STUDENT ENGAGEMENT, ACADEMIC OPTIMISM, AND LEADERSHIP:

A CASE STUDY OF PERFORMANCE-BASED SCHOOLS

by

Michael Alan Ruyle

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ABSTRACT

The performance-based model of education has been proven successful in a number of schools across the United States and the world. The majority of the students and teachers who are currently operating in innovative performance-based programs have been exposed to the traditional model of education for the bulk of their educational lives, and are in a unique position to judge the efficacy of the system. In an earlier pilot study, there was a significant difference in the perspective of the students and teachers in favor of the performance-based system, which could eventually lead to the adoption of the model on a larger scale in future years.

The purpose of this embedded, multiple-case study was to analyze how students and teachers operating in two educational programs that had implemented the performance-based model perceived their own levels of engagement and optimism, and how the teachers judged the leadership that helped put the system in place. The case is bound by the system of performance-based education, bound by place in terms of one school in California and one in Montana, and bound by time in that the analysis of the participant data is from the early months of 2014. This research was framed by the following central question: How do teachers and students who operate in a performance-based educational system describe academic optimism, student engagement, and transformational leadership behaviors of their principals?

Three primary sources of data were used: individual interviews, student and teacher surveys, and achievement documentation. Analysis and triangulation of the data identified key issues and painted a rich picture of academic success in this innovative model.

CHAPTER 1

INTRODUCTION

Background and Definition

Today's young people face a future that is more uncertain than at any other time in recent memory. "There are forces at work now for which there are no precedents" (Robinson, 2001, p.5). Much of our current student population will hold jobs in coming years that have yet to be created, and the skills necessary to perform in those new roles are constantly evolving. Additionally, the advent of modern technology has increased the speed with which any person can gain access to information and knowledge. "New technologies are revolutionizing the nature of work everywhere… What is certain is that in the next 50 to 100 years, our children will need to confront challenges that are unique in human history" (Robinson, 2013, p.6).

As the world continues to develop at such breakneck speed, schools face the pressure to develop just as quickly in order to prepare students for this uncertain future. "The cultural and economic circumstances in which we and our children have to make our way are utterly different from those of the past. We cannot meet the challenges of the 21st century with the educational ideologies of the nineteenth" (Robinson, 2001, p.283). This monumental change in the nature of schooling will require a fundamental paradigm shift and demand that educational leaders examine and implement paradigms that transform the expectations and roles of principals, teachers, students, and parents.

The performance-based system of education is designed to facilitate students toward the mastery of real-world skills, regardless of the time constraints that are common in the more traditional school model. "Performance-based" is a common term and will be used throughout this study. This approach is also referred to in the literature as personal mastery, mastery learning, competency-based, and the standards-based model. Educational programs based on performance-based learning principles shift the focus of learning from that of a teacher-centered, time-based system to a model designed around meeting the individual needs of every learner. Student focus initially centers on the acquisition and understanding of basic skills and concepts. Once mastery on those standards is achieved, authentic learning opportunities are created in which students are required to apply their current knowledge and skills and work toward mastery of a new set of objectives (Priest, Rudenstine, Weisstein, & Gerwin, 2012). Performance-based systems operate today at every level of education and in different nations throughout the world (Guskey, 1997, 2001). Recent trends in education show that performance-based paradigms are being implemented in a number of states across this county including New Hampshire (Bramante, 2010; Khadaroo, 2013), Montana (Schontzler, 2012), Iowa (Wiser, 2013), Alaska (DeLorenzo, Battino, Schreiber, & Gaddy-Carrio, 2009), New York and Rhode Island (Littky, 2004). Additional school districts and states are likely to continue implementing performance-based paradigms as continued research demonstrates an increase in student engagement and achievement.

While there is no single model for a performance-based educational system, two elements are clearly at the center of all successful systems: "(1) a clear, measurable

definition of mastery, along with procedures and tools for tracking that mastery and (2) the flexible use of time" (Priest et al., 2012, p. IV). The Met Center in Providence, Rhode Island has met with tremendous success as a performance-based school and has created a system known as the Big Picture model (Littky, 2004). Additionally, the Chugach School District in Alaska implemented a performance-based approach to schooling in the early 1980s. As a result of that shift, this impoverished, low performing, rural district produced skyrocketing achievement gains and was recognized for innovation in education winning the prestigious Baldridge Award (DeLorenzo, et al., 2009). Leaders in Chugach eventually formed the Re-inventing Schools Coalition in order to help develop the system in other schools and districts, which eventually became known as the RISC model. This particular system, which epitomizes an actual transformation of what schooling looks like, has the potential to help schools realize unprecedented levels of success for all students. In a traditional education system, time is the constant and learning is the variable. Students progress en masse through grade levels by earning credits through seat time and reaching minimum levels of performance, as low as a D-. In a RISC system, learning is the constant and time is the variable. The model is designed to ensure that students master required content, not simply get by each year with very little academic knowledge and low-level skills (DeLorenzo, et al., 2009).

The traditional educational system is essentially a passive learning environment in which learners often take little ownership of their own learning. Students are grouped into cohorts based on their chronological age, respond to teacher direction, and submit assignments required of their coursework in order to earn enough credits to graduate.

Student engagement, however, is a focused area of study that has increased over the past two decades due, largely, to the realization that there is a direct correlation between engaged students and academic success. Furthermore, there is a correspondingly strong correlation between disengagement and dropping out of school. "Academic engagement has been shown to decline as students progress through the upper elementary grades and middle school, reaching its lowest levels in high school" (Marks 2000; National Research Council and Institute of Medicine 2004 as cited in Fredericks, et al., 2011). This decline in engagement and achievement can be even more dramatic in low-performing, high-poverty schools (Yazzie-Mintz 2007). Thus, it is clear that optimal student engagement, learning and achievement are not effectively addressed in systems that simply maintain the status quo of traditional schooling (Fredricks, J., McCloskey, W., Meli, J., Mordica, J., Montrosse, B., & Mooney, K. 2011).

In a recent pilot study I completed, students participating in a performance-based program based on the RISC model expressed the strong opinion that they perceived themselves to be more engaged in their own academic progress and they also believed that they were achieving at a higher academic level than they had accomplished under the more traditional, time-based model (Ruyle, 2013). Student engagement occurs when students make a psychological investment in learning. They try hard to learn what school offers. They take pride not simply in earning the formal grades, but in understanding the material and incorporating or internalizing it in their lives. A definition of student engagement includes behavioral, emotional, and cognitive components as well as feelings of belonging, enjoyment, and attachment (Fredricks, et al 2011). Additionally,

engagement can be further defined by the behaviors that spring forth from the energy and drive of motivation, playing a large role in terms of student interest, their enjoyment of academics, and their ultimate level of academic achievement (Martin, 2007, 2009, 2013, Pintrich, 2003, Schunk, 2008, & Schenck, 2011). The term is also used to describe meaningful student involvement throughout the learning environment, including student ownership over their learning.

Enhanced engagement levels in students can lead directly to increased motivational levels for the educators who teach them. "The good news for educators is that a 21st century, anytime, anyplace, anyhow, any pace, student-centered, move-on-when-ready model will rekindle the enthusiasm that inspired most educators to enter the profession in the first place" (Bramante & Colby, p. 62). "Motivation and instruction are linked: good instruction can raise motivation for learning and motivated learners seek effective instructional practices" (Mayer, p.233). Understanding the perceptions of the teaching staff and their corresponding impact on student achievement can have powerful impact for educational leaders who are implementing a system that supports a performance-based paradigm. Additional research on the concept of academic optimism includes the traits of academic emphasis, collective efficacy, and faculty trust in their students, parents, and administration, and recent research has indicated that this relatively new construct imparts a positive influence on student achievement in spite of negative socio-economic conditions in the student population. Academic emphasis, collective efficacy, and faculty trust "are assessed as emergent organizational attributes in

aggregated individual perceptions of the *group*, as opposed to the *individual"* (Hoy,

Tarter, & Woolfolk, 2006a, p. 430).

Furthermore, research clearly indicates that transformational leadership can be

utilized to effectively facilitate the transition to the performance-based model

(DeLorenzo et al., 2009; Littky, 2004; Priest et al., 2012). Given the deep change that this

shift will require, "school leaders who take on the challenge of the personal mastery

model must be driven by a core commitment to children – in other words, a deep sense of

moral purpose" (DeLorenzo, et al, 2009, p.19). An effective educational model designed

around performance-based principles requires a paradigm shift in which the educational

leader must combine the best of transformational leadership theory with the moral

authority suggested by Sergiovanni in addition to earning the faculty trust that results

from Greenleaf's servant leadership. It takes moral courage to examine the principles that

have been foundational to our institutions, and then work to change those principles in

order help the institutions adapt to the changes in the future world. But "social progress

may require that someone push the system to its limits" (Heifitz, p.21).

The findings of a number of the aforementioned researchers in the areas of

student engagement, academic optimism of teachers, and transformational leadership

behaviors of school administrators represent a crucial coalition in the movement for

substantive educational reform in the United States. The evidence suggests that it could

be valuable, and even critical, for district administrators to lead a dramatic and

fundamental paradigm shift away from schools simply teaching curriculum to creating a

culture of collective efficacy in which all school staff work collaboratively in order to

become professional learning communities that focus solely on improved student engagement and learning. Transformational leadership strategies employed by principals during the implementation and the ongoing evolution of an initiative such as the performance-based model increases the likelihood of that initiative becoming the norm in the culture of a school.

Problem Statement

The impact of student engagement on subsequent academic success is clear (Marks 2000; National Research Council and Institute of Medicine 2004 as cited in Fredericks, et al., 2011, Yazzie-Mintz 2007, Fredricks, J., McCloskey, W., Meli, J., Mordica, J., Montrosse, B., & Mooney, K. 2011). The academic optimism of teachers who foster this engagement is also profound (Hoy, Tarter, & Woolfolk, 2006a). School leadership has been identified as the single most important component of successful school reform (Marzano, 2003). And the research is powerful in terms of the effect transformational leaders have on the vitality and growth of their organizations (Hattie, 2009, Bass, 2008, Marzano, 2003,). In spite of this compelling evidence, there are few if any empirical studies available that examine the relationships between student engagement, academic optimism, and transformational leadership in any particular educational program.

Purpose Statement

For a school district to thrive and move forward in the modern world, real and

substantive change is an absolute necessity. Marzano and Waters state, "…the highest performing systems in the world establish and accomplish nonnegotiable goals for instruction in every classroom…They do this by establishing clear instructional priorities at the system level, establishing a systematic and system wide approach to instruction, investing in teacher preparation and professional development, and developing strong instructional leadership" (p. 21). Additionally, in terms of creating stronger teaching staffs, "more research in a variety of school settings is necessary to build a comprehensive theory of academic optimism in schools…we need to discover the kind of interventions that produce higher academic optimism" (Hoy, et al., 2006, p.154). Finally, continued study in the area of student engagement is essential considering the mandates for educational reform that pervade our society. Student engagement in the educational process is a critical component for school leaders to consistently and actively consider in order to realize optimal student learning and achievement.

Therefore, the purpose of this embedded, multiple-case design study was to analyze what the performance-based model looks like in two specific cases, and how people operating in the model perceive the constructs of student engagement, academic optimism, and transformational leadership. The programs being studied comprised a comprehensive high school that practiced the performance-based model and an alternative school program that had implemented the performance-based model within a traditional school setting. Both the performance-based high school and the alternative program had implemented second order change, and this had resulted in a dramatic shift away from the traditional model in terms of grades and general philosophy. A significant

similarity between these two non-traditional programs lied in the ability of students to accelerate through the curriculum based on proficiency to skills and how they were released from time constraints. In the performance-based programs being studied, students earned credit once proficiency to standards had been consistently demonstrated, which may have happened at any time during the course of a year.

To date there is little evidence to support the relationship between the implementation of performance-based schools and the impact of school leaders' transformational leadership behaviors, which together, result in increased academic optimism of staff and student engagement. The model of performance-based education defined these cases. The study was bounded by time and place in that the analysis of the participant data was from Lindsay, California and Bozeman, Montana during the early months of 2014.

The Research Questions

Creswell states, "In a qualitative study...research questions assume two forms: a central question and associated sub questions" (2003, p. 105). Yin, points out that "…'how' and 'why' questions are more explanatory and likely to lead to the use of a case study… This is because such questions deal with operational links needing to be traced over time rather than mere frequencies or incidence' (p.10). The following central and sub questions framed this research:

Central Question: How do teachers and students who operate in a performance-based educational system describe academic optimism, student engagement, and

transformational leadership behaviors of their principals?

Sub questions:

     1. How do teachers in the performance-based model schools describe the transformational leadership behaviors of their principals?

     2. How do high school teachers in the performance-based model schools describe their academic optimism?

     3. How do students describe their own level of academic engagement in the performance-based model of education?

     For the purpose of this study, the Multifactor Leadership Questionnaire (MLQ) operationalized transformational leadership, the Motivation and Engagement Scale (MES) measured student engagement, and the School Academic Optimism Scale (SAOS) measured academic optimism in the Bridger Alternative Program. Lindsay High School used the Motivated Strategies for Learning Questionnaire (MSLQ) to measure student engagement and the Teacher Sense of Efficacy Survey (TSES) to measure teacher efficacy. Additionally, individual interviews with students and staff were conducted in order to drill deeper into their perspectives pertaining to their engagement and optimism. Finally, achievement and demographic data was analyzed to create a more complete picture of the differing cases.

Conceptual Lens

     This research study was viewed through the conceptual lens of the performance-based model of education. The main assumptions inherent in this study was that both

school programs used the same academic format, and that this format was based on performance-based learning principles that shift the focus of learning from that of a traditional, teacher-centered, time-based system to a system designed around meeting the individual needs of every learner. It was assumed that if the performance-based model was fully implemented in a school, student academic engagement would increase and have a subsequent positive impact on achievement and retention. Additionally, more engaged students would lead to more optimistic teachers. If academic optimism is high among the faculty, teachers will feel efficacious, report a high level of trust with their colleagues and administration, and will hold students to high academic standards. If student engagement and academic optimism are indeed high in the performance-based system, it was assumed that certain transformational leadership behaviors would be necessary for administrative teams to practice in order to facilitate the second order change required to successfully implement the model. A final assumption was that a number of school districts and states are likely to continue implementing performance-based paradigms as continued research demonstrates an increase in student engagement and achievement. As a result of this increased implementation, the relationship between student engagement, academic optimism, and transformational leadership behaviors is critical to examine.

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

There are a number of potential limitations within any study, and the early identification of weaknesses is a critical component in research (Creswell, 2003). The

first limitation specific to this research was that the sample used was purposeful and not random, so caution must be used in generalizing results to the larger educational community. Because a case study is, by definition, bounded by space, time, and context, transferability and generalizability are limited. Secondly, the students and teachers who choose to volunteer may have had preconceived notions about the efficacy of the model under which they operated and may not have had an unbiased opinion. Third, the researcher led the performance-based alternative program, and volunteering participants could have been biased in support of the model. A fourth potential limitation centered on the abbreviated time of the study. The time frame in which data was collected was six to eight weeks; therefore, it was not possible to collect longitudinal data on teachers' perceptions of academic optimism, student perception of engagement, and principals' transformational leadership behaviors. A fifth limitation involved interviews of participants regarding such subjective terms as engagement and optimism. Information gleaned could be misleading simply due to the fact that some participants are naturally more skilled in terms of verbal presentation and may be more apt to express strong opinions that could be perceived to compromise results. The sixth limitation involved the results of the study as being subject to the known validity and reliability of the instrument. Information on the reliability and validity of the SAOS, TSES, MES, MSLQ, and MLQ was known; however, the instruments may have limitations in measuring the constructs they were designed to measure. Only subsequent studies within other research populations utilizing different instruments will help further our overall understanding of the concepts measured in this study. Finally, although statistical instruments were used to

measure similar constructs, some of the quantitative tools used in the study were different in the two schools (MLQ, MES, and SAOS in the Bridger Alternative Program, while Lindsay High School utilized the MSLQ and the TSES).

Delimitations

Creswell states that delimitations "narrow the scope of a study (2003, p. 148). This study was delimited to teachers and students with experience operating in two specific schools in 2014. Teachers and students who do not meet these qualifications were excluded from this study.

Definition of Terms

1. Second-Order Change:

   A change process that entails a fundamental or significant break with past and current practices intended to make dramatic differences in the current situation. Second-order changes require new knowledge and skills for successful implementation (Waters et al., 2003).

2. Performance-Based Education:

   This educational paradigm differs from more traditional systems in that it (1) has a clear definition of mastery along with the tools necessary to track student progress toward mastery and (2) provide for the flexible use of time (Priest et al., 2012).

3. RISC:

   The Reinventing Schools Coalition, a non-profit organization based in
   Anchorage, Alaska, that had created a specific paradigm in implementing a
   performance-based model of education that emphasizes instruction, assessment,
   and reporting.

4. Transformational Leadership:

   This form of leadership requires that principals who engage with their teaching
   staff in ways that inspire them to new levels of moral purpose, energy, and
   commitment to work collaboratively in an effort to accomplish challenges and
   organizational goals (Hattie, 2009). For the purposes of this study, the
   Multifactor Leadership Questionnaire (MLQ) measured transformational
   leadership.

5. Student Engagement:

   A recent definition of student engagement includes behavioral, emotional, and
   cognitive components (Fredricks, et, al, 2011) in addition to feelings of
   belonging, enjoyment, and attachment. The term is also used to describe
   meaningful student involvement throughout the learning environment, including
   student ownership over their own learning and the corresponding impact on
   school climate. Student engagement occurs when students make a psychological
   investment in learning. The term is also used to describe meaningful student
   involvement throughout the learning environment, including students
   participating in creating standards and impacting the school climate. For the

purposes of the study, the MES measured student engagement.

6. Student Achievement:

   Defined by measures of student learning and performance such as student scores on pre-tests and end-of-level assessments; student performance on English language proficiency assessments; and other measures of student achievement that are rigorous and comparable across classrooms throughout typical secondary institutions.

7. Academic Optimism:

   This construct is the combined collective traits of academic emphasis, collective efficacy, and faculty trust (Hoy, Tarter, & Woolfolk Hoy, 2006a). For the purposes of this study, the School Academic Optimism Scale (SAOS) measured academic optimism.

8. Academic Emphasis:

   This is the extent to which a school is driven in their pursuit of academic excellence (Hoy & Miskel, 2005).

9. Collective Efficacy:

   Within the school setting, collective efficacy represents the beliefs about the performance capacity of the teaching staff as a whole (Bandura, 1997).

10. Faculty Trust:

    This concept is defined as the trust in parents and students and includes willingness to risk vulnerability, confidence, benevolence, reliability, competence, honesty, and openness (Tschannen-Moran & Hoy, 2000).

11. Alternative School:

An educational institution created to meet the needs of students who require a more non-traditional approach to schooling, and are often more flexible in terms of program of study, curriculum, instruction, assessment, and reporting.

Significance of the Study

Research and teacher intuition have long indicated that engaged students are a sought after goal of schooling. If the performance-based model does indeed lead to improved student engagement, there is a moral imperative for schools to change the way in which they operate in order to meet the needs of their current population. Hopefully, conducting this study added some credibility to the researcher as a building level administrator and will eventually help in leading faculty members from various schools through the process of second order change. Leadership strategies employed by principals during the implementation of an initiative such as the performance-based model increases the likelihood of that initiative becoming the norm in the culture of a school.

Chapter One Summary

The performance-based model of education has been proven successful in a number of schools across the United States and the world (Burks and Hochbein, 2013; DeLorenzo et al., 2009; Littkey, 2004). This system, which recognizes a fundamental shift in our understanding of the learning process, has the potential to help schools realize unprecedented levels of success for all students. This study

demonstrates that the performance-based model is the result of second order change and significantly supports the need for transformational leadership to implement the paradigm shift, which in turn yields increased teacher academic optimism and a resulting increase in student engagement.

Leithwood, Jantzi, and Steinbach (1999) assert that transformational leadership practices are conducive to positive results in school reform efforts. Educational leaders in performance-based schools are change agents who are "willing to take a radically different approach to schooling than they have in the past, and who have the courage and moral purpose to see the vision through" (DeLorenzo, et al., 2009). Second-order changes require new knowledge and skills for successful implementation (Walters et al., 2004). This study used the Multifactor Leadership Questionnaire (MLQ) to measure transformational leadership.

The concept of student engagement as an area of study has increased over the past two decades due, largely, to the realization that there is a direct correlation between engaged students and academic success. There is a correspondingly strong correlation between disengagement and dropping out of school. "Academic engagement has been shown to decline as students progress through the upper elementary grades and middle school, reaching its lowest levels in high school (Marks 2000; National Research Council and Institute of Medicine 2004 as cited in Fredericks, et al., 2011). This decline can be even more dramatic as students move through feeder patterns of low-performing, high-poverty schools (Yazzie-Mintz 2007). This study used the Motivation and Engagement Scale (MES) and the

Motivated Strategies for Learning Questionnaire (MSLQ) to measure student engagement.

Academic optimism is a relatively new concept that combines academic emphasis, collective efficacy, and faculty trust in to single organizational construct. Academic optimism has been shown to have a profound effect of student achievement (Hoy et al., 2006a). This study used School Academic Optimism Scale (SAOS) as well as the Teacher Sense of Efficacy Survey (TSES) to measure academic optimism and teacher perceptions of their efficacy.

This study used qualitative and quantitative statistical methods to examine whether or not students were engaged in their academic progress and teachers experienced a high level of academic optimism in the performance-based system, underpinned by the transformational leadership behaviors that were critical to bring the change about. This information could provide compelling data and guidance for leaders who are engaged in implementing second order change that is naturally entailed by adopting the performance-based model.

CHAPTER 2

REVIEW OF LITERATURE

History and Efficacy of the Performance-Based Model

As early as 1916, John Dewey addressed the concept of personal mastery in

education in his seminal work, *Democracy and Education: An Introduction to the

Philosophy of Education.* In the 1970s, Benjamin Bloom presented an in-depth analysis

of personal mastery and theorized that virtually every student could attain mastery of any

learning task if they were provided with the appropriate setting and necessary time in

which to succeed (1977).   Bloom described mastery learning as an instructional strategy

to meet the needs of individual students, and although the theory has evolved and has

been adopted by a number of educational reformers in subsequent decades, the model has

not been fully integrated into the traditional, mainstream school system. 21st century

students still walk into schools that are still set up in the way that previous generations

operated, with resources that often do not meet their particular needs (Bramante & Colby,

2012). Grant, Forsten, and Richardson (2000) highlight the flaws inherent in the

traditional model:

> Under today's practices, high-ability students are forced to spend more
> time than they need on a curriculum developed for students of moderate
> ability. Many become bored, unmotivated, and frustrated. They become
> prisoners of time.

> Meanwhile, struggling students are forced to move with the class and receive less time than they need to master the material. They are penalized with poor grades. They are pushed on to the next task before they are ready. They fall further and further behind and begin living with a powerful dynamic of school failure that is reinforced as long as they remain enrolled or until they drop out. They also become prisoners of time.
>
> What of the "average" students? They get caught in the time trap as well. Conscientious teachers discover that the effort to motivate the most capable and help those in difficulty robs them of time for the rest of the class. Typical students are prisoners of time, too (p. 27).

The performance-based approach to schooling has led to remarkable gains in student achievement. The Chugach School District in Alaska produced skyrocketing achievement gains in terms of student achievement, student engagement, and teacher optimism in the 1980s (DeLorenzo, et al., 2009). More recently, in response to the demand for the turnaround of low achievement, leaders from Louisville, Kentucky implemented "Project Proficiency" (Burks & Hochbein, 2013, p. 1) with a segment of their at-risk population. Results from state-administered mathematics tests demonstrated that all participating schools reported substantial and significant gains in student achievement, which, the authors believe, could suggest potentially scalable and effective high school reform (Burks & Hochbein, 2013). Educational research centered on achievement goal theory has clearly demonstrated the efficacy of pursuing mastery goals in terms of student achievement (Martin, 2006), and Pintrich concluded that programs that implement and focus on striving for performance goals have not necessarily witnessed a detriment to successful school functioning (2000). In fact, pursuing Personal Mastery goals may have a synergistic effect that captures both student engagement and achievement (Martin, 2006).

Importance of Studying Student Engagement

Some studies estimate that by high school as many as 40–60 percent of youth are

disengaged (Marks 2000). Not surprisingly, increasing student engagement has been an

explicit goal of many school and district improvement efforts, especially at the secondary

level (National Research Council and Institute of Medicine 2004). Martin states that there

are a number of theories that contribute to our knowledge of student engagement

including "need achievement theory, self-worth motivation theory, self-efficacy theory,

expectancy-value theory, attribution theory, control theory, self-determination theory, and

motivation orientation theory" (2013, p. 23). However these theories are "usually not

articulated or conceptualized in a way that is actionable for educators or understandable

for students. More importantly, theory and concepts within it must be packaged in a way

that can be communicated by educators to students. This brings into consideration the

need for a model of motivation and engagement that can be readily harnessed by

educators to help motivate and engage their students. Ideally, students would also readily

harness this model" (2013, p. 28).

Though a clear and consistent definition does not exist in the research literature,

student engagement is often described as a complex psychological construct comprised of

multiple dimensions including behavioral, emotional, and cognitive components as well

as feelings of belonging, enjoyment, and attachment (Fredricks, et al 2011). Engagement

can also be understood as a series of relationships: "between the student and school

community, the student and school adults, the student and peers, the student and

instruction, and the student and curriculum" (Yazzie-Mintz, 2010, p.1). Finally, engagement can be further defined by the behaviors that spring forth from the energy and drive of motivation, and it plays a large part in terms of student interest, their enjoyment of academics, and it underpins their ultimate level of academic achievement (Martin, 2007, 2009, 2013, Pintrich, 2003, Schunk, 2008, & Schenck, 2011).

One critical element that has clearly been indicated by research is that academic engagement tends to decline as students progress through the upper elementary grades and middle school, reaching its lowest levels in high school (Marks 2000; National Research Council and Institute of Medicine 2004 as cited in Fredericks, et al., 2011). This decline can be even more dramatic as students move through feeder patterns of low-performing, high-poverty schools (Yazzie-Mintz 2007). A multitude of studies can point to no single reason why students stop attending high school, but there is a strong correlation between disengagement and dropping out. Bridgeland and his colleagues surveyed a number of high school students and concluded that most dropouts are students who could have, and believe they could have, succeeded in school. Respondents reported different reasons for quitting school including a lack of connection to the school environment; a perception that school is boring; feeling unmotivated; academic challenges; and the weight of real world events. In fact, nearly half (47 percent) said a major reason for dropping out was that classes were not interesting. These young people reported being bored and disengaged from high school. Nearly 7 in 10 respondents (69 percent) said they were not motivated or inspired to work hard. (Bridgeland, J.M., DiIulio, J.J., Jr., & Morison, K.B., 2006).

Carol Ann Tomlinson has addressed the current generation of schoolchildren and concluded that,

> far too many of these students don't know how to reason, how to think abstractly—and they readily say so. Their goal, because it's how they've been schooled throughout their pre-university education, is to do what's necessary to get an acceptable score. They have no fire in their bellies to read, debate, or craft their opinions in writing. But without exception, they have completed acreages of classroom drills and passed tests that demonstrate 'mastery.' It is all they have known (2013, p.88).

Gardiner clearly addressed the issue of student engagement when he said:

> We have schools because we hope that some day when children have left schools that they will still be able to use what it is that they've learned. And there is now a massive amount of evidence from all realms of science that unless individuals take a very active role in what it is that they're studying, unless they learn to ask questions, to do things hands on, to essentially re-create things in their own mind and transform them as is needed, the ideas just disappear. The student may have a good grade on the exam, we may think that he or she is learning, but a year or two later there's nothing left (1997, p.2).

Thus, it is clear that maintaining the status quo of traditional schooling will never lead to optimal student engagement, learning and achievement (Fredricks, et, al, 2011).

But indications are strong that these barriers to graduation are not insurmountable. In fact, "schools that focus on student engagement are seeing both great possibility and real success" (Yazzie –Mintz, 2010, p. 2). For example, a powerful study of high school students who had been identified as "gifted" in elementary school and were currently "underachieving" in later grades found that "schooling" — as opposed to "learning" – was associated with boredom. Five factors, however, were identified as likely to create a situation of learning instead of boredom: control, choice, challenge, complexity, and caring" (Kanevsky & Keighley, 2003 as quoted in Yazzie-Mintz, E. (2010). When

students are motivated and engaged they tend to demonstrate higher academic achievement, work more effectively on difficult tasks, show a higher level of understanding, and enjoy school more. Engagement is changeable and can be learned (Martin, 2010). "Students who are engaged in their work are energized by four goals—success, curiosity, originality, and satisfying relationships" (Strong, R., Silver, H.F., & Robinson, A. 1995, p.8). Additionally, the concept of "personal best" (PB) has been developed by Andrew Martin and his research clearly addresses the relevance of engagement on mastery and performance goals. The impact that educational interventions aimed at enhancing students' personal bests in terms of their engagement and achievement over the course of their academic development can be profound (2006). Instruction that focuses on academic PBs has the potential to facilitate and increase students' self-efficacy in learning (Bandura, 1997). This is so because "performing as well or better than a previous performance is seen as accessible by students and this perceived accessibility to success enhances students' efficacy regarding their learning" (Martin, 2006).

