals would do well to conscientiously make themselves visible in not only teachers' classrooms, but also in such common areas as hallways and cafeterias. Besides promoting relational trust, this would be consistent with modeling the way in terms of transformational leadership, as it would show that the principal was willing to spend time managing students in common areas, just as teachers are expected to do.

This point, however, is especially important in light of the fourth and final new finding from the data collected in this study: whereas collective teacher efficacy in regard to teachers' ability to manage student behavior was weaker in common areas than in classrooms, data collected from teachers also indicated that increased principal visibility in common areas helped them feel greater collective efficacy in their ability to manage student behaviors. Therefore, principals should be able to improve not only teacher perceptions of their own reliability, but also their teachers' collective efficacy, by consistently spending time in common areas. An excellent example of this possibility was evidenced by Northwest Elementary School: of the three case schools, it was the only one in which teachers did not report lower collective efficacy in their ability to manage student behaviors in common areas; importantly, it was also the only school in which teachers reported that the principal was frequently visible in the hallways, playground, and cafeteria.

While collective teacher efficacy has a tendency to become a nearly fixed aspect of school culture, which is resistant to change, it is nonetheless possible to improve it gradually. This can be done via "small wins:" as teachers see continued examples of success, their collective efficacy improves in turn. For example, teachers with low collective efficacy in their belief that student behavior in common areas can be effectively managed may gradually improve in this regard if their principal becomes reliably visible to help manage student behaviors in such places. As a result, teachers who once found themselves preoccupied with student discipline issues may become freer to focus on teaching. Because schools with a high percentage of low-income students are

more likely to struggle with student discipline and achievement, with one result being lower collective teacher efficacy, this approach to incrementally raising collective teacher efficacy by generating small wins merits serious consideration by principals of Title I schools, particularly in light of the established link between collective teacher efficacy and student achievement.

Returning to relational trust, the data also confirmed previous research on the subject. At Northwest Elementary School, Principal Barnes' "family first" emphasis was repeatedly referred to by teachers in describing his behavior as a benevolent, caring principal; at Musselshell Elementary, teachers lamented the lack of benevolence they perceived as their current principal passed them in the hallway without saying hello, while one fondly remembered how the former principal had always said hello and inquired about her family. At Northwest Elementary, teachers expressed trust in Mr. Barnes' competence, as evidenced by his knowledge of cutting edge research, frequently shared with faculty, and his reputation as having previously been a successful classroom teacher; at Musselshell Elementary, the current principal's similar knowledge of research was undercut by the faculty's perception that, as a music teacher, she lacked experience relevant to teaching in a grade-level elementary classroom, resulting in teacher concerns about her competence. Openness was personified by principals who were not only open to teacher input, but actively invited it, as Mr. Barnes had with his use of electronic surveys, and who listened willingly to teachers' concerns, as he, Mr. Wilder, and Mrs. Martin at Cotton Memorial Middle School were all described as good listeners. Honesty was recognized in principals who shared accurate information and upheld confidentiality.

Besides the new finding about principal visibility in common areas, reliability was perceived in principals who were highly visible in the school, handled things in a timely manner, and did what they said they would do. As Mr. Barnes explained.

The third and final point for principals who want to improve student achievement is to promote teacher collaboration with an emphasis on continually improving teaching and learning as a professional learning community. Each one of the high-achieving Title I schools that participated in this study functioned as a professional learning community, with collegial teacher relationships and widespread teacher collaboration; these organizational routines contributed to each school's academic achievement and were evidentiary of a culture in each school dedicated to teaching and learning.

Teachers collaborated formally during designated meeting times for grade-level teachers, as curricular departments, and in RTI teams; principals enabled this by designing the school's schedule to incorporate common planning times for grade-level and department teachers, and by scheduling regular meeting times for teams. Teachers in each school also collaborated informally about students, teaching, and learning; although not provided for directly by the principal, these informal interactions were described as typical of each school's culture, a culture that the principal had helped create through the establishment of formal collaboration times; teachers who were accustomed to collaborating with each other in these formal settings often continued to collaborate informally and on their own time.

Each school also exhibited a healthy sense of collective teacher efficacy. Again, the data from this study also indicated that increased principal visibility, particularly in



common areas, might help improve teachers' collective efficacy in regard to managing student behaviors. It seems likely that the combination of the principal's transformational leadership practices, strong perceptions of relational trust in the principal, and a professional learning community characterized by teacher collaboration and collegial relationships also promoted the belief among each school's faculty that their efforts, as a whole faculty, would make a positive difference for students at their school.

These suggestions, based on previous research as well as the triangulated data analyzed for this study, provide a descriptive guide for principals to follow as they seek to improve student achievement in their own schools.

#### Recommendations for Further Research

The triangulated data that was analyzed in this embedded multiple-case study supported the proposition that principal leadership behaviors and organizational routines have played an important role in the high student achievement of Montana Title I schools that were recognized by the Office of Public Instruction as distinguished Title I schools for two or more consecutive years of exceptional student achievement. This finding further supported the established links between transformational leadership, relational trust, and collective teacher efficacy, respectively, and high student achievement. It also supported the proposition that professional learning communities are related to higher student achievement.

In two of the three case schools, this study also confirmed the link between relational trust and collective teacher efficacy; however, at Musselshell Elementary School, relational trust in the current principal was weak, yet collective teacher efficacy

had appeared to remain strong. As the data indicated that relational trust in the school's previous principal had been strong, however, it is uncertain whether teachers' weak relational trust in the current principal actually disproves the connection between trust and collective teacher efficacy. It is possible that collective teacher efficacy there had developed under the previous principal; as it had previously been found that CTE, once established, is difficult to change. Viewed from this perspective, Musselshell Elementary School's continued strong collective teacher efficacy may represent an enduring legacy of the faculty's strong trust in the former principal, as well as a reinforcement of the finding that CTE is difficult to change once it has been established.

These findings provided a basis from which to develop recommendations for further research. While the qualitative data from this study supported the proposition that professional learning communities contribute to high student achievement, even a multiple-case study such as this is limited in its generalizability. Further quantitative study of the relationship between professional learning communities and student achievement, such as that conducted by Richardson (2009), but perhaps on a larger scale, could produce statistically significant data to support or refute the proposition that schools whose faculties function as professional learning communities are more likely to produce higher student achievement. A quantitative instrument, such as the Professional Learning Communities Assessment (Hipp, et. al., 2003) could be used in such a study.

Also, although the relationship between relational trust and collective teacher efficacy was not a subject of this study's research questions, the uncertainty of its peripheral findings about this relationship could also serve as grounds for further study,

to learn whether relational trust and collective teacher efficacy are actually related to one another. As valid and reliable quantitative questionnaires about both factors already exist, a large-scale quantitative study could be conducted to determine whether a statistically significant relationship between relational trust and collective teacher efficacy exists. The findings of such a study could either refute or further support the proposition that these two factors are related.

### Final Summary

The literature on principal leadership behaviors and organizational routines provided evidence that transformational leadership, relational trust, professional learning communities, and collective teacher efficacy are all related to student achievement. This study produced four findings not previously mentioned in the literature on principal leadership behaviors and organizational routines.

First, it was found that principals attempting to practice transformational leadership behaviors that encourage the heart should be sensitive to the possibility that public praise of some teachers could unintentionally offend other teachers and cause hard feelings, and so must be used carefully. Second, it was found that teachers at the schools studied here tended to view their principal as more competent in terms of relational trust if they also perceived that their principal had been a successful teacher in a core content area. Third, it was found that principals were also perceived as more trustworthy in terms of reliability if they were consistently visible, not only in classrooms, but also in common areas. Fourth, collective teacher efficacy in managing student behavior was found to be weaker in common areas than in classroom settings; principal visibility in common areas

appeared to be a potential remedy for improving not only the principal's perceived reliability among teachers, but also teachers' collective efficacy in managing student behaviors.

It had been previously found that principals who practiced transformational leadership contributed to student achievement by having a positive effect on teachers. This embedded multiple-case study produced data that supported this finding in regard to the Montana Title I schools that represented its units of analysis: in these high-achieving Title I schools, the data indicated that principals at each school had practiced transformational leadership as student achievement at all three schools had improved, culminating in their recognition as distinguished Title I schools.

Research had also indicated a clear relationship between relational trust and student achievement. This study's findings supported that this was also the case in Montana's distinguished Title I schools, as all three case schools were found to have been characterized by high faculty trust in the principal as they attained high levels of student achievement.

Prior research had also indicated a relationship between professional learning communities and student achievement. Each of the three high-achieving Title I schools that participated in this study were found to have faculties characterized by collegial teacher relationships; each school's faculty had also regularly collaborated to continually improve teaching and learning. As these traits had been identified as hallmarks of professional learning communities, they indicated that professional learning communities

did make contributions at these high-achieving schools. This provided further support for the proposition that professional learning communities contribute to student achievement.

Finally, the literature on collective teacher efficacy had indicated that a strong link existed between collective teacher efficacy and student achievement. This study found that each of the high-achieving Montana Title I schools researched had strong collective teacher efficacy beliefs. This finding added further support to the literature's evidence that collective teacher efficacy is related to student achievement.

Overall, this study helped fill the need in the literature for research into the contributions of principal leadership behaviors and organizational routines to student achievement. In particular, it filled a gap in the research as to the contributions made by these factors in Title I schools, located in the largely rural state of Montana. The thick, rich data produced by this study was obtained through use of quantitative questionnaires on transformational leadership and collective teacher efficacy, and qualitative interviews, focus group discussions, observations, and document analysis that examined principal leadership behaviors and organizational routines at three award-winning Montana Title I schools. The data was then pattern matched to the theoretical propositions of transformational leadership, relational trust, professional learning communities, and collective teacher efficacy. The findings supported the proposition that all four of these factors had contributed to each school's high student achievement.

These findings implied that school principals may be able to improve student achievement in their own schools. It was suggested that principals may accomplish this by: (1) Practicing transformational leadership behaviors; (2) Engaging in leadership

behaviors that exemplify relational trust; and (3) Promoting teacher collaboration with an emphasis on continually improving teaching and learning as a professional learning community. Superintendents may facilitate this by hiring principals who have strong knowledge of, and are committed to, these three areas, and by providing professional development to instill or improve such knowledge and values in principals already employed. Additionally, recommendations were made for further research into the relationship of professional learning communities to student achievement, and of relational trust to collective teacher efficacy.