Additionally, there seems to be a solid relationship between engagement and intrinsic motivation (Ryan & Deci, 2000), which is generally considered more durable and self-enhancing than is seen through extrinsic factors (Kohn 1993). This concept aligns with what Csikszentmihalyi describes as 'flow' in learning (1990), and is related to students ultimately achieving a level of growth that significantly exceeds their present capacity (Martin, 2006). "PB-oriented interventions might seek to develop students' skills in setting personalized academic goals that are specific and optimally more

challenging than what they have previously achieved and also help students develop strategies to achieve these goals" (Martin, 2006, p. 269). For students, engaging work "stimulated their curiosity, permitted them to express their creativity, and fostered positive relationships with others. It was also work at which they were *good*. As for activities they hated, both teachers and students cited work that was repetitive, that required little or no thought, and that was forced on them by others" (Strong, R., Silver, H.F., & Robinson, A. 1995, p.8).

Finally, the connection between engagement and student confidence in their ability to be successful is becoming clear. "Interventions specifically designed to improve academic skills might require improvement of academic self-concept, or the belief in one's academic ability" (Burks & Hochbein, 2013). Marsh and Craven's research indicated that student confidence, or self-concept, in terms of their academic abilities often results in stronger student outcomes (2006), and this higher level of achievement can cyclically lead to further increases in academic self-concept, a phenomena that has been referred to as the "reciprocal effects model" (Marsh and O'Mara, 2008, p. 549). And in another study that strengthened this theory, researchers found that student levels of academic self-concept predicted measures of school disengagement (Bodkin- Andrews, O'Rourke, Dillon, Craven, & Yeung, 2009, as cited in Burks & Hochbein, 2013).

<center>

Student Engagement and the
Performance Based Model

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Carol Dweck theorized that people in general hold one of two basic beliefs about human intelligence: either we are born with a predetermined, fixed amount of

intelligence, or we are able to grow in terms of intelligence when we put forth effort to learn. The main goal of those with a growth mindset is get smarter over time (1983, 2006). When compared to traditionally taught classes, students in mastery learning classes consistently have been shown to learn better, reach higher levels of achievement, and develop greater confidence in their ability to learn and in themselves as learners (Guskey, 1997, 2001).

Established structures and policies, however, often imbue schools with a culture that makes truly individual approaches difficult to implement. Many factors that contribute to dropping out are within the control of the school itself, such as content and classes are not interesting, students do not feel connected to school, and students do not see the purpose or relevance in the work (Bridgeland, DiIulio, & Morison, 2006). Kulik, Kulik, Bangert-Drowns, & Slavin, conducted a meta-analysis of 108 studies of mastery learning and found positive effects for high-achieving students, but even greater effects for low-achieving students. The researchers concluded that mastery programs could help reduce the achievement gap between high and low aptitude learners (1990).

> Let's get real. Let's look at the kinds of things that we really value in the world. Let's be as explicit as we can. Let's provide feedback to kids from as early as possible and then let them internalize the feedback so they themselves can say what's going well, what's not going so well (Gardiner, 1997, p.3).

All students, to some extent, seek mastery, understanding, self-expression, and positive interpersonal relationships.

> Imagine what could happen if we engaged our students in a discussion of these four types of motivation. What might they tell us about themselves and their

classrooms? Could we actually teach them to design their own work in ways that match their own unique potential for engagement? (Strong, R., Silver, H.F., & Robinson, A. 1995, p.12).

In order to help students engage more fully with their schooling, the instructional goal must be toward guided discovery leading to periods of self-directed mastery where students practice skills independently. As students note their progress, they are apt to believe they are capable of further learning. This is particularly important for remedial learners or at-risk students.

> Mastery also implies attitudes that characterize success—a work ethic, willingness to think strategically, tolerance for ambiguity, capacity to delay gratification, clarity about what quality looks like, and so on. I can think of no individuals who've achieved real mastery of a skill or discipline without those characteristics. Completing many of the tasks characteristic of schoolwork neither commends nor inspires those attributes. Standardized tests do not measure them (Tomlinson, C.A. 2013, p.89).

While understanding student engagement is not an easy task, it is essential considering the mandates for educational reform that pervade our society. In his best-selling work *Drive*, Daniel Pink concluded that three elements are the hallmarks of true motivation – autonomy, mastery, and purpose. Although educators are intuitively aware of this reality, and

> … as the world economy demands more nonroutine, creative, conceptual abilities - too many schools are moving in the wrong direction. They're redoubling their efforts on routines, right answers, and standardization…We're bribing students into compliance instead of challenging them into engagement (2009, p. 185).

Students want and need work that enables them to demonstrate and improve their sense of themselves as competent and successful human beings. This is the drive toward mastery. But success, while highly valued in our society, can be more or less

motivational. People who are highly creative, for example, actually experience failure far

more often than success.

>Before we can use success to motivate our students to produce high-quality work
>we must meet three conditions:
>1. We must clearly articulate the criteria for success and provide clear, immediate,
>and constructive feedback.
>2. We must show students that the skills they need to be successful are within
>their grasp by clearly and systematically modeling these skills.
>3. We must help them see success as a valuable aspect of their personalities
>(Strong, R., Silver, H.F., & Robinson, A. 1995, p.10).

In an earlier pilot study I conducted in the Bridger Alternative Program, students'

perceptions as to their level of engagement in performance-based model were profound.

They exhibited a higher level of trust in trust their teachers as well as themselves than

they did under the traditional system, and they have expressed belief in their efforts to

move their school forward. Common themes included higher student engagement, higher

achievement, more individualized instruction, improved assessments, higher

expectations, pride in accomplishments, and the need to expand the model into the

general school population. The answers provided by students interviewed for this

research clearly indicate that they perceive their academic engagement and achievement

to be at a much higher level in the performance-based model of education than they

experienced in the traditional system. This perception, coupled with increased pride and

enthusiasm for school points to the need for further study in terms of more quantifiable

data to analyze actual student achievement.

Additionally, data gleaned form this study could prove to be invaluable as staff

proceeds with the continued evolution of the personal mastery model of instruction,

assessment, and reporting. Professional development and program direction are almost

always the exclusive domain of adult educators in the building. This practice is not

necessarily improper as the adults are the experts in the field of education. The voice of

the students is powerful and profound, however, and should be more actively solicited

from an enlightened and progressive staff. Pink discussed the Montessori model of

education, and stated the this system resonates with children in that they

> naturally engage in self-directed learning and independent study; that teachers should act as observers and facilitators of learning, and not as lecturers or commanders; and that children are naturally inclined are naturally inclined to experience periods of intense focus, concentration, and flow that adults should do their best not to interrupt…Although Montessori schools are rare at the secondary level, every school and educator can learn from its enduring and successful approach (2009, p. 195).

If continuous school improvement is truly to be a commitment from the staff and

community, students voice and choice is the absolutely critical and foundational piece to

be examined. Students are the experts into what works for them, and staffs ignore their

perceptions at their own peril.

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Student Engagement as the
<u>New Measure of School Effectiveness</u>

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"One of the best ways to know whether you've mastered something is to try to

teach it…A classroom of teachers is a classroom of learners" (Pink, 2010, p. 196). The

concept of student engagement as an area of study has increased over the past two

decades due, largely, to the realization that there is a direct correlation between engaged

students and academic success. Student engagement occurs when students make a psychological investment in learning. They try hard to learn what school offers. They take pride not simply in earning the formal grades, but in understanding the material and incorporating or internalizing it in their lives. A recent definition of student engagement includes behavioral, emotional, and cognitive components (Fredricks, et, al, 2011) as well as feelings of belonging, enjoyment, and attachment. The term is also used to describe meaningful student involvement throughout the learning environment, including student ownership over their own learning and the corresponding impact on school climate. Student engagement is a broader term under which the narrower concept of "student achievement" resides (Henderson, 2013). Furthermore, "understanding students' reasons for being in school may help schools create more engaging learning environments for students, providing students with compelling reasons to persist and achieve. At the same time, understanding students' reasons for checking out of school — either temporarily in the case of boredom or permanently in the case of dropping out — can provide schools with a set of guideposts for engaging students in learning" (Yazzie-Mintz, 2010, p. 5).

Additionally, a Gallup poll conducted in 2012 surveyed over 459,000 American students. The survey measured hope, engagement, and wellbeing. The Gallup Poll defined engagement as "involvement in and enthusiasm for school. Engaged students are highly involved with and enthusiastic about school. 'Not Engaged' students are present but not involved with or enthusiastic about school. 'Actively Disengaged' students undermine the educational process for self and others" (Copyright © 2012 Gallup, Inc., p.3). Data showed that student engagement declines from grades 5 through 12, that

roughly 43% of students are not engaged or are actively disengaged at school, and that

over 1.2 million students drop out of high school annually. Results also indicated that

hope is a stronger predictor of academic success than more traditional indicators such as

test scores and GPA. In relation to this specific measure, 72% of hopeful students are

engaged, and only 65% of thriving students are engaged. Yet, 84% of students who

believe that their school is committed to building on their strengths are engaged

(Copyright © 2012 Gallup, Inc.).

Research also indicates that school climate and a sense of belonging have a direct

impact on student effort and performance, (De Wit et al., 2010; Rumberger & Lim, 2008,

as cited in Burks and Hochbein, 2013). Every child can learn given the right approach

and the right amount of time, but not every student can thrive in the traditional

educational setting. And some students are experiencing such crisis in their lives that they

are often unable to take advantage of their education and can, therefore, have great

difficulty advancing to the next educational level. Metaphorical doors can be shut to them

before they even have the chance to take advantage of opportunities. A relatively small

percentage of adolescents can fall into the "at risk" category, which has been traditionally

used as a term by educators to describe students with a higher probability of dropping out

of school. Many of these students also tend to exhibit corresponding behaviors that are

problematic such as substance abuse, pregnancy, delinquency, and homelessness

(Feinstein, 2007).

Measuring engagement helps identify at-risk students. For many students, dropping

out of high school is the last step in a long process of disengagement (Finn 1989,

Bridgeland, DiIulio, & Morison, 2006,). Its consequences for middle and high school

students from disadvantaged backgrounds are especially severe, because these students

are less likely to graduate and will face more limited employment prospects, increasing

their risk of poverty, poor health, and involvement in the criminal justice system

(National Research Council and Institute of Medicine 2004). For this reason, many

educators, school psychologists, and community organizations are interested in obtaining

better data on engagement and disengagement for needs assessment, diagnosis, and

prevention (Fredericks, et al., 2011)."

It is apparent that the at-risk population especially would demand different

instructional strategies in order to find the right trigger for individuals who are all in

vastly different stages of intellectual growth. These strategies that work for the at-risk

population, should actually become standard operating procedure for education in

general. Problem solving and transfer are the critical skills to be nurtured and sharpened

in the modern world. Students must know this is the expectation of education and

teachers must be trained in how to better help students learn and sharpen those skills

(Schenck, 2011). Ultimately, the goal should be for teachers to utilize challenging real

world problems, student design, creativity, and original solutions to help students make a

difference in the new global reality.

Friere believed that education should be based on dialogue that draws out and

develops a student's prior knowledge of the world. He also argued that the traditional

curriculums and systems are disconnected from the real lives of students, reinforcing the

learner as a passive participant in the educational process. Learners are like empty

accounts that need to be filled by a teacher (Freire, 1970). Although Friere worked

mainly with groups of illiterate adults, there is no reason why his approach should not be

employed with younger students in terms of teaching curriculum relative to their lives

and experiences. This would necessarily involve a radical shift in terms of attitudes

toward the role of teacher and student in the traditional educational system. Friere himself

discussed the critical piece in establishing a new system involved the creation of a new

attitude of seeing education as a dialogue rather than simple transmission of information.

Traditional schools still largely follow this deficit model of education in which students

are grouped in a cohort by age and endure the typical instructional practice that consists

of organizing curricular content into units and then assessing student progress at the

conclusion of each section or chapter of a textbook.

Academic Optimism

"Being a teacher is a creative profession. One of the reasons schools fail and

systems stumble is that teachers as well as students become disengaged. There are

teachers who are not interested in learning or have no gift for teaching and should be

doing something else that fulfills them" (Robinson, 2001, p.267). The construct of

academic optimism is closely tied to resilience, positive psychology, and engagement and

has been shown to be a factor in increased student achievement (Hoy, Tarter, & Woolfolk

Hoy, 2006b).

> Teachers who utilize mastery learning recognize the students who do well on the
> initial formative assessment and either allow them to progress more quickly or
> may offer enrichment activities. But those teachers also acknowledge that
> students who demonstrate proficiency on later assessments have learned just as

much and by also mastering the performance standards, deserve the same grades as those who scored well early (Guskey, 2010).

There are two ways to foster meaningful learning: improve instruction and improve thinking. How can we meet students where they are, and help them build skills and strategies for future learning? The difference is subtle but critical. "We sometimes expect students to learn but seldom teach them anything about learning...We need to develop the general principles of how to learn, how to remember, and then establish the place of these methods in an academic curriculum" (Mayer, p.142). Authentic learning occurs when teachers have identified important skills and concepts to be learned, provided high-quality instruction, and immediately administered formative assessments in order to gauge student progress. "By seeking to break down boundaries between teacher and teacher, teacher and student, student and the learning process, we will learn what students want and need. As a result, more and more teachers may go to bed at night remembering the images of wonder, enthusiasm, and perseverance on the faces of their students" (Strong, R., Silver, H.F., & Robinson, A. 1995, p. 12).

Research indicates that school climate and a sense of belonging have a direct impact on student effort and performance (De Wit et al., 2010; Rumberger & Lim, 2008, as cited in Burks and Hochbein, 2013). "Yet, findings also have demonstrated that student perception of peer, teacher, and emotional support typically decreases at the secondary level" (Barber & Olsen, 2004; Furrer & Skinner, 2003; Marks, 2000; Reschly, Huebner, Appleton, & Antaramian, 2008 as cited in Burkes and Hochbein, 2013). Thus, schools have a need to improve high school students' self-confidence and cultivate caring

learning environment. However, without simultaneous improvements in teaching, improved student confidence and perceptions are unlikely to generate authentic student growth and achievement (Bryk, Sebring, et al., 2010). Ken Robinson states that "too many teachers are hired for knowledge of their discipline rather than their interest in students. Good teaching requires personal knowledge as well as the ability to engage others. Teaching for creativity is about facilitating other people's creative work" (2001, p.267). In *Drive,* Daniel Pink presents three main factors in human motivation: autonomy, mastery, and purpose (2009). If we are to motivate teachers to change their professional practice, we have to tap into these motivational factors. It may be beyond our control to give a teacher more autonomy in their work. It may be difficult to increase the level of purpose that a teacher sees in their profession. However, we can all increase our mastery of the incredibly complex craft of teaching. If we can help a teacher to see how they can get better at what they do, they could be motivated to change.

"The good news for educators is that a 21st century, anytime, anyplace, anyhow, any pace, student-centered, move-on-when-ready model will rekindle the enthusiasm that inspired most educators to enter the profession in the first place" (Bramante & Colby, p. 62). Teachers should claim the power of collectively ensuring student learning by collaborating to evaluate student understanding of standards, instead of settling for the averaging grades (Guskey, 2009; Lekholm & Cliffordson, 2008; Marzano, 2010). Teachers should also create common formative assessments to measure individual student progress, engage learners in self-reflection, and seek instructional implications (Stiggins & DuFour, 2009). The relationship between academic optimism and student

achievement represents a powerful force to be used in school reform. The overall

construct of academic optimism is grounded in the framework of positive psychology,

thus, leaders may be able to replicate success by facilitating beliefs in student excellence

and the resilience to persevere through setbacks. Understanding the correlation between

the two topics can provide educational leaders with valuable information that can be used

to assist them as they lead second-order change required to implement systems of

personalized mastery.

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Transformational Leadership and
<u>Second Order Change</u>

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Such a monumental change in the nature of schooling will necessitate a

fundamental paradigm shift. Kouzes and Posner (2007) established the crucial component

of strength and courage that leaders and staff must exhibit in order to lead a school

through difficult times. Constructivist theory provides a valuable and concise construct

for the personal mastery model in terms of instructional practice. Constructivist

environments differ from traditional classrooms in three important areas:

1. Curriculum focuses on big concepts. The key is to structure the learning environment such that students can effectively construct new knowledge and skills. There is a difference between teaching to standards and teaching a curriculum in which standards have been embedded.
2. Learning should be structured around primary concepts. Holistic teaching involves structuring content differently. For example, a thematic approach to history as opposed to a chronological model.
3. Seek and value students' points of view. If this does not happen, teachers fail to capitalize on the role of the students' own experiences in learning. It is possible for kids to arrive at a correct answer through faulty reasoning, and conversely, to answer incorrectly but during teaching and is an assessment of both student and teacher. Formative assessments are crucial and summative

assessments must also reflect meaningful and deep student structured learning. (Schunk, p. 262).

Research clearly indicates that transformational leadership can be utilized to effectively facilitate this transition toward second order change (DeLorenzo et al., 2009; Littky, 2004; Priest et al., 2012). Moving a school staff together as a whole in a new direction is heavy work. It "all begins with the initiative of an individual… A leader initiates, provides the ideas and the structure, and takes the risk of failure …while knowing that the path is uncertain, even dangerous" (Greenleaf, 1977, p.29). Schools are filled with good people who believe in what they are doing, but can be difficult to move out of their comfort zones. It is our job as educational leaders to clarify the goals, aspirations and values in our school communities as we wrestle with the myriad of problems that demand definition and action (Heifitz, 2002). Leithwood and Jantzi (2008) found transformational leadership has a significant effect on teacher satisfaction and organizational health. In addition, the authors found transformational leadership to be related to student achievement. Marzano, et al. (2005) states that a correlation coefficient of .25 exists between transformational leadership practices and student success. Chin (2007) found a significant effect size between transformational leadership as defined by the MLQ and student achievement ($r = .487$, $p < .001$).

Transformational leadership theory has been studied extensively by, among others, Bennis & Nanus (1985) and Burns (1978). A number of researchers including Bass (1985), Yukl (1989), and Leithwood et al. (1999) have asserted that traditional models of school leadership (bureaucratic, managerial, etc.) are not as useful for school leaders as transformational approaches. Research has shown that transformational leaders tend to be

adept in demonstrating certain characteristics that may ultimately lead to an increase in

employee performance. Eyal and Kark (2004) established a solid link between

transformational leadership theory and the effective implementation of second-order

change. First Order Change describes phenomena in which there is some minor change in

a system but the larger system itself is not fundamentally altered; an organization simply

evolves and adapts. First order change entails incremental adaptation and eventual

mastery by individuals within the system. Second Order Change, on the other hand, may

be defined as a higher degree of change in which a system or organization is, itself,

fundamentally altered. The system makes a foundational transformation and is bound to a

level of permanent change from which it can never revert to its previous form. Second-

order changes require new knowledge and skills for successful implementation (Walters

et al., 2004). Transformational leadership strategies employed by principals during the

implementation of an initiative such as the Personal Mastery model increases the

likelihood of that initiative becoming the norm in the culture of a school. These leaders

activities seek to establish a culture within the school that builds the individual capacity

of the teacher while maintaining focus on common goals.

Effective change within schools is often determined by the actions of the school

principal. Leithwood speaks to the critical role of the principal in creating an environment

in which such a shift can take place when he said, "school administrators must focus their

attention on using facilitative powers to make second-order changes in their schools.

Transformational leadership provides such a focus" (1992, p 16). Some of the qualities of

an educational leader that define him/her as transformational include setting direction,

building a clear school vision, establishing school goals, and creating high performance

expectations. Additionally, the skillful leader develops people through modeling

behaviors, and by providing individualized support, intellectual stimulation, and a climate

in which staff are held accountable yet also may experience consistent success (Marzano,

Waters, & McNulty, 2005). Transformational leaders foster higher levels of motivation

and commitment to the organization by developing organizational vision, commitment

and trust among employees, and facilitating organizational learning (Bennis & Nanus,

1985). Leithwood and his colleagues have extensively studied the effects of

transformational school leadership and the corresponding activities that provide the

strong motivation to teachers by providing examples of best practice, encouragement,

personal attention, and recognition. Teachers begin to feel empowered through shared

decision-making, which leads to a belief in their abilities to make a difference in the

classroom and the school as a whole (Leithwood et al., 1999).

Leaders within a school must be agents of change, continually seeking to improve

student performance through effective reform. Leithwood, Jantzi, and Steinbach (1999)

assert that transformational leadership practices are conducive to positive results in

school reform efforts. Marzano and Waters (2009) attempted to determine whether or not

strong district leadership in the public school system has a causal effect on overall student

achievement. At the conclusion of their meta-analysis, they were able to reveal a

"statistically significant correlation between effective district level leadership and

subsequent student learning" (p. 4). They also identified five specific behaviors that

define effective leadership from central office that did indeed have a direct impact on the

achievement of students across a district:

     1. Ensuring collaborative goal setting
     2. Establishing nonnegotiable goals for achievement and instruction

     3.Creating board alignment with and support of district goals
     4. Monitoring achievement and instruction goals.
     5. Allocating resources to support the goals for achievement and instruction
     (p. 5-6).

       Leithwood and Jantzi's review of transformational leadership research found five

of nine quantitative research studies that reported significant relationships between

transformational leadership and some measure of student achievement. They determined

that this model of leadership has been shown to have positive relationships to

improvement in such areas as student engagement, innovative classroom instruction, and

improved teacher commitment. These qualities have been further grouped into four larger

core practices: setting direction, developing people, redesigning the organization, and

managing the instructional program (2005).

       Educational leaders in Personal Mastery schools are change agents who are

"willing to take a radically different approach to schooling than they have in the past, and

who have the courage and moral purpose to see the vision through" (DeLorenzo, et al.,

2009). According to Hoyle et al. (2005), the role of the school leader has changed from

the less visible manager to a highly visible chief executive who needs vision, skills, and

knowledge to lead in a new and complex world. Firestone and Riehl (2005) assert that

school leaders must not only have a wide range of knowledge about teaching, learning,

and organizational management but must also have knowledge of leadership

competencies and practices that are associated with increased performance and

effectiveness (p. 3).

The findings represent a crucial component in the movement for substantive educational reform in the United States. The evidence suggests that district leaders may consider mandating a dramatic and fundamental paradigm shift away from schools simply teaching curriculum to creating a culture of collective efficacy in which all school staff work collaboratively in order to become professional learning communities that focus solely on improved student learning.

Fullan (2005) described one of the major responsibilities for sustaining effective school leadership as developing others as leaders. Principals simply cannot perform all the necessary tasks to effectively manage school procedures and innovation without the assistance of a group of similar thinking colleagues. Some of the qualities of an educational leader that define him/her as transformational include setting direction, building a clear school vision, establishing school goals, and creating high performance expectations. Additionally, the skillful leader develops people through modeling behaviors, and by providing individualized support, intellectual stimulation, and a climate in which staff are held accountable yet also may experience consistent success (Marzano, Waters, & McNulty, 2005). Transformational leaders foster higher levels of motivation and commitment to the organization by developing organizational vision, commitment and trust among employees, and facilitating organizational learning (Bennis & Nanus, 1985). Leithwood and his colleagues have extensively studied the effects of transformational school leadership and the corresponding activities that provide the strong motivation to teachers by providing examples of best practice, encouragement,

personal attention, and recognition. Teachers begin to feel empowered through shared

decision-making, which leads to a belief in their abilities to make a difference in the

classroom and the school as a whole (Leithwood et al., 1999).

According to Hoyle et al. (2005), the role of the school leader has changed from

the less visible manager to a highly visible chief executive who needs vision, skills, and

knowledge to lead in a new and complex world. Once students recognize that they need

to operate differently in order to realize success in this modern era, they will help drive

the changes to instruction, assessment, and reporting that is necessary in carrying out

critical educational reform. The changing world, job requirements, and workforce skills

have necessitated a paradigm shift in terms of how schools operate for the benefit of all

students.

<div align="center">Transformational Leadership and Moral Purpose</div>

Northouse (2007) defines transformational leadership as, "…a process that changes

and transforms people. It is concerned with the emotions, values, ethics, standards, and

long-term goals and includes assessing followers' motives, satisfying their needs, and

treating them as full human beings" (p. 175). Given the deep change that this shift will

require, "school leaders who take on the challenge of the personal mastery model must be

driven by a core commitment to children – in other words, a deep sense of moral

purpose" (DeLorenzo, et al, 2009, p.19). As such, this philosophical change in education

can be closely aligned with ethical leadership and social justice theory as well. It takes

moral courage to examine the principles that have been foundational to our institutions,

and then work to change those principles in order help the institutions adapt to the changes in the future world. But "social progress may require that someone push the system to its limits" (Heifitz, p.21).

The concept of ethical leadership aligns perfectly with transformational leadership theory. Moral purpose is the critical element of ethical leadership, and it segues to the essence of transformational leadership – "engaging others in order to create a connection that raises the level of motivation, and then exhibiting confidence in the followers' ability to meet high expectations" (Northouse, 2010, p. 172). "Nothing of substance will happen unless there are good people inside institutions who are able to lead them to better performance for the public good" (Greenleaf, 1977, p 16). Heifitz addresses the moral imperative facing educational leaders in the future when he states that our values are "shaped and refined by rubbing against real problems, … and in the defining moments of our lives, values count for little without the willingness to put them into practice" (Heifitz, 2002, p. 22). This is the difference between leadership that works, and leadership that endures. Sergiovanni asserts that schools exceed expectations in terms of commitment and performance only once moral authority transcends bureaucratic leadership paradigms (1990). Michael Fullan's concept of whole system reform addresses issues that many educators have recognized for years as necessary for schools to move forward, especially now that the world has become so interdependent. Fullan places moral purpose and high expectations at the center of his reform plan because it is absolutely the only place from which real and substantive change can spring.

> Moral purpose focuses on raising the bar and closing the gap for all children and youth in society relative to those dispositions and skills essential for surviving and

thriving in a complex, interdependent global society…Moral purpose consists of the triumvirate of raise the bar, close the gap, and clear, uplifting standards and high expectations for all (Fullan, 2010, p.62).

DeLorenzo and his colleagues speak to the moral imperative of implementing a personal

mastery model in our educational systems:

Second-order change shakes up the status quo and challenges underlying assumptions and beliefs. Relative to education, second-order change equates to the transformation of the primary operating principles, structure, and design of the education system… Given the deep change that this shift will require, school leaders who take on the challenge of this standards-based model must be driven by a core commitment to children – in other words, a deep sense of moral purpose (2009, p.26).

<p style="text-align:center">Assessing Student Engagement</p>

The MES survey will be used in this study in order to gauge student engagement.

The survey has been developed and validated by Dr. Andrew J. Martin, of the University

of Sydney, and published by the Lifelong Achievement Group

(www.lifelongachievement.com) in 2009. The MES-High School version has been

normed with 21,579 students, ages 12–18, across 58 schools. Samples were

predominately middle-class students from urban, rural, and suburban areas of Australia.

The questionnaire contains 11 subscales, each of which comprises 4 items, for a total of

44 items. Sample high school items for each of the subscales include:

Self-belief: "If I try hard, I believe I can do my schoolwork well."

Learning focus: "I feel very happy with myself when I really understand what

I'm taught at school."

Valuing school: "Learning at school is important."

Persistence: "If I cannot understand my schoolwork, I keep trying until I do."

Planning: "Before I start a project, I plan out how I'm going to do it."

In terms of scoring, Response scale ranges from 1 (strongly disagree) to 7 (strongly agree). Responses to 4 items on each of the 11 subscales are aggregated as a raw score and then converted to a normed score (motivation quotient) for that dimension. Students are then assigned a grade from A to D on each construct, based on number of standard deviations below or above the mean score from the norming sample. Survey license comes with worksheets for calculating scores and developing profile for each student. The MES technical manual reports mean Cronbach's alpha for the 11 subscales as .79 for the high school version (.77–.82 for individual scales) and .78 for the junior school version).70–.87 for individual scales) (Martin 2009a,b). Average test-retest reliability for high school version is reported as .73 (.61–.81 for individual scales) (Martin 2008b). The MES technical manual also reports that a confirmatory factor analysis of the standardization sample data was also undertaken to provide validity evidence for MES constructs. Results from this analysis found that the 11-factor solution identified by the exploratory analysis fit the hypothesized population model well further supporting the construct validity of the MES. In addition, further analysis of the MES standardization data shows that the MES has significant correlations with achievement and other academic outcomes, showing criterion-related validity. The MES has been used in in various studies conducted in Australia to evaluate effects of intervention programs (Martin 2005, 2007, 2008a), diagnose students with low motivation and engagement (Martin 2003), and examine differences between age and gender in motivation and

engagement (Martin 2007). For example, Howard (2006) conducted a study in the United

States with a population of Black, urban high school students with low socioeconomic

status, comparing the motivation and engagement of those promoted to grade 10 with

those retained in grade 9 (Fredericks, et al., 2011) In this study, Martin found a

significant difference in engagement levels for those who were promoted as opposed to

those that were retained.

<div align="center">Assessing Academic Optimism</div>

The School Academic Optimism Scale (SAOS) has been developed and validated

by Smith and Hoy (2007). This survey contains thirty questions designed to measure the

collective staff properties contained within academic optimism. The first twelve

questions on the survey have been validated to measure collective efficacy. Those

questions are measured on a six-point Likert scale. Smith and Hoy (2007) established

that the alpha coefficient for this subscale to be alpha = 0.91.

Question numbers thirteen through twenty-two have been validated to measure

faculty trust. These questions were also measured on a six-point Likert scale. The alpha

coefficient for this subscale was found to be alpha = 0.97 (Smith & Hoy, 2007).