In conclusion, this study added to the body of literature in educational research by filling a gap in the existing literature and providing a basis for future research. The need to describe principal leadership behaviors and school organizational routines that contribute to high student achievement is serious. This study provided rich data from real-world settings to help fill this need, and, it is hoped, to help more schools attain high student achievement in the future.

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APPENDICES

APPENDIX A

COLLECTIVE TEACHER BELIEFS SCALE



Collective Teacher Beliefs Scale

**Collective Teacher Beliefs**

This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential.

*Directions:* Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) “None at all” to (9) “A Great Deal” as each represents a degree on the continuum.

**Please respond to each of the questions by considering the *current* ability, resources, and opportunity of the teaching staff in your school to do each of the following.**

**None at all**

**Very Little**

**Some Degree**

**Quite A Bit**

**A Great Deal**

1. How much can teachers in your school do to produce meaningful student learning?

2. How much can your school do to get students to believe they can do well in schoolwork?

3. To what extent can teachers in your school make expectations clear about appropriate student behavior?

4. To what extent can school personnel in your school establish rules and procedures that facilitate learning?

5. How much can teachers in your school do to help students master complex content?

6. How much can teachers in your school do to promote deep understanding of academic concepts?

7. How well can teachers in your school respond to defiant students?

8. How much can school personnel in your school do to



APPENDIX B

PRINCIPAL SENSE OF EFFICACY SCALE





APPENDIX C

PERMISSION TO USE LEADERSHIP PRACTICES INVENTORY

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August 18, 2011

Sean Donnelly  
1124 22<sup>nd</sup> Avenue SW  
Great Falls, MT 59404

Dear Sean:

Thank you for your request to use the Leadership Practices Inventory (LPI) in your dissertation. We are willing to allow you to **reproduce** the instrument in written form, as outlined in your request, at no charge. If you prefer to use our electronic distribution of the LPI (vs. making copies of the print materials) you will need to separately contact Lisa Shannon ([lshannon@wiley.com](mailto:lshannon@wiley.com)) directly for instructions and payment. Permission to use either the written or electronic versions requires the following agreement:

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- (2) That copyright of the LPI, or any derivation of the instrument, is retained by Kouzes Posner International, and that the following copyright statement is included on all copies of the instrument; "Copyright © 2003 James M. Kouzes and Barry Z. Posner. All rights reserved. Used with permission",
- (3) That one (1) **electronic** copy of your dissertation and one (1) copy of all papers, reports, articles, and the like which make use of the LPI data be sent **promptly** to our attention; and,
- (4) That you agree to allow us to include an abstract of your study and any other published papers utilizing the LPI on our various websites.

If the terms outlined above are acceptable, would you indicate so by signing one (1) copy of this letter and returning it to us. Best wishes for every success with your research project.

Cordially,

Ellen Peterson  
Permissions Editor  
Epeterson4@gmail.com

I understand and agree to abide by these conditions:

(Signed) \_\_\_\_\_ Date: \_\_\_\_\_

Expected Date of Completion is: \_\_\_\_\_



APPENDIX D

LEADERSHIP PRACTICES INVENTORY:

OBSERVER QUESTIONNAIRE

## Leadership Practices Inventory

## Observer Questionnaire

▶ **Leadership Practices Inventory - Observer** James M. Kouzes / Barry Z. Posner

Below are thirty statements describing various leadership behaviors. Please read each statement carefully. Then look at the rating scale and decide how frequently this leader engages in the behavior described.

In selecting each response, please be realistic about the extent to which the leader actually engages in the behavior. Do not answer in terms of how you would like to see this person behave or in terms of how you think he or she should behave. Answer in terms of how the leader typically behaves- on most days, on most projects, and with most people.

For each statement, decide on a rating and record it in the blank to the left of the statement. When you have responded to all thirty statements, click 'Submit'.

<input type="button" value="SUBMIT"/>	
Name of Leader	
Your relationship to this Leader	
Other...	
SURVEY QUESTIONS	
1.	Sets a personal example of what he/she expects from others.
2.	Talks about future trends that will influence how our work gets done.
3.	Seeks out challenging opportunities that test his/her own skills and abilities.
4.	Develops cooperative relationships among the people he/she works with.
5.	Praises people for a job well done.
6.	Sends time and energy making certain that the people he/she works with adhere to the principles and standards that we have agreed on.

7. Describes a compelling image of what our future could be like.
8. Challenges people to try out new and innovative ways to do their work.
9. Actively listens to diverse points of view.
10. Makes it a point to let people know about his/her confidence in their abilities.
11. Follows through on promises and commitments he/she makes.
12. Appeals to others to share an exciting dream of the future.
13. Searches outside the formal boundaries of his/her organization for innovative ways to improve what we do.
14. Treats other with dignity and respect.
15. Makes sure that people are creatively rewarded for their contributions to the success of projects.
16. Asks for feedback on how his/her actions affect other people's performance.
17. Shows others how their long-term interests can be realized by enlisting in a common vision.
18. Asks "What can we learn?" when things don't go as expected.
19. Supports the decisions that people make on their own.
20. Publicly recognizes people who exemplify commitment to shared values.
21. Builds consensus around a common set of values for running our organization.
22. Paints the "big picture" of what we aspire to accomplish.
23. Makes certain that we set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs that we work on.
24. Gives peoples a great deal of freedom and choice in deciding how to do their work.

- 
25. Finds ways to celebrate accomplishments.
- 
26. Is clear about his/her philosophy of leadership.
- 
27. Speaks with genuine conviction about the higher meaning and purpose of our work.
- 
28. Experiments and takes risks, even when there is a chance of failure.
- 
29. Ensures that people grow in their jobs by learning new skills and developing themselves.
- 
30. Gives the members of the team lots of appreciation and support for their contributions.

Please answer this last question with number 0 to 10, with 0 representing "not at all likely" and 10 representing "extremely likely." All things considered, how likely are you to recommend this person as a leader to others?

0    1    2    3    4    5    6    7    8    9    10

0

APPENDIX E

PRINCIPAL INTERVIEW PROTOCOL

## PRINCIPAL INTERVIEW PROTOCOL

<p>Research Question: How do principal leadership behaviors contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Interview Questions:</p> <ol style="list-style-type: none"> <li>1. How do your daily actions exemplify your goals for this school? <ul style="list-style-type: none"> <li>• Shares own values</li> <li>• Review of goal progress</li> <li>• Discussion of goals</li> <li>• How goals shared</li> <li>• Who goals shared with</li> <li>• Goals posted in school (observation)</li> <li>• Goals in handbook (observation)</li> <li>• Goals measured</li> <li>• Actions consistent with goals</li> </ul> </li> <li>2. How do you inspire and enlist the support of the faculty in a vision of making your school the best it can be? <ul style="list-style-type: none"> <li>• Vision statement visible (observation)</li> <li>• Articulation of vision</li> <li>• Vision shared with stakeholders</li> <li>• Stakeholder input in formulating vision</li> <li>• Enthusiasm for vision</li> </ul> </li> <li>3. How have you changed the status quo in order to improve the school? <ul style="list-style-type: none"> <li>• Has changed former practices</li> <li>• Encourages input on how to improve the school</li> <li>• Encourages experimentation</li> <li>• Values learning from mistakes</li> </ul> </li> <li>4. How have you shown trust in teachers by empowering them to take action? <ul style="list-style-type: none"> <li>• Uses "we" more often than "I"</li> <li>• Engages all involved with a project</li> <li>• Delegates authority</li> <li>• Values teamwork</li> </ul> </li> <li>5. How have you recognized and celebrated the contributions of teachers at your school?</li> </ol>
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	<ul style="list-style-type: none"> <li>• Personalizes recognition of others</li> <li>• One-to-one recognition</li> <li>• Recognition with group</li> <li>• Celebrations/rituals to honor performance or values</li> </ul>
<p>Research Subquestion: How does relational trust contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Interview Questions:</p> <ol style="list-style-type: none"> <li>1. How do you show teachers that you care about them as individuals? <ul style="list-style-type: none"> <li>• Treats teachers with kindness</li> <li>• Shows personal interest in teachers' well-being</li> <li>• Encourages teachers' professional growth goals</li> </ul> </li> <li>2. How do you know that you are competent in doing your job? <ul style="list-style-type: none"> <li>• Sound knowledge base</li> <li>• Instructional leadership skills</li> <li>• Interpersonal skills</li> <li>• Makes wise decisions</li> <li>• Handles difficult situations well</li> </ul> </li> <li>3. How do you facilitate mutual sharing of ideas and information? <ul style="list-style-type: none"> <li>• Invites teacher input</li> <li>• Listens intently</li> <li>• Makes sure teachers know what is going on</li> </ul> </li> <li>4. How do your teachers know that they can believe what you tell them about events in your school? <ul style="list-style-type: none"> <li>• Shares accurate information</li> <li>• Keeps promises</li> <li>• Upholds confidentiality</li> </ul> </li> <li>5. How would you describe your overall reliability? <ul style="list-style-type: none"> <li>• Maintains high visibility</li> <li>• Does what he/she says he/she will do</li> <li>• Handles things in a timely manner</li> <li>• Is there when teachers need him/her</li> </ul> </li> </ol>

<p>Research Question: How do organizational structures contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Interview Questions:</p> <ol style="list-style-type: none"> <li>1. What structures for teacher collaboration are designed into your school's schedule? <ul style="list-style-type: none"> <li>• Meeting times for specific groups/committees/purposes</li> <li>• How often are meeting times</li> <li>• Durations of meeting times</li> <li>• When are meetings held</li> <li>• Conduct protocols</li> </ul> </li> <li>2. How do teachers at your school work together to continually improve teaching and learning? <ul style="list-style-type: none"> <li>• Collaboration about pedagogy</li> <li>• Collaboration about specific students/student groups</li> </ul> </li> <li>3. Overall, how would you describe the relationships between teachers at this school? <ul style="list-style-type: none"> <li>• Collegiality</li> <li>• Social activities</li> <li>• Friendships</li> </ul> </li> <li>4. How would you describe the productivity of most time set aside for teacher collaboration in your school? <ul style="list-style-type: none"> <li>• What gets accomplished</li> <li>• Group focused on stated purpose</li> <li>• Group meets for full duration of allotted time</li> </ul> </li> </ol>
<p>Research Subquestion: How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Interview Questions:</p> <ol style="list-style-type: none"> <li>1. How would you describe the ability of teachers at this school to produce meaningful student learning? <ul style="list-style-type: none"> <li>• Strategies used</li> <li>• Resources</li> <li>• How is learning measured</li> <li>• Results for students</li> </ul> </li> <li>2. How would you describe the ability of teachers in your school to manage student behavior? <ul style="list-style-type: none"> <li>• Classroom management strategies</li> </ul> </li> </ol>