Finally, question numbers twenty-three through thirty have been validated to

measure academic emphasis. This bank of questions was measured using a four-point

Likert scale. The alpha coefficient of this subscale was determined to be alpha = 0.89

(Smith & Hoy, 2007).

Smith, Hoy, and Sweetland (2001) further reported that a factor analysis on the three

variables of academic optimism explained 89.83 percent of the variance within their

study. This statistical finding supports the concept that academic emphasis, collective

efficacy, and faculty trust can be combined to create the new construct of academic

optimism.

<u>Assessing Transformational Leadership Skills</u>

An instrument that is commonly used to explore transformational leadership is the

quantifiable survey known as the MLQ, which was developed, by Avolio and Bass

(2004). In the past twenty years, the MLQ has been used to measure transformational

leadership in American companies, Russian companies, Korean institutions, and

organizations from New Zealand. The instrument has been used to measure

transformational leadership in the military, the private sector, government, education, and

many other nonprofit organizations (Bass & Riggio, 2006).

The MLQ consists of 45 items assessing each component of the FRL including

laissez-faire practices, transactional leadership, and transformational leadership. The

scale for each item ranges from 0 (behavior not seen) to 5 (behavior is frequently seen).

The MLQ was validated during its original design (Bass, 2008) and has been revised and

further validated over a span of more than 20 years (Avolio, Bass, & Yung, 1999). Bass

and Riggio (2006) state "the MLQ scales have demonstrated good to excellent internal

consistency, with alpha coefficients above the .80 level for all MLQ scales" (p. 22). The

correlation coefficients range in rate-rerate consistency across all MLQ scales from a

high of .74 to a low of .45.

Previous Studies Investigating
Leadership and Student Engagement

"The 20th century model used the Carnegie Unit as a measure of learning. The

21st century model uses competency as a measure of learning" (Bramante and Colby, p.

63).

Schools that have successfully implemented a personal mastery model have undergone a

fundamental paradigm shift that affects teachers, students, and parents. This demands

district leaders who have a high tolerance for ambiguity and dissent, and the deep

commitment to remedy existing weaknesses in the system, coupled with the ability to

lead and inspire others to the same depth of commitment. "They must be able to lead

such an endeavor successfully over the long term, despite potential setbacks and the

significant work that will be required to make changes in the day-to-day strategies and

processes of teachers, administrators, and support staff " (DeLorenzo, et al., p. 137). In

cases where the system has been implemented with fidelity, student achievement has

been well documented. Today, the Re-Inventing Schools Coalition (RISC) model

(DeLorenzo et al., 2009), and the Big Picture Learning (BPL) model (Littky, 2004) are

two of the country's leading personalized mastery paradigms.

Existing studies reveal that transformational leadership and personalized mastery

paradigms have a positive effect on student achievement. However, correlations between

transformational leadership and student engagement within these settings have yet to be observed. The hypothesis of this research centers on the concept that there will be a statistical correlation between transformational leadership and student engagement. For the purpose of this study, transformational leadership will be measured using the MLQ, and student engagement will be measured using the MES.

Research has supported the fact that building principals are the most important factors in the success or failure of building level initiative. There are virtually no documented instances of troubled schools being turned around without intervention by a powerful leader (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Leadership strategies employed by principals during the implementation of an initiative such as the Personal Mastery model increases the likelihood of that initiative becoming the norm in the culture of a school. Transformational leadership, by definition, can move followers to exceed expected performance, and can also lead to high levels of follower optimism and commitment. Thus, transformational leadership can support the development of successful personal mastery schools.

Chapter Two Summary

Although substantial research exists around the singular constructs of student engagement, academic optimism, and transformational leadership, no studies have been conducted to examine correlations between all three concepts in a Personal Mastery system compared to more traditional systems. Across the country, student success has

been profound in schools that have successfully implemented a Personalized Mastery

paradigm. This success that is more likely to continue when leaders engage in

transformational leadership practices that ultimately facilitate the second-order change

required to support a personal mastery system.

CHAPTER 3

METHODOLOGY

Research Paradigm Explanation and Justification

In choosing a research design, a researcher asks fundamental questions about why using a particular method is more appropriate than pursuing an alternative approach for a study. Stake expressed that quantitative researchers often search for explanation while qualitative researchers seek to understand complex issues (1995). Yin identifies situations in which a specific method of research is indicated: "For case study research, this niche is when a 'how' or 'why' question is being asked about a contemporary set of events over which a researcher has little or no control" (2014, p.14). Additionally, this is the preferred method in order to "understand a real-world case and assume that such an understanding is likely to involve important contextual conditions pertinent to your case" (2014, p.16). This particular study was designed to bring a researcher's analysis to the implementation of the performance-based model of schooling in two different settings. It also attempted to analyze "complex interrelationships" (Stake, 1995, p. 37) and how the ongoing dynamic of leadership affects student engagement and academic optimism in two performance-based educational programs.

Purpose Statement

The purpose of this embedded, case study was to analyze what the performance-based model of education looked like in two specific cases, and how people operating in

the model perceived the constructs of student engagement, academic optimism, and

transformational leadership. The programs studied comprised a comprehensive high

school that practiced the performance-based model, and an alternative program that had

implemented the performance-based system within a traditional high school setting. Both

the performance-based high school and the alternative program had made a dramatic shift

from the traditional model in terms of grades and general philosophy that has resulted in

second order change. A significant similarity between the two non-traditional programs

was the ability of students to accelerate through the curriculum based on proficiency to

skills and how they are released from additional time constraints. In the performance-

based model, students earned credit once standards had been met, which may have

happened at any time during the course of a school year.

To date there is little empirical evidence suggesting that high schools using

performance-based learning also evidenced more transformational leadership behaviors

by their principals, greater academic optimism and higher levels student engagement. The

model of performance-based education defined each case. The study was bounded by

time in that the analysis of the participants was from the early months of 2014, and bound

by place in terms of Lindsay, California and Bozeman, Montana.

Role of the Researcher

Researcher positionality was a critical consideration of this study. As Stake

(1995) has noted, a researcher may act as a

> teacher, participant observer, interviewer, reader, storyteller, advocate, artist,
> counselor, evaluator, consultant, and others. Although the rules of research

oftentimes seem prescribed and restrictive, the styles researchers follow in designing, studying, writing, and consulting vary considerably. Each researcher consciously or unconsciously makes decisions about how much emphasis to give each role (p. 91).

As an educational leader in the Bridger Alternative Program, an alternative school-within-a-school operating on the Bozeman High School campus, I undoubtedly had several biases and predispositions concerning the performance-based model. I had personally witnessed the power of the model, was aware of what it took to accomplish second order change, and had a deep appreciation of the school culture engendered by faithful implementation of the system. I could, conceivably, be compromised in maintaining a sufficient level of objectivity required of any researcher. Additionally, participants' trust and willingness to engage with me could have been biased because of my intimate understanding of the performance-based model and my relationship as leader of the Bridger Alternative Program.

However, I believe that my role as a leader in the Bridger Program also gave me a profound insight into the experience of the students and teachers who had worked through the tremendous change necessary to implement the model, which could have led to increased trust and openness. The fact that I was able to gather data from Lindsay High School, also afforded me the opportunity to balance the information gleaned from the Bridger Alternative Program and, thus, increase the reliability of the study. Yin is clear that a researcher should use his/her "own prior, expert knowledge in the case study" (2103, p. 168). In an attempt to find an example of how researcher positionality could serve as a strength, I turned to a study that Yin mentioned of Zigler and Muenchow's case study of the Head Start program in 1992.

> Their book was exceptionally insightful, possibly because it is based on Zigler's personal experiences with the program beginning with his role as the first director. However, the book also calls on other independent sources of evidence… The result is a winning combination: a most readable but also well-documented book (2013, p.118).

Additionally, in terms of interviewing adolescents, Boyle (2007) makes the point strongly that it is imperative for young people to believe that professionals are going to stop, look and listen to them as students often believe that their perspective has not been fully respected. In the context of this study, I chose to assume the role of an adult mentor who was interested in them as individuals and valued their perspectives and experiences as experts in being students. They knew that I was actively soliciting their "voice" and wanted to hear their opinions about their particular process of learning so that their leaders could continue to improve the model of education under which they were learning. Furthermore, I was able to engage the students at a deeper level and help them become "fully involved, and indeed becomes a full partner, in the process" (Boyle, 2007, p. 41). Every student appeared to enjoy the opportunity to describe various aspects of their education and how schools could operate better in meeting their needs.

I was acutely aware that researcher bias could, indeed, become a liability and decrease my objectivity in the collection and analysis of the data. But balancing my relationships with the participants with the role of researcher enhanced and strengthened the overall interview data. Thus, every effort was made to ensure appropriate objectivity was maintained through carefully designed procedures and diligent triangulation of the data.

Research Questions

Designing good research questions in a case study is the great challenge for a researcher. The questions need to "direct the looking and the thinking enough and not too much" (Stake, 1995, p. 15). While the central question and the original sub questions remained consistent and served to guide the research throughout the study, the interview process did lead to additional questions and issues that proved noteworthy. The following central and sub questions framed this research:

Central Question: How do teachers and students who operate in a performance-based educational system describe academic optimism, student engagement, and transformational leadership behaviors of their principals?

Sub questions:

1. How do teachers in the performance-based model schools describe the transformational leadership behaviors of their principals?

2. How do high school teachers in the performance-based model schools describe their academic optimism?

3. How do students describe their own level of academic engagement in the performance-based model of education?

For the purpose of this study, an interview protocol was developed to collect rich and thick descriptions of student perceptions of engagement and staff perceptions of academic optimism and transformational leadership. The interviews, in terms of questions and protocol, were identical in both programs and provided the consistent piece and common data in the study.

Design

A case study involves the widest array of data collection as the researcher

attempts to build an in-depth picture of "the case" (Stake, 1998, p. 123). Importantly, the

rigor of this method can be increased by "the use of a mix of quantitative and qualitative

evidence, along with the necessity for defining 'a case,' are but two of the ways that case

study research goes beyond being a type of qualitative research" alone (Yin, 2014, p.18).

An embedded case study contains more than one sub-unit of analysis, and the study's

methodology provides a means of integrating both quantitative and qualitative methods in

order to address "more complicated research questions and collect a richer and stronger

array of evidence than can be accomplished by any single method alone" (Yin, 2014,

p.66).

When a study contains more than a single case, it is considered a multiple case design.

An example presented by Yin is a study of school innovations (such as the use of new

curricula, rearranged school schedules, or a new educational technology) in which some

individual schools adopt some innovation. "Each school might be the subject of an

individual case study, but the study as a whole covers several schools and in this way

uses a multiple-case design" (2014, p.56). The evidence from multiple cases is often

considered "more compelling, and the overall study is therefore regarded as being more

robust: (Herriott & Firestone, 1983, as quoted in Yin, 2014). This particular study was

bounded by time and place because of the unique nature of the performance-based system

that defined the cases. The cases were of two different public school programs with

different demographics, both of which were in different stages of implementing the

performance-based model of schooling. Data was collected in February and March, 2014. This research can also be defined as an intrinsic case study in that:

> …we get curious about a particular agency, or when we take the responsibility of evaluating a program. The case is given. We are interested in it, not because by studying it we learn about other cases or about some general problem, but because we need to learn about that particular case. We have an intrinsic interest in the case, and we may call our work intrinsic case study (Stake, 1995, p. 3).

Thus, this embedded, multiple-case design was an intrinsic case study as the research is focused on a performance-based model school in California and a performance-based school-within-a-school in Montana. A multiple-case design is an appropriate method to confirm, challenge, or extend a theory. In fact, Yin states that some theory development is highly desired in case studies, and that the case should be thought of as 'the opportunity to shed empirical light about some theoretical concepts or principles… (2014, p. 40). The study used multiple sources of information including: (a) school demographic and achievement information (b) face-to-face student and teacher interviews, and (c) descriptive statistics to consider how people from two schools, in different stages of performance-based implementation, perceived the constructs of transformational leadership, academic optimism, teacher efficacy, and student engagement. As is appropriate in multiple-case studies, the research design followed replication logic, and served "in a manner similar to multiple experiments, with similar results (a literal replication) or contrasting results (a theoretical replication) predicted explicitly at the outset of the investigation" (Yin, 2014, p.63).

Student engagement in the Bridger Alternative Program was operationalized through the use of the Motivation and Engagement Scale (MES) developed by Martin in

2009, and Lindsay High School measured engagement using the Motivated Strategies for

Learning Questionnaire (MSLQ) that was developed and validated by Pintrich, Smith,

Garcia, and McKeachie. In addition, The Teacher Sense of Efficacy Scale (TSES) that

was developed and validated originally in 1990 by Woolfolk and Hoy was used to

operationalize teacher efficacy in Lindsay High School. The School Academic Optimism

Scale (SAOS) that Smith and Hoy developed in 2007 was used to measure academic

optimism in the Bridger Alternative Program. Transformational leadership perceptions

were addressed in both schools via teacher interviews. In addition, teacher perceptions

using the Multifactor Leadership Questionnaire (MLQ) created by Avolio and Bass

(2004) was used to measure teachers' perceptions of transformational leadership

behaviors displayed by the principal in the Bridger Alternative Program. All survey data

was collected from staff members and students who were functioning within the two

schooling contexts. The intersection of this data as demonstrated in the multiple cases

provided an additional layer and supports the triangulation of the data. Finally, in order to

establish a clear nomenclature, Lindsay High School was identified by the acronym LHS

and the Bridger Alternative Program by BAP.

The study was also carried out using qualitative research methods, specifically, an

ethnographic research design in collecting data. Ethnographic designs, as Creswell (2002)

described them, "are qualitative research procedures for describing, analyzing, and

interpreting a culture-sharing group's shared patterns of behavior, beliefs, and language

that develop over time". As such, by using this research design and utilizing in-depth

interviews, the study explored "culture-sharing" beliefs, among students in the context of

an alternative educational program. Students' perceptions were obtained through interviews with semi-structured questions so that students could freely express their thoughts and ideas around particular topics.

Finally, a linear-analytic structure (Yin, p.188) was used to compose the final research report. After a research problem and a review of the literature had been presented, the report covered the data used, the data collected, and the data analysis or findings, ending with the conclusions and the implications for the original issue that had been studied. This particular structure is especially applicable to explanatory and descriptive case studies (Yin, 2014).

Participants

"Case study research is not sampling research" (Stake, 1995, p. 4). Numbers of participants is intended to employ maximum variation as a way to discern multiple perspectives about the case (Creswell, 1998). The participants for this study came from a convenience sample and consisted of students and staff from the Bridger Alternative Program (BAP) and Lindsay High School (LHS). Lindsay High School had implemented the performance-based model comprehensively while the Bridger Alternative Program, operating as a "school-within-a-school" on the main Bozeman High campus and had fully adopted the performance-based model within the parameters of an innovative program that still, ultimately, had to assign traditional grades. Although the two overall school communities in the study are dramatically different in terms of demographics, economics, and educational system, both Lindsay High School and the Bridger Alternative Program

were comparatively low performing schools prior to implementing the performance-based model of education. The adoption of the system, as well as the subsequent results, provides a compelling story.

Twenty faculty members from the Bridger Alternative Program were surveyed using the School Academic Optimism Scale (SAOS) and the Multi-Factor Leadership Questionnaire (MLQ) after they had been given a brief description of the concepts surrounding academic optimism and transformational leadership. All 20 teachers (100%) completed and submitted the surveys, and 8 of these teachers were interviewed. The participants who consented to interviews and survey completion are represented with the participant profiles noted in Table1.

Table 1
Bridger Alternative Program Teacher Participant Profiles

Teacher Characteristics	Data
Total Teachers	20
Average Number of Years as a Teacher	8.5 yrs.
Average Number of Years in the Performance-Based Model	2.4 yrs.
Classes Currently Taught in the Performance-Based Model	17/40 = 42.5%
SAOS/MLQ Completion Rate	20 (100%)
Teacher Interviews	8 Teachers

One hundred twenty students from the Bridger Alternative Program were surveyed as to their level of academic engagement in their own schooling using the Motivation and Engagement Survey (MES). Sixty-eight students (56.6%) completed and submitted the surveys, and 18 of these students consented to interviews. The students who consented to interviews and survey completion are represented with the participant

profiles noted in Table 2.

Table 2

Bridger Alternative Program Student Participant Profiles

Student Characteristics	Data
Total Students/Grade Levels	137 / 9-12
MES Completion Rate	68 (49.6%)
Student Interviews	18 BAP Students

The numbers of teachers and students proposed to complete the survey instruments was based on estimating the numbers needed to detect a moderate effect when the program was compared to national norms on measures of transformational leadership, academic optimism and student engagement.

Ideally, the study would have used the same quantitative instruments at both sites. However, in 2013, Lindsay High School received a $10 million Race-to-the-Top grant from the federal government and, as a result, was required to collect substantial data at regular intervals. District leadership determined that student engagement would be measured using the Motivated Strategies for Learning Questionnaire (MSLQ), and that teacher efficacy and confidence would be measured using the Teacher Sense of Efficacy Survey (TSES) during the 2013-14 school year. After extensive discussion with central office leaders, I decided to use data recently gathered as part of the grant in order to not impose an additional research burden on students and staff. Although the data collected from Lindsay was from different quantitative instruments, the results were similar in terms of research focus and all tools were previously validated and deemed reliable. The MSLQ was administered to one thousand Lindsay High School students. The 765 completed surveys represented a 76.5% return rate, and 10 of these students participated

in interviews. The participant profile in terms of Lindsay Students is presented in Table 3.

Table 3.
Lindsay High School Student Participant Profiles

Student Characteristics	Data
Total Students/Grade Levels	1,000 / 9-12
MSLQ Completion Rate	765 (76.5%)
Student Interviews	10 LHS Students

Similarly, the TSES was administered to 58 Lindsay High School teachers, and

the 43 completed surveys represented a response rate of 74%, and from this group, 4

teachers agreed to be interviewed in order for me to gain additional insight into their

perceptions of leadership, engagement, and optimism. The teachers who consented to

interviews and survey completion are represented with the participant profiles noted in

Table 4.

Table 4
Lindsay High School Teacher Participant Profiles

Teacher Characteristics	Data
Total Teachers	58
Average Number Years as a Teacher	5.75
Average Number Years in PBS	3.13
Classes Currently Taught in PBS	5 (100%)
TSES Completion Rate	43 (74.1%)
Interviews	4 Teachers

Quantitative Instruments

Student Engagement:

The Motivation and Engagement Scale (MES) was used in the Bridger

Alternative Program to measure student engagement, while the Motivated Strategies for

Learning Questionnaire (MSLQ) was a tool utilized in Lindsay High School for the same

purpose. The MES survey had been validated by Dr. Andrew J. Martin, from the

University of Sydney, and published by the Lifelong Achievement Group

(www.lifelongachievement.com) in 2009. The MES-High School version had been

normed with 33,778 students, ages 12–18, across 58 schools. Samples were

predominately middle-class students from urban, rural, and suburban areas of Australia,

but did include American schools as well. The questionnaire contained 11 subscales,

each of which comprises 4 items, for a total of 44 items. Sample high school items for

each of the subscales include:

> Self-belief: "If I try hard, I believe I can do my schoolwork well."

> Learning focus: "I feel very happy with myself when I really understand what

>> I'm taught at school."

> Valuing school: "Learning at school is important."

> Persistence: "If I cannot understand my schoolwork, I keep trying until I do."

> Planning: "Before I start a project, I plan out how I'm going to do it."

In terms of scoring, Response scale ranges from 1 (strongly disagree) to 7. Responses to

4 items on each of the 11 subscales are aggregated as a raw score and then converted to a

normed score (motivation quotient) for that dimension. Students are then assigned a

grade from A to D on each construct, based on number of standard deviations below or

above the mean score from the norming sample. Survey license comes with worksheets

for calculating scores and developing profile for each student. Reliability: Developer

reports mean Cronbach's alpha for the 11 subscales as .79 for the high school version

(.77–.82 for individual scales) and .78 for the junior school version (.70–.87 for

individual scales) (www. lifelongachievement.com; Martin 2009a,b). Average test-retest

reliability for high school version is reported as .73 (.61–.81 for individual scales)

(Martin 2008b). Validity: Developer has conducted confirmatory factor analyses to

demonstrate construct validity of the 11 subscales (Martin 2009a,b). Analyses

demonstrate significant correlations with achievement and other academic outcomes,

showing criterion-related validity. The developer has used instrument in various studies

in Australia to evaluate effects of intervention programs (Martin 2005, 2007, 2008a),

diagnose students with low motivation and engagement (Martin 2003), and examine

differences between age and gender in motivation and engagement (Martin 2007).

Howard (2006) conducted a study in the United States with a population of Black, urban

high school students with low socioeconomic status, comparing the motivation and

engagement of those promoted to grade 10 with those retained in grade 9 (Fredericks, et

al., 2011)

The Motivated Strategies for Learning Questionnaire (MSLQ) was developed and

validated by Pintrich, Smith, Garcia, and McKeachie to assess college students'

motivational orientations and their use of different learning strategies for a college

course. The MSLQ identified fifteen different scales in order to isolate motivation and

learning strategies behaviors. Students rate themselves on a seven point Likert scale with

1 = not at all true of me to 7 = very true of me. The fifteen different scales were

constructed by taking the means of the items that make up that scale. The MSLQ shows

reasonable factor reliability (Pintrich, P.R., Smith,D.A.F., Garcia, T., & McKeachie,

W.J., 1991).

Academic Optimism:

Academic optimism was measured using the School Academic Optimism Scale

(SAOS) in the Bridger Alternative Program. One facet of academic optimism, teacher

sense of efficacy was collected from Lindsay high school teachers using the Teacher

Sense of Efficacy Scale (TSES). Teacher efficacy is one of the three components of

academic optimism and relates to a teacher's belief in himself or herself to perform well

in the classroom and have a positive ability to connect with all students at any level of

academic development. The TSES developed by Tschannen-Moran and Hoy, measures

the efficacy of pre-service teachers in terms of their perceived level of confidence in their

ability to carry out teaching duties and be effective in the classroom. The instrument was

also used in the actual development of the concept of individual academic optimism in

secondary teachers based on the recognition that there is a strong connection between

teacher confidence and their overall level of optimism since both concepts evolve from

the construct of positive psychology (Fahey, et al, 2010). Although the SAOS and TSES

instruments measure different affective constructs, studies show a significant and

moderate relationship between teacher sense of efficacy and their overall perceptions of

academic optimism (Fahy, Wu & Hoy, 2010).

The School Academic Optimism Scale (SAOS) has been developed and validated

by Smith and Hoy (2007). This survey contains thirty questions designed to measure the

collective staff properties contained within academic optimism. The first twelve

questions on the survey have been validated to measure collective efficacy. Those

questions are measured on a six-point Likert scale with 1 = strongly disagree to 6 = strongly agree. Smith and Hoy (2007) established that the alpha coefficient for this subscale to be alpha = 0.91. Question numbers thirteen through twenty-two have been validated to measure faculty trust. These questions were also measured on a six-point Likert scale. The alpha coefficient for this subscale was found to be alpha = 0.97 (Smith & Hoy, 2007).

Finally, question numbers twenty-three through thirty have been validated to measure academic emphasis. This bank of questions was measured using a four-point Likert scale. The alpha coefficient of this subscale was determined to be alpha = 0.89 (Smith & Hoy, 2007). Smith et al. (2001) further reported that a factor analysis on the three variables of academic optimism explained 89.83 percent of the variance within their study. This statistical finding supports the concept that academic emphasis, teacher efficacy, and trust combine to form a solid foundation for academic optimism.

The Teacher Sense of Efficacy Scale (TSES) was developed and validated originally in 1990 by Woolfolk and Hoy to measure pre-service teachers' self efficacy beliefs in terms of student literacy. The 23-question survey consists of three dimensions: instructional strategies, classroom management, and student engagement, and measures teacher perceptions in terms of how successful they feel about their ability to perform and deliver content to students. The questions are measured on a nine-point Likert scale with 1= not at all to 9 = almost always. The reliability for the survey was 0.94 and Cronbach's alpha demonstrated an adequate level of .74 of reliability and a high level of internal consistency among the items (Woolfolk, A.E., & Hoy, W.K., 1990). The researchers

were clear in their findings that composite scores from the TSES should only be used as

one point of reference in order to identify examples of high and low efficacy teachers A

subsequent instrument was created by Woolfolk-Hoy and Tschannen-Moran that was

revised to use a five-point Likert range (2001).

Transformational Leadership

Teacher perceptions of transformational leadership behaviors exhibited by their

principals was assessed, primarily, through personal interviews. In addition, the

Multifactor Leadership Questionnaire (MLQ) as administered to the Bridger Alternative

Program staff was developed by Avolio and Bass in 2004 to measure transformational

leadership in a number of businesses, the military, government, education, and many

nonprofit organizations (Bass & Riggio, 2006). The MLQ 5X short contains 45 items that

measure and identify leadership behaviors that previous research has linked with

individual and organizational success (Avolio & Bass, 2004). This survey was validated

by Avolio and Bass (2004) and the validation results were also confirmed by Antonakis,

Avolio, and Sivasubramaniam (2003). The questions measure leadership qualities that

align with leadership traits of transformational leadership and transactional leadership.

These questions were measured on a five-point Likert scale and responses range from $0 =$

behavior not seen to $4 =$ behavior is frequently seen. The alpha coefficient for each

leadership factor was found to range from alpha $= 0.74$ to 0.94 (Avolio & Bass, 2004).

Bass and Riggio (2006) state "the MLQ scales have demonstrated good to

excellent internal consistency, with alpha coefficients above the .80 level for all MLQ

scales" (p. 22). The correlation coefficients range in rate-rerate consistency across all MLQ scales from a high of .74 to a low of .45.

<div align="center">Qualitative Instruments</div>

As in ethnography, my intent with these interviews was "to understand the workplace from the insider's perspective (Gee & Ullman, 1998, p.3). Information gleaned from personal interviews can lead the research in many different directions, so, as Stake observes, "The best research questions evolve during the study" (1995, p. 33). The interview questions that guided this study were what Stake referred to as "issue oriented" (1995, p.65) but were also intended to be open-ended enough to provoke data that would lend itself to analysis of student and teacher perceptions related to their level of engagement and academic optimism. After an extensive review of the key researchers in the literature in regards to student engagement, mini-tour and example questions were developed in order to "put a magnifying glass on an activity or area that is important" (Gee & Ullman, 1998, p.1). Engagement, relevance, motivation, and school culture have been identified as critical factors in student success. Thus, the interview protocol for students in this study consisted of four questions that helped the researcher delve into why they feel engaged academically and motivated in the performance-based system. Student Interviews:

1. Can you describe for me how are you engaged in your own learning?

   > Academic engagement has been shown to decline as students progress through the upper elementary grades and middle school, reaching its lowest levels in high school (Marks 2000; National Research Council and Institute of Medicine 2004 as cited in Fredericks, et al., 2011).

2. Can you describe how what you learn in school is valuable and relevant to your

    life?

> Student engagement occurs when students make a psychological investment in learning. They try hard to learn what school offers. They take pride not simply in earning the formal grades, but in understanding the material and incorporating or internalizing it in their lives. A definition of student engagement includes behavioral, emotional, and cognitive components as well as feelings of belonging, enjoyment, and attachment (Fredricks, et al 2011).

3. What do you feel holds you back in your learning?

> One problem with systems of assessment that use letters and grades is that they are usually very light on description and very heavy on comparison. Students are sometimes given grades without really knowing what they mean, and teachers sometimes give grades without being completely sure why (Robinson, 2001, p. 276).

> Meanwhile, struggling students are forced to move with the class and receive less time than they need to master the material. They are penalized with poor grades. They are pushed on to the next task before they are ready. They fall further and further behind and begin living with a powerful dynamic of school failure that is reinforced as long as they remain enrolled or until they drop out. They also become prisoners of time" (Grant, Forsten, and Richardson, 2000, p.27).

4. What would you like to change about school?

> Established structures and policies imbue schools with a culture that makes truly individual approaches difficult to implement. While understanding student engagement is not an easy task, it is essential considering the mandates for educational reform that pervade our society" (Burks & Hochbein, 2013).

The interview protocol for teachers followed the same process as stated above in order to arrive at the questions for the study. After an extensive review of key researchers from the literature in regards to academic optimism and transformational leadership,

mini-tour and example questions were explored. Ultimately, the interview protocol for

teachers consisted of five questions that helped the researcher delve into why they feel

optimistic in the performance-based system, and to identify the critical leadership

behaviors that administrators exhibited in order to shift an educational program to the

performance-based system. Questions one and two were taken from the SAOS, and

helped uncover into why teachers felt more optimistic about their jobs as teachers in the

Performance-Based model. Questions three through five from the MLQ, helped identify

what leadership behaviors were most transformational and helpful in moving an

organization in this direction.

Teacher Interviews

1. Can you describe what you typically do after a lesson?

> To realize our true creative potential – in our organizations, in our schools, and in our communities – we need to think differently about ourselves and to act differently toward each other (Pink, 2009, p. 286). One of the reasons schools fail and systems stumble is that teachers as well as students become disengaged. There are teachers who are not interested in learning or have no gift for teaching and should be doing something else that fulfills them (Robinson, 2001, p.267). Enhanced engagement levels in students can lead directly to increased motivational levels for the educators who teach them. The good news for educators is that a 21st century, anytime, anyplace, anyhow, any pace, student-centered, move-on-when-ready model will rekindle the enthusiasm that inspired most educators to enter the profession in the first place (Bramante & Colby, p. 62).