	<ul style="list-style-type: none"><li>• Resources</li><li>• How effectiveness of strategies assessed</li></ul> <p>3. How would you describe the ability of teachers in your school to help students master complex content?</p> <ul style="list-style-type: none"><li>• Strategies used</li><li>• Resources</li><li>• How assessed</li><li>• Student results</li></ul> <p>4. How would you describe the ability of teachers in your school to help students learn to think critically?</p> <ul style="list-style-type: none"><li>• Strategies used</li><li>• Resources</li><li>• How assessed</li><li>• Student results</li></ul> <p>5. How much can your school do to get students to believe they can do well in schoolwork?</p> <ul style="list-style-type: none"><li>• Support structures</li><li>• Strategies used</li><li>• How measured</li><li>• Student results</li></ul>
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APPENDIX F

TEACHER INTERVIEW PROTOCOL

## TEACHER INTERVIEW PROTOCOL

<p>Research Question: How do principal leadership behaviors contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Interview Questions:</p> <ol style="list-style-type: none"> <li>1. How do your principal's daily actions exemplify his/her goals for your school? <ul style="list-style-type: none"> <li>• Principal shares own values</li> <li>• Review of goal progress</li> <li>• Discussion of goals</li> <li>• How goals shared</li> <li>• Who goals shared with</li> <li>• Goals posted in school (observation)</li> <li>• Goals in handbook (observation)</li> <li>• Goals measured</li> <li>• Principal actions consistent with goals</li> </ul> </li> <li>2. How does your principal inspire and enlist the support of the faculty in a vision of making your school the best it can be? <ul style="list-style-type: none"> <li>• Vision statement visible (observation)</li> <li>• Articulation of vision</li> <li>• Vision shared with stakeholders</li> <li>• Stakeholder input in formulating vision</li> <li>• Principal enthusiasm for vision</li> </ul> </li> <li>3. How has your principal changed the status quo in order to improve the school? <ul style="list-style-type: none"> <li>• Principal has changed former practices</li> <li>• Principal encourages input on how to improve the school</li> <li>• Principal encourages experimentation</li> <li>• Principal values learning from mistakes</li> </ul> </li> <li>4. How has your principal shown trust in teachers by empowering them to take action?</li> </ol>
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	<ul style="list-style-type: none"> <li>• Principal uses “we” more often than “I”</li> <li>• Principal engages all involved with a project</li> <li>• Principal delegates authority</li> <li>• Principal values teamwork</li> </ul> <p>5. How has your principal recognized and celebrated the contributions of teachers at your school?</p> <ul style="list-style-type: none"> <li>• Principal personalizes recognition of others</li> <li>• One-to-one recognition</li> <li>• Recognition with group</li> <li>• Celebrations/rituals to honor performance or values</li> </ul>
<p>Research Subquestion: How does relational trust contribute to the high achievement of Montana’s distinguished Title I schools?</p>	<p>Interview Questions:</p> <ol style="list-style-type: none"> <li>1. How does your principal show teachers that he/she cares about them as individuals?             <ul style="list-style-type: none"> <li>• Treats teachers with kindness</li> <li>• Shows personal interest in teachers’ well-being</li> <li>• Encourages teachers’ professional growth goals</li> </ul> </li> <li>2. How can you tell that your principal is competent in doing his/her job?             <ul style="list-style-type: none"> <li>• Sound knowledge base</li> <li>• Instructional leadership skills</li> <li>• Interpersonal skills</li> <li>• Makes wise decisions</li> <li>• Handles difficult situations well</li> </ul> </li> <li>3. How does your principal facilitate mutual sharing of ideas and information?             <ul style="list-style-type: none"> <li>• Invites teacher input</li> <li>• Listens intently</li> <li>• Makes sure teachers know what is going on</li> </ul> </li> <li>4. How do you know that you can believe what your principal tells you about events in your school?</li> </ol>

	<ul style="list-style-type: none"> <li>• Shares accurate information</li> <li>• Keeps promises</li> <li>• Upholds confidentiality</li> </ul> <p>5. How would you describe the overall reliability of your principal?</p> <ul style="list-style-type: none"> <li>• Maintains high visibility</li> <li>• Does what he/she says he/she will do</li> <li>• Handles things in a timely manner</li> <li>• Is there when teachers need him/her</li> </ul>
<p>Research Question: How do organizational structures contribute to the high achievement of Montana’s distinguished Title I schools?</p>	<p>Interview Questions:</p> <ol style="list-style-type: none"> <li>1. What structures for teacher collaboration are designed into your school’s schedule?             <ul style="list-style-type: none"> <li>• Meeting times for specific groups/committees/purposes</li> <li>• How often are meeting times</li> <li>• Durations of meeting times</li> <li>• When are meetings held</li> <li>• Conduct protocols</li> </ul> </li> <li>2. How do teachers at your school work together to continually improve teaching and learning?             <ul style="list-style-type: none"> <li>• Collaboration about pedagogy</li> <li>• Collaboration about specific students/student groups</li> </ul> </li> <li>3. Overall, how would you describe the relationships between teachers at this school?             <ul style="list-style-type: none"> <li>• Collegiality</li> <li>• Social activities</li> <li>• Friendships</li> </ul> </li> <li>4. How would you describe the productivity of most time set aside for teacher collaboration in your school?             <ul style="list-style-type: none"> <li>• What gets accomplished</li> <li>• Group focused on stated purpose</li> <li>• Group meets for full duration of allotted time</li> </ul> </li> </ol>
<p>Research Subquestion: How does</p>	<p>Interview Questions:</p>

<p>collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?</p>	<ol style="list-style-type: none"><li>1. How would you describe the ability of teachers at this school to produce meaningful student learning?<ul style="list-style-type: none"><li>• Strategies used</li><li>• Resources</li><li>• How is learning measured</li><li>• Results for students</li></ul></li><li>2. How would you describe the ability of teachers in your school to manage student behavior?<ul style="list-style-type: none"><li>• Classroom management strategies</li><li>• Resources</li><li>• How effectiveness of strategies assessed</li></ul></li><li>3. How would you describe the ability of teachers in your school to help students master complex content?<ul style="list-style-type: none"><li>• Strategies used</li><li>• Resources</li><li>• How assessed</li><li>• Student results</li></ul></li><li>4. How would you describe the ability of teachers in your school to help students learn to think critically?<ul style="list-style-type: none"><li>• Strategies used</li><li>• Resources</li><li>• How assessed</li><li>• Student results</li></ul></li><li>5. How much can your school do to get students to believe they can do well in schoolwork?<ul style="list-style-type: none"><li>• Support structures</li><li>• Strategies used</li><li>• How measured</li><li>• Student results</li></ul></li></ol>
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APPENDIX G

FOCUS GROUP PROTOCOL AT COTTON

MEMORIAL MIDDLE SCHOOL

## FOCUS GROUP PROTOCOL: COTTON MEMORIAL MIDDLE SCHOOL

<p>Research Question: How do principal leadership behaviors contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Focus Group Questions:</p> <ol style="list-style-type: none"> <li>1. What does your principal do to facilitate goals for your school? <ul style="list-style-type: none"> <li>• Asks for teacher feedback on how her actions affect people's performance*</li> <li>• Makes certain that people adhere to agreed-on standards*</li> <li>• Shares own values</li> <li>• Principal actions consistent with goals</li> <li>• Discussion of goals</li> <li>• Review of goal progress</li> </ul> </li> <li>2. What does your principal do to empower teachers in your school? <ul style="list-style-type: none"> <li>• Gives people choice about how to do their work*</li> <li>• Principal delegates authority</li> <li>• Principal values teamwork</li> <li>• Principal engages all involved with a project</li> <li>• Develops cooperative relationships*</li> <li>• Supports decisions other people make*</li> <li>• Ensures that people grow in their jobs*</li> <li>• Treats people with dignity and respect*</li> </ul> </li> <li>3. What does your principal do to recognize and praise the contributions of teachers in your school?*** <ul style="list-style-type: none"> <li>• Group recognition</li> <li>• Individual praise</li> <li>• Ceremonies/rituals/celebrations</li> </ul> </li> </ol>
<p>Research Subquestion: How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Focus Group Questions:</p> <ol style="list-style-type: none"> <li>1. How would you describe the ability of teachers at your school to make expectations clear about appropriate student behavior?*** <ul style="list-style-type: none"> <li>• How expectations are communicated</li> <li>• How is success measured</li> <li>• Consistency in expectations across teaching staff</li> <li>• Strengths of teaching staff in making clear expectations about appropriate student behavior</li> </ul> </li> </ol>



	<p>2. How well can adults in your school get students to follow school rules?***</p> <ul style="list-style-type: none"> <li>• Consistency across staff in getting students to follow school rules</li> <li>• Methods or strategies used to get students to follow school rules</li> <li>• Weaknesses in getting students to follow school rules</li> <li>• How is success measured</li> </ul>
<p>Additional focus group question (if needed)                  Research Question: How do organizational routines contribute to the high achievement of Montana’s distinguished Title I schools?</p>	<p>Focus Group Questions:</p>
<p>Additional focus group question (if needed)                  Research Subquestion: How does relational trust contribute to the high achievement of Montana’s distinguished Title I schools?</p>	<p>Focus Group Questions:</p>

\*Denotes specific LPI item with extreme high or low response from this school

\*\*Denotes specific CTBS item with extreme high or low response from this school

\*\*\*Denotes question based on unusual interview response at this school

APPENDIX H

FOCUS GROUP PROTOCOL AT  
NORTHWEST ELEMENTARY SCHOOL

## FOCUS GROUP PROTOCOL: NORTHWEST ELEMENTARY SCHOOL

<p>Research Question: How do principal leadership behaviors contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Focus Group Questions:</p> <ol style="list-style-type: none"> <li>1. What does your principal do that shows dignity and respect in his treatment of faculty and staff?*</li> <ul style="list-style-type: none"> <li>• Delegates authority</li> <li>• Shows trust in teachers</li> <li>• Empowers teachers in decision-making</li> <li>• Empowers teachers in classroom practices</li> </ul> <li>2. What does your principal do to set a personal example of what is expected?*</li> <ul style="list-style-type: none"> <li>• Principal's actions consistent with stated goals</li> <li>• Shares own values</li> <li>• Actions consistent with values</li> </ul> <li>3. What does your principal do to gather feedback on how his actions affect teachers' performance?*</li> <ul style="list-style-type: none"> <li>• Asks for faculty feedback on decisions, policies, actions</li> <li>• Gathers faculty input on professional needs</li> </ul> </ol>
<p>Research Subquestion: How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Focus Group Questions:</p> <ol style="list-style-type: none"> <li>1. How much can teachers in your school do to produce meaningful student learning?***</li> <ul style="list-style-type: none"> <li>• Strategies used</li> <li>• Resources available</li> <li>• How success measured</li> <li>• Strengths of teaching staff in producing meaningful student learning</li> </ul> <li>2. How would you describe the ability of teachers at your school to make expectations clear about appropriate student behavior?***</li> <ul style="list-style-type: none"> <li>• How expectations are</li> </ul> </ol>

	<p>communicated</p> <ul style="list-style-type: none"> <li>• How is success measured</li> <li>• Consistency in expectations across teaching staff</li> <li>• Strengths of teaching staff in making clear expectations about appropriate student behavior</li> </ul> <p>3. How much can your school do to foster student creativity?*</p> <ul style="list-style-type: none"> <li>• Strategies used</li> <li>• Resources available</li> <li>• How success measured</li> <li>• Strengths and weaknesses in fostering student creativity</li> </ul>
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\*Denotes specific LPI item with extreme high or low response from this school

\*\*Denotes specific CTBS item with extreme high or low response from this school

APPENDIX I

FOCUS GROUP PROTOCOL AT  
MUSSELSHELL ELEMENTARY SCHOOL

FOCUS GROUP PROTOCOL: MUSSELHELL ELEMENTARY SCHOOL

<p>Research Question: How do principal leadership behaviors contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Focus Group Questions:</p> <ol style="list-style-type: none"> <li>1. How would you describe your principal's behavior in talking about future trends influencing your work? <ul style="list-style-type: none"> <li>• Shares research</li> <li>• Invites faculty input/knowledge of future trends</li> <li>• Discusses impact of future trends for faculty/school</li> <li>• Discusses plans for dealing with future trends</li> </ul> </li> <li>2. How would you describe your principal in regard to giving people choice about how to do their work? <ul style="list-style-type: none"> <li>• Open to faculty input</li> <li>• Delegates authority</li> <li>• Removes barriers to work</li> <li>• Allows faculty to make own decisions about teaching</li> </ul> </li> <li>3. How would you describe your principal's openness to feedback on how her actions affect teachers' performance? <ul style="list-style-type: none"> <li>• Asks for faculty feedback on decisions, policies, actions</li> <li>• Gathers faculty input on professional needs</li> <li>• Is open to suggestions/criticism</li> </ul> </li> </ol>
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<p>Research Subquestion: How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Focus Group Questions:</p> <ol style="list-style-type: none"> <li>1. How well can teachers in your school establish rules and procedures that facilitate learning?*** <ul style="list-style-type: none"> <li>• Strategies used</li> <li>• Resources available</li> <li>• How success measured</li> <li>• Strengths of teaching staff in this area</li> </ul> </li> <li>2. How well can teachers at your school make expectations clear about appropriate student behavior?*** <ul style="list-style-type: none"> <li>• How expectations are communicated</li> <li>• How is success measured</li> <li>• Consistency in expectations across teaching staff</li> <li>• Strengths of teaching staff in making clear expectations about appropriate student behavior</li> </ul> </li> <li>3. How much can your school do to help students feel safe while they are at school?*** <ul style="list-style-type: none"> <li>• Strategies used</li> <li>• Resources available</li> <li>• How success measured</li> <li>• Strengths of faculty in helping students feel safe</li> </ul> </li> <li>4. How well can adults in your school get students to follow school rules?*** <ul style="list-style-type: none"> <li>• Degree of consistency across staff in getting students to follow school rules</li> <li>• Methods or strategies used to get students to follow school rules</li> <li>• Weaknesses in getting students to follow school rules</li> <li>• Barriers to getting students to follow school rules</li> </ul> </li> </ol>
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\*Based on specific LPI item with extreme high or low response from this school

\*\*Based on specific CTBS item with extreme high or low response from this school

APPENDIX J

OBSERVATION PROTOCOL



## OBSERVATION PROTOCOL

<p>Research Question: How do principal leadership behaviors contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Observation Protocol:</p> <ol style="list-style-type: none"> <li>1. Evidence of transformational leadership practices in interactions with teachers: <ul style="list-style-type: none"> <li>• Modeling the way</li> <li>• Inspiring a shared vision</li> <li>• Challenging the process</li> <li>• Enabling others to act</li> <li>• Encouraging the heart</li> </ul> </li> </ol>
<p>Research Subquestion: How does relational trust contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Observation Protocol:</p> <ol style="list-style-type: none"> <li>1. Evidence of relational trust in interactions with teachers: <ul style="list-style-type: none"> <li>• Benevolence</li> <li>• Competence</li> <li>• Openness</li> <li>• Honesty</li> <li>• Reliability</li> </ul> </li> </ol>
<p>Research Question: How do organizational structures contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Observation Protocol:</p> <ol style="list-style-type: none"> <li>1. Evidence of professional learning community: <ul style="list-style-type: none"> <li>• Teacher collaboration</li> <li>• Commitment to improve teaching and learning</li> <li>• Collegial interactions between teachers</li> <li>• Interactions between teachers and principal</li> <li>• Other interactions faculty and staff interactions</li> </ul> </li> </ol>
<p>Research Subquestion: How does collective teacher efficacy contribute to the high achievement of Montana's distinguished Title I schools?</p>	<p>Observation Protocol:</p> <ol style="list-style-type: none"> <li>1. Evidence of collective teacher efficacy: <ul style="list-style-type: none"> <li>• Teachers exhibit confidence in teaching strategies</li> <li>• Teachers exhibit confidence in classroom management</li> <li>• Teachers exhibit confidence in dealing with students in common areas (hallways, cafeteria, etc.)</li> </ul> </li> </ol>

APPENDIX K

PILOT STUDY

### Introduction

Principal leadership and organizational routines have been linked to positive outcomes for schools, including high student achievement. Specifically, schools that exhibit transformational leadership and systems thinking, represented in schools as professional learning communities, have often been found to have high student achievement (Eck & Goodwin, 2010; Terrell, 2010; Richardson, 2009; Garrett & Roberson, 2008). Therefore, transformational leadership and professional learning communities are considered likely to result in higher student achievement. Collective teacher efficacy and relational trust have likewise been identified as factors associated with higher student achievement (Robinson, 2010; Cybulski, Hoy, & Sweetland, 2005; Tschannen-Moran, 2004; Tschannen-Moran & Barr, 2004; Goddard, 2002; Goddard, Hoy, & Hoy, 2000).

Title I schools that have won awards for high student achievement have, by definition, exhibited higher student achievement than other Title I schools. The problem in this case is that, while transformational leadership and systems thinking have been generally associated with high student achievement, it is not known if Montana's high-achieving Title I schools have practiced transformational leadership, utilized professional learning communities, or built up relational trust and collective teacher efficacy in the course of producing high student achievement. Furthermore, the link between professional learning communities and student achievement has not yet been as thoroughly researched as the other factors involved here, leaving a gap in the research that this study aims to address.

Therefore, an embedded multiple-case study has been proposed, guided by the research question, “How do principal leadership behaviors and organizational routines contribute to the high achievement of Montana’s distinguished Title I Schools?” A supporting subquestion for principal leadership behaviors is, “How does relational trust contribute to the high achievement of Montana’s distinguished Title I schools?” A supporting subquestion for organizational routines is, “How does collective teacher efficacy contribute to the high achievement of Montana’s distinguished Title I schools?”

This pilot study was conducted to improve the researcher’s knowledge and skills, as well as to identify areas for improvement in the main study’s design. The key advantage of conducting a pilot study is that these improvements subsequently buttress the credibility of the final study (Yin, 2009).

### Pilot Design

The pilot study was conducted at a Title I high school in north-central Montana. This school was chosen as the site for the pilot study due in part to the fact that its Title I status is a trait shared by the three schools to be studied in the final multiple-case study. Additionally, this school employs the researcher, which ensured accessibility for conducting the pilot study. It also provided the researcher an opportunity to learn more about his school of employment, while also yielding data that the school’s faculty and administration could use in their ongoing efforts to improve the school further.

The variables researched by the pilot study were principal leadership behaviors, relational trust, school practices and routines exemplary of a professional learning community, and collective teacher efficacy. Data regarding principal leadership

behaviors were analyzed by pattern-matching the data to Kouzes and Posner's (2007) five exemplary practices of transformational leadership: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. Data regarding relational trust in the principal was analyzed by pattern-matching it to Tschannen-Moran and Hoy's (2000) five aspects of relational trust: benevolence, reliability, competence, honesty, and openness. Working with Hord in 2006, Roy described "schools as PLCs (professional learning communities) where educators collectively engage in continual inquiry on behalf of student learning and where staff and students gain from this way of working" (p. 499). Therefore, data on the school as a professional learning community was pattern-matched for evidence of teacher collaboration and relationships. Finally, Tschannen-Moran and Barr (2004) described collective teacher efficacy as the collective belief of a school's teachers in their ability to make a positive difference for their students, above and beyond outside factors in the home or community. Data that reflected beliefs about the ability of the school as a whole to positively influence student learning and behavior were therefore pattern-matched to collective teacher efficacy beliefs.

A quantitative questionnaire for measuring collective teacher efficacy, the Collective Teacher Beliefs Scale (Tschannen-Moran & Barr, 2004), or CTBS, was also administered to the pilot school's faculty to provide further data on this factor. This was consistent with helping the researcher prepare for conducting an embedded multiple-case study. Embedding this quantitative instrument in the qualitative pilot case study allowed the researcher to learn the overall mean level of collective teacher efficacy among

respondents at the pilot schools, as well as the mean levels of collective teacher efficacy reported by respondents on each of the 12 items of the CTBS.

Qualitative data collection for the pilot study included three separate interviews, one with the school's principal, and two with individual teachers who volunteered to participate. Although the researcher's dissertation proposal had stated that only two teachers would be interviewed for the pilot study, the researcher subsequently decided to conduct an interview with the pilot school's principal as well. This decision was made in light of the researcher's desire to gain as much interview experience as possible prior to beginning his final dissertation study, as well as to obtain another source of pilot study data to analyze.