2. Can you give me an example how you are able to take all students to a higher

   level?

> Motivation and instruction are linked: good instruction can raise motivation for learning and motivated learners seek effective instructional practices (Mayer, p.233). …performing as well or better than a previous

performance is seen as accessible by students and this perceived accessibility to success enhances students' efficacy regarding their learning (Martin, 2006).

3. How does your building leadership inspire people to buy in to their vision?

It is our job as educational leaders to clarify the goals, aspirations and values in our school communities as we wrestle with the myriad of problems that demand definition and action (Heifitz, 2002).

4. Can you describe how your leadership team takes risks that often result in positive

outcomes?

A leader initiates, provides the ideas and the structure, and takes the risk of failure …while knowing that the path is uncertain, even dangerous (Greenleaf, 1977, p.29).
Marzano and Waters state, "…the highest performing systems in the world establish and accomplish nonnegotiable goals for instruction in every classroom…They do this by establishing clear instructional priorities at the system level, establishing a systematic and system wide approach to instruction, investing in teacher preparation and professional development, and developing strong instructional leadership (p. 21).

5. Can you give an example how your leadership team encourages and celebrates

innovation?

Creating a culture of innovation will only work if the initiative is led from the top of the organization. The endorsement and involvement of leaders means everything, if the environment is to change (Robinson, 2001, p.220).

Data Collection Procedures

Various forms of data were collected in order to access "a matrix of information sources" (Creswell, 1998, p.123) that can best convey a rich and in-depth picture of the cases. In February 2014, the performance-based implementation protocol along with demographic and achievement data was gathered from the two participating schools,

which provided a rich portrait of the two schools. Subsequent data collection was gathered using both qualitative and quantitative approaches.

One hundred twenty Motivation and Engagement Surveys (MES) were distributed to students in the Bridger Alternative Program Bozeman and the 68 MES survey returns represented a 56.6% response rate. The response rate for the 20 Bridger Alternative Program teachers on the School Academic Optimism Scale (SAOS) as well as the Multi-Factor Leadership Questionnaire (MLQ) was 100%. Fifty-eight Lindsay High School teachers received the Teacher Sense of Efficacy Survey (TSES) and the 43 submitted surveys represented a 74% response rate while 765 student responses to the 1,000 distributed Motivated Strategies for Learning Questionnaire (MSLQ) represented a 76.5% rate of return.

The qualitative interview protocol, however, for both contexts was identical. These interviews were designed to collect data on the constructs of student engagement, academic optimism, and transformational leadership behaviors. The researcher provided the participants with a written statement describing the purpose as well as the voluntary nature of the research. Participants were then allowed to read and complete the consent form agreeing to take part in the study. No student interviews were conducted unless the researcher was in possession of signed parental consent forms (Appendix G) These forms had been composed and written at an 8th grade reading level in order to ensure full access and understanding by all potential parents and students. All survey data was collected using either a pencil and paper or an on-line format that maintained participant confidentiality. Additionally, each interview was prefaced with a statement that satisfied

Montana State University's Institutional Review Board protocol requirements (Appendix

H) and participants were encouraged to engage in more of a conversation than a

question/answer interview. Eighteen students and 8 teachers from the Bridger Alternative

Program participated in the interviews, while 4 teachers and 10 students

from Lindsay High School consented to interviews. This was a number sufficient to

achieve saturation in terms of the research questions.

Face-to-face interviews were conducted in a semi-structured, open-ended format

suggested by Creswell (1998). The interview protocol was similar to that used in a pilot

study conducted in March, 2013. This pilot study proved advantageous as some issues

surfaced in the protocol that allowed for more focused areas of research. The interviews

were audio recorded and transcribed verbatim by the researcher. Although the interview

protocol was the same in both Lindsay High School and the Bridger Alternative Program,

the questions were designed so that the interview was able to evolve more as a

conversation rather than a simple question and answer session.

Data Management

Once the interviews and transcriptions were completed, the individual data was

secured in files that identified the participant's code and contained the interview

transcription. In addition to the hard file, each participant's interview transcription was

maintained electronically in three different locations. The participant consent forms were

stored separately in a locked storage area as required by the Institutional Review Board at

Montana State University.

Subsequently, categorical aggregations were identified by protocol questions and matching sections of the interview response data was recorded under each section. These categorical aggregation transcriptions were stored electronically and maintained electronically in two external hard drives. Since participant response to research questions was transcribed, I was able to engage the entire case in a separate analysis for each question and match the data with data from the surveys. The categorical aggregations were based on the specific interview questions.

<u>Data Analysis</u>

"The real business of case study is particularization, not generalization. We take a particular case and come to know it well, not primarily as to how it is different from others but what it is, what it does" (Stake, 1995, p. 8). Importantly, the use of multiple sources of evidence imposes a greater burden on the researcher in that it requires him/her to be adept at carrying out the full variety of data collection and analysis techniques. Yin (2014) describes the necessity, in case study research, for multiple sources of evidence all triangulating on the same set of research questions. Multiple sources of evidence allow a researcher to address a broader range of issues and, most importantly lead to "the development of *converging lines of inquiry.* Any case study finding or conclusion is likely to be more convincing and accurate if it is based on several sources of information, following a similar convergence" (p.120). Additionally, it is critical to include the use of documents "to corroborate and augment evidence from other sources. Documents play

an explicit role in any data collection in doing any case study research" (p.107). This

principle of documenting multiple sources serves to strengthen construct validity of the

case study as well as reliability of the data. Furthermore, the multiple sources of evidence

can provide multiple measures of the same phenomenon. This study used documents,

qualitative, and quantitative data in order to reach conclusions.

In terms of the quantitative data analysis, once the completed surveys were

collected from both participating programs, they were scored and summarized. Teacher

and student responses were entered into the Statistical Package for the Social Sciences

(SPSS), and a statistical analysis protocol was utilized to examine the constructs of

transformational leadership in the Bridger Alternative Program, student engagement in

both schools, academic optimism at BAP, and teacher efficacy at LHS as compared to

established national norms.

In terms of the analyzing the interview data, Yin (2014) referred to the importance

of "playing" with the data in order to identify patterns, insights, or concepts that could

help lead to the discovery of additional relationships. The data was also analyzed in order

to discern what Stake referred to as "assertions" (1995, p.12) since he strongly suggests

that "all research is a search for patterns, for consistencies" (1995, p. 44). Also, Yin

points to "an inductive strategy" (p.138) as an appropriate means of interpreting an

embedded unit of analysis within a broader case study. In response to this expectation,

each interview was recorded verbatim, and each participant's response received multiple

readings. Stake (1995) suggests that data be analyzed in the form of direct interpretation

through individual instances and categorical aggregations in order to deepen

understanding. This allowed for reading the data through the lens of the individual as well as across the larger case. Thus, in response to Yin's (2014) recommendation, the next step involved the creation of memos or notes about what was observed in the data in order to conceptualize information and form a preliminary set of codes. A systematic approach to creating working definitions for each code allowed the data to be categorized into distinct units of analysis. This coded data was then organized into categories or themes that addressed the rich and complex nature of the data. The criteria for identifying themes included concepts that were stated multiple times, and were framed by the research questions. Finally, a number of examples from the data in the form of actual quotations from the transcripts were assigned to each theme.

Additionally, Creswell outlines several methods of data analysis that can be used in qualitative research studies to verify the results, including triangulation, peer review, identifying researcher bias, member checking, and a complete, detailed description (1998, p. 201-201). Triangulation was accomplished by comparing the documentation of academic achievement data, individual interview data, as well as the survey data from multiple instruments. Secondly, an important procedure that helped increase the quality and validity of the study was to have the draft reviewed by the informers and participants in the case. This review is critical as a means of corroborating the essential findings and validating the interpretations presented in the evidence (Yin, 2013). During the first week of May 2014, the findings from this report were presented to participants in both Lindsay and Bozeman in order to gauge their general opinions at to the thoroughness and accuracy of the data. Additions or clarifications have been included in the appropriate

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section. The depth and detail of these interviews and the subsequent data gleaned lent

themselves to a rich description of the case and thus enable readers of the study to

consider the transferability of the study.

Acknowledging researcher bias was an important component of this study and

was addressed in the *Role of the Researcher* section. Member checking was a constant

tool used during the interviews in that I would regularly as participants to restate their

meaning or intent if there was any doubt as to my understanding of their perspective.

Finally, the data gleaned form the interviews produced such a "rich, thick, description"

(Stake, 1998, p. 203) of participant description that readers of the study could consider

the depth and detail of the information and the generalizability of the overall study.

<div align="center">Trustworthiness of the Data Collection
and Analysis Procedures</div>

The burden of verifying the data and ensuring the quality of the study was

addressed from a number of approaches. First, triangulation was accomplished by

corroborating the data from the following three sources: (a) individual interview

transcripts, (b) statistical analysis of variance gleaned from the MLQ, SAOS, TSES,

MSLQ, and MES surveys, and (c) participating school demographic and achievement

data.

Secondly, in regards to the quantitative data, reliability of the study was

accomplished by vigilantly following the steps required by the method used, through the

use of multiple sources, and a chain of evidence, which allows an external observer to

follow the derivation of any research from initial research questions to ultimate case

study conclusions. Construct validity was addressed by using operational definitions for successful implementation, student engagement, academic optimism, teacher efficacy, and transformational leadership, as well as by identifying the measurement instruments. External validity was addressed through the creation of pressing and relevant descriptive or exploratory questions. Internal validity seeks to address "a causal relationship whereby certain conditions are believed to lead to other conditions, as distinguished from spurious relationships" (Yin, 2014, p.46). Internal validity was established through pattern matching and explanation building.

Third, Yin (2014) stated the strategies with which to establish the trustworthiness of a study from a qualitative approach. The criteria for establishing credibility in each of these cases included triangulation, peer checking, member checking, a solid and identical interview protocol, structural coherence, and the established authority of the researcher. Transferability was established using a dense description of the case data. The concept of dependability was addressed with the use of triangulation, peer examination, stepwise replication, and a dense description of research methods. And confirmability was established using triangulation techniques and the examination of the circular effects of cause and effect, which is commonly referred to as reflexivity (Yin, 2014).

Chapter Three Summary

The purpose of this mixed-methods, multiple case study was to analyze whether or not two educational programs that operate under a performance-based model as compared to more traditional systems differ in terms of student engagement, teacher

efficacy, and academic optimism, and more importantly, to examine the transformational leadership skills necessary for principals to practice in order to facilitate the change necessary for full implementation of the performance-based model. The Central Question considered how teachers and students who operate in a performance-based educational system perceive transformational leadership, student engagement, and academic optimism. Three sub questions were formulated in order to better address the central question. 1. How do teachers in the performance-based model schools describe the transformational leadership behaviors of their principals? 2. How do high school teachers in the performance-based model schools describe their academic optimism? 3. How do students describe their own level of academic engagement in the performance-based model of education? Various forms of data including documents, interviews, and quantitative survey instruments were collected in order to best convey a rich and in-depth picture of the cases.

CHAPTER FOUR

RESULTS

<u>Introduction</u>

Yin points out that the "analysis of case study evidence is one of the least developed aspect of doing case studies…Much depends on a researcher's own style of rigorous empirical thinking, along with the sufficient presentation of evidence and careful consideration of alternative interpretations" (2014, p.133). Data analysis for this study included documents from both Lindsay High School and the Bridger Alternative Program in addition to the statistical interpretation procured from both schools. The Multifactor Leader Questionnaire (MLQ), the School Academic Optimism Scale (SAOS), and the Motivation and Engagement Scale (MES) were distributed to teachers and students in the Bridger Alternative Program, while the Teacher Sense of Efficacy Survey (TSES) and the Motivated Strategies for Learning Questionnaire (MSLQ) was completed by Lindsay High School teachers and students. The quantitative data was reinforced by powerful personal interviews, transcribed faithfully and fully in order to present a clear picture of how the performance-based model was successfully implemented and the impact it had on the lives of students and teachers operating in it.

Creswell describes a "spiraling" (1998, p. 143) procedure that addresses, among

other things, data management, interpreting, representing, and pattern recognition. The

volume of data that was generated by this mixed methods study was immense and

organization was a critical first step. I decided to rely on theoretical propositions as the

general strategy in presenting the case study due to the fact that my initial objectives and

case design were "based on such propositions, which in turn reflected a set of research

questions, reviews of the literature, and new hypotheses or propositions (Yin, 2014,

p.136). Finally, Yin describes how the potential audience should dictate the final form of

the case study report and "should reflect the emphases, details, compositional forms, and

be even the length suitable for the potential audience" (2013, p.181). My audience was

specifically intended to be educational leaders who may be interested in implementing an

innovative system like the performance-based model.

Intent of the Study

The intent of this embedded, multiple-case design study was to analyze how

students and teachers operating in two schools that utilize a performance-based model

perceive student engagement and academic optimism and, more importantly, to examine

the critical transformational leadership skills necessary for principals to practice in order

to facilitate the full implementation of the model. Both the performance-based high

school and the alternative program had made a dramatic shift from the traditional model

in terms of grades and general philosophy that has resulted in second order change. A

significant similarity between the two non-traditional programs was the ability of

students to accelerate through the curriculum based on proficiency to skills and how they

are released from additional time constraints. In the performance-based model, students earned credit once standards had been met, which may have happened at any time during the course of a year.

Research Questions

The research questions that guided this study were intended to be open-ended enough to provoke data that would lend itself to analysis of student and teacher perceptions related to their level of engagement and academic optimism. While the central question and the original sub questions remained consistent and served to guide the research throughout the study, the interview process did lead to additional questions and issues that proved noteworthy. The following central and sub questions framed this research:

Central Question: How do teachers and students who operate in a performance-based educational system describe academic optimism, student engagement, and transformational leadership behaviors of their principals?

Sub questions:

1. How do teachers in the performance-based model schools describe the transformational leadership behaviors of their principals?

2. How do high school teachers in the performance-based model schools describe their academic optimism?

3. How do students describe their own level of academic engagement in the performance-based model of education?

For the purpose of this study, the Multifactor Leadership Questionnaire (MLQ) was used to operationalize transformational leadership, the Motivation and Engagement Scale (MES) measured student engagement, and the School Academic Optimism Scale (SAOS) measured academic optimism in the Bridger Alternative Program. In Lindsay, student engagement was operationalized through the use of the Motivated Strategies for Learning Questionnaire (MSLQ). In addition, while the Teacher Sense of Efficacy Scale (TSES) was used to operationalize teacher efficacy and confidence in their ability to perform effectively as a teacher. The TSES was used to support results of Lindsey teacher interview results related to their perceptions of Academic Optimism. Teachers perceptions of transformational leadership behaviors using the Muti-Factor Leadership Questionnaire was not measured using quantitative methods in Lindsay.

Also, the interview protocols were used to delve deeper into student and staff perceptions relating to student engagement, academic optimism and teacher efficacy, and the transformational leadership behaviors of their principals. The intersection of this data as demonstrated in the multiple cases (two performance-based education model cases) provides an additional layer and supports the triangulation of the data. Finally, in order to establish a clear nomenclature, Lindsay High School will be identified by the acronym LHS and the Bridger Alternative Program by BAP.

<u>Case Descriptions</u>

Although Yin has stated that a case study does not follow any stereotypic form, the reporting format utilized for this research reflects what he referred to as "the multiple-

case version of the classic single – case study" (p.184). This report consists of a description of the single cases in separate sections, followed by presentations of the quantitative data in the areas of student engagement, academic optimism, and transformational leadership. A subsequent section will address the interview data and attempt to present richer case descriptions. The final section addresses comparisons and contrasts between the cases.

<div align="center">Lindsay High School</div>

Demographics

The city of Lindsay, in the heart of California's central valley, is composed of roughly 12,833 residents, 51% live below the poverty level, 62% have not earned a high school diploma, and 41% of males work in the field of agriculture. As of August 2012, the unemployment rate was 11.1% (http://www.city-data.com).

The Lindsay Unified School District consists of six K-8 elementary schools, one comprehensive high school, and three alternative education schools that combine to serve 4105 students. The student population entails 60% English Language Learners, 25% migrant, 12% homeless, and 100% free and reduced lunch (http://www.lindsay.k12.ca.us/).

Performance-Based Implementation

The Lindsay community largely came together to demand a change from the traditional system of education that was not meeting the needs of their student population.

A number of community meetings, facilitated by school administrators, were conducted in order to gauge public concerns and enlist public support and opinion. The case of Lindsay, California, provides an example of adult dedicated, community driven, top-down implementation of the performance-based model of education. The community, led by a proactive school board, strong administrative leaders, and concerned parent groups became galvanized in their commitment to change their school system. This commitment, in 2007 led to the trust placed in school leaders to research and identify a model that would provide the best fit for the Lindsay community. Once the performance-based model was selected, leaders from across the district were selected to create a guaranteed and viable curriculum, resources were allocated, and Dr. Robert Marzano, along with his team from the Marzano Research Laboratory (MREL) were commissioned to begin working beside Lindsay educators in order to unpack standards, create measurement topics, and create rubrics to demonstrate proficiency. In 2008, groups of vanguard teachers began piloting the process by teaching to measurement topics, and discussing proficiency to standards. Teacher feedback led to continued revisions during the course of the year. The following year, in 2009, measurement topics were adopted at all grade levels, and the performance-based model was implemented in grade 9 at Lindsay High School, with assistance from the Re-inventing Schools Coalition (RISC). As Marzano and MREL provided the research base to adopt the model, RISC was commissioned to help teachers implement the practice in the actual classrooms. In 2010, assessments designed to measure progress on measurement topics were piloted in English and Math at all grade levels in the district, and the performance-based model was expanded to grades

9-10 at Lindsay High School. 2011 saw the adoption of assessments on measurement

topics in all core areas and at all grade levels, and the performance-based model of

instruction was implemented at grades K-11. By 2012, the performance-based model was

adopted in all grades district-wide, and an online assessment program was adopted for all

measurement topics at grades 9-12. As a result of successful change in practice and

corresponding growth in achievement, the Lindsay Unified School District was awarded

a $10 million grant to continue the implementation and evolution of the performance-

based system. Lindsay schools followed a planned schedule, utilized experts in the field,

and implemented the model with fidelity. The results have been astounding in terms of

student achievement and stakeholder buy-in as documented in the following section.

Student Academic Achievement

The results in terms of academic growth have been profound, and recently

resulted in a $10 million Race To The Top grant being awarded to the Lindsay Unified

School District in order to continue the evolution the performance-based model. In the

Fall of 2012, the District leadership administered the California Healthy Kids Survey

(CHKS) that measures climate factors such as safety, drugs, alcohol, protective home

environment and gang membership. The subsequent data analysis showed great

improvement from the earlier survey conducted in 2004 in terms of the climate factors

that can be directly tied to academic success. Also, the student achievement data reflects

significant increase in virtually every measure. The percentage of 10th graders passing the

English component of the CAHSEE exam from 2009-10 to 2011-12 increased from 67%

to 78%, the math measure on the same exam improved 9%. Students meeting AMAO 1

on the CELDT rose from 48.5% in 2009 to 64.6% in 2012, and students measuring at

proficiency and

above on the ELA portion of the CST improved in grades 9-11 from 2009-2012 from a

low of 25% to a high of 47%., and the math scores from the same period rose from 4% to

28% for 10th graders.

Student Engagement Data

      Student engagement data from Lindsay High School was collected from the

Motivated Strategies for Learning Questionnaire (MSLQ). The MSLQ identified fifteen

different scales in order to isolate motivation and learning strategies behaviors. Students

rate themselves on a seven point Likert scale with 1 = not at all true of me to 7 = very

true of me. The fifteen different scales were constructed by taking the means of the items

that make up that scale. (Pintrich, P.R., Smith, D.A.F., Garcia, T., & McKeachie, W.J.,

1991).

      After surveys were distributed and data collected, the Statistical Package for the

Social Sciences (SPSS) was used to determine the MSLQ subtest means to determine if

students' scores for motivation and learning strategies were higher in any particular area.

The descriptive statistics are presented in Table 5.

Table 5
MSLQ from Lindsay High School Students (LHS)
Descriptive Statistics

Construct	Population	N	M	SD	Z Score
Intrinsic	LHS	750	3.3	1.29	-1.56
Goals	Norm	380	5.0	1.09	
Extrinsic Goals	LHS	736	3.2	1.22	-1.46
	Norm	380	5.0	1.23	
Task Value	LHS	755	2.9	1.18	-2.08
	Norm	380	5.5	1.25	
Control of	LHS	717	3.1	1.32	-2.10
Learning	Norm	380	5.7	.90	
Self Efficacy	LHS	765	3.1	1.19	-3.10
	Norm	380	5.5	1.14	
Anxiety	LHS	758	2.9	1.19	-.48
	Norm	380	3.6	1.45	
Rehearsal	LHS	707	3.1	1.25	-1.03
	Norm	380	4.5	1.35	
Elaboration	LHS	753	2.5	.97	-2.22
	Norm	380	4.9	1.08	
Organizational	LHS	756	2.9	1.19	-.90
	Norm	380	4.1	1.33	
Critical Think	LHS	749	3.0	1.22	-.93
	Norm	380	4.2	1.28	
Self Reg	LHS	772	2.9	1.19	-1.34
	Norm	380	4.5	.90	
Time/Environ	LHS	752	2.9	1.14	-1.90
	Norm	380	4.9	1.05	
Effort Regulate	LHS	733	3.1	1.28	-2.0
	Norm	380	5.3	1.10	
Peer Learning	LHS	712	3.1	1.26	.13
	Norm	380	2.9	1.53	
Help Seeking	LHS	736	3.1	1.20	-.56
	Norm	380	3.8	1.23	

Summary of Student Engagement
<u>Survey at Lindsay High School</u>

The MSLQ is designed to assess college students' motivational orientations and their use of different learning strategies for a college course and is, thus, perhaps not a wholly appropriate instrument to gauge the academic engagement of high school students. Lindsey student mean MSLQ scores were compared with the norm group mean MSLQ scores using z tests. Results found that the areas of task value, control of learning, self-efficacy, elaboration, and effort regulation were subtests where Lindsey students scored significantly lower than the norm group. Nevertheless, when examining the Lindsay High School MSLQ mean scores, the intrinsic (M = 3.3, SD = 1.29) and extrinsic goals (M = 3.2, SD = 1.22) had the highest mean scores, which suggests that they are the primary motivating factors for the majority of students at Lindsay High School. This indicates that the students' participation in a learning task is an end unto itself, and they participate in learning tasks for reasons such as grades, rewards, performance, and competition.

Effort regulation (M = 3.1, SD = 1.28) refers to students' ability to control their effort and attention in spite of distraction and boredom, and is important because it signifies goal commitment. Peer learning (M = 3.1, SD =1.26) involves collaborating with peers, while help seeking refers to students' ability to identify a person who is able to help them with a specific task. Research indicates that these two concepts that are especially relevant to performance based learning, also facilitate student achievement and are viewed positively by students in terms of their overall academic engagement (Pintrich, et al, 1991). The elaboration of content material had the lowest mean score (M

= 2.5, SD = .97) and this could possibly be attributed to the high percentage of English

Language Learners in the school who find it difficult to engage with some of the material

on a deeper level. There did not seem to be any large difference between the other

motivational factors presented to the students for their consideration of the impact on

their learning or engagement. Furthermore, motivational and engagement factors, as a

whole, were not high according to this survey instrument compared to national norms.

Teacher Sense of Efficacy Data

The TSES was given to Lindsay staff members during the 2013-14 school year.

The 23-question survey consists of three dimensions: instructional strategies, classroom

management, and student engagement, and measures teacher perceptions in terms of how

successful they feel about their ability to perform in these areas. The questions are

measured on a nine-point Likert scale with 1= not at all to 9 = almost always. After data

from the survey was collected, a t-test was utilized through the SPSS protocol to analyze

teacher self-efficacy scores in the areas of instruction, classroom management, and

student engagement as well as to determine if there was a significant statistical difference

between teacher perceptions as to their level of efficacy in any of the three constructs.

Additionally, effect sizes were calculated in order to help describe the magnitude of

differences between the two groups. The descriptive statistics are presented in table 6.

Table 6
TSES – Teachers from Lindsay High School (LHS)
Descriptive Statistics

Construct	N	M	SD	ES
Instruction				
LHS	43	6.8	1.18	.41
Norm	43	7.3	1.2	
Class Management				
LHS	43	7.0	1.09	-.25
Norm	43	6.7	1.2	
Student Engagement				
LHS	43	6.1	1.04	.91
Norm	43	7.2	1.2	

Summary of the Teacher Sense of Efficacy
Survey at Lindsay High School

The TSES measures teacher perceptions in terms of how successful they feel about their ability to perform in the areas of instructional strategies, classroom management, and student engagement. Overall, TSES results show that Lindsay teachers apparently felt confident about their ability to manage classroom behaviors (M = 7.0, SD =1.09) and deliver curriculum with sound instructional strategies (M= 6.8, SD = 1.18). This most certainly speaks to the intensive and focused professional development that the district has utilized for all staff over the past number of years. As a result, teachers feel empowered and clear as to their mission, as well as supported by their building administration. In addition, there was a large effect sizes in the Student Engagement subtest as defined by any score above .80, which is important in terms of practical significance (Cohen, 1988). This perception was clearly articulated in the teacher interviews that are presented later in this chapter.

Bridger Alternative Program

Demographics

Although the Bridger Alternative Program draws from the same community as Bozeman High School, the student profile often appears quite different. The Bridger Alternative High School opened in 1994 in a location off site from the main Bozeman High School campus, and it remained separate until 2010. The program was designed to meet the needs of at-risk students in the Bozeman community, and during the first eighteen years of its existence, the program saw only 2% of its graduates complete the requirements for a college degree within ten years. From 1994-2011 Bridger traditionally served roughly 80-100 students annually, and retained an average of 65% of its student population in terms of graduating or remaining in school. Additionally risk factors and the impact on students in the Bridger Alternative Program is listed in Table 7.

With the implementation of the performance-based model, Bridger saw a larger influx of students wishing to take advantage of the new system. In 2012-13, 229 Students accessed Bridger services, and of the 59 students who exited the program, only 9 were deemed actual dropouts. Student follow up information is presented in Table 8.

Table 7

Risk Factors for Bridger Alternative Program Students

At Risk Indicators	2008-09	2009-10
Number of Students	88	91
Diagnosed Mental Illness (Bipolar,PTSD,Depression)	67%	68%
Victims of Sexual Assault or Physical Violence	57%	60%
Criminal Behavior/ Family	24 Students	22 Students
Been Homeless this Year	22 Students	17 Students
Teen Mothers	4 Students	2 Students
Special Education	14 Students	9 Students
ELL	6 Students	5 Students
Free and Reduced Lunch	43%	40%
Received a grade of D or F in Freshman English at their previous school	74%	74%
Received a grade of D or F in Math during 9th grade at their previous school	71%	72%
Received a grade of D or F in Physical Science at their previous school	77%	78%

Table 8

Student Withdrawals from the Bridger Alternative Program in 2012-13

Reasons for Program Withdraw	Number of Students
Transferred	13
Treatment (1 Returned to BAP)	3
Returned Fulltime to BHS	1
Youth Challenge	1
Online School/Homeschool	4
Earned GED/Still Attending GED	21/7
Drop Outs	9 (4%)

According to the above-mentioned criteria, 96% of Bridger students graduated, remained

in school, or were continuing to pursue educational goals in 2012-13.

Performance-Based Implementation

The Bridger Alternative Program at Bozeman High School followed a completely

different path in terms of performance-based implementation than did Lindsay High

School. In response to budgetary constraints, the Bozeman School District Board of

Trustees moved the Bridger Alternative Program onto the main high school campus in

2010. There was a strongly expressed concern within the Bozeman community that the

Bridger Alternative Program maintain, in some form, its alternative flair in order to meet

the needs of a variety of at-risk students.

Richard DeLorenzo, a co-founder of RISC, visited the Bozeman district office in 2011,

while he was in the area on a fishing excursion. Bozeman High School administrators

were invited to attend a breakfast meeting and hear about his experiences leading second-

order change in a small, rural Alaska town. After the meeting, the high school team was

inspired to pursue implementation of the performance-based model in the Bridger

Alternative Program, deeming it a good fit for the new Bridger paradigm. The

administrative team began a book study of DeLorenzo's "Delivering on the Promise"

with the Bridger staff, and co-facilitated a class with a Montana State University

professor that allowed teachers to earn college credit while studying standards and

assessments. The leadership soon recognized that there was general agreement in terms

of philosophy of performance-based instruction and assessment, but there was no concept

on how the system actually worked in individual classrooms. As a result, the Bridger

principal contacted Lindsay High School and requested a site visit in the spring of 2011.

Two building administrators, a math teacher, an English teacher, and a Montana State

University professor were welcomed to the Lindsay campus and engaged in philosophical discussions as well as extensive class visits.

Upon return, the team that visited Lindsay began working with colleagues in order to start the process of unpacking standards and creating rubrics. The principal decided that full implementation of the performance-based model would begin in the fall semester, just 3 months away. The Bridger Alternative Program was smaller than Lindsay High School, and the principal believed that slow and deliberate implementation, although probably superior in most cases, would allow teachers to ignore the directive of attempting the new model in this particular situation. A retreat for all staff members was held prior to the opening of the school year in which the vision for the program was stated and agreed upon. The model was then introduced to students during the opening days of school and to parents soon after during the annual school open house. Regular communication with parents, central office, and other interested stakeholders was a critical component during this phase of implementation, as the staff and students encountered inevitable difficulty and needed time to work through the myriad of issues that are inherent in the second-order change process. For example, standards, proficiency levels, and general timeframes had been identified specifically in the content areas of English and math prior to the opening day of school. At the conclusion, of the first semester, 90% of students had not earned their credit for the classes as they had not yet demonstrated proficiency in all standards. After the initial outcry subsided, students and teachers continued progressing, so much so that by the end of the first year, virtually all students were either on-pace or ahead-of-pace.

During year two of implementation, the 2012-13 school year, the Lame Deer School

District in Montana resolved to join the Bridger Program in implementing the

performance-based model, and commissioned RISC to train the staff in the instructional

practice. This was an important development in the continued evolution of the model in

the Bridger Program as staff was invited to join in the training sessions at no cost to the

Bozeman School District. The Bridger staff was able to make great strides in terms of

their understanding of the model and also learned solid instructional and assessment

strategies that made the system work better for all students. A new progress monitoring

and reporting system was developed by a software designer (who happened to be married

to one of the teachers) for exclusive use in the Bridger Program, and the performance-

based system was deemed successfully implemented at that time. Year three of

implementation, the 2013-14 school year, saw a shift in terms of staff. One teacher who

disagreed with the direction of the program under the new model retired from the

profession, and two others were transferred to other positions in Bozeman High School,

which allowed for the introduction of new teachers who were dedicated to the new

system. Year three was when the Bridger Program witnessed a leap forward in the

evolution of the performance-based model.

Student Academic Achievement

The new system was still in the early stages of implementation but the test results

in terms of student achievement had been promising. 10th grade scores on the Montana

Comprehensive Assessment Criterion Referenced Test (CRT) in math rose from 17%

proficient in 2011 to 29% in 2013. During the same time period, proficiency on the

science component of the CRT rose from 23% to 36 %, and the English score rose from 62% to 86%. More importantly, the Bridger Program served 229 students with at least one class in 2012-13, and although 28 students dropped out in order to pursue the GED in that year, 21 completed the requirements to earn their equivalency diploma, and only 6 students (3%) dropped out and have yet to pursue additional education. In addition, a recent study of student performance based on the STAR assessment, a computer adaptive program from Renaissance Learning that individually remediates and strengthens basic math and reading skills, suggested that the performance-based model was a more effective intervention in terms of demonstrating student growth in the areas of reading and math when compared to other interventions such as collaborative teaching, implementing a specialized program such as READ 180, and simply working through the general curriculum in a traditional model.

Student Engagement Data

The central question of this study was how teachers and students in a performance-based model school describe their engagement, academic optimism, and leadership. As such, one projected outcome was that students would be more engaged in the performance-based model. The MES measures engagement and motivation on a seven point Likert scale with 1= strongly disagree to 7 = strongly agree. Surveys were distributed to 120 Bridger (57% return rate) students. After the data was collected, a z test was utilized through the SPSS protocol to determine if engagement scores in personalized mastery subjects were different from normed student scores established by the MES protocol. The mean MES scores from the Bridger Alternative School students were

compared to the MES norm group mean scores using z tests. The descriptive statistics for

the Bridger Alternative student MES scores are presented in table 9. The Bridger

Alternative Program was abbreviated as BAP.

Table 9
MES at the Bridger Alternative Program (BAP)
Descriptive Statistics

Trait	School	N	M	SD	Z Score	ES
Self Belief	BAP	68	77.7	15.23	-.20	.20
	Norm	33,788	80.6	14.11		
Valuing	BAP	68	69.8	19.72	-.02	.02
	Norm	33,788	70.1	15.9		
Learning	BAP	68	83.2	26.66	.06	-.06
Focus	Norm	33,788	82.2	13.74		
Persistence	BAP	68	60.7	16.32	-.78	.78
	Norm	33,788	80.9	14.31		
Task Mgmt	BAP	68	62.1	20.48	-.41	.41
	Norm	33,788	69.9	18.51		
Planning	BAP	68	50.2	15.87	-.60	.60
	Norm	33,788	61.1	15.05		
Disengagement	BAP	68	45.4	21.63	.53	-.53
	Norm	33,788	35.8	18.18		
Self-Sabotage	BAP	68	41.1	17.37	.01	-.01
	Norm	33,788	40.8	18.84		
Uncert Contrl	BAP	68	51.8	26.04	.11	-.11
	Norm	33,788	49.7	18.50		
Failure/Avoid	BAP	68	52.3	18.63	.33	-.33
	Norm	33,788	45.7	19.61		
Anxiety	BAP	68	58.5	19.59	-.12	.12
	Norm	33,788	60.7	19.59		

Summary of Student Engagement
<u>Survey in the Bridger Program</u>

Normed scores from over 33,000 students from traditional schools in Australia

and the United States were compared with the local data. The result of z test comparisons

found no significant differences between BAP and the MES norm group mean subtest

scores when using an alpha level of .05. Additionally, there were no large effects on any

subtest component with the MES. Therefore, the fact that there was no significance

difference in mean scores for academic engagement between students classified at-risk

and their peers from the traditional school setting suggests that high school students

enrolled in the performance-based system are just as engaged as their peers who are

attending traditional high schools. One of the main reasons for high school students

attending BAP in the past is because of the lack of engagement and hence their risk of not

graduating from high school (see Table 9 above). Also, students in the Bridger Program

had higher mean scores from their traditionally educated peers in the areas of Learning

Focus (M= 83.2, SD=26.0), suggesting that the performance-based model does seem to

address the individual needs of these students well, a perception supported prominently

by the student and teacher interviews presented later in this chapter. Finally, Bridger

students had higher mean scores in the areas of Disengagement (M= 45.4, SD=21.63),

Self Sabotage (M= 41.1, SD=17.37), Uncertain Control (M=51.8, SD=26.04), and

Failure/Avoidance (M=5.23, SD=18.63), in addition to lower scores in Persistence (M=

69.7, SD=16.32), than did their counterparts from the general population of the control

group, which could speak to the more difficult circumstances many at-risk students face

as part of their daily lives.

Academic Optimism Data

The SAOS was distributed via survey monkey to 20 Bridger Alternative Program

staff members during March of 2014. Bridger Alternative staff returned 20 (100%)

surveys. Bridger Alternative Teachers' mean SAOS scores were compared to the mean

SAOS norm group teacher mean scores from the original SAOS validation study. The

descriptive statistics for Bridger Alternative Program teacher SAOS scores are presented

in table 10.

Table 10
SAOS – Bridger Alternative Program (BAP)

Construct	N	M	SD	Z Score	ES
Teacher Efficacy					
BAP	20	4.4	0.62	-.91	.91
Norm	131	5.5	1.2		
Faculty Trust					
BAP	20	4.1	0.69	.82	-.82
Norm	131	3.4	.85		
Academic Emphasis					
BAP	20	3.2	.55	-1.52	1.52
Norm	131	4.4	,755		

Summary of Academic Optimism
Survey in the Bridger Program

Although there were no significant differences between Bridger Alternative

Program teacher mean scores on the SAOS and mean SAOS scores from the traditional

model teachers represented by the norm group, there are some practical differences in

terms of the perceptions of teachers in the performance-based model and how they

operated under the more traditional setting. Also, there were large effect sizes in all three

subtests on the SAOS as defined by any score above .80, which is important in terms of

practical significance (Cohen, 1988). These perceptions are addressed more fully in the

interview section. Also, in all three constructs, scores were not statistically significant in

terms of variation, which is an important development as the Bridger Program has

traditionally been perceived by all staff as offering a less challenging curriculum in order to help students meet the academic requirements necessary to earn credit and graduate. Interestingly, faculty trust (M=4.1, SD=.69), a measurement of staff perception of the abilities of their students to navigate their personal issues, was higher with the Bridger staff, which points to the importance of building relationships with all students, but especially with at-risk youth and families. The Lindsay staff echoed this particular phenomenon through interview data.

Transformational Leadership Data

The MLQ was distributed via survey monkey to 20 Bridger Alternative Program staff members during March of 2014. After surveys were distributed and data collected, a z-test was utilized through the SPSS protocol to determine if perceptions of academic optimism in performance based subjects were different from established national norm scores established by the MLQ protocol. The *z*-test was utilized to determine whether or not two identified groups (BAP and the national normed population) differ significantly on the categorical characteristic of transformational leadership. Any value over 1.96 would be considered significant. The MLQ descriptive statistics are presented in Table 11.

Table 11
MLQ – Bridger Alternative Program Teachers (BAP)
Descriptive Statistics

Construct	N	M	SD	Z Score	ES
Influence Attributes					
BAP	20	3.3	.85	.83	-.83
Norm	27,285	2.9	.76		
Influence Behaviors					
BAP	20	3.3	.85	.83	-.83
Norm	27,285	2.7	.72		
Inspirational Motivation					
BAP	20	3.6	.73	.92	-.92
Norm	27,285	2.9	.76		
Intellectual Stimulation					
BAP	20	3.1	.97	.56	-.56
Norm	27,285	2.7	.71		
Individual Consideration					
BAP	20	3.2	.99	.51	-.51
Norm	27,285	2.8	.78		

Summary of Transformational Leadership Survey
for the Bridger Alternative Program

In comparing the performance-based BAP group with national norms,

transformational leadership scores were normally distributed and showed no statistical

difference between means (p less than .05). Effect sizes, however, showed a moderate

effect in the areas of Influence Attributes, Intellectual Stimulation, and Individual

Consideration (ES = or above .50), and a large effect in the areas of Individual Behaviors

and Inspirational Motivation (ES = or above .80). In addition, there are practical

differences in terms of the perceptions of teachers in the performance based model and

their colleagues operating under the traditional system. Bridger mean scores were

consistently and even dramatically higher as to staff perceptions of leadership in the

performance-based model as opposed to the more traditional educational program in all

the areas of influence attributes (M=3.4, SD= .94), influence behaviors (M=3.3, SD=.85),

inspirational motivation (M=3.6, SD=.73), intellectual stimulation (M=3.1, SD=.97),

individualized consideration (M=3.2, SD=.99), indicating that Bridger teachers perceive

the leadership behaviors of their principal to be transformative. The Bridger and Lindsay

staffs in the interview data presented in the following section address these constructs

consistently.

<div align="center">Analysis of the Interview Data</div>

Yin spoke to shorter case study interviews as being appropriate when a major

purpose of an interview might be "simply to corroborate certain findings that may have

already been established " (2013, p.111). The interviews were designed to engage

participants in reflective discussions about how effectively they feel the performance-

based model meets student. The answers pointed to a profound understanding of the

performance-based model and how it has proven exceptional for the students and staff in

these two cases. It can be seen that students have a strong perception of the need for

educational reform both in terms of general theory as well as from their personal

experience. Instructional strategies are an area students have received extensive exposure to a variety of teachers and methods over the course of their school careers.

The process of analyzing the qualitative data followed the recommendations of Yin in terms of a three-step process that entailed organizing the data, providing a sense of the case by an initial reading of the transcripts, and followed subsequently by coding according to theme and focus on research questions (2014). A general, overall reading of all the interview transcriptions was initially conducted in order to get a feel for the case (Creswell, 1998), and subsequent categorical aggregations were identified in alignment with the research questions. The protocol questions sparked deep discussion on the nature of educational reform, and a number of themes could be identified. The theoretical propositions focused on transformational leadership, student engagement, and academic optimism served to guide and organize the case study analysis, "pointing to relevant contextual conditions to be described as well as explanations to be examined (Yin, 2014, p.136).

Interview Results for Lindsay High School Students

The personal interviews with ten Lindsay students averaged fifteen minutes in length, and were conducted on March 3, 2014. The six themes listed in table 12 emerged from the Lindsey High School Student Interviews. The reference tally is the number of times topics related to these overall themes emerged from the interview transcripts.

Table 12
LHS Student Interview Response on Academic Engagement

Preliminary Theme	Reference Tally
One-to-One	6/10
Teachers Respect "My Way of Learning"	10/10
Student Voice and Choice	8/10
Teachers/Assignments as Obstacles	10/10
All Teachers Not Proficient - Problem	10/10
Student Apathy is a Problem	10/10

The four questions below were designed to delve into the student understanding

of the model as well as their perception of their own level of academic engagement:

Q 1. Can you describe for me how are you engaged in your own learning?

Q 2. Can you describe how what you learn in school is valuable and relevant to

your life?

Q 3. What do you feel holds you back in your learning?

Q 4. What would you like to change about school?

Results from interviews with these students show that they have a solid knowledge of the

performance-based model. I chose to include complete quotes from the interviews in

order to provide a full understanding of student perspective as their opinions provide a

powerful insight into how their schooling affects them. Anonymity of participants was

deemed justifiable in this case (Yin, 2013). Students are identified by grade level.

One-To-One Instruction

Personal connection is a critical piece in terms of student engagement. Without a

high level of engagement, students often simply follow assigned tasks in order to earn

grades and credit. One Lindsay High sophomore stated this perfectly when she said, "I

love when the teachers give me one-to-one time. Some teachers are better at it than

others. But if they know me, they can help me with the technology, and all the subjects

get more interesting" (LHS So 1).

Additionally, customized learning opportunities are a hallmark of the

performance-based model as teachers strive to meet each student at their own levels of

proficiency rather than simply teaching curriculum. "I know that many of the things I

learn here will help me get into college, and I really want to go to college! Teachers

respect me when I say that and help me more 1-1" (LHS Jr 2).

Lindsay students seemed to be acutely aware of the importance of one-to-one

instruction and were critical of classrooms in which this was not common. Student

responses highlighted the fact that even at Lindsay High School not all teachers have

fully embraced or become adept in the performance-based model. "In math, we don't

often get 1-1 help. We just take notes, which is boring and I don't focus. In my classes

where we have 1-1, I do so much better" (LHS, So 2).

Teachers Respect "My Way of Learning

How teachers actually work in the performance-based system is something the

students felt comfortable describing, and they constantly reinforced how teachers seem to

care more for them as individuals in this model. A LHS junior spoke to this when she

said, "I like that I can follow my own progress, and that I can do lots of things like

quizzes, posters, worksheets, essays, and power points. I like essays and power points

the best because then I get to show what I know better." Another student echoed this

sentiment by stating, "I'm engaged in most of my classes, and I like how I can move

ahead and progress faster if I want to." A final student summed up the inherent

individuality of the model when he succinctly stated, "I love seeing myself progress on

my measurement topics.

The work of their teachers in the performance-based model drew high praise from

all students. What students like about the system is an area that seemed to draw

enthusiastic responses, as their personal stories of success were easy for them to describe,

as evidence by another sophomore's statement, "I love the advisories and all the

technology. In some classes we have to listen to a teacher talk a lot, but in the other ones

there is always lots of activity and the teachers just help us find things in different ways."

Another third-year student mentioned their excitement by saying, "I want to go to

college, so I'm motivated. And I like learning. I like how the teachers change things

every year. If you're dedicated, you can really get ahead and have so much knowledge."

LHS students could also refer to the failings of their teachers in terms of meeting

their needs when more traditional methods were utilized, as one of the seniors powerfully

stated, "I hate how some teachers just talk to a whole class in some of my classes. How

boring is that? Like he thinks everyone understands what he is saying? In my good

classes, where performance-based really works, the teachers work with us in a way we

are interested and help us learn that way. I want them to help me in my way, not talk at

me in their way" (LHS Sr 4).

Student Choice and Voice

Student voice and choice is a foundational tenant of performance-based education

and focuses on the ability of students to make a psychological investment in learning.

They try hard to learn what school offers. They take pride not simply in earning the formal grades, but in understanding the material and incorporating or internalizing it in their lives. One Lindsay sophomore spoke to this when he said, "I want to be an accountant, so the math is important. But really the English is great because I need to be able to speak formally and write well so that my business will succeed. Everything I do is to help me get where I want to be." Another 10th grade student shared a similar sentiment by saying, "Usually, if I really do the work, I think I know the material better and then it's more interesting." The most compelling argument in terms of student voice and choice came from a senior when he said, "What's been great is how we each have our own computers and how we can use them to study subjects in a way that makes sense to us. Some of my classes still teach all kids from the same page in a book – but not all kids are listening or get what's going on. I need to be able to learn stuff in a way that makes sense to me. Teachers need to let me do that and I'll work harder."

The concept of student voice is also used to describe meaningful student involvement throughout the learning environment, including student ownership over their learning and the corresponding impact on school climate. The concept is stressed in the Lindsay academic program, and the students addressed it as a factor that helps provide relevance encourages them take charge of their own learning, as evidenced by a junior's statement, "If I get to learn about the things that interest me, I'll do better. If I have to do just what some teacher says, I don't do as well. That's why kids cheat or don't do anything, because just doing what a teacher says is important isn't always important to us." An LHS senior was equally as powerful with their response, "Some teachers really

ask me what I like to do and help me do those things better. Other teachers just tell me

what to do, and then kids just do it, like a circus animal. If I get to pick assignments, I do

sooooo much better and I like school so much more."

Teachers are the Biggest
Obstacle to Student Engagement

Students were unanimous in the sentiment that teachers are often the one thing

that holds them back from proceeding successfully through school. The staff members

who have fully embraced the performance-based model and were successful in

connecting with them as individuals were enthusiastically praised. The teachers who

exhibit a steadfast resolve to cling to the traditional instructional model were discussed

with an equal level of frustration, as one sophomore clearly stated, "I think they need to

re-teach some of the teachers. They have been doing it the same way for so long that

they can't speak to kids in a way that makes sense anymore. They need to be updated so

they can teach us and update us in a better way." This sentiment was again powerfully

stated by a senior when she said, "Some of the teachers don't care, they just want to make

us do work. The older teachers are mostly really good, but some of the newer ones are

not very good. It's hard for them, and then it's hard for us."

Teachers who were not proficient in the performance-based model were a cause

of frustration and disengagement, as one LHS junior stated, "In lots of classes, when the

teacher is teaching something, I can still go forward. One problem though is that a lot of

times I think they just make me do stuff, and then I don't care." One sophomore, in

particular was even more forthright in expressing frustration with some teachers when

she said, "There are too many teachers and subjects that don't help us. I know we are supposed to see lots of things to be well rounded, but this doesn't really do that. It just forces kids to do things that are of NO interest. Then with a teacher who doesn't care about us, and I can guarantee I'll never like it" (LHS So 2).

Teacher Proficiency & Student Apathy

This theme about what they would like to change did not inspire students to address the performance-based model in general, but rather what they found frustrating in Lindsay's specific practice. The responses, however, could be easily expanded to the more general system. A freshman student mentioned that teacher proficiency has a huge impact on their learning when he said, "Lots of the newer teachers don't know how to do the system very well. I hate how some teachers are great and some don't seem to care very much. Then the kids don't care either." A junior expressed a similar frustration when he said, "Sometimes, if learners are behind pace, they can just copy some other kids work. And the teachers don't care. That bugs me sometimes." Most powerfully, one sophomore student clearly expressed frustration with teacher proficiency by saying "I hate how some teachers don't understand the system, because then I end up doing extra work for nothing." And a junior student mad, perhaps, the strongest statement of all when she said, "I don't like how they make kids show we are proficient at lots of things, but the teachers don't have to show they are proficient at teaching us. It should be the same for everyone" (LHS Jr 1).

As much as students expressed frustration with some non-proficient teachers, they had equally critical statements about non-motivated peers, as evidenced by on

sophomore's comment, "I hate being in classes with behind-pace learners. It feels like the teachers spend so much time with kids that don't want to be there that I get left alone. If kids aren't motivated, they should leave. Teachers should spend time with the kids who want to be here and want to succeed." This concept was echoed by another sophomore's statement, "A big percentage of the kids don't care, and then it's harder on the teacher. It makes it harder on the rest of us who want to move quickly." And a senior unequivocally stated her anger at non-motivated peers with the comment, "If people are not motivated to do school, then they will not do school. In traditional school, they will fail unless a teacher gives extra credit. Here though, at least they get to follow their own interests. If you can't succeed with that system, then you just don't care and those kids should go away and not make it harder on the rest of us."

Summary of Results from Lindsey
Student Engagement Interviews

The student interviews yielded rich and powerful data that demands more explanation and analysis. For example, although Lindsay High School is a performance-based high school, that fact does not insure that performance-based teaching methods are being practiced in every classroom. Lindsay learners were quite critical of the teachers who were not as adept in utilizing teaching strategies appropriate to the system. A number of students said the often simply follow assigned tasks in order to earn grades and credit. However, the work of the majority of their teachers in the performance-based model drew high praise from all students and was something the students felt comfortable

describing, and they constantly reinforced how generally their teachers seem to care more for them as individuals in this model.

What students like about the system is an area that seemed to draw enthusiastic responses, as their personal stories of success were easy for them to describe. Also, student voice and choice is a foundational tenet of performance-based education. The concept is stressed in the Lindsay academic program, and the students addressed it as a factor that helps provide relevance encouraging them to take charge of their own learning. Lindsay students certainly speak to the fact that they are more engaged academically in the performance-based model than they were under the more traditional system. However, student apathy as a factor in relation to teacher proficiency is something the Lindsay students spoke to as a serious deficiency in their program. The fact that this was not a factor with the Bridger students suggests that class size and community expectation is a difficult obstacle to overcome in any educational model.

Interview Results for Lindsay High School Teachers

The personal interviews with four Lindsay teachers averaged twenty minutes in length, and were conducted on March 3, 2014. The 4 selected teachers volunteered to speak to me in response to a general request made via an administrative email. These teachers seemed to have embraced the performance-based model and therefore were probably more positive in terms of their comments.

As with the students, the interviews were designed to engage participants in reflective discussions about how they feel the performance-based model meets student

needs differently than the traditional system and, thus, also impacts the academic optimism of teachers. An additional focus was on the leadership behaviors that facilitated the change to the performance-based model. The answers pointed to a profound understanding of the model and how it is superior for the students and staff in these cases. The two questions below were designed to delve into the teacher's perception of their own level of academic optimism:

Q 1. Can you describe what you typically do after a lesson?

Q 2. Can you give me an example how you are able to take all students to a higher level?

The following three questions below were designed to delve into the teacher's perception of the leadership behaviors necessary to successfully implement the model:

Q 3. How does your building leadership inspire people to buy in to their vision?

Q 4. Can you describe how your leadership team takes risks that often result in positive outcomes?

Q 5. Can you give an example how your leadership team encourages and celebrates innovation?

I chose, again, to include complete quotes from the interviews in order to provide a full understanding of teacher perspective as their opinions provide a powerful insight into how the model affects their optimism and support for administrative leadership. Anonymity of participants was deemed justifiable in this case (Yin, 2013). Teachers are identified by an alias. The two themes listed in table 13 emerged from the Lindsey High

School Teacher Interviews. The reference tally is the number of times topics related to

these overall themes emerged from the interview transcripts.

Table 13
LHS Teacher Interview Response Results

Preliminary Theme	Reference Tally
Engaging Individual Students	4
Assess Student Progress	4

Engaging Individual Students

Teachers mentioned the importance of engaging students individually with great

consistency and without regard to the subject area taught. Ken, a science teacher said,

> The most important thing I do is work to make kids into independent learners. It's also the hardest thing I do – try to wean kids off me and have them take responsibility for their own learning. I try to train kids to be able to train other kids, especially in technology. Helping them engage in the material is the center of what I do.

Anne discussed the concept of engagement and her excitement when things work well by

saying, "After class I'm still energized and have LOTS of ideas for tomorrow. I reflect on

things – what was good and what I can fix - and am focused on finding things, how to

engage individual kids." Also, shaping instructional practices to engage students

academically was discussed by every staff member interviewed, and none discussed the

idea of using best practices to engage kids better than Liza when she said,

> I'm always trying to find ways to engage kids with the content. Lindsay is so much different than it used to be. The sleepers don't exist anymore. I can't say that all students are engaged, but it's getting better and better every year. And that's exciting. It makes me more optimistic about what I do and how successful our kids can be.

Assessing Student Progress

Assessing student progress and growth drew strong responses and the most in-depth opinion from staff. The assessments are something in which Lindsay has invested a tremendous amount of time and energy. Teachers and administration use the assessments constantly in order to chart their own growth as a district and teachers feel empowered by their ability to help students reach benchmarks and visualize goals. As Ken said, "The assessments here in Lindsay are amazing, and are always available. I'm not sure that it helps take all kids to a higher level, but it sure helps most kids by setting the bar high."

Also, assessing student progress, according to staff members, helps them feel optimistic about the jobs they do and their ability to help students grow. Susan clearly spoke to this when she said,

> I think that is our biggest challenge here in Lindsay. We have done a great job getting the low kids to basic proficiency. Kids know how to be successful. But we need to be able to bring in higher-level classes, like AP, so that our highest kids can be pushed to their ability level. That is our next step here, I think. And I'm excited about that.

Assessing academic progress, however, can be disappointing for teachers when their students don not achieve at the desired rate, as was vividly stated by Anne, a veteran LHS teacher when she said, "What kids need to do just to "get by" is so much higher now than it used to be. And if kids have grit and are motivated, the sky's the limit. But the motivational piece is huge, and it's VERY difficult here." Liza, another veteran staff member, expressed some frustration from a different, yet no less powerful perspective when she said,

> We gathered lots of data during the implementation period. The district posted the data and hired a data specialist. Now is the time to be true to their word and

follow through on this. We need to be able to challenge the fast movers with real-life opportunities and advanced experiences. Just because a kid is done with level 3, how can we take that kid to the next level? Sometimes we are so worried about the low kids that we forget the higher ones.

Summary of Academic Optimism Interview
Results at Lindsay High School

Lindsay teachers responded to the questions with consistency no matter which subject area they taught. The fours staff members interviewed were excited to be part of the Lindsay educational community, and spoke with pride about the innovations and growth they see in their students and in themselves. Attempts at shaping instructional practices to engage students academically were discussed in detail by every staff member interviewed. This prompted great discussion about motivation, local demographics, educational philosophy, and local reform efforts. Lindsay teachers believed they try to engage students with content and curriculum but that it was a very difficult thing for them to do. The participants seemed to believe that individualizing instruction is much more apparent in the performance-based system than in the traditional model, but helping students engage personally rather than simply performing for a grade is always a challenge. The concept of student engagement and the ultimate value of education in the larger Lindsay community was also a point made by teachers and students as well.

Assessing progress, however, drew a high number of responses and the most in-depth opinion. This speaks to the quality of the assessments that have been developed over the years as well as to the Lindsay commitment to assess and report student growth consistently and constantly. There did seem to be a difference of opinion between

students and staff in this area though. Many of the teachers spoke very highly of the

assessments and Lindsay's ability to track student growth, while many students seemed

to find the assessments stifling and as simply a task to complete that actually hindered

their progress.

Overall, these Lindsay teachers appeared very optimistic and energetic in their

jobs. They felt as though they were good "fits" for the model, which increased their own

levels of engagement, and passion for the job, the students, and the community.

Results from Transformational Leadership Teacher
Interview Questions at Lindsay High School

The three themes listed in table 14 emerged from the Lindsey High School

Teacher Interviews. The reference tally is the number of times topics related to these over

all themes emerged from the interview transcripts and support the overall themes

interpreted.

Table 14
Teacher Interview Response

Preliminary Theme	Reference Tally
We Live the Vision – Constant Discussion	4
Leadership Engaged and Visible	4
Celebrate Innovation Constantly	4

We Live the Vision – It's a Constant Discussion

The concept of leaders and staff "living" the vision was a strong theme that drew

a powerful and enthusiastic response from all staff as a necessary behavior for successful

implementation of the model. Anne was working in Lindsay when implementation of the

model began and spoke powerfully to this idea when she said,

> The principal we had when this process started understood the model so well and
> was so positive, that he inspired people to try something different. He was very
> supportive. He actually worked with staff just like teachers are supposed to work
> with kids, and he led staff meetings that way. He understood that we all have bad
> days, could measure where we were, and go from there. But we have a different
> leadership style now and that's good. The burden has been placed more on the
> teachers to do the job, just like the kids. The administration is still there to help
> and push, but its not being taught in the same way. I think we needed both
> leaders at the different times, but the vision is the same.

Additionally, teachers said "living the vision" was not in any way the same as

having a mission statement, or a motto that is part of some long range plan, but is

something organically alive, that all staff understand, and that all decisions in terms of

personnel and professional development revolve around. As Ken said,

> When the administration here in Lindsay hires people here, they look for "fit," not
> just certification. I've been through lots of interviews before and was never asked
> questions like I was in the interview here. It's unique. Not a single question about
> my content knowledge, but they were probing to see how open-minded I would be
> and how adaptable to a new way of doing business. And if someone doesn't fit,
> they don't just hammer them, but they try to help them find a job elsewhere that
> could be a better match for them.

Liza expressed a similar sentiment when she said, "We always look to hire teachers who

will be able to release power to kids. It's hard sometimes to find the right teachers, but

that is how we can be successful. It's different here."

Leadership Engaged and Visible

Another critical theme that resulted from the teacher interviews was an engaged

and visible leadership team that is constantly providing support while at the

same time challenging teachers to stretch in accordance with the vision. As Ken said,

> Our administration is totally focused on the staff and the kids. They are very supportive of anything that could work better for kids and encourage us to try different things. Lots of freedom and lots of support here. Also, since the administration is so dedicated to community involvement and parental input, there is a culture here that encourages risk taking.

Susan was even more succinct, "Teachers that take risks here are not threatened. In fact risk-taking is part of the strategic design. We hire risk-takers, and are encouraged to take risks in our evaluations" (Susan, LHS).