The principal was asked 19 open-ended questions: five based on Kouzes and Posner's (2007) practices of transformational leadership, five based on Tschannen-Moran and Hoy's (2000) five aspects of relational trust, four based on the concept of the school as a professional learning community (Roy, 2006), and five questions on collective teacher efficacy that were based on the CTBS (Tschannen-Moran & Barr, 2004). Both teachers were also asked 19 open-ended interview questions; each item was either identical or highly similar (with minor wording adjustments to reflect the fact that questions were being asked of teachers, rather than the principal) to those used in the principal interview. Each interview lasted approximately 50 minutes, and was audio recorded and subsequently transcribed.

The second method of qualitative data collection used in the pilot study was a focus group that consisted of eight volunteer teachers. The group was asked four broad

questions, one each for the four research factors of principal transformational leadership behaviors, relational trust in the principal, the school as a professional learning community, and the school's collective teacher efficacy. The focus group discussed each of these issues in turn for a total of approximately 35 minutes. As with the interviews, the focus group was audio recorded and transcribed. A ninth teacher volunteer assisted the researcher by taking notes of the discussion, which aided the researcher in identifying individual speakers during the transcription process.

### Pilot School

The pilot school is a large public high school in north-central Montana, with 122 teachers and an enrollment of approximately 1,400 students. The school's administration consists of the building principal and three assistant principals. Due to its significant percentage of low-income students, it is designated as a Title I school. While its Title I status is a common trait with the three schools to be included in the final multiple-case study, a key difference between the pilot school and its final study counterparts is its academic achievement status as measured by the Montana Office of Public Instruction.

While the three schools included in the final study are all winners of the office's award for exceptional student achievement, the pilot study school has failed to make Adequate Yearly Progress, also known as AYP, for the past several years. As such, the outcome of relatively high student achievement that was necessary for inclusion of a school in the final study was not exhibited in the pilot school.

Because the pilot school has not exhibited high standardized achievement scores, it is not possible for the pilot study to answer the final study's research questions, which

deal with the contributions of principal leadership and organizational routines to the high achievement of Montana's distinguished Title I schools. The main purpose of the pilot study, however, is to improve the final study's research methods and the researcher's individual skills. This purpose may be fulfilled regardless of the pilot school's standardized achievement scores.

### Principal

The pilot school's principal is serving his tenth year in this role. At 65 years of age, he has been a high school administrator for the past 33 years, and a building principal for the past 30 years. He has also won several awards, including awards that recognized him as Montana's high school principal of the year, and as the state's top overall K-12 school administrator. A Montana native, he has lived in the state his entire life, growing up in a rural town in central Montana and spending most of his career in eastern Montana before moving to his current school in 2002. For the purposes of this pilot study, he is referred to by the pseudonym, Dr. Don Blake.

### Teacher Interviewees

The first teacher interviewee for the pilot study is a ninth grade science teacher. Born and raised in southwestern Montana, she is 30 years old, with six years of teaching experience, all in her current position at the pilot school. For the purposes of this pilot study, she is referred to by the pseudonym, Betty Ross.

The second teacher interviewee teaches various levels of high school English. Having grown up in southwestern Montana, he is 29 years old, with seven years of



teaching experience, all in his current position at the pilot school. For the purposes of this pilot study, he is referred to by the pseudonym, Ken Lang.

### Focus Group Participants

The focus group consisted of eight teachers from the pilot school: five males and three females. Their ages ranged from 29 to 60 years, and their level of experience varied from five to 39 years of teaching experience. All had been teachers at the pilot school for periods ranging from the past five years to the past 28 years. In this report, they will be identified by pseudonyms as needed.

### The Collective Teacher Beliefs Scale

To gather basic quantitative data about the collective teacher efficacy at the pilot school, an electronic version of the Collective Teacher Beliefs Scale, or CTBS, was utilized. Factor analysis tests found that the CTBS's 12 items loaded on one factor, with factor loadings that ranged from 0.79 to 0.58 per item, making it a valid instrument for measuring collective teacher efficacy (Tschannen-Moran & Barr, 2004). Reliability of the CTBS was also strong at 0.97 overall (Tschannen-Moran & Barr, 2004). For the pilot study, the mean score for all 12 items was calculated to represent the overall level of collective teacher efficacy of among respondents to the CTBS. Mean collective teacher efficacy scores for each of the 12 individual items were also calculated. Of the 122 teachers at the pilot school, 63 completed the CTBS.

### Interview Process

Each pilot study interview was conducted at a time and place chosen by the interviewee. Prior to each interview, the interviewees had been informed of the study's research topics and methods in a letter of invitation sent to them by the researcher. As detailed above, the interview protocols consisted of 19 open-ended questions that reflected key practices and beliefs associated with transformational leadership, relational trust, professional learning communities, and collective teacher efficacy.

The principal interview was conducted in the principal's office, and had to be conducted in two separate sessions due to the demands of the principal's job. The interview, scheduled to begin at 8:00 a.m. on September 21, was delayed when the principal was called out of his office just prior to the scheduled interview time. After the principal returned, the interview began, but time did not allow for its completion in that sitting. The interview resumed on September 22 at 3:15 p.m., at which time it was carried on through the remainder of the 19 interview questions.

The first teacher interview was conducted in the teacher's classroom the morning of September 22, during her prep period. Over a period of approximately 50 minutes, all 19 interview questions were completed. The second teacher interview took place at the interviewee's home on September 25, and all 19 interview questions were once again completed in approximately 50 minutes. The length of the three interviews was consistent with the anticipated interview length of 30 to 60 minutes, stated in the researcher's dissertation proposal.

Pattern-matching (Yin, 2009) was used as the analytic strategy to determine whether interviewee responses generated data relevant to the study's research questions. During each interview, the researcher took notes in the margin of his interview protocol copy; these margin notes were a first step in the data analysis process, allowing the researcher to notice trends and patterns in the various statements made by each interviewee. For example, if two interviewees gave highly similar answers or used the same phrase in response to the same interview question, the researcher was able to see those similarities when reviewing the protocol margin notes after the interviews were completed. Also, each interview was audio recorded and transcribed verbatim to allow the researcher to review the transcripts and conduct a deeper, more thorough review of the interview data as the data analysis process evolved. These practices enabled the researcher to detect and match the patterns present in the data to the factors represented in this study's research questions.

#### Focus Group Process

The focus group discussion was conducted in the researcher's classroom after the end of the school day on September 28. Ten individuals were present: the researcher, a teaching colleague who had volunteered to assist the researcher by taking notes of the focus group session, and the eight focus group participants described previously. The focus group participants had general knowledge of the study's research topics and methods from the same invitation letter as the interview participants.

As stated, the group was asked four broad, open-ended questions to generate discussion on each of the four research question topics: principal leadership behaviors

associated with transformational leadership; the teachers' relational trust in the principal; practices associated with the school as a professional learning community, such as teacher collaboration; and issues of collective teacher efficacy beliefs. Each question generated between seven and 15 minutes of discussion, for a total discussion time of just over 35 minutes. This was consistent with the anticipated focus group discussion length of 30 to 60 minutes stated in the researcher's dissertation proposal.

As with the interview data, Yin's (2009) strategy of pattern-matching was used to analyze whether data collected from the focus group was consistent with the study's research questions. The focus group discussion was audio recorded and transcribed verbatim to allow the researcher to review the transcript and conduct a deeper, more thorough review of the focus group data as the data analysis process evolved. This enabled the researcher to detect and match the patterns present in the data to the factors of transformational leadership, relational trust, professional learning communities, and collective teacher efficacy represented in this study's research questions.

Principal Leadership:  
Transformational Leadership

Qualitative data was pattern-matched as representative of transformational leadership if it aligned with one or more of Kouzes and Posner's (2007) five practices of exemplary leadership: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. The first five interview questions were based, respectively, on each of these five practices. The first of the four focus group questions was broadly written and accompanied by prompts to elicit responses from the

group that indicated and explained either the presence or absence of transformational leadership behaviors in the pilot school's principal, Dr. Don Blake.

Overall, the data collected from the interviews and focus group supported the proposition that Dr. Blake's leadership behaviors are representative of transformational leadership, particularly in regard to challenging the process and enabling others to act. Data supporting Dr. Blake's behaviors to inspire a shared vision and encourage the heart were also in evidence. A good example of his willingness to challenge the process emerged at one point during Dr. Blake's interview:

Ultimately, the responsibility that I have... is to the students... and the teachers... and to the facility. Sometimes I've gotten into trouble for this, very honestly, because I've been told that my responsibilities and loyalties need to lie with the central administration.... I'd hope that we'd all have the same goal, but my ultimate first responsibility is to the school and the students it serves, and my secondary responsibility is to the district, and that's not politically very popular, but it's what I believe, and I hope to project that to the people that are here.

This statement is consistent with Kouzes and Posner's (2007) statements about exemplary leaders challenging the process by removing barriers to change and sometimes needing to resist mandates from above in order to better serve their followers. Dr. Blake's comment was subsequently supported by teacher interview and focus group comments that essentially repeated the theme of Dr. Blake being perceived as a principal who tailors programs and policies to fit the culture of his school, and who is willing to stand by those decisions even when they conflict with the preferences of the district's central administration.

On the other hand, little data on Dr. Blake's behaviors being perceived as modeling the way was noted in either the interview or focus group notes or transcriptions. A possible reason for this lack of supporting data may have emerged from Dr. Blake himself, who stated, "My values and goals are probably less reflected in the goals today than they were in the goals five years ago... predominantly because, being a Title I school that has not made AYP, we're involved in the Office of Public Instruction SIT visitation, and their critical three recommendations become the foundation of our school improvement goals" (Principal interview, September 21, 2011). The dearth of responses perceiving Dr. Blake as a leader who models the way may be due in part to Dr. Blake's apparent perception that he has a diminished ability to inject his own beliefs into the school improvement goals.

#### Principal Leadership: Relational Trust

Qualitative data was pattern-matched as representative of relational trust in the principal if it aligned with one or more of Tschannen-Moran and Hoy's (2000) five aspects of relational trust: benevolence, reliability, competence, honesty, and openness. The interview and focus group data also yielded many comments in support of the proposition that Dr. Blake is well-trusted by teachers.