The leadership is present not only to staff, but also to students and the community as a visible personification of the vision. Staff mentioned that it is critical for the leadership to be in classrooms, in the halls, and always engaged in order to "walk the talk" and keep everyone on the same page. The LHS veteran, Liza, mentioned this strongly when she said,

> Our leadership team is very visible in the school and in the community. Especially the building leaders, but the district people as well. I do think communication could be better lots of time, but they're trying. One thing happening is that site leaders will train a group of parents in the performance-based system, and those people will serve as trainers for other groups of parents. The principal teaches the parents and they teach each other. That's good, but I think that should be a district level job. The principal's job should be to train the staff.

Celebrate Innovation Constantly

Lindsay teachers discussed that the implementation of the model was, from the beginning, a huge innovation and a risk worth taking. As such, it was important for the leadership to continue moving in this direction, encouraging attempts to improve and take risks, and celebrating innovative thinking and strategies. Regular celebration gave positive reinforcement to staff and tended to release the tension inherent in teaching in a difficult environment. Ken mentioned how important celebration is when he said, "We

celebrate success always. In staff meetings, in district meetings. All the time. And we do

walk-throughs here that are very important. People are always walking in the room and I

have feedback within the hour. I really value that." Liza said that "Innovation is part of

the culture here. The building administration talks about it all the time, and good

principals model what they want to see. It leads to lots of positive energy." And Anne

stated how this positive energy spreads throughout the overall staff when she said,

> Not all of our teachers really trust the system, and some still don't understand it,
> so their ability to innovate can be hampered, but then the administration spends
> more time in their room trying to help them. And staff members really help each
> other. We're a good team here.

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Summary of Lindsay High School
Transformational Leadership Interviews

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The central role and effective behaviors of the educational leadership team was

strongly expressed as the most critical component in Lindsay's success by the teachers

interviewed. The question about vision drew a particularly powerful and enthusiastic

response from all staff. Teachers stated that the concept of all stakeholders "living" the

vision was a necessary behavior for successful implementation of the model, and that it

began at the top. There was unanimous support for the idea that in Lindsay, leaders know

what the model looks like, they speak to it constantly, they hire staff based on "fit" rather

than other criteria, and constantly challenge teachers to engage with the model and

innovate whenever possible. The administration lives the vision, is visible on the front

lines, has simplified the message, and celebrates victories constantly. Due to the work of

Marzano and RISC, Lindsay is truly a leader in terms of preparing administration and

teachers for the full implementation of the performance-based model.

Interview Results for Bridger Alternative
Program Students Student Engagement

Personal interviews with eighteen Bridger students averaged fifteen minutes in

length, and were conducted during the weeks of February 10-March 3. As with Lindsay

students, the answers pointed to a profound understanding of the performance-based

model and how it is superior for the students and staff in this case. It can be seen that

students have a strong perception of the need for educational reform both in terms of

general theory as well as from their personal experience. Instructional strategies are an

area students have received extensive exposure to a variety of teachers and methods over

the course of their school careers. The six themes listed in table 15 emerged from the

Bridger Alternative Student Interviews. The reference tally is the number of times topics

related to these over all themes emerged from the interview transcripts and support the

overall themes interpreted.

Table 15
Student Interview Response

Preliminary Theme	Reference Tally
One-to-One	18
Teachers Teach Differently	17
Teachers Respect "My Way of Learning"	17
Student Choice and Voice	18
Not So Centered on Tests	18
Grades/Assignments	
All Teachers Proficient	18

The themes below were strongly stated and developed by virtually every student interviewed. It appears that students have a solid knowledge of the performance-based model and can eloquently speak to its benefits, even though implementation is still in the early phases. Students are identified by grade level.

One-to-One Instruction

Students consistently rate the individual attention they receive in the performance-based model as the most important factor in their engagement and ultimate success. Although teachers and most outsiders would not necessarily consider the actual time spent as more 1-1, student perception as to this being reality is undeniable. Teacher work with individuals or small groups is more efficient since learning targets are better defined, which leads students to understand tasks and enhances their ability to receive the targeted instruction and assistance they need. One senior spoke to his belief in the power of individualized instruction when he said, "The 1-1 part is huge. Sometimes it's 3-1 or 4-1. But it's still much different and much better. Teachers can't do that in regular, huge classes. Some of my classes are the same size as they are in the regular school, but doesn't feel like it." Bridger students constantly compared their experience in the performance-based model with that of the traditional system, and made comments such as the following from a junior, "There is more 1-1, and the teachers know what I am working on. In the traditional model, the teacher talks a lot more. Here, it is more side-by-side," and a sophomore made a similar claim, "The time and personal help is huge here. At the main high school, teachers grade me on what I do wrong, and then they don't help any more – we just move on. Here, there is more personal help. I'm working harder

and I want to stay in school now!"

In addition, the personal connection that students feel from their teachers in the model is an important piece in terms of their academic engagement. A Bridger junior spoke to this when he said, "My teachers here in Bridger are more in-tune with kids than most other teachers. They are more helpful, and they know me better, so I work harder for them." Similarly, a senior how important it is when Bridger teachers connect with her when she said, "It's not about sitting in a classroom and going by what a teacher says all the time. The teachers help me more one-to-one because I know what I need to do and they know what they need to do to help me," and another senior made a comment that "The teachers help me more one-to-one, because I know what I need to do and they know what to do to help me. I can advance at my own rate, and take more time if I need it."

Teachers Teach Differently

How teachers actually work in the performance-based system is something the students felt comfortable describing, and they constantly reinforced how teachers seem to care more for them as individuals in this model. A senior mentioned this concept of personal care when he said,

> I really don't need the teachers to tell me things in performance-based because standards and rubrics have it spelled out. They encourage me to do better though because I can, and I can usually tell on my own if the work is good enough. The teachers actually help me find my interests and point out different things I may find exciting.

Another senior spoke to the different style of Bridger teachers by saying, "

> The teachers in regular school hold me back all the time. They are all so 'by the book' and they can't get out of their own comfort zone to focus on what I need or understand. They don't address us as different people unless someone has bad

behavior. Here in Bridger though, they really know me and help me to be better in everything. I would have dropped out early, but these people can see me and help me get better.

The work of their teachers in the performance-based model drew high praise from

all students. As one senior student said,

Teachers teach differently in this system. Kids are more independent, but teachers are still there to help and push us to be better. They are always there for us. In this program, you actually have to learn and understand concepts. There is no way to mess around. You have to work because you need an 80%. There are no Cs or Ds. You have to prove that you understand the standards and do good work.

A sophomore summed up her feeling about how her teachers meet her needs in the model

by saying,

I think teachers in the regular classes like traditional school better because it's easier for them to have kids just follow them and do what they say, but that doesn't push kids to be better. They don't have to connect with kids and work with them individually as much. They just have to teach something once and then give homework. But here, they teach in a way that fits me better. This is awesome!

Finally, a freshman student made an especially profound comment about how the

different teaching style is a better fit for her by stating,

Teachers and tests are what always hold me back in regular classes. I should test when I'm ready. I'm not a slacker, I'm just not as ready as some kids on test day. My teachers here know that, and teach me that way, and help me do better. They help me more here, and it is so much better.

Teachers Respect "My Way of Learning"

What students like about the system is an area that seemed to draw enthusiastic

responses, as their personal stories of success were easy for them to describe. A senior

girl said,

I was always scared to raise my hand in the regular classes. Now I do it all the time because I know I'll get the help I need, and I know that I'm not stupid. Other kids ask me for help sometimes, and that makes me feel good. I never felt that in any class before. Since I feel like I'm moving, I get more comfortable. The teacher knows where I am. It feels good to progress through and have them check in with me.

Another senior spoke to the individualized learning styles inherent in the model by

stating,

There are not as many huge lectures I have to sit through. Teachers give me more and better explanations. The teachers are also more open to me being different and be able to show my knowledge in different ways. I 'get' things more, because I see where I need to be. I respect myself more, and I respect the school more.

And a junior student summed up this concept clearly by saying

In English, I read the standard until I understand what I need to do. My teachers help by talking with me so that I'm sure I know it means, then I get to work in my way to show that I 'get' it. I love that. And if I don't think that an assessment is right for me to show my knowledge, then I can change it and show them how I can do it in a better way.

The "herd mentality" as defined by the concept of sitting in a classroom and

listening to a teacher was mentioned in some format by a number of respondents as a

condemnation of their previous educational experience. As one senior said,

In the normal high school, I was just in the middle of a big herd of people, and we were moved along like cows. In performance-based, I get to choose my own path and move that way. It's so much more interesting and motivating, and I want to be done early so I can move on with life. And now I will be done early with a higher skill level.

Another senior said,

I need more personal time to learn things – not lots, but enough to help me get into it. Then I can go on and do it quickly, and sometimes I help others. I'm not like a cow in a herd here. Here, it's not just "shut up and listen, shut up and do this." It's more of "how can I help you on this standard?

Finally, students expressed excitement about how their individual learning styles

were respected with such comments as this one by a sophomore,

> I hate it when you go into a regular class and a teacher just tells you the rules - so
> here I get to understand what I have to do and then do it MY way. I need more
> hands-on, and the personal work with the standards allows me to excel. In a
> regular class, when a teacher is up blabbing, it just goes right through me.

Another sophomore said,

> I understand my classes better and then I can do better on the test. It feels
> GREAT knowing how I will do on a test. And if I mess up, I fix it and can still
> move on. I like this better, so I'm a lot more motivated. Most of all the kids like it
> better. They can get ahead, and they have a choice on what to read, and on what
> to do. It motivates me to move and get done more quickly. It can be harder
> sometimes to have independence, but I do learn things better. I just have to work
> harder at it, which is probably a good thing.

And a freshman stated clearly that, "Teachers help kids more here – not just getting stuff

out to them. Teaching is more personalized for each kid. I can tell if I understand things

or not, and I know when I'm ready to demonstrate. I love that and I do better."

Student Voice and Choice

Student voice and choice is a foundational tenant of performance-based

education. The concept is stressed in both the Lindsay and Bridger academic programs,

and the students addressed it as a factor that helps provide relevance encourages them

take charge of their own learning. A senior student clearly expressed the power of student

voice and choice when she said,

> In performance-based, kids have more of a chance to get motivated because they
> can follow their own interests. It's liberating to be able to think differently and do
> what I want. I'm encouraged to do better because I can. I can tell on my own if
> the work I do is good enough or not. I really don't need for the teachers to tell me,
> because the standards and rubrics have it spelled out. And the teachers don't just
> throw work at us. I get what I need to do, and I do what I need to get it done. It's

really all about student performance. People know where they are and they move from there. And that is how it works in jobs in the real world.

A junior student also spoke to this idea of taking charge of their own learning when she said,

I like this way more! It feels GREAT knowing how I will do on an assessment, and if I mess-up, I can still fix it and move on. I like this better so I'm more motivated. Most of the kids like it better because they have a choice on what to read and what to do. It can be harder, sometimes, to have the independence, but I do learn things better when I have choices, and I just have to work harder, which is probably a good thing.

The idea of student voice increasing motivation was clearly stated by another junior student when he stated,

It's easy because I get to show things my way, I know what proficiency should look like, and I know if I have it or not - and so does the teacher. I was always scared to raise my hand in the regular classes. Now I do it all the time because I know I'll get the help I need, and I know that I'm not stupid. Other kids ask me for help sometimes, and that makes me feel good. I never felt that in any class before. Since I feel like I'm moving, I get more comfortable. The teacher knows where I am. It feels good to progress through and have them check in with me.

A senior on the verge of graduation powerfully stated that

Instead of busy work, worksheets, and assignments, in performance-based you get to show you are capable of doing skills, and after you show that you have it down, you can move on. Then all the other things get better because you know it more. I'm doing so much better, and that just makes me try harder. I LOVE being successful at school!

Other students spoke to student voice as allowing them to achieve at a higher level. One sophomore in particular made the comment that,

This is not as easy as people think. It's actually harder, but I'm doing better in school now than I ever have. It all makes more sense to me, and I feel good when I see myself moving and getting things done. We are getting a better education here. All the other kids are getting cheated. Too bad for them!

And a freshman mad a powerful statement,

> I was going to drop out before you let me come here. I hate the regular classes because they don't make sense and I didn't care. They just make you do work that doesn't matter. But now, I know what I'm learning is important, and I'm doing a good job in school. For the first time since 2nd grade!

A sophomore student summed up how having input into her own education has had a big impact when she said, "This is easier to understand why I am learning things and what I need to do. Then I can do better. It makes sense. The standards are easy to understand and I get to say how I will put things together. I'm doing better than I ever have."

Not So Centered on Grades and Assignments

Students could easily describe what success looks like, and why success is important for them. One senior said,

> When I can complete a task without teacher help, I know I'm proficient. I know what it needs to look like. It's better than sitting back and listening to a teacher blab. No one cares. I can work on my individual pace and do things better – not just turn stuff in to get the points.

And another senior made the powerful statement that, "We need to have skills in the real world. Grades don't matter. Some kids have the grades but not the skills. That's not good for anybody. Schools need to change because kids don't care as much. Schools are not real-life lots of time." A junior student made an especially profound comment,

> I know I will need the skills we work on here. Kids get bored with school the regular way. It's not working really. Kids cheat all the time and just copy homework so they can turn it in for points. They just care about passing, not really learning. There is more opportunity for better learning here.

Students clearly expressed that success should not be measured by grades alone, but that a number of other factors should be considered. As one junior said,

> I was nervous to come here at the beginning, but this is definitely so much better. OMG! I had great grades at BHS, but I would get overwhelmed sometimes, and

would then shut down automatically. Here, I can go into a class and not worry about silly assignments. I know where to go and can do what I need to do to get there.

Similarly, a sophomore said, "Here I get to show what I know, and not just get tested on what I don't know. Also, sometimes I might make a mistake, and in the regular class I lose points. A mistake doesn't mean I don't know it – I just made a mistake. I'm always on edge in regular classes."

The concept of demonstrating proficiency when appropriate in terms of readiness was a point of emphasis for all students. There was unanimous support of this leading to higher levels of achievement over the traditional practice of deadlines and test dates. Students seem excited that they know intuitively when they are ready to demonstrate proficiency. The fact that they are well aware of what excellence looks like is a motivating factor for them. This was beautifully expressed by a senior who said,

I KNOW I will pass the test, because I KNOW that I can do the stuff. That feels GREAT! I failed Algebra I for 3 years – but if feels great that I can really do it and help other kids. I don't feel stupid anymore. I like that I can do school faster and better. I like how I can really understand proficiency, and that I understand the stuff they are teaching me much better.

And a young student powerfully discussed how being able to show proficiency when ready was critical for him when he said,

Teachers help me where I am, and I don't feel I have to keep up with a class where I don't know what's going on. I can go at my own pace and not be rushed by deadlines. I'm working harder than I did in the regular school and want to stay in school. The work in my other classes made me want to leave – and I'm only a freshman!

The final comment by a sophomore was especially telling,

I took two tests in math this week and got A's on both of them. I like being able to go at my own pace and not wait for everybody else. Everybody taking a test in

the same day is so silly to me. If I'm ready earlier, why should I have to wait? I have the knowledge, let me go on!

Finally, success not being so dependent on tests and assignments lead students to believe that their progress was more authentic. A junior made the following insightful comment,

> I love this! It's saving me. I like coming to class and being able to focus on what I need to do, and not just follow what the teacher says. Time-based education really is pretty ridiculous. People learn things differently. Schools need to see that and not have people move through like cows. The whole school should do it like this. Things are a lot different. I'm proud of that. It's not about the grade.

Additionally, A number of students discussed how grades are not a measure of real knowledge. As a senior eloquently said,

> The pressure is off for kids to meet deadlines when they can't do it. In regular classes, bad grades and punishment is always hanging over us. It's not all about assignments and homework and attendance. I had to go to treatment twice and missed some time, but it doesn't matter as long as I know the stuff and can show my skills. You have to make sure you really know things before you can move on.

And a freshman had an equally profound insight when she said, "It's not so grade-based, but real knowledge based. And I need more time usually, I hate to be rushed – it stresses me out, and then I get too focused on tests that I don't do well on."

Teacher Proficiency &
Student Apathy Are Problems

As with Lindsay, Bridger students were unanimous in the sentiment that teachers are the one thing that holds them back from proceeding through school and that they would most like to see improve. Bridger students, however, spoke specifically about

teachers from their traditional classes and not being able to meet their needs in the same

way as do those from the Bridger Program. A freshman student said,

> Nothing about Bridger should change. I just wish all the teachers were good at it. This system makes more sense. I've improved my speaking and writing. If there is a topic I'm interested in, I get to work on it more which will make it all better when I turn it in. I like how the teachers push me to think about lots of different things.

And a senior made a strong statement about his perception of performance-based teachers

when he said,

> The teachers here call parents, which makes kids work harder. Others down the hall don't because they don't want to take the time. You need to be self-motivated. If you're lazy, you will fail either way. Those kids fail here or down the hall in the regular school.

> A number of students linked student apathy and teacher proficiency to relevance.

A senior spoke directly to this when he said,

> Lots of stuff I learned in the regular school is totally worthless. They teach some basics, which is good, and we all should be able to read and analyze, and think, but so much of the stuff is ridiculous. Lots of times, I go into a class and am excited, and the teacher turns me off to it forever. Big classes with a boring teacher, makes it totally not relevant for me. That's why it's so much better here. I see how it's important.

And a junior expressed similar feelings when he stated,

> Most of the work is sooooo boring in the regular school. I can't believe teachers think we really like sitting there and listening to them every single day!! And then the stupid homework!! Just tell me what I need to do in class – don't waste my time and I won't need to do your work at home.

> Student apathy was mentioned by a few students as being an issue in all models of

education. But Bridger students presented an interesting indictment of peers who are

unmotivated and choose to fail. "You need to be self-motivated to be successful here

though. If you're lazy, you will fail either way. Those kids fail down here or down the hall in the regular classes."

Summary of Results from Bridger Alternative
Program Student Engagement Interviews

Bridger students provided a powerful narrative about how the performance-based model allows and encourages them to be more engaged in the own schooling. They could easily describe what success looks like and, likewise, could provide a number of examples of what the lack of success showed. Students spoke easily and clearly about their experience in both systems and stated that in their traditional classes, there may well be an awareness of their lack of achievement, but the performance-based model provided a road map of how to get back on track and pointed to a direction that will lead them to ultimate completion. The concept of demonstrating proficiency when appropriate in terms of readiness was a point of emphasis for all students. There was unanimous support of this leading to higher levels of achievement over the traditional practice of deadlines and test dates. Students seemed excited that they know intuitively when they were ready to demonstrate proficiency. The fact that they were well aware of what excellence looks like is a motivating factor for them. The question about what they would like to change did not inspire students to address the performance-based model in general, but rather what they found frustrating in the Bridger Program's specific practice. Their responses, however, could be easily expanded to the more general system.

Results from Academic Optimism Teacher
Interviews at the Bridger Alternative Program

The personal interviews with eight Bridger teachers averaged 30 minutes in length, and were conducted during the weeks of February 10-March 3. The interviews were designed to engage participants in reflective discussions about how they feel the performance-based model meets student needs differently than in the traditional system and, thus, also impacts the academic optimism of teachers. All teachers were identified by an alias. The two themes listed in table 16 emerged from the Bridger Alternative Program Teacher Interviews. The reference tally is the number of times topics related to these over all themes emerged from the interview transcripts and support the overall themes interpreted.

Table 16
Bridger Teacher Interview Response

Preliminary Theme	Reference Tally
Engaging Individual Students	8
Assess Student Progress	8

Engaging Individual Students

As with their counterparts from Lindsay, Bridger teachers mentioned, with great consistency and without regard to the subject area taught, the importance of engaging students individually. The end of a class period tended to be a time of reflection for Bridger teachers in terms of how engaged their students were and they seemed energized to continue with their lesson the next day. Shaping instructional practices and focusing their efforts to engage students academically was discussed by every staff member

interviewed, and their efforts to engage their students, when successful, increased their

own levels of optimism as professionals. Robert was clear about how his thoughts

immediately focus on engagement,

> After a class period I typically reflect on what happened. I look for what the kids showed they learned. What could I have done better? It's great having a colleague here during the same period, so we can reflect together. I also look over and record my formatives – I usually give 1-4 daily. It may be something as simple as verbal feedback, or as sophisticated as a written piece, but I want to check on whether or not what I did was good and go from there. In my regular classes, I set up for what I'm doing. In this class, I plan for how I can reach each kid differently. And I always am conscious of who did a good job as well as those who are struggling or had some behaviors that I need to address. I think more here about engagement. In my regular classes, I think more about planning a lesson and keeping kids busy so that they are interested in my lesson and will get it for the test.

Pat spoke of a similar dynamic,

> I plan my formatives for the same class tomorrow – it's important to plan things while this class dynamic is still fresh in my mind. I'll also plan for which groupings should take place, and the vocabulary that the kids will need to progress. Those few minutes after a class are really necessary for success tomorrow.

Steve spoke of the same powerful energy he finds when students are engaged,

> After class I'm still energized and have LOTS of ideas for tomorrow. I reflect on things – what was good and what I can fix - and am focused on finding things, how to engage individual kids. It's like the coaching process, I need to evaluate where kids are in terms of skills and knowledge, and then figure out how I can get them excited to keep moving. You can't really lesson plan in the traditional way here, it's like an ongoing book, and I make my own adjustments every day. I shift according to needs. It's all about connections. It's not about me, it's about them, and I need to always think about that so that I can be better and more effective.

And Sarah, a veteran teacher, made an especially powerful statement,

> One thing I can tell you is that I think about kids more than I used to. In the program, I think about how to connect with kids and how to connect them with the standards better. In regular classes, I think about the things I need to do – but here I think about the kids. And that's a huge difference. I'm definitely more in

tune with the kids now – I know what they are working on and am always trying to connect with them so that I can help them better. But I also take it more personally if they don't do well or if they don't take it a seriously as I do. So it's a total change of focus for me after a class here.

Assessing Student Progress

The use of formative and summative assessments in charting student progress and growth drew strong responses and the most in-depth opinion from the Bridger staff. Teachers have been piloting an innovative progress-monitoring tool developed specifically for the Bridger Program, and assessing student progress, according to staff members, helps them feel optimistic about the jobs they do and their ability to help students grow. Pat was especially clear when he discussed how monitoring student improvement has a strong impact on him personally when he said,

> I have to assess where they are first – absolutely the most critical thing. Once I've figured out where they are in terms of skills and knowledge, I need to figure out what the stumbling blocks are – what are the missing skills? Are they missing some previous skills that we need to address, was it just a bad day, are they simply having trouble getting this particular concept, or are they ready to move on? Once that is clear, then I can work with them harder and more effectively. I also need to convince them that whatever we are working on is important and help them see the big picture. That is why the relationship and caring about them is critical – they will work harder for me if they trust that I know them and want them to be successful both in school and in life. In my traditional classes, just have to accept that I will fall 'off pace' when I work with kids this way. I take what I've learned in the performance-based system and bring it to my other classes, but that means I have to slow down and really look at the formatives. That is the key because it determines how I will help a kid and how I will be able to help him move to a higher level.

Sarah also spoke about how monitoring growth has a strong influence on her personally,

> It's easier and more difficult at the same time in this model. Since kids are at different skill levels, I have to work to identify where they are and come up with strategies to motivate and help them. I'm more involved with them personally

than I am in a traditional classroom. I still get the same level of frustration sometimes, but I definitely feel I can take kids higher here because I know them better and they know exactly what to do and how to get help. In traditional classes, it's easier in lots of ways to talk to 30 kids and then tell them what to do – and then they either do it or not, and I just grade on that. Here, I have to connect with each kid each day. It's harder, but it's much better because I know I can take them to a high level individually.

As with Lindsay, Bridger teachers feel empowered by their ability to help

students reach benchmarks and visualize goals. Robert spoke eloquently about this

energy when he said,

I always want to give kids solid direction and then time to get started on things, then go help them as individuals or groups. 1-1 interaction is the absolute key here. If I know their strengths, I can work from there. Plus, they work harder if they know that I really get them. I don't want kids to think they can slack off and get a good grade. I want them to know I will push them as high as they can go individually.

Steve discussed how charting growth has a similarly strong effect on student

attitudes as well,

Kids need to self evaluate first so that they can clearly see where they are and where they need to go. Then, I try to ask the right questions – thought provoking ones that can further assess where they are. I'm interested in how they learn and how it affects their life. I want them to be interested in that also so that they engage more and move to the highest level they can. The most important thing is that they use the knowledge they already have, learn more from there, and then be able to apply it to life. It's not just 'learn and be done.' That's how I'm always thinking Quadrant D. Rigor is important but it all comes from relevance for them. That is the most important. They engage more that way, and that is what moves them up to the next level.

Summary of Bridger Alternative
Program Academic Optimism Interviews

Bridger teachers responded to these questions regarding academic optimism with

amazing consistency. Every Bridger staff member interviewed discussed shaping

instructional practices to engage students academically, and this was especially telling in

that they were able to compare their performance-based classes with those they teach in

the traditional system. Engaging with students personally rather than focusing on

curriculum was a hallmark of the Bridger teaching staff. This concept of truly engaging

with students spilled over into the realm of assessments as well. The Bridger staff did not

have access to the same level of assessment instruments as did Lindsay, and as a result,

spend more time creating assessments that address individual student strengths and skill

level. This extra work, however, helped teachers individualize assessments as well as

instructional strategies that increased student engagement and their own sense of

academic optimism. As with Lindsay staff, these questions prompted great discussion

about motivation, local demographics, educational philosophy, and local reform efforts.

Results from Transformational Leadership Interview
Questions at the Bridger Alternative Program

Teachers powerfully expressed the themes that emerged about the leadership

behaviors necessary to successfully implement innovation such as the performance-based

model. Bridger staff recognized the critical role of leadership in the change process and

spoke of it eloquently. Again, I chose to include complete quotes from the interviews in

order to provide a full understanding of teacher perspective as their opinions provide a

powerful insight into their level of support for administrative leadership. The three

themes listed in table 17 emerged from the Bridger Alternative Program Teacher

Interviews. The reference tally is the number of times topics related to these over all

themes emerged from the interview transcripts and support the overall themes interpreted.

Table 17
Bridger Teacher Interview Response

Preliminary Theme	Reference Tally
Leadership Lives the Vision	8
Risk-Taking Encouraged - SOP	8
Celebrate Innovation Constantly	8

Leadership is Visible and
Fully Engaged with the Vision

This theme about vision drew a powerful and enthusiastic description from all

staff. The concept of both leaders and staff "living" the vision was shared by all teachers

as a necessary behavior for successful implementation of the performance-based model.

Robert spoke clearly to the ideal of leadership living a consistent vision when he stated,

The principal here is a visionary. He's very hands-on and helps me personally. He's always around, and is a great resource. He asks me questions that might work better, or maybe they help him understand the situation better, but he's always making me think about things in a different way. Sometimes, it reinforces me in my thinking about what I'm doing, sometimes it confuses me, and sometimes he makes a light go on in my head. But I'm always thinking now. And the kids like it when he's here asking them about things. It makes them feel good when they can explain things and that he knows the direction they are going. He also inspires a confidence and calm here, we see it in action every day. He encourages, and actually demands, that I get out of the box. He gives me the confidence to try new things, and even tells me 'you can't get in trouble here for trying something.' I have no fear and I'm not always looking to make sure things are good so I'll have a job next year. He really helps me get better.

Pat, a longtime Bridger Alternative staff member made an equally strong case for

visionary leadership by stating,

When I have a boss with vision and I can trust him, then we work collaboratively. Just like in my classroom – if kids trust me and know where we are going, it's easier to work together to get things done. In Bridger, the vision was there in the beginning, although it has changes and evolved over the years. I've had my share of disagreements with the leadership because I don't think they understand my subject area all the time, but we have made huge strides here and this is great. We are on the same page because the vision and direction is clear and we can move together. And just because we disagree sometimes, it's done positively and we know that we have each other's back. But in the regular school setting, the classes are too big and there are too many teachers – I just don't see the vision. It's like there is a new flavor every month. Most of those things are good and we are a good district so we try to do lots of things, but there are too many initiatives, so the staff truly doesn't "see" the vision in the general school.

A few teachers spoke to the differences in their experience between leadership

behaviors exhibited in the performance-based model in the Bridger Alternative Program

as opposed to the more traditional model. Steve said,

Bridger and Bozeman High are apples and oranges. In Bridger, the vision leads to **everything**. We teach to the heart. Here we are changing kids lives and trying to make it better for them forever. It's all change based – we are always trying to do things better, so we try everything, and if it doesn't work, we all try to fix it together. There is constant engagement with kids and staff. That is our vision. We use academics to reach them at a deeper level. At BHS, it's almost academics for it's own sake, and kids really just jump through hoops much of the time. We always hear about the LRSP, but I still don't know what the vision is really. How does it affect me and what I do? I totally get that in Bridger, but not in my other classes.

Sarah made a similar distinction between the two models,

We have lots of vision and talk of direction at Bozeman High, but I'm never sure exactly what that means for me as a teacher. This year, I saw personalized learning as a goal – but I've not done anything different than I always have. It's hard in a big school like this. But in Bridger, the vision is performance-based education, and everything flows from that. The principal and the teachers all speak the same language – even though we are not all at the same level of proficiency ourselves. Mike is always in the rooms asking kids what they are doing, asking me what we are doing, and throwing out lots of ideas – and it makes sense what he's trying to do. Even though I don't have the system down well yet, I know I'm getting there.

Risk-Taking as Standard
Operating Procedure for Leadership

A culture in which teachers feel free and are encouraged to take risks was

expressed strongly by the Bridger staff as an important piece in successfully

implementing any innovation, and especially something as fundamentally different as a

new model of instructional practice. When discussing leadership behaviors from the

Bridger Alternative Program principal, Robert said,

> He encourages me to take risks every day. He actually challenges me to think
> differently, and I think the kids appreciate it. No one wants the class to look like
> some traditional teacher-centered room. Sometimes, I'll change a lesson on the
> fly, right here and now if I think it could work better. At other schools, I never
> really have seen principals in the room challenging teachers to be better and think
> differently – it's almost like they are afraid to challenge teachers. But it doesn't
> have to be in a bad way. Kids here see that it's ok to wrestle with things and
> collaboration can lead to better results. But he always defers to my expertise as
> well. It's pretty cool. If you really want to implement change, and if schools
> really are going to evolve, we need people in rooms trying to lead it and help
> people do it better. Teachers need leaders who really speak the language and
> know what life is like for me.

Again, a number of staff members felt compelled to compare their experience in

the performance-based system practiced in the Bridger Alternative Program with that

from the more traditional Bozeman High School. Pat stated,

> In Bridger, we definitely take risks. This whole model was a risk, and now we are
> seeing positive results. We take calculated risks all the time. They don't always
> work, but we all see what happened are on the same page moving forward. In the
> general school, we never take risks. We always pull back. Look at the grading
> practice. I've heard about that for years, then nothing. Then it's rolled out, then
> we go back. Ridiculous. Let's try it – so what if it doesn't work – at least we
> tried. Maybe we just need to work through it. And we give a model to kids about
> taking risks and staying focused. But not here. We are too afraid of the
> complainers.

And Steve was equally passionate about risk taking as a critical element of effective

leadership by saying,

> I look at the common core as a risk we should be taking. We hear about it all the
> time, but it's just talk really. It's not a vision, its not a passion, it's not exciting.
> It's really nothing that has made a change in classrooms on a large scale. Here's
> the deal, we always talk about curriculum and standards, but that is often just
> groupthink from teachers. How can I fit it into what I always do? It hasn't led to
> real change, and we are just continuing in the same way, and that will eventually
> lead to average and mediocrity. We are so based on curriculum around here, that
> it just leads to cookie cutter. In my regular class, I often teach just like the guy
> next door – in fact, that the goal with pacing guides and all the other stuff. A
> monkey could read our curriculums and teach it. But Bridger is all about process
> skills – I teach job skills and life skills like collaboration and leadership. It's what
> the community really wants, but lots of teachers don't want to hear that because it
> changes how they will have to operate. In Bridger we took a risk and then worked
> hard to make it work. At BHS, we seem afraid to take real risks because it will
> rock the boat.

Celebrate Innovation and Risk-Taking Constantly

The perception of the overall celebration of innovation received high marks from

the Bridger staff. Bridger teachers mentioned that the manner in which celebrations for

innovations and "outside-the-box" thinking was important for them individually, and also

tended to translate into actual practice in their classrooms. Robert said,

> We celebrate small victories almost every day. The main campus is not bad, but
> it's harder to do it and harder to see it. But, when teachers get rewarded and
> recognized, they will do it more with kids in class. They know how it feels and
> want to spread it. Rewarding short-term growth is important, because this will
> take time and energy to make it happen long term. Teachers and kids need to be
> celebrated regularly. You can tell he was a football coach and like to celebrate a
> lot, because we do that a lot here. It creates an infectious energy. Not sure how
> to do it large scale though.

And Pat also mentioned the importance of celebration by saying,

> Bridger celebrates all the time. We have changed things. Our leadership
> celebrates us, and we celebrate each other. And we celebrate the kids a lot. It has

a great trickle down effect. We are good at innovation and celebrating 'wins.' And then the kudos lead to discussion with colleagues. People come up to me and say, 'so what's happening there?' On the main campus – not so much. The Monday Memo is fine, but pretty hokey. Just like some mini shout out. And too many kudos breed resentment. It's either the same people getting the recognition, or people that don't really deserve it.

Steve mentioned both innovation and risk taking as standard operating procedure in order to lead to substantive change by stating,

In Bridger, we are willing and encouraged to try anything – whatever could work – and we have no fear of failure or change. But leadership is not just flying by the seat of their pants – it's all research based and solid with data. Mike isn't afraid of offending people – he'll call it like it is and work to keep us focused on the main thing. You can't have 2nd order change without risk and focus. Bozeman High tends to focus on non-offensive things, and then some teachers just use extreme examples to argue points. Here, we can argue and debate, but the vision is clear, and the innovation follows. And we celebrate all the time. The teachers here are awesome!! And we all appreciate the efforts and improvement we have made here. It's amazing. I can't teach the old way anymore, and I hate going to department meetings where people – intelligent people – can't get outside their box.

And Lee said that the effect of innovation has a way of increasing collaboration,

Mike is all about innovation. It's all he talks about. It's good, but sometimes he's talking above me. Not in a bad way, it's just I don't see what he means or how it fits in yet. But we celebrate innovation and share ideas all the time. There is great collaboration here and we push each other to innovate and think differently.

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Summary of Bridger Alternative Program's
Transformational Leadership Interviews

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The most powerful theme uncovered by these Bridger teacher interviews was one in which the leader must necessarily be visible and deeply involved in leading the change process by constantly modeling the vision. Bridger teachers mentioned that it was crucial

for principals to be experts in the model and push teachers to stretch in order to innovate, take risks, and collaborate as to what works and what does not work in terms of student success. The comments mirror the data from the MLQ in which the staff perceptions of the Bridger leader resulted in higher mean scores in terms of influence, inspiration, individual consideration, and intellectual stimulation. The respect for the principal as an educational leader as opposed to a manager was powerfully stated and was in direct opposition to teacher perceptions of the principal from the traditional Bozeman High School, which should lead to additional research that includes a larger control group.

Chapter 4 Summary

Quantitative and qualitative methods were used to gather data in the two case studies. Although the survey data did not uncover statistical differences between student perceptions of their level of engagement, or teacher perceptions of their academic optimism or transformational leadership behaviors of their building principals, the interview data provided a rich and powerful picture in which students and teachers in the performance-based model do indeed seem to be highly engaged and optimistic. And staff in the programs that successfully implemented the performance-based model are led by visionary, transformational leaders who are highly involved in leading the change by inspiring their teachers and encouraging them to teach to the heart of students, and not simply refer to arbitrary measures of achievement.

The answers provided by students and teachers interviewed for this research clearly indicate that they perceive student academic engagement and achievement to be at

a higher level in the performance-based model of education than they experienced in the traditional system. Students related that they believe they are operating at a higher level, and that their classmates and the teachers made similar statements as well. This perception, coupled with increased pride and enthusiasm for school points to the need for further study in terms of more quantifiable data to analyze actual student achievement.

Examining whether or not the performance-based system leads to improved student engagement was a major focus of this study and was, indeed, a strong theme that emerged. Bridger and Lindsay students all expressed that they are definitely more engaged in their academic progress than they were in the traditional system. Students consistently expressed that the ability of teachers to interact with them on a more individual basis was the most important difference for them in terms of helping them engage in their studies. Increased engagement also revolves around the fact that instructors in the performance-based model teach differently and respect their individual styles of learning more effectively than they had experienced in their traditional classes, that there is a recognition of student choice and voice, and that academic progress does not simply center on test grades and assignments, but can be charted by growth and progress

Teachers in both the Bridger Alternative Program and Lindsay High School spoke to the increased engagement of their students and the subsequent impact on their own levels of academic optimism, and there was also unanimous support for a leadership model that is transformational in terms of implementing real second order change. Among performance-based staff, there was a palpable sense of enthusiasm for the model,

perception the leadership role of administration, and the connection between student

engagement and academic optimism.

The main impetus of this question was to determine what type of leadership behaviors are

required for an educational program to successfully transition from the traditional model

to one that successfully implements the performance-based system. Interviews with staff

members from both the Bridger Alternative Program and Lindsay High School did indeed

reveal certain leadership behaviors that are critical in terms of leading the shift to the

performance-based system of education. First, a solid vision that is clearly communicated

to all stakeholders is essential. Also, every teacher spoke to the necessity of a leader or

leadership team that not only understands the vision, but, most importantly, requires a

principal to lead change rather than simply be involved in the process. Moreover, the

ability to encourage others to take risks, celebrate innovation, and be engaged and visible.

When school leaders passionately pursue higher expectations for all students, are not

satisfied with the status quo, and suggest creative solutions, they are more likely to be

successful in implementing the shift to the performance-based model.

As Ken Robinson succinctly put it, "Creating a culture of innovation will only work if the

initiative is led from the top of the organization. The endorsement and involvement of

leaders means everything, if the environment is to change" (2001, p.220).

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Introduction

Yin stated that an exclusive definition of an exemplary case study is difficult to discover, but that exemplary case studies have five characteristics in common including significance, completeness, consideration of alternative perspectives, sufficient evidence, and engaging (2013). This chapter will distill the analysis from a rich field of data into some essence of clarity and understanding. Initially, connections will be made that link important research from the Review of Literature in Chapter Two to the findings of this study. Secondly, a summary addressing the Central Question identified in Chapter One and Three will be presented. Third, several recommendations for further research in this area have been identified and will be suggested. Finally, a number of insights into what this research has done for me personally and professionally will be presented.

Connections to the Literature Review

The model of performance-based education as practiced in Lindsay High School as well as the Bridger Alternative Program is directly linked to the theoretical construct of personal mastery. In the Review of Literature from Chapter Two, it is clear that the concept of personal mastery in education is nothing new, but has, in fact, been studied by a number of researchers including, Dewey (1916), Bloom (1970), and Gusky (2007,

2010, 2011, 2013). Bloom described mastery learning as an instructional strategy to meet

the needs of individual students, and although the theory has evolved and has been

adopted by a number of educational reformers in subsequent decades, the model has not

been fully integrated into the traditional, mainstream school system. Traditional schools

still largely follow the deficit model of education (Freire, 1970) that was prevalent in the

past century in which students are grouped in a cohort by age and endure the typical

instructional practice that consists of organizing curricular content into units and then

assessing student progress at the conclusion of each section or chapter of a textbook.

One critical element that has clearly been indicated by research is that student academic

engagement tends to decline as learners progress through the upper elementary grades

and middle school, reaching its lowest levels in high school (Marks 2000; National

Research Council and Institute of Medicine 2004 as cited in Fredericks, et al., 2011). This

decline can be even more dramatic as students move through feeder patterns of low-

performing, high-poverty schools (Yazzie-Mintz 2007). A multitude of studies can point

to no single reason why students stop attending high school, but there is a strong

correlation between disengagement and dropping out. Bridgeland and his colleagues

surveyed a number of high school students and concluded that most dropouts are students

who could have, and believe they could have, succeeded in school. Respondents reported

different reasons for quitting school including a lack of connection to the school

environment; a perception that school is boring; feeling unmotivated; academic

challenges; and the weight of real world events. In fact, nearly half (47 percent) said a

major reason for dropping out was that classes were not interesting. These young people

reported being bored and disengaged from high school. Nearly 7 in 10

respondents (69 percent) said they were not motivated or inspired to work hard.

(Bridgeland, J.M., DiIulio, J.J., Jr., & Morison, K.B., 2006). Tomlinson (2013) and

Gardiner (1997) have both addressed the current generation of schoolchildren and

concluded that without substantial change to the current educational setting, America's

school will produce a higher number of disengaged young people who lack the skills

necessary to succeed in a rapidly changing, dynamic, global economy. Thus, it is clear

that maintaining the status quo of traditional schooling will never lead to optimal student

engagement, learning and achievement for many students (Fredricks, et, al, 2011).

Teacher efficacy and, especially, academic optimism is a relatively new area of

research that is directly linked to student academic engagement.

> Being a teacher is a creative profession. One of the reasons schools fail and
> systems stumble is that teachers as well as students become disengaged. There are
> teachers who are not interested in learning or have no gift for teaching and should
> be doing something else that fulfills them (Robinson, 2001, p.267).

The construct of academic optimism is closely tied to resilience, positive psychology, and

engagement, and has been shown to be a factor in increased student achievement (Hoy et

al., 2006b).

> Teachers who utilize mastery learning recognize the students who do well on the
> initial formative assessment and either allow them to progress more quickly or
> may offer enrichment activities. But those teachers also acknowledge that
> students who demonstrate proficiency on later assessments have learned just as
> much and by also mastering the performance standards, deserve the same grades
> as those who scored well early (Guskey, 2010).

Finally, successfully shifting schools from the entrenched traditional system to a more progressive and innovative model requires tremendous fortitude, energy, and direction. Research clearly indicates that transformational leadership can be utilized to effectively facilitate the transition toward second order change (DeLorenzo et al., 2009; Littky, 2004; Priest et al., 2012). Moving a school staff as a whole in a new direction is heavy work. It "all begins with the initiative of an individual… A leader initiates, provides the ideas and the structure, and takes the risk of failure …while knowing that the path is uncertain, even dangerous" (Greenleaf, 1977, p.29). Leithwood and Jantzi (2008) found transformational leadership has a significant effect on teacher satisfaction and organizational health. In addition, the authors found transformational leadership to be related to student achievement. Marzano, et al. (2005) states that a correlation coefficient of .25 exists between transformational leadership practices and student success. Chin (2007) found a significant effect size between transformational leadership as defined by the MLQ and student achievement ($r = .487$, $p < .001$). The effects of leadership are undeniable and necessary.

Yet, in spite of the existing research, to date, there is no empirical evidence suggesting that schools successfully using the performance-based system of learning also demonstrated more transformational leadership behaviors by their principals, greater academic optimism of teachers, and higher levels student engagement. Thus, this study is new research and suggests that the performance-based model requires transformational leadership in order to be effectively implemented and, once accomplished, has a direct impact on increased student engagement and academic optimism. In other words, once a

performance-based system has been successfully implemented into an educational program, a framework will have been established that transforms good instructional practices into the realm of exceptional schooling as a whole.

<center>Implementation of the Performance-Based Model</center>

The performance-based approach to schooling has led to remarkable gains in student achievement in a number of districts, most notably the Chugach School District in Alaska (DeLorenzo, et al., 2009), and Louisville, Kentucky with the "Project Proficiency" initiative (Burks & Hochbein, 2013, p. 1). Additionally, research exploring achievement goal theory has clearly demonstrated the efficacy of pursuing mastery goals in terms of student achievement (Martin, 2006), and Pintrich concluded that programs that implement and focus on striving for performance goals have not necessarily witnessed a detriment to successful school functioning (2000). In fact, pursuing Personal Mastery goals may have a synergistic effect that captures both student engagement and achievement (Martin, 2006). Thus, successful implementation of the performance-based model can be shown to lead directly to increased student engagement and teacher optimism. The two schools in this study have successfully implemented the performance-based model have, indeed, witnessed an increase in student engagement and teacher academic optimism, thus, providing a metaphorical roadmap of appropriate implementation.

The general population demographics of Bozeman, Montana and Lindsay, California are in stark contrast to one another, and thus, perhaps appropriately, the

methods to implement the performance-based model in the local schools differed dramatically as well. However, what Lindsay High School and the Bridger Alternative Program had in common was a history of low academic achievement overall and a relatively high percentage of students who could be deemed at-risk of not graduating from high school with adequate skills to transition successfully to either college, vocational school, or the world of work.

The Lindsay community largely came together to demand a change from the traditional system of education that was not meeting the needs of their student population. A number of community meetings were conducted in order to gauge public concerns and enlist public support and opinion. The case of Lindsay, California, provides an example of adult dedicated, community driven, top-down implementation of the performance-based model of education. The community, led by a proactive school board, strong administrative leaders, and concerned parent groups became galvanized in their commitment to change their school system. By 2012, the performance-based model was adopted in all grades district-wide, and an online assessment program was adopted for all measurement topics at grades 9-12. As a result of successful change in practice and corresponding growth in achievement, the Lindsay Unified School District was awarded a $10 million grant to continue the implementation and evolution of the performance-based system. Lindsay schools followed a planned schedule, utilized experts in the field, and implemented the model with fidelity. The results have been astounding in terms of student achievement and stakeholder buy-in.

The implementation of the model in the Bridger Alternative Program was very

different from the process followed in Lindsay. Lindsay implemented according to a step-by-step plan that had been researched, and was mandated from the top down for use in the entire district. The process was transparent to all stakeholders from the beginning, allowing for a vision to which every staff member could refer and be held accountable. This is undoubtedly a superior means to achieve the second-order change inherent in a shift to a new educational system. The Bridger Program, on the other hand, followed a process in which the model was implemented on a very small scale, allowing for the development of exemplars in the performance-based model that would subsequently be able to teach their colleagues how to implement the system in individual classrooms. Every Bridger teacher works part of their schedule in the Bridger Program, and the remainder of their classes in the general population of Bozeman High School. In this way, the performance-based system is blossoming organically into other areas of the larger school. As of this writing, the system has been fully adopted in the world language department, and is becoming more common in math and English.

Contribution to the Literature

Given the assertions presented in the Review of Literature regarding the demands for educational leaders today to facilitate second-order change in order to more fully engage students in their own learning, the educational systems as practiced in Lindsay and Bozeman provided an excellent bounded case study focused on the following central question: How do teachers and students who operate in a performance-based educational system describe academic optimism, student engagement, and transformational

leadership behaviors of their principals? From this central question came the three sub

questions designed to evoke opinion and engage participants as to the efficacy of the

model and how best to implement it in other settings.

Sub questions:

1. How do teachers in the performance-based model schools describe the

transformational leadership behaviors of their principals?

2. How do high school teachers in the performance-based model schools describe

their academic optimism?

3. How do students describe their own level of academic engagement in the

performance-based model of education?

The research design worked to address the questions well and, in fact, revealed an

array of data to be considered further in other studies. A number of connections began to

surface during the interviews themselves, and were reinforced by achievement data

documents and completed staff/student surveys that were aimed at analyzing

engagement, optimism, and leadership from the Bridger Alternative Program and Lindsay

High School. From these three cross sections of data, several themes surfaced which are

the focus of this chapter and will be discussed at length in the next section.

Transformational Leadership

The first research question posed for this study was "How do teachers in the

performance-based model schools describe the transformational leadership behaviors of

their principals?" Teachers at both Lindsay High School and the Bridger Alternative

Program spoke powerfully and clearly as to the most important behaviors that principals

must exhibit in order to facilitate the second-order change inherent in a move to the

performance-based model. The school principal plays the critical role in creating an

environment in which evolutionary shifts can take place. "School administrators must

focus their attention on using facilitative powers to make second-order changes in their

schools. Transformational leadership provides such a focus" (Leithwood, 1992, p 16).

Some of the qualities of an educational leader that define him/her as transformational

include setting direction, building a clear school vision, establishing school goals, and

creating high performance expectations. Additionally, the skillful leader develops people

through modeling behaviors, and by providing individualized support, intellectual

stimulation, and a climate in which staff are held accountable yet also may experience

consistent success (Marzano, Waters, & McNulty, 2005).

Lindsay High School is a nationally recognized leader in the performance-based

movement. As such they are well versed in the leadership skills necessary to implement

the model. A mission, guiding principles, and various visions have been well ingrained

in the entire school community, and focused professional development is an accepted

norm that is effectively utilized. Although there was no quantitative instrument available

to measure teacher perception of the leadership construct, staff interviews as well as

artifacts and documents point to a well-organized and effective leadership structure.

Lindsay is far ahead of the curve in terms of professional development for teachers and

administrators, as well as community education to continue to evolve in the model.

In the Bridger Alternative Program case, although a statistical analysis of the MLQ

revealed no significant difference between Bridger teachers and national norms in terms of their perception of transformational leadership behaviors exhibited by their administrative staff, the Bridger leadership mean scores were consistently and even dramatically higher in every measured area. Additionally, effect sizes showed a moderate effect in the areas of Influence Attributes, Intellectual Stimulation, and Individual Consideration, and a large effect in the areas of Individual Behaviors and Inspirational Motivation, indicating that Bridger teachers perceive the leadership behaviors of their principal to be transformative.

Change of this magnitude is difficult for any staff, and interviews with teachers from both Bridger Alternative and Lindsay High School did indeed reveal certain leadership behaviors that are critical in terms of leading the shift to the performance-based system of education. First, a clear vision that is powerfully communicated was identified as the primary leadership quality to bring about second order change. This vision provides direction, trust, and collaboration between leaders and followers, and, most importantly, requires a principal to actively lead change rather than simply be involved in the process. In fact, a solid vision on the part of a principal is such a critical element in leading a massive paradigm shift that "nothing of substance will happen unless there are good people inside institutions who are able to lead other people to better performance for the public good" (Greenleaf, 1977, p 16). Heifitz addresses the issue of vision from a moral perspective facing educational leaders when he states that our values are "shaped and refined by rubbing against real problems, … and in the defining moments of our lives, values count for little without the willingness to put them into practice" (2002, p. 22).

This is the difference between leadership that works, and leadership that endures.

The leaders must not only understand the vision, but live it every day and speak it in every classroom, in every meeting, and to the community at large. The principal must serve as the face of the new model, and be ready and able to engage in discussion. In such schools, teachers begin to feel empowered, which leads to a belief in their abilities to make a difference in the classroom and the school as a whole (Leithwood et al., 1999). As Steve from Bridger said, "… the vision leads to **everything**. We teach to the heart. Here we are changing kids lives and trying to make it better for them forever. It's all change based – we are always trying to do things better, so we try everything, and if it doesn't work, we all try to fix it together." Anne from Lindsay also powerfully stated,

> The principal we had when this process started understood the model so well and was so positive, that he inspired people to try something different. He was very supportive. He actually worked with staff just like teachers are supposed to work with kids, and he led staff meetings that way. He understood that we all have bad days, could measure where we were, and go from there.

And Pat from Bridger made a strong observation by saying,

> When I have a boss with vision and I can trust him, then we work collaboratively. Just like in my classroom – if kids trust me and know where we are going, it's easier to work together to get things done. In Bridger, the vision was there in the beginning, although it has changes and evolved over the years. I've had my share of disagreements with the leadership because I don't think they understand my subject area all the time, but we have made huge strides here and this is great. We are on the same page because the vision and direction is clear and we can move together.

Celebrating innovation was a strong theme in the study as well. When school leaders passionately pursue higher expectations for all students, are not satisfied with the

status quo, and suggest creative solutions, they are more likely to be successful in implementing the shift to the performance-based model. As Ken Robinson succinctly put it, "Creating a culture of innovation will only work if the initiative is led from the top of the organization. The endorsement and involvement of leaders means everything, if the environment is to change" (2001, p.220). The Bridger Alternative Program case bore this out specifically. Effect sizes from the MLQ showed a large effect in the areas of Individual Behaviors and Inspirational Motivation, and the interviews spoke to the perception that the leadership behaviors of their principal must be transformative. Every teacher expressed how exhausting and, at times, paralyzing it is to move forward in a model in which one is unfamiliar. It takes people out of their comfort zones and can easily lead to teacher burnout. Celebrating regularly is key to helping people re-energize and recalibrate professionally. As Steve from Lindsay expressed, "We celebrate success always. In staff meetings, in district meetings. All the time. And we do walk-throughs here that are very important. People are always walking in the room and I have feedback with the hour."

The ability to encourage others to take risks is the third quality that teachers from both Lindsay High School and the Bridger Alternative Program deem imperative to leading change. It "all begins with the initiative of an individual… A leader initiates, provides the ideas and the structure, and takes the risk of failure …while knowing that the path is uncertain, even dangerous" (Greenleaf, 1977, p.29). Teachers must necessarily feel that they are free from the threat of judgment or penalty in order to stretch as professionals, and it is critical that principals create a culture in which risk-taking and

change are encouraged and celebrated. As Pat from Bridger said,

> This whole model was a risk, and now we are seeing positive results. We take calculated risks all the time. They don't always work, but we all see what happened are on the same page moving forward. In the general school, we never take risks. We always pull back.

Susan from Lindsay expressed similar sentiments when she said, "Teachers that take risks here are not threatened. In fact risk-taking is part of the strategic design. We hire risk-takers, and are encouraged to take risks in our evaluations." Another quality that teachers from both Lindsay High School and the Bridger Alternative Program deem imperative to leading this change is the ability to encourage others to take risks. Teachers must necessarily feel that they are free from the threat of judgment or penalty in order to stretch as professionals, and it is critical that principals create a culture in which risk-taking and change are encouraged and celebrated.

An engaged and visible leader is the fourth key element that was identified in the study. Principals in performance-based schools are change agents who are "willing to take a radically different approach to schooling than they have in the past, and who have the courage and moral purpose to see the vision through" (DeLorenzo, et al., 2009). According to Hoyle et al. (2005), the role of the school leader has changed from the less visible manager to a highly visible chief executive who needs vision, skills, and knowledge to lead in a new and complex world. Firestone and Riehl (2005) assert that school leaders must not only have a wide range of knowledge about teaching, learning, and organizational management but must also have knowledge of leadership

competencies and practices that are associated with increased performance and

effectiveness (p. 3). Teachers must not feel or believe that they are in the process alone or

that they will have to answer for failed attempts or unsuccessful practices. A visible and

engaged leader is able to shoulder the burden of outside distractions, ultimately allowing

for teachers to continue growing and evolving as effective practitioners. Also, an engaged

leader is able to present different perspectives on a daily basis as well as ideas previously

unconsidered. This leader also models constant collaboration and provides a positive

presence. As Steve from Bridger said,

> …we are willing and encouraged to try anything – whatever could work – and we
> have no fear of failure or change. But leadership is not just flying by the seat of
> their pants – it's all research based and solid with data. Our principal isn't afraid
> of offending people – he'll call it like it is and work to keep us focused on the
> main thing. You can't have second order change without risk and focus.

A final, interesting connection that was uncovered during this study was the link

between transformational leadership and academic optimism. This relationship has not

yet been well researched and there is little in the literature to draw upon. But what

became quite clear was that during the second-order change process that is inherent in the

shift to this innovative model, rather than attempting to force a teacher to change their

practice, leaders must inspire and guide them to do so. This inspiration and guidance

must be presented compassionately and without judgment. When presenting a staff with

an alternative future state, it is important that they perceive it as a positive opportunity,

rather than a condemnation of their present reality. Robert from Bridger spoke to this

confidence in leadership when he stated,

The principal here is a visionary. He's very hands-on and helps me personally. He's always around, and is a great resource. He asks me questions that might work better, or maybe they help him understand the situation better, but he's always making me think about things in a different way. Sometimes, it reinforces me in my thinking about what I'm doing, sometimes it confuses me, and sometimes he makes a light go on in my head. But I'm always thinking now. And the kids like it when he's here asking them about things. It makes them feel good when they can explain things and that he knows the direction they are going. He also inspires a confidence and calm here; we see it in action every day. He encourages, and actually demands, that I get out of the box. He gives me the confidence to try new things, and even tells me 'you can't get in trouble here for trying something.' I have no fear and I'm not always looking to make sure things are good so I'll have a job next year. He really helps me get better.

Teacher Academic Optimism

The second research question this study was designed to investigate was "How do high school teachers in the performance-based model schools describe their academic optimism?" Teachers in this study did, indeed, clearly state that the performance-based model of education seems to have a tremendous impact on the engagement level of their students, which has a corresponding effect on their own level of academic optimism. The construct of academic optimism is closely tied to resilience, positive psychology, and engagement and has been shown to be a factor in increased student achievement (Hoy, Tarter, & Woolfolk Hoy, 2006b).

Ken Robinson powerfully spoke to the absolute necessity of having confident, competent teachers in every classroom.

Being a teacher is a creative profession. One of the reasons schools fail and systems stumble is that teachers as well as students become disengaged. There are teachers who are not interested in learning or have no gift for teaching and should be doing something else that fulfills them (2001, p.267).

Thus, the discovery of increased levels of academic optimism are pervasive among

teachers in the performance-based model is important and compelling.

Although a statistical analysis of the SAOS revealed no significant difference between teachers in the Bridger Program and national norms, the Bridger staff did have a higher mean scores in the area of trust, which reflects the feelings expressed in the interviews about the difficult lives so many at-risk students experience at home, and how their teachers and peers often serve them in a similar capacity as a family. Also, there were large effect sizes in all three subtests on the SAOS, which speaks to a strong sense of optimism and connection among teachers. Both staff and students reinforced this perception. As a Bridger student said, "My teachers here in Bridger are more in-tune with kids than most other teachers. They are more helpful, and they know me better, so I work harder for them," and this concept was echoed from the Bridger teachers such as Sarah when she stated, "I still get the same level of frustration sometimes, but I definitely feel I can take kids higher here because I know them better and they know exactly what to do and how to get help." Pat made a similar, powerful claim when he said "That is why the relationship and caring about them is critical – they will work harder for me if they trust that I know them and want them to be successful both in school and in life."

Also, in the interviews, Bridger Alternative teachers clearly stated that the higher level of engagement they witness from their students in the performance-based model does indeed tend to increase their own level of engagement. The work involved in such a paradigm shift is difficult, but they all expressed appreciation that they could engage more deeply with students individually and it was motivating to be able to help their students chart their own progress. As Steve from Bridger said,

…I am focused on finding things, how to engage individual kids. It's like the coaching process, I need to evaluate where kids are in terms of skills and knowledge, and then figure out how I can get them excited to keep moving. … I shift according to needs. It's all about connections. It's not about me, it's about them, and I need to always think about that so that I can be better and more effective.