In particular, his teachers commented repeatedly on their perception that he is a benevolent leader. Similar to the transformational leadership practice of encouraging the heart, benevolence is centered on the genuine care and recognition that a leader bestows upon his followers. When asked how he shows teachers that he cares about them as individuals, Dr. Blake gave a telling response: "I think you *have* to care about them as

individuals before you can *show* that you care about them.” He went on to say that taking an interest in teachers’ lives is crucial, a point reiterated by Mrs. Ross: “...he’s very good at knowing you, and trying to know what you’re interested in, or where you’re from... and just sort of being caring with you” (Teacher interview, September 22, 2011). This was one of many teacher comments that expressed perceptions of Dr. Blake as a benevolent leader; there were no comments to the contrary in any of the interview and focus group data.

Organizational Routines:  
Professional Learning Community

Qualitative data was pattern-matched as representative of the pilot school as a professional learning community if it reflected teacher collaboration and relationships in the interest of continually improving teaching and learning, hallmarks of professional learning communities described by Roy (2006), in partnership with Hord. Data from the interviews and focus group in regard to teacher collaboration was mixed, while data about teacher relationships indicated a strong sense of community within the pilot school.

The teacher interviews and focus group data presented teacher collaboration as an important and desirable practice within the school, but some lamented the lack of time to do so, or the misuse of time nominally allotted for collaboration. Some data also indicated that collaboration often occurs informally and upon the initiative of individual teachers; those who want to collaborate do so, on their own time if necessary. It was also commented that collaboration can take different forms, such as electronically via email, and sometimes deals with non-academic but nonetheless vital issues, such as managing student behavior in the hallway between classes.

Interview and focus group data on teacher relationships within the pilot school were brief, but powerful. An interesting point that was mentioned more than once was the fact that a high proportion of the school's current teachers are also alumni of the school, so many current faculty relationships date back literally to childhood. The other key factor in regard to teacher relationships, which emerged from the data, was the frequency and importance of social activities for the school's faculty and staff, such as faculty picnics and Christmas parties. This was noteworthy, as these types of social gatherings are often a key part of the culture in schools that function as professional learning communities (Roy, 2006).

**Organizational Routines:**  
Collective Teacher Efficacy

Qualitative data was pattern-matched as representative of collective teacher efficacy if it reflected Goddard, Hoy, and Hoy's (2000) description of collective teacher efficacy as stemming from "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (p. 480). This definition of collective teacher efficacy was also used by Tschannen-Moran and Barr (2004) in their development of the Collective Teacher Belief Scale, or CTBS.

As stated, the CTBS was used in this pilot study to collect quantitative data on the collective teacher efficacy of the faculty at the pilot school. The CTBS uses a nine-point Likert scale to rate responses, with a score of "1" representing the lowest possible collective teacher efficacy score for each of the 12 items, and a score of "9" representing the highest possible score. The pilot school's results from the CTBS ranged from a low item-mean score of 5.68 to a high item-mean score of 7.86. Overall, the pilot school's



mean level of collective teacher efficacy, taken as an average of all 12 items' mean scores, was 6.86 out of a possible 9.00. Of 122 teachers at the pilot school, 63 completed the CTBS, a return rate of 52 percent.

Interview questions on collective teacher efficacy inquired about the perceived ability of teachers at the school to produce meaningful student learning, help students master complex content, help students learn to think critically, manage student behavior, and help students believe they can succeed in school. The focus group was asked to describe the ability of teachers at the school to make a positive difference, either socially, academically, or both, in the lives of students, above and beyond outside influences such as home and community.

Interview data in regard to teachers' ability to produce meaningful student learning, help students master complex content, and learn critical thinking skills generally indicated beliefs that teachers at the pilot school do well in these areas, or at least, are capable of doing well. However, concerns were expressed about external and district-level assessment measures, centering on the perception that these measures focused mainly on rote knowledge, thus putting pressure on teachers to teach rote learning at the expense of complex content and critical thinking. There appeared to be a good deal of overlap in the data collected from these questions, leading the researcher to consider combining them for the final study, rather than asking them as three separate questions. The interview data on teachers' ability to manage student behaviors was brief, but consistent: all three interviewees stated that this ability varies among individual teachers, but is good at the pilot school overall.

The most data on collective teacher efficacy, in both the interviews and the focus group, was generated in regard to teachers' ability to get students to believe they can succeed in school. Interviewees and focus group members consistently cited the availability of teachers and programs, and the practice of working with parents, as reasons for the school's perceived strength in this area. As one focus group participant noted, the number of interventions in which the school engaged with struggling students meant that, in order for a student to fail at the pilot school, "They have to fail about three times, really" (Focus Group interview, September 28, 2011).

### Summary

Prior to fully summarizing the data collected in the pilot study, it is appropriate to review the purpose of the pilot. The primary goals of the pilot study are to improve the researchers' skills in data collection and analysis, and to identify areas for improvement in the research methods themselves. This, in turn, enables the researcher to make improvements that will bolster the credibility of the final dissertation study (Yin, 2009). The final section of this report will be dedicated to adjustments to be made for the final, multiple-case dissertation study, based on what was learned from the pilot study.

During data analysis, it is important that the researcher deal with craft rivals and real-life rival explanations before making any conclusions. The main craft rival for this study was the possibility of researcher bias. This craft rival was dealt with by the use of various, rigorous research methods: multiple interviews, all of which were recorded and transcribed verbatim; the focus group discussion, which was also recorded and

transcribed verbatim; and use of the CTBS to provide quantitative data to consider along with qualitative data collected for collective teacher efficacy.

The main real-life rival explanation to the final dissertation study will be the possibility that other factors than principal leadership behaviors and organizational routines make a greater contribution to the high achievement of the distinguished Title I schools that will be studied. Because the pilot school is not considered to have high student achievement, as measured by standardized tests, the pilot study is naturally limited in that it cannot analyze the contributions of principal leadership and organizational routines on the pilot school's high achievement; the pilot school is not defined as having high achievement to have been contributed to by any factors.

It is anticipated, however, that real-life rivals to principal leadership and organizational routines in the final study may include teacher experience or the use of "turnaround" strategies, in which low-performing schools are required to make government-mandated changes, such as replacing teachers and the principal, in order to improve their performance (Fullan, 2006). Therefore, these factors will be considered during analysis of the pilot study's data as well. After summary analysis of the data collected in regard to principal leadership behaviors and organizational routines at the pilot school, a summary analysis of possible evidence for these rival explanations will also be made.

Principal Leadership:  
Transformational Leadership

The interview and focus group data regarding the principal's leadership behaviors was interpreted through the lens of transformational leadership, according to Kouzes and

Posner's (2007) five practices of exemplary leadership: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. The data indicated that the principal, Dr. Blake, practices transformational leadership, although his perceived transformational leadership behaviors were clearly stronger in some practices than in others.

Relatively little data was yielded from the first interview question, which was intended to yield data regarding Dr. Blake's practices of modeling the way via schoolwide goals. Dr. Blake himself, as stated previously, acknowledged that his own values are not reflected in the schoolwide goals as much as they once were, a fact that he attributed to the increased influence of an external source of the school's goals: recommendations by the Montana Office of Public Instruction. These recommendations result from the fact that the pilot school has been categorized as not making Adequate Yearly Progress, or AYP, by the office. Therefore, the office annually sends a visitation team to the pilot school, and the visitation team subsequently makes recommendations that the school must follow as it sets its goals.

Some insight into perceptions of Dr. Blake's modeling the way for the school was gained from the teacher interviews. Mr. Lang commented that Dr. Blake's values showed through his "frankness and candidness" at faculty meetings. Mrs. Ross, who serves on the pilot school's school improvement team, or SIP, stated that during the SIP team's goal-setting process, it is obvious that Dr. Blake "feels very strongly about kids' succeeding."

The theme that was detected from this data indicated that Dr. Blake values honesty and student success, but does not regularly and explicitly state these values to the

faculty. Perceptions of his beliefs and practices that model the way appear to come more often from his general demeanor, and from his interactions with individual teachers or small work groups, than from explicit statements or actions toward the faculty as a whole.

Dr. Blake's work in inspiring a shared vision was evident from interview data about his practices in engaging teachers and gathering their input in decision-making. His statement that "I typically... visit with people, either one-on-one or in small groups, about the importance of the vision, and where we want it to lead us" was corroborated by interview data from Mr. Lang and Mrs. Ross, although they qualified their remarks by commenting on the limitations of Dr. Blake's ability to gather teacher input.

Mrs. Ross noted that "...he does a nice job bringing people along... on SIP, it's not like he just comes up with the goals and says, 'this is our plan.' We talk about it quite a bit, talk about what we believe to be important things that we are looking at as far as challenges, and then, along with him, we work toward developing some goals." Mr. Lang said, "He's always asking for volunteers through email. That probably doesn't work as good because of the diffusion of responsibility," while Mrs. Ross stated, "As far as others' input, I think that's often asked for, but people don't give it; they don't find the time...."

The prevailing theme of the interview data indicated that Dr. Blake certainly enlists others to inspire a shared vision. However, his efforts are not universally successful, apparently due to the reluctance of some faculty to participate by providing their input.

Teachers had strong feelings about Dr. Blake's practices in regard to challenging the process. A common belief was that he was willing to tailor mandated policies to fit the needs and culture of the pilot school, even when doing so was not looked upon favorably by the district's central administration. As Dr. Blake said in his interview:

Ultimately, the responsibility that I have... is to the students... and the teachers... and to the facility. Sometimes I've gotten into trouble for this, very honestly, because I've been told that my responsibilities and loyalties need to lie with the central administration.... I'd hope that we'd all have the same goal, but my ultimate first responsibility is to the school and the students it serves, and my secondary responsibility is to the district, and that's not politically very popular, but it's what I believe, and I hope to project that to the people that are here.

Teachers seemed to suspect, or know full well, that Dr. Blake's willingness to stand up to the district administration was not always easy, and expressed their appreciation for it.

One issue that reflected this perception was the school's "Connections" program, a student advisory program, mandated by the district for both of its high schools, to build student-teacher relationships and perform community service. While the district's other high school followed a scripted, schoolwide Connections program, Dr. Blake allowed his teachers to conduct an "interest-based" program. This allowed students to choose a Connections group based on the group's topic; each teacher offered a topic, or theme, of his or her own choosing during Connections time. This decision by Dr. Blake was made in response to teachers' request for more autonomy in the Connections program, and in fact,

the idea of making Connections interest-based originated with one teacher, who suggested it at a faculty inservice meeting.

One focus group member stated “A lot of times, he’s kind of the human shield for us, because there’s a lot of stuff that he’s mandated that he will do, that... doesn’t necessarily fit in well with this building, so... he’s found some creative ways sometimes to do that, like, for instance, with Connections.” Mr. Lang said, “I think he is willing to personalize for (the pilot school). I don’t know what degree of heat or struggle... that makes for him... I know that last year, he was having to collect evidence that, even though we did Connections our own way, we were still meeting our benchmarks” Another focus group participant stated, “He stands up for you, he really does. He goes to bat for a lot of things, policies that he may not agree with, so he tries to... make them the best you can.”

The theme of all the data collected regarding Dr. Blake’s behaviors in regard to challenging the process indicated that teachers perceive him as a supportive leader. This supportiveness extends to challenging the status quo and a willingness to face criticism from above as the price of doing what works best for the pilot school.

Enabling others to act was another leadership practice that teachers perceived as a strong point for Dr. Blake. Among the interviewees and the focus group, there seemed to exist a universal perception that Dr. Blake empowers teachers by giving them a high level of autonomy. As Dr. Blake put it, “...when you delegate something to a person, you delegate not only the responsibility but the ability to do the job, and then you don’t micromanage it.” Others reiterated this in their own statements. Mr. Lang: “He’s not a micromanager, which is nice.” Mrs. Ross: “He doesn’t like to micromanage.” Jake (a

focus group participant): “(Don) leaves us alone a lot... gives you some latitude to do some experimenting on your own... if he were more of a micromanager, I don’t think you’d be allowed some of those latitudes.” Another focus group participant agreed, saying “You know, we’re left alone; that almost becomes its own form of empowerment... he’s allowing us to self-empower.”

The theme that emerged from these statements was a clear perception that Dr. Blake does enable others to act. Besides the repeated references to his preference to not micromanage teachers, it was also pointed out that Dr. Blake relies upon the skills of his faculty for problem-solving. Mr. Lang stated, “...a phrase he uses frequently is, ‘if we can figure this out in-house,’ you know, use professional abilities in-house.”

In regard to the practice of encouraging the heart, the interview data about Dr. Blake was brief. Dr. Blake stated his belief that he could do a better job of formally recognizing teachers in front of their peers, adding that he often uses one-to-one recognition by way of personally thanking teachers “for a job well done.... That’s very valuable, but one of the problems with it is it doesn’t provide any peer acknowledgement.” Mr. Lang concurred, although he stated a preference for individual, informal recognition: “...the accolades are usually informal, which is usually all that people seek, and I think if you be too formal, sometimes you run the risk of those people that don’t seek gratification never getting recognized, and that would be a problem.” So, while little data was generated about Dr. Blake’s practices for encouraging the heart, the theme based on the available data appeared to be that Dr. Blake consistently thanks or praises teachers individually, but rarely conducts any formal ceremonies or celebrations of recognition.



### Principal Leadership: Relational Trust

The interview and focus group data on the teachers' relational trust in Dr. Blake was analyzed according to Tschannen-Moran and Hoy's five aspects of trust: benevolence, reliability, competence, honesty, and openness. Many statements were made in support of the proposition that Dr. Blake is well-trusted by his teachers.

In particular, his teachers commented repeatedly on their perception that he is a benevolent leader. Similar to the transformational leadership practice of encouraging the heart, benevolence is centered on the genuine care and recognition that a leader bestows upon his followers. When asked how he shows teachers that he cares about them as individuals, Dr. Blake gave a telling response: "I think you *have* to care about them as individuals before you can *show* that you care about them." He went on to say that taking an interest in teachers' lives is crucial, a point reiterated by Mrs. Ross: "...he's very good at knowing you, and trying to know what you're interested in, or where you're from... and just sort of being caring with you." Bethany, a focus group participant, said "He greets everyone. I've never seen him walk down the hall and not greet everyone by their name."

Some members of the focus group appeared emotionally touched by Dr. Blake's benevolence. Clark, a focus group participant, said: "He's done things that are above and beyond what a principal does, to more of what a humanitarian does." Another focus group participant, Bill, related the following about a former teacher at the school who had recently been critically injured in an accident:

I think the worse the crisis, the better (Don) seems to be...  
when Bruce was hurt, his wife called (Don). That was the

first person she called with the school system, and Bruce doesn't work here anymore. And (Don) was immediately there at the hospital.... In those critical moments, he's *really* good.

Interview data about Dr. Blake's competence was brief, but positive. The limited data available centered upon the theme of Dr. Blake's experience assuring interviewees of his competence. Mr. Lang expressed an appreciation for Dr. Blake's background knowledge of issues, which Mrs. Ross reiterated, saying "...he has a good handle, as far as history goes, because he's been doing it for a long time, of different individuals and different programs."

The interview and focus group data on Dr. Blake's openness revealed a theme of teachers viewing him as a leader who was open to them personally, as well as to different points of view. Mr. Lang said, "I've never felt like I was not able to go straight to him," while Mrs. Ross stated, "He might not necessarily agree, but he's definitely listening to what I have to say." Mark, a focus group participant: "One thing I appreciate about (Don) is, when you need to talk, he's always available, and he'll put down what he's doing" to talk to a teacher. Angela, a focus group participant and also faculty teachers' union representative, stated her belief that Dr. Blake "has an open door policy... when something goes wrong, I have to go talk to him.... And I can actually go and talk to him and not worry about retaliation."

Interview data about Dr. Blake's honesty was also brief, but consistently supportive of the perception that he is viewed as an honest leader. Dr. Blake stressed that, in all his communications, such as those about the former teacher who had been recently injured, "I try to tell them stuff that I know is truthful, and isn't based on supposition or

hope.” This was supported by Mrs. Ross: “I don’t think something has ever been different than what he’s told us,” and by Mr. Lang, who said, “I think he’s transparent... he usually just explains the players and how we came to the junction we’re at.”

Overall, interview data about Dr. Blake’s reliability was brief but positive, albeit with some qualifying remarks. Dr. Blake stated that, to be perceived as reliable, a leader must “Do what you say you’re going to do, and follow up on what you say.” It is noteworthy that the first part of this response echoed, almost verbatim, Kouzes and Posner’s second law of leadership, “Do What You Say You Will Do” (2007, p. 41). This is evidence of the similarities or overlaps that exist between transformational leadership and trustworthy leadership.

Teacher interviewees viewed Dr. Blake as generally reliable, as witnessed by Mrs. Ross’s statement, “I think he’s there when teachers need him,” and Mr. Lang’s observation that Dr. Blake is “pretty visible” within the school. However, both also expressed concerns about consistency; Mr. Lang said that “...sometimes we start a program, follow through doesn’t happen.” Mrs. Ross conjectured that Dr. Blake’s benevolence sometimes compromised his reliability, saying that when a teacher is “obviously not doing their job, sometimes it takes a little longer than some of us would expect to see some kind of disciplinary reaction, but that comes out of him wanting to encourage.” When pressed for details, Mrs. Ross emphasized that only a small number of teachers at the school, perhaps six of the school’s 122-person faculty, fell into the status of non-performance to which she had referred.

Organizational Routines:  
Professional Learning Community

Data from the interviews and focus group was analyzed for evidence of teacher collaboration and teacher relationships, both key traits of a professional learning community. The overall theme in regard to teacher collaboration was mixed, while data about teacher relationships indicated a strong sense of community within the pilot school.

The teacher interviews and focus group data presented teacher collaboration as an important and desirable practice within the school, but some lamented the lack of time to do so, or the misuse of time nominally allotted for collaboration. Dr. Blake stated his preference for using heterogeneous groups in formal teacher collaboration settings, so that teachers from different departments who don't typically collaborate with each other would have the opportunity to do so.

Mr. Lang noted that teachers at the school were encouraged to observe other teachers at work in order to gain insights that might improve their teaching, and that the school would arrange for a substitute teacher to facilitate such visitations. However, he acknowledged that this opportunity was not often utilized. He also lamented a lack of formal time in the schedule for meeting with teachers in his department, which limited opportunities for collaboration: "Department time kind of becomes housekeeping, you know, you're seeing your department once a month."

While the school has formal Professional Learning Community Time, or PLCT, and Small Learning Community, or SLC, meeting times for ninth grade teachers, the focus group had mixed feelings about these. Bethany stated that "we did a ton of collaborating" during PLCT, but Bill expressed frustration that PLCT was "dictated from

on high... apparently, we can't be trusted... to get together, work intelligently, professionally, on our own," a perception, he clarified, that he associated with the school district's central administration rather than with the principal or other school-level administrators. In regard to SLC meeting time, Angela and another focus group participant, Ruby, both expressed that SLC time was too short, often resulting in discussions that focused on dealing with student behavior issues, rather than curriculum and instruction.

Some data also indicated that collaboration often occurs informally within departments, and upon the initiative of individual teachers; those who want to collaborate do so, on their own time if necessary. It was also commented that collaboration can take different forms, such as electronically via email, and sometimes deals with non-academic but nonetheless vital issues, such as managing student behavior in the hallway between classes.

Interview and focus group data on teacher relationships within the pilot school were brief, but powerful. An interesting point that was mentioned more than once was the fact that a high proportion of the school's current teachers are also alumni of the school, so many current faculty relationships date back literally to childhood. Both Dr. Blake and Mr. Lang noted the dynamic of so many school alumni being on the faculty together, with Mr. Lang noting that "...what, 80 percent of them are alumni, or whatever." The other key factor in regard to teacher relationships that emerged from the data was the frequency and importance of social activities for the school's faculty and staff, such as faculty picnics and Christmas parties. This was noteworthy, as these types of social

gatherings are often a key part of the culture in schools that function as professional learning communities (Roy, 2006).

Organizational Routines:  
Collective Teacher Efficacy

Qualitative data was pattern-matched as representative of collective teacher efficacy if it reflected Goddard, Hoy, and Hoy's (2000) description of collective teacher efficacy as stemming from "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (p. 480). This definition of collective teacher efficacy was also used by Tschannen-Moran and Barr (2004) in their development of the Collective Teacher Belief Scale, or CTBS.

The CTBS was used in this pilot study to collect quantitative data on the collective teacher efficacy of the faculty at the pilot school. The CTBS uses a nine-point Likert scale to rate responses, with a score of "1" representing the lowest possible collective teacher efficacy score for each of the 12 items, and a score of "9" representing the highest possible score. The pilot school's results from the CTBS ranged from a low item-mean score of 5.68 to a high item-mean score of 7.86. Overall, the pilot school's mean level of collective teacher efficacy, taken as an average of all 12 items' mean scores, was 6.86 out of a possible 9.00. Of 122 teachers at the pilot school, 63 completed the CTBS, a return rate of 52 percent. This falls short of the return number of 93, or 76 percent, needed to achieve a 95 percent confidence level (Creative Research Systems, 2011); however, for purposes of the qualitative pilot study, the data yielded by the CTBS is still worth acknowledging. Also, although the CTBS has not been norm-referenced, which would allow for categorization of a school's collective teacher efficacy scores to

be categorically stated as being higher or lower than a corresponding percentage of other schools, an overall collective teacher efficacy score of 6.86 out of 9.00 possible appears to indicate a fairly high level of collective teacher efficacy at the pilot school.

Interview questions on collective teacher efficacy inquired about the perceived ability of teachers at the school to produce meaningful student learning, help students master complex content, help students learn to think critically, manage student behavior, and help students believe they can succeed in school. The focus group was asked to describe the ability of teachers at the school to make a positive difference, either socially, academically, or both, in the lives of students, above and beyond outside influences such as home and community.

Interview data in regard to teachers' ability to produce meaningful student learning, help students master complex content, and learn critical thinking skills generally indicated beliefs that teachers at the pilot school do well in these areas, or at least, are capable of doing well. However, concerns were expressed about external and district-level assessment measures, centering on the perception that these measures focused mainly on rote knowledge, thus putting pressure on teachers to teach rote learning at the expense of complex content and critical thinking. Dr. Blake expressed this view by saying, "I don't think you create a fat calf by weighing him every day.... One of the problems is I think we test, a lot of times, because of external pressure, not because of a need to evaluate, and we don't always test what we should. We test what's easy to score on an LXR machine."

There appeared to be a good deal of overlap in the data collected from these questions, leading the researcher to consider combining them for the final study, rather than asking them as three separate questions. The interview data on teachers' ability to manage student behaviors was brief, but consistent: all three interviewees stated that this ability varies among individual teachers, but is good at the pilot school overall. Mrs. Ross noted that she judges the school's overall effectiveness in managing student behaviors positively, based upon what she sees in her classes: "I think a lot of what you can tell is, your kids' behavior in your class, the things you have to fix that someone else has let go. That's a pretty good situation."

The most data on collective teacher efficacy, in both the interviews and the focus group, was generated in regard to teachers' ability to get students to believe they can succeed in school. Interviewees and focus group members consistently cited the availability of teachers and programs, and the practice of working with parents, as reasons for the school's perceived strength in this area.

"I've never seen a teacher not have time for someone... a kid comes up, they (the teachers) stop what they're doing and take care of whatever the kid wanted.... People here do put kids first," said John, a participant in the focus group. Angela said, "...for most of the teachers I know... this isn't just a job, it's where their attachment is. So, it goes back to that old saying, 'what do you teach? You teach kids.'" John noted the long hours that teachers were available for students: "I come up here at seven o'clock every morning... Bethany and Phil are here till all damn hours at night... you know, if a kid wants help, it's there, available for them." Ruby commented: "...from the SLC



perspective, we have three of us who are wrapping ourselves around these kids... doing everything we possibly can to prevent these kids from failing,” and supported this statement by pointing out that lesson plans are emailed home to all parents who have an email address, phone calls are made to all parents of students with a grade lower than 65% in any ninth-grade class, and that students who must stay after school for help have even been given bus tickets so they could get a ride home afterward. As one focus group participant noted, the number of interventions in which the school engaged with struggling students meant that, in order for a student to fail at the pilot school, “They have to fail about three times, really” (Focus Group interview, September 28, 2011).

### Rival Explanations

The main real-life rivals to the contributions made by principal leadership behaviors and organizational routines at the pilot school are teacher experience or the use of “turnaround” strategies, in which low-performing schools are required to make government-mandated changes, such as replacing teachers and the principal, in order to improve their performance (Fullan, 2006). Let us examine each of these in turn, based on the data produced by the study.

The first rival, teacher experience, does not appear to be a plausible candidate for having made greater contributions than principal behaviors or organizational routines. Based on the teachers who participated in the interviews and focus groups, there was a wide range of teacher ages and experience levels among the pilot school’s faculty. Of the ten teachers included in the qualitative data collection, two were age 25 to 29; two were age 30 to 34; three were age 35 to 39; one was age 40 to 44; one was age 55 to 59; and

one was age 60 to 64. Six had five to nine years of experience; one had 10 to 14 years; two had 15 to 19 years; and one had 35 to 39 years. The respective figures for age and experience do not reveal any clear trend indicating a strong contribution to the school's performance, if it were a school defined as a distinguished Title I school as the schools in the final dissertation study will be.

There also appears to be little support in the data for the other rival explanation, that positive outcomes in the pilot school might be the result of turnaround strategies. Although it was noted that the school has failed to make AYP, and thus formulates its goals based on recommendations from the Montana Office of Public Instruction, no other evidence of external interventions for school improvement were observed. The principal has not been removed, teachers have not been dismissed or reassigned, and there was no mention of mandates to restructure the school.

### Conclusion

The data collected in this pilot study, overall, support the propositions that the principal practices transformational leadership and is perceived by teachers as a trustworthy leader. It also indicates that the school functions as a professional learning community that has strong relationships between teachers, but has had mixed results in conducting effective teacher collaboration. Finally, the collective teacher efficacy of the pilot school appears fairly strong, particularly in teachers' beliefs that the school can help students believe in their own ability to succeed.

The main purpose of the pilot study, however, was not so much to reach conclusions about these factors at the pilot school, but to develop the researcher's skills

and to strengthen the overall design of the subsequent final dissertation study. To do so, attention must be paid to factors that make up the overall trustworthiness of a qualitative study: credibility, transferability, dependability, and confirmability (Key, 1997).

### Credibility

Credibility is important for studies, such as the upcoming dissertation study, that seek to explain how specific factors have contributed to a specific outcome. Maxwell (2005) asserted that the use of multiple sources and methods of data collection, known as triangulation, greatly improves credibility. It is thus recommended that a qualitative study use various types of data including interviews, focus groups, document analysis, and questionnaires. In the pilot study, interviews, a focus group, and a questionnaire were used. It has also been recommended that supporting quantitative evidence be used to buttress credibility (Maxwell, 2005; Weiss, 1994). The pilot study used quantitative data from the CTBS to further support the credibility of what was generally a qualitative study. However, the response rate to the CTBS was smaller than that required to achieve a 95% confidence level; the CTBS results should therefore not be taken at face value for the pilot study.

Key (1997) also recommended triangulation to enhance a study's credibility; the use of different methods of data collection in the pilot study was consistent with this advice, but further methods will be used in the final study, which will further increase its credibility. Key also recommended respondent validation, often known as member checking. This entails a researcher reporting his findings back to individual respondents in the study, after data collection has taken place, but before the final report has been

written. Member checking thereby allows respondents to confirm or correct the researcher's initial interpretations of the data and helps ensure that the study's findings are accurate. This was not done in the pilot study, but will be done in the final dissertation study.

Data analysis techniques, such as pattern matching, and the use of rival explanations when interpreting the study's findings, also contribute to a study's credibility. Both were used in the pilot study.

### Transferability

Transferability of qualitative findings refers to whether those findings may be generalized to a larger population, beyond the cases studied. Transferability of qualitative findings depends on factors such as the denseness of the researcher's descriptions and on the similarity of the sample group to the demographics of the larger population. As this pilot study dealt with a Title I school in Montana, it is possible that its findings may be transferable to other Title I schools in the state. However, this possibility is severely limited by the fact that the pilot was a single-case study. The pilot school may be an anomaly, rather than representative of Title I schools statewide.

### Dependability

Dependability of a qualitative study is drawn from triangulation and a "dense description of research methods" (Key, 1997). A highly dependable study is one that can be repeated by another researcher, who uses the first researcher's design to achieve the same results. For this to be possible, it is necessary that the researcher carefully document

his work and faithfully follow his stated research design. Care was taken to do both in the conduct of this pilot study.

### Confirmability

A case study's confirmability refers to whether it actually measures the phenomena or behaviors it was intended to measure. Because case study research takes place in contemporary settings that cannot be controlled by the researcher, it is important for the researcher to adhere to the study's research questions and propositions. This faithfulness to the study's research design will help the researcher to avoid collecting and analyzing information that is not relevant to the study.

Confirmability can be enhanced by data triangulation. By using different and dissimilar sources of data, the researcher can see evidence of confirmability if these different data sources converge to produce common findings. In this pilot study, for example, both interviews and focus groups were used in data collection. These data sources are somewhat similar, which limits the confirmability of the pilot study. If data from dissimilar sources had been obtained, and still indicated similar evidence about the contributions of principal leadership behaviors and organizational routines, the confirmability of the pilot study would have been supported. This shortcoming will be avoided in the final dissertation study, as it has always been planned to use a wider variety of data sources. The scaled-down nature and short time span for completion of the pilot study necessitated the use of a more limited number of data sources. Interviews and a focus group were utilized in the pilot study to help improve the interviewing skills of the researcher.

### Adjustments to the Embedded Multiple-Case Study

During the pilot study, some questions from the interview protocol appeared to be either too similar to other questions, resulting in redundant answers, or simply drew insufficient responses from the interviewees to provide meaningful data for the researcher. Specifically, it appears that two questions from the interview protocol section on organizational routines should be eliminated, and that two questions from the section on collective teacher efficacy should be combined.

The organizational routines interview question, “What practices for teacher collaboration are designed into your school’s schedule?” received similar responses to the question, “How do teachers at your school work together to continually improve teaching and learning?” However, the latter question produced more robust data, leading the researcher to conclude that the former question can be eliminated. Also, the organizational routines interview question, “How would you describe the productivity of most time set aside for teacher collaboration in your school?” produced relatively little data, as teachers indicated that they could only speak to their personal collaborations, but not to that of the school as a whole. The researcher therefore considers that the overall interview protocol would be stronger with the elimination of this question.

The collective teacher efficacy interview questions, “How would you describe the ability of teachers in your school to help students master complex content?” and “How would you describe the ability of teachers in your school to help students learn to think critically?” generated similar responses from the interviewees. One interviewee prefaced his answer to the question on critical thinking by saying, “I’ll try not to give you the same

answer I gave you twice already.” This indicates that either one of the two questions can be safely eliminated, or that the two could be combined. Not wanting to eliminate a question unnecessarily, the researcher has decided to combine the two. The new interview question that will take their place will be: “How would you describe the ability of teachers in your school to help students learn to think critically and master complex content?”

This pilot study has served its purpose in allowing the researcher to gain experience in qualitative research methods and techniques, and in indicating the need to adjust the interview protocol to be used in the final dissertation study.