The mean scores from Lindsay teachers on the TSES showed that Lindsay teachers apparently felt confident about their ability to manage classroom behaviors and deliver curriculum with sound instructional strategies. This most certainly speaks to the intensive and focused professional development that the district has utilized for all staff over the past number of years. As a result, teachers feel empowered and clear as to their mission, as well as supported by their building administration. This perception was clearly articulated in the teacher interviews as well. The student engagement mean score was lower than the norm and the effect size in this area was deemed significant. As Liza from Lindsay said,

I'm always trying to find ways to engage kids with the content. Lindsay is so much different than it used to be. The sleepers don't exist anymore. I can't say that all students are engaged, but it's getting better and better every year. And that's exciting. It makes me more optimistic about what I do and how successful our kids can be.

Sarah from the Bridger Alternative Program went a bit farther by saying

One thing I can tell you is that I think about kids more than I used to. In the program, I think about how to connect with kids and how to connect them with the standards better. In regular classes, I think about the things I need to do – but here I think about the kids. And that's a huge difference. I'm definitely more in tune with the kids now – I know what they are working on and am always trying to connect with them so that I can help them better. But I also take it more personally if they don't do well or if they don't take it a seriously as I do. So it's a total change of focus for me after a class here.

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It is clear from the evidence presented, that more engaged students do indeed lead to more optimistic teachers.

Teachers in both the Bridger Alternative Program and Lindsay High School spoke to the increased engagement of their students and the subsequent impact on their own levels of academic optimism, and there was also unanimous support for a leadership model that is transformational in terms of implementing real second order change. Among performance-based staff, there was a palpable sense of enthusiasm for the model, perception the leadership role of administration, and the connection between student engagement and academic optimism.

Teachers did admit to interesting challenges with the new model, but these challenges are different than the ones teachers faced before the implementation of performance-based. Anne summed up the demographic challenges that still exist in spite of a new instructional system, "What kids need to do just to "get by" is so much higher now than it used to be. And if kids have grit and are motivated, the sky's the limit. But the motivational piece is huge, and it's VERY difficult here." And Susan presented an additional issue by stating

> I think that is our biggest challenge here in Lindsay. We have done a great job getting the low kids to basic proficiency. Kids know how to be successful. But we need to be able to bring in higher-level classes, like AP, so that our highest kids can be pushed to their ability level. That is our next step here, I think.

Student Engagement

The third question in this study investigated student perceptions of the performance based education model. Specifically, "How do students describe their own level of academic engagement in the performance-based model of education?" Student engagement can be defined by the behaviors that spring forth from the energy and drive of motivation, and it plays a large part in terms of student interest, their enjoyment of academics, and it underpins their ultimate level of academic achievement (Martin, 2007, 2009, 2013, Pintrich, 2003, Schunk, 2008, & Schenck, 2011). Increasing student engagement has been an explicit goal of many school and district improvement efforts, especially at the secondary level (National Research Council and Institute of Medicine 2004), since some studies have estimated that by high school as many as 40–60 percent of youth are disengaged (Marks 2000).

Examining whether or not the performance-based system leads to improved student engagement was a major focus of this study and was, indeed, a strong theme that emerged. The MES survey was administered to students in the Bridger Program and the engagement scores were normally distributed, and showed no statistical difference between means (p less than .05) than the established national norms. Although the difference between students operating in the two systems is not statistically significant, there are a number of practical differences that should be considered. First, similar engagement scores between academically successful students as well as those considered at-risk could be, in itself, a significant development. At risk students, as identified in the Bridger Program, often tend to have higher levels of active disengagement, as shown in the Bridger Risk Factors in table 9 above. Also, this survey was used to consider where students deem their level of engagement at the present time and did not measure the growth in engagement that students have experienced by being part of the model. There could be a presumption that many at-risk students are, inherently, not as engaged as more academically inclines students, so the lack of statistical significant difference points to the model actually leveling the field for a number of students.

Adding to validity of this observation is the fact that Bridger students did seem to present substantially higher mean scores in the areas of self-sabotage, uncertain control, and failure avoidance when compared to the normed scores from the survey itself. This would align with the fact that many of the Bridger students come from difficult home or personal circumstances and they have become accustomed to these behaviors as, perhaps, a type of survival mechanism. Another interesting area of difference in means was

observed in the area of learning focus, which may point to the fact that students in the

performance-based system are able to appreciate and be aware of standards and

proficiency levels which are clearly presented.

Lindsay students did not appear to score as highly as Bridger students in terms of

academic engagement. Engagement scores from the Motivated Strategies for Learning

Questionnaire (MSLQ) were normally distributed, and showed no statistical difference

between means (p less than .05) in terms of the different areas of analysis. The MSLQ,

however, was originally designed to assess college students' motivational orientations

and their use of different learning strategies for a college course. Scores from this

instrument, therefore, could be reasonably expected to display lower means for high

school students.

The qualitative component of the study presented compelling data in that

students' perceptions of their levels of engagement in the performance-based model were

profound. Bridger and Lindsay students all expressed that they are definitely more

engaged in their academic progress than they were in the traditional system. Students

consistently expressed that the ability of teachers to interact with them on a more

individual basis was the most important difference for them in terms of helping them

engage in their studies. Students in the Bridger Alternative Program were effusive in their

praise for the performance-based model of instruction, assessment, and reporting. They

demonstrated solid knowledge of the system, could explain their success, and had ideas

to improve the model as implementation continues to evolve. The data collected from the

program thus far has been positive, yet still largely anecdotal. The great bulk of students

do seem to be operating at a much higher level of engagement, and their academic

performance has correspondingly improved as well. I wished to find insight into students

taking responsibility for their own learning and the corresponding increase in their

achievement, and the evidence seems to prove this out as achievement scores have risen

in both Bridger and Lindsay over the past three years.

Lindsay High School students also praised the performance-based model as

meeting their needs and contributing to a better education for every student in the

community. They did not speak as highly about their teachers overall, but this seems to

be attributed to general demographic issues, as well as being part of a much a larger

educational setting. This is an area ripe for further study, especially in regards to

including data from more traditional settings.

Five themes were identified by students fro both schools in the interviews that

they deemed especially pertinent to their increased level of academic engagement.

One-to-One.

Students consistently rate the individual attention they receive in the performance-

based model as the most important factor in their engagement and ultimate success.

Andrew Martin stated that engagement is changeable and can be learned (2010).

Furthermore, "students who are engaged in their work are energized by four goals—

success, curiosity, originality, and satisfying relationships" (Strong, R., Silver, H.F., &

Robinson, A. 1995, p.8). In this study, the "herd mentality" as defined by the concept of

sitting in a classroom and listening to a teacher was mentioned in some format by every

respondent as a condemnation of their previous educational experience. As a Bridger

senior stated, "The 1-1 part is huge. Sometimes it's 3-1 or 4-1. But it's still much

different and much better. Teachers can't do that in regular, huge classes. Some of my

classes are the same size as they are in the regular school, but it doesn't feel like it." An

interesting opinion that was revealed from the interviews is that Lindsay students do not

recognize this same level of one-to-one interaction with their teachers. Lindsay class

sizes averaged over 33/1 in terms of student/teacher ratio, while Bridger classes averaged

22/1. The substantial size difference explains how one-to-one interactions are perceived

to be fewer in Lindsay than in the Bridger Alternative Program.

Although teachers and most outsiders would not necessarily consider the actual

time spent as more one-to-one, student perception as to this being reality is undeniable.

Teacher work with individuals or small groups is more efficient since learning targets are

better defined, which leads students to understand tasks and enhances their ability to

receive the targeted instruction and assistance they need. As can be seen, the students

exhibit a higher level of trust in their teachers as well as themselves than they did under

the traditional system, and they have great belief in their efforts to move their schooling

forward. It can also be inferred from the students' statements that the teachers are good

role models, and serve more as facilitators and guides rather than oracles that dispense

knowledge with little care for individual student needs.

Improved Assessments

Students stress that they better understand why they are learning certain standards,

and, therefore, engage more with specific material than they did under the traditional

system. The research literature speaks to the concept of "personal best" (PB) which

clearly addresses the relevance of engagement on mastery and performance goals. The impact that educational interventions aimed at enhancing students' personal bests in terms of their engagement and achievement over the course of their academic development can be profound (Martin, 2006). Instruction that focuses on academic PBs has the potential to facilitate and increase students' self-efficacy in learning (Bandura, 1997). This is so because "performing as well or better than a previous performance is seen as accessible by students and this perceived accessibility to success enhances students' efficacy regarding their learning" (Martin, 2006). Students stated that since they know exactly what is expected and what proficiency looks like in the performance-based model, they are more confident when taking tests or submitting assessments. Their ability to demonstrate proficiency when they are ready rather than at an arbitrary time set by a teacher is another important factor in their engagement. Teachers stressed that appropriate assessments are a critical piece of the performance-based model.

Higher Expectations

Student perception that their work was at a higher level was a strong theme throughout the interviews. The research literature suggests that there seems to be a solid relationship between engagement and intrinsic motivation (Ryan & Deci, 2000), which is generally considered more durable and self-enhancing than is seen through extrinsic factors (Kohn 1993). This concept aligns with what Csikszentmihalyi describes as 'flow' in learning (1990), and is related to students ultimately achieving a level of growth that significantly exceeds their present capacity (Martin, 2006). Participants in this study

regularly expressed that their teachers expected more from them, and they therefore expected more from themselves than they had before.

An important component in the statements was that although the expectations were higher, the help necessary for them to reach the level was always available and they were confident they would be able to achieve any level of proficiency. Students strongly expressed that their level of engagement often revolves around the fact that instructors in the performance-based model teach differently and respect their individual styles of learning more effectively than they had experienced in their traditional classes. Differentiation according to student needs and abilities is a hallmark of the performance-based model, and the ability of students to monitor their own progress lends itself well to the idea of increased engagement on their part. A Bridger senior powerfully expressed this when she said "The teachers are also more open to me being different and being able to show my knowledge in different ways. I 'get' things more, because I see where I need to be. I respect myself more, and I respect the school more." A sophomore from Bridger also expressed similar sentiments by stating,

> I need more personal time to learn things – not lots, but enough to help me get into it. Then I can go on and do it quickly, and sometimes I help others. I'm not like a cow in a herd here. Here, it's not just 'shut up and listen, shut up and do this.' It's more of 'how can I help you on this standard?'

Likewise, a Lindsay sophomore summed the idea up concisely when he expressed "I'm engaged in most of my classes, and I like how I can move ahead and progress faster if I want to."

<u>Pride</u>

Students were very proud of the work they were doing, of their level of
achievement, and they wanted to show off their skills. The research points to a
connection between engagement and student confidence in their ability to be successful
that is becoming clear. "Interventions specifically designed to improve academic skills
might require improvement of academic self-concept, or the belief in one's academic
ability" (Burks & Hochbein, 2013). Marsh and Craven's research indicated that student
confidence, or self-concept, in terms of their academic abilities often results in stronger
student outcomes (2006), and this higher level of achievement can cyclically lead to
further increases in academic self-concept, a phenomena that has been referred to as the
"reciprocal effects model" (Marsh and O'Mara, 2008, p. 549).

In this study, students were proud to be part of real innovation and reform. Some
of the students, for example, had been part of the Bridger Program for three years, while
others were new to the model this year. The pride all students felt with their success was
a common theme expressed by every student at some point during their interview. A
Bridger senior spoke to this concepts when she stated,

> In the normal high school, I was just in the middle of a big herd of people, and we
> were moved along like cows. In performance-based, I get to choose my own path
> and move that way. It's so much more interesting and motivating, and I want to
> be done early so I can move on with life. And now I will be done early with a
> higher skill level!

A Bridger sophomore expressed the same idea with different words when he expressed
that "I hate it when you go into a class and a teacher just tells you the rules, so here I get
to understand what I have to do and then do it MY way. I need more hands-on, and the

personal work with the standards allows me to excel. In a regular class, when a teacher is up blabbing, it just goes right through me." Finally, a Bridger junior summed this up succinctly when he said,

> I understand my classes better and then I can do better on the test. It feels GREAT knowing how I will do on a test. And if I mess up, I fix it and can still move on. I like this better, so I'm a lot more motivated. Most of all the kids like it better. They can get ahead, and they have a choice on what to read, and on what to do. It motivates me to move and get done more quickly. It can be harder sometimes to have independence, but I do learn things better. I just have to work harder at it, which is probably a good thing.

Need for Expansion

All students from the Bridger Alternative Program expressed, at some level, their belief that the performance-based system should expand onto the main campus due to the success it has engendered with at-risk students. The research literature suggests that "understanding students' reasons for being in school may help schools create more engaging learning environments for students, providing students with compelling reasons to persist and achieve. At the same time, understanding students' reasons for checking out of school — either temporarily in the case of boredom or permanently in the case of dropping out — can provide schools with a set of guideposts for engaging students in learning" (Yazzie-Mintz, 2010, p. 5). Additionally, a Gallup poll conducted in 2012 surveyed over 459,000 American students. The survey measured hope, engagement, and wellbeing. The Gallup Poll defined engagement as "involvement in and enthusiasm for school. Engaged students are highly involved with and enthusiastic about school. 'Not Engaged' students are present but not involved with or enthusiastic about school.

'Actively Disengaged' students undermine the educational process for self and others"

(Copyright © 2012 Gallup, Inc., p.3). Data showed that student engagement declines

from grades 5 through 12, that roughly 43% of students are not engaged or are actively

disengaged at school, and that over 1.2 million students drop out of high school annually.

Results also indicated that hope is a stronger predictor of academic success than more

traditional indicators such as test scores and GPA. In relation to this specific measure,

72% of hopeful students are engaged, and only 65% of thriving students are engaged.

Yet, 84% of students who believe that their school is committed to building on their

strengths are engaged (Copyright © 2012 Gallup, Inc.). Student interest in the Bridger

Alternative Program has increased exponentially across the general population due to

word of mouth communication among students, and the respondents seemed to feel

genuine sympathy for their peers who were unable to participate in the model.

Finally, in terms of what tends to inhibit their engagement, students were clear

that teachers who are not proficient in the model not only hold them back academically

but also contribute to their level of boredom and can reduce their motivation to be

successful. One Lindsay junior summed it up powerfully when she stated, "I don't like

how they make kids show we are proficient at lots of things, but the teachers don't have

to show they are proficient at teaching us. It should be the same for everyone" And a

Bridger senior also expressed the same idea, "Lots of times, I go into a class and am

excited, and the teacher turns me off to it forever. Big classes with a boring teacher,

makes it totally not relevant for me."

Additionally, fellow students who lack motivation is a significant inhibitor for student

engagement and it can tend to create distractions and frustration. A Lindsay sophomore

expressed his frustration with some of his peers by stating

> If people are not motivated to do school, then they will not do school. In traditional school, they will fail unless a teacher gives extra credit. Here though, at least they get to follow their own interests. If you can't succeed with that system, then you just don't care and those kids should go away and not make it harder on the rest of us.

A Bridger senior summed up the same idea when he said "You need to be self-motivated

to be successful here though. If you're lazy, you will fail either way. Those kids fail

down here or down the hall in the regular classes.

<center>Implications for Further Research</center>

During the course of this study, several implications came to light that could be

appropriate for further study. First, in terms of student engagement, a number of students

from the traditional population explained why they did not feel compelled to complete

the MES instrument by stating clearly that "it doesn't matter" what their opinions are, as

"nothing ever really changes." Continued study of student engagement in differing

systems of instruction could provide powerful data for educators to consider. Secondly,

Lindsay students did not speak as highly about their teachers overall as did the Bridger

Alternative students. It seems apparent that much of this phenomenon is due to the larger

class sizes in Lindsay as compared to Bozeman, but demographic realities could certainly

play a role and implementation of the model in larger districts could be an area for

continued study. Third, both the Bridger Alternative Program and Lindsay High School

have focused their reform efforts largely on a lower achieving student population. A

study examining whether or not more successful students who are working in a performance-based model report the same level of engagement and motivation could be appropriate and important. Fourth, professional development and program direction is almost always the exclusive domain of adult educators in the building. This practice is not necessarily improper as the adults are the experts in the field of education. The voice of the students, however, is powerful and profound, and should be more actively solicited from an enlightened and progressive staff. If continuous school improvement is truly to be a commitment from the staff and community, students' voices and choices are the absolutely critical and foundational pieces to be examined. Students are the experts into what works for them, and staffs ignore their perceptions at their own peril. Finally, additional leadership qualities that were identified by some staff such as personal/social/emotional characteristics and community relationship building that could help facilitate the shift to the performance-based model would be an important area of study.

Personal Impact from this Research

Over the past three years, I often struggled to find an area of research that would resonate deeply within me as an educational leader. I wanted to write a dissertation that I was passionate about and could make a difference in the field. The old adage "the only good dissertation is a done dissertation" was not something I ever really considered to be true, and I can say, in all honesty, that I have been personally transformed by this process. The fact that I have been able to conduct research in conjunction with helping lead

second order change in an academic program has been compelling, powerful and has provided me with a direction for continued professional growth as well as a future research agenda.

As stated earlier, the research from this study clearly indicates the skills and abilities that are central to leading the change to a performance-based system are coherent vision, empowerment of staff and students, and instructional leadership. Additionally, when school leaders passionately pursue higher expectations for all students, are not satisfied with the status quo, and suggest creative solutions, they are more likely to be successful in implementing a paradigm shift. The work of effectively leading the dramatic change inherent in substantive educational reform is difficult and draining. I have personally witnessed a number of programs attempt to implement the performance-based system and fail, simply due to the difficulty of clearly understanding a direction and committing to the energy necessary to lead such change. In my own district, I have seen tremendous apprehension from my administrative colleagues in moving forward toward with this model even though it is clearly expressed in the Long Range Strategic Plan that has been adopted by the Board of Trustees. The main obstacle lies in the inability of leaders to clearly understand the vision and their subsequent inability to lead the change consistently and firmly. Lindsay High School, largely due to their work with the Marzano group and the unwavering commitment of a leadership team that all clearly subscribe to the mandated direction have provided a template for other leadership teams to follow in terms of single-minded focus and energy. I hope to continue research in the area of leadership and guide aspiring principals as well as leadership teams in the actual

skills required to implement the dramatic changes for American schools in order to keep up in a rapidly changing world. I see my job differently than I did four years ago, and my desire to grow and lead change has become my passion. The paradigm of the role of a principal must necessarily change if the same is to be expected of teachers, students, and systems.

My research with staff and students in Bozeman and Lindsay also uncovered an interesting phenomenon involving the identity shift for educational leaders that ties closely with the work of Dweck (2007). I witnessed that once people in the two performance-based programs became engaged in the new model, the vast majority of people evolved to a growth mindset both individually as well as collaboratively. In other words, students and teachers were able to move to a growth mindset simultaneously - but the leadership piece was critical in terms of creating the right conditions and also directing the change. Leadership theory plays an important role in the study of this construct, but organizational theory is perhaps even more fitting. Fullan (2010) speaks to this when he implored all stakeholders to:

> Make more efforts to understand what schools are striving to achieve in today's world. Try and get first-hand knowledge and experience of what your children's school is doing now. Consider the knowledge and skills your children will need as they become citizens and workers in the future, and what kinds of teaching and learning are necessary to create these. Don't long for your children to have exactly the kind of education you think you remember having yourself, just because that is what is familiar to you. The science of learning is profoundly different today. Find out more about these new developments. What worked in 1965 is unlikely suitable for 1995 or 200 (p. 205).

Finally, I anticipate continuing to pursue a research agenda in the future that examines the correlations between transformational leadership, academic optimism, and student engagement with the overarching construct of social justice. In 2013, Sonia Caus Gleason and Nancy Gerzon published a timely and important new book that makes the case that effective school-wide implementation and use of personalized learning is essential to the pursuit of greater educational equity, that provides compelling evidence of how teachers, principals, school district leaders, and policymakers can create and embrace this equity in to ensure that all students are learning and achieving. Engaging students academically is an important element that schools must address rather than simply relying on reporting achievement based on standardized tests. And teachers still often teach in controlled paradigms due to the fact that they feel safe in the current system as that is all they have ever known. If students clearly tell us that this model works better for them than the traditional one, why are teachers afraid to step into a new system? Traditional staffs often see the possibilities, but don't often have the chance to fully explore and realize second order change. Effective, transformational leadership based on social justice and moral courage is an absolute requirement in order to implement such dramatic change. A possible research agenda for the remainder of my career is presented in the diagram below connecting social justice (SJ), transformational leadership (TL), student engagement (SE), and academic optimism (AO) in the performance-based model (PMM) of education.

SJ

TL

PMM

AO————SE
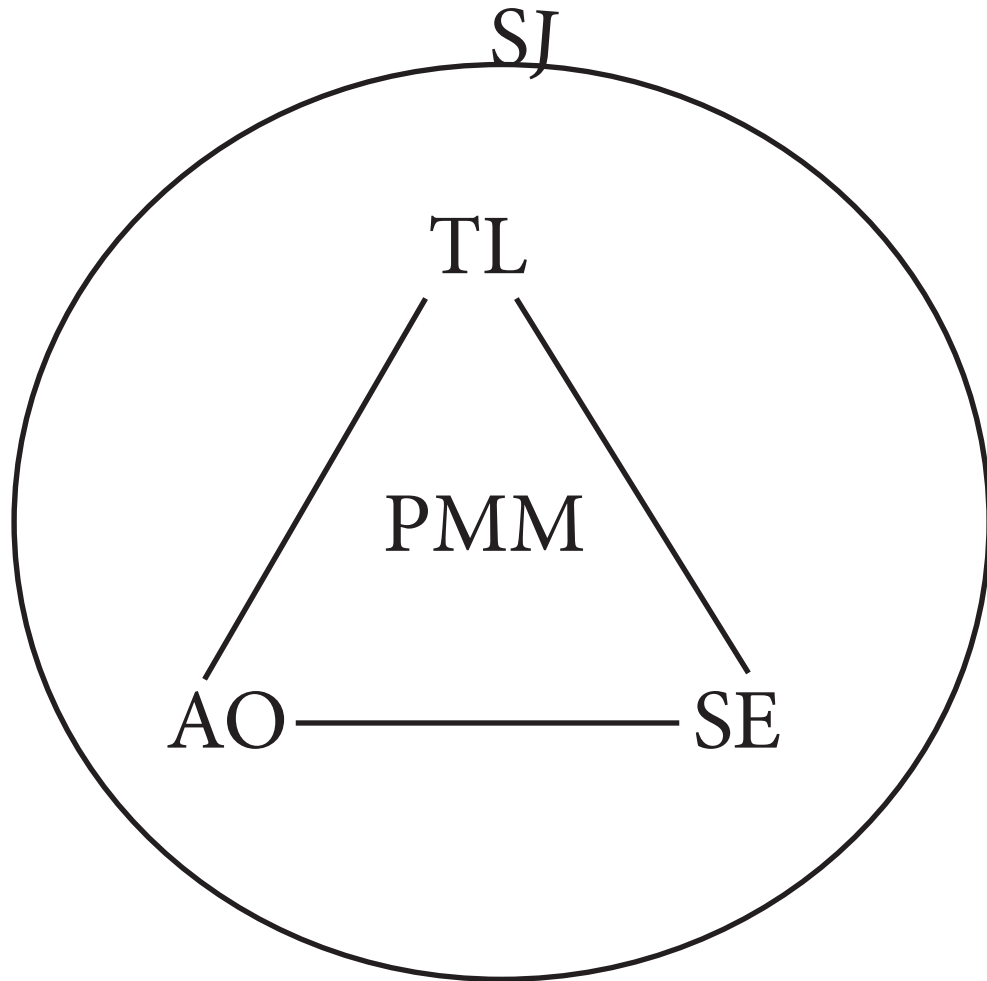
Conclusions and Recommendations

This study has specifically addressed and established new and original research. The areas of student engagement, academic optimism, and transformational leadership have been researched separately, but correlational studies and analysis of the constructs in a performance-based educational model have not yet been undertaken. Also, data

gleaned from this study could prove to be invaluable as schools proceed with full implementation of the performance-based model of instruction, assessment, and reporting. Lindsay High School and the Bridger Alternative Program at Bozeman High School have both successfully implemented the model and a large percentage of students have experienced success. The implementation protocol has been dramatically different as are the community demographics and the school systems as a whole, but the achievement levels of the students in both systems have increased, the commitment from both staff groups has been profound, and both administrative teams have been viewed as exhibiting qualities of transformational leadership. Students, as well as staff in both programs have repeatedly stated that they could not return to the traditional model after experiencing success in the performance-based system. Most importantly, the identity shift displayed by students, teachers, and administration has been profound and compelling.

Student engagement has clearly increased in both schools as a result of the full implementation. Students continually refer to the pride they feel in being part of a new, innovative, and unique model of schooling. The system works because it is truly a student-centered approach that recognizes students' skill levels and facilitates their individual growth toward the demonstrated proficiency of an identified set of skills and content knowledge. Increased student achievement is a result of increased engagement in this model. "Transforming education is not easy but the price of failure is more than we can afford, while the benefits of success are more than we can imagine" (Robinson, 2001, p.283).

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APPENDICES

APENDIX A

MOTIVATION AND ENGAGEMENT SCALE

MES

Dear Student Welcome to the Motivation and Engagement Scale – High School.

This survey has been given to you to examine your motivation and engagement, how you study, and what you think of yourself as a student.

There are no right or wrong answers. Just make sure that your answers show what you really think about yourself. When answering the questions, if you want to change an answer, just cross it out and circle the answer that you prefer. If you are not sure which answer to circle, just circle the one that is the closest to what you think. You should have only one answer for each question. For the purposes of the survey, it is best that you do not leave out any questions.

If before, during, or after the survey you have any concerns, please talk to your teacher, tutor, counselor, psychologist, or the person who administered this survey.

There are some questions that are very similar to each other. This is not a trick. It is just that this type of survey needs to ask some similar questions in slightly different ways. Just answer them in a way that shows what you really think about yourself.

Thanks for your participation. Before you start, here is an example:

Lifelong

Motivation and Engagement Scale – High School

Andrew J. Martin PhD

Disagree Strongly	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree		Agree Strongly
1	2	3	4	5	6		7

PLEASE CIRCLE ONE NUMBER FOR EACH STATEMENT	Disagree Strongly					Agree Strongly	
1. If I can't understand my schoolwork at first, I keep going over it until I do	1	2	3	4	5	6	7
2. I feel very pleased with myself when I really understand what I'm taught at school	1	2	3	4	5	6	7
3. When I study, I usually study in places where I can concentrate	1	2	3	4	5	6	7
4. I'm able to use some of the things I learn at school in other parts of my life	1	2	3	4	5	6	7
5. Sometimes I don't try hard at assignments so I have an excuse if I don't do so well	1	2	3	4	5	6	7
6. When I don't do so well at school I'm often unsure how to avoid that happening again	1	2	3	4	5	6	7
7. I feel very pleased with myself when I do well at school by working hard	1	2	3	4	5	6	7
8. Each week I'm trying less and less	1	2	3	4	5	6	7
9. If my homework is difficult, I keep working at it trying to figure it out	1	2	3	4	5	6	7
10. When exams and assignments are coming up, I worry a lot	1	2	3	4	5	6	7
11. Often the main reason I work at school is because I don't want people to think that I'm dumb	1	2	3	4	5	6	7
12. When I get a good mark I'm often not sure how I'm going to get that mark again	1	2	3	4	5	6	7
13. If I try hard, I believe I can do my schoolwork well	1	2	3	4	5	6	7
14. Learning at school is important	1	2	3	4	5	6	7
15. I don't really care about school anymore	1	2	3	4	5	6	7
16. When I get a bad mark I'm often unsure how I'm going to avoid getting that mark again	1	2	3	4	5	6	7
17. When I study, I usually organize my study area to help me study best	1	2	3	4	5	6	7
18. I'm often unsure how I can avoid doing poorly at school	1	2	3	4	5	6	7

Motivation and Engagement Scale – High School

Andrew J. Martin PhD

Disagree Strongly	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree		Agree Strongly
1	2	3	4	5	6		7

PLEASE CIRCLE ONE NUMBER FOR EACH STATEMENT	Disagree Strongly						Agree Strongly
19. I worry about failing exams and assignments	1	2	3	4	5	6	7
20. Often the main reason I work at school is because I don't want people to think bad things about me	1	2	3	4	5	6	7
21. I get it clear in my head what I'm going to do when I sit down to study	1	2	3	4	5	6	7
22. I've pretty much given up being involved in things at school	1	2	3	4	5	6	7
23. If I don't give up, I believe I can do difficult schoolwork	1	2	3	4	5	6	7
24. I sometimes don't study very hard before exams so I have an excuse if I don't do so well	1	2	3	4	5	6	7
25. I feel very pleased with myself when what I learn at school gives me a better idea of how something works	1	2	3	4	5	6	7
26. I feel very pleased with myself when I learn new things at school	1	2	3	4	5	6	7
27. Before I start an assignment, I plan out how I am going to do it	1	2	3	4	5	6	7
28. When I'm taught something that doesn't make sense, I spend time to try to understand it	1	2	3	4	5	6	7
29. I've pretty much given up being interested in school	1	2	3	4	5	6	7
30. I try to plan things out before I start working on my homework or assignments	1	2	3	4	5	6	7
31. Often the main reason I work at school is because I don't want to disappoint my parents	1	2	3	4	5	6	7
32. When I study, I usually try to find a place where I can study well	1	2	3	4	5	6	7
33. If I have enough time, I believe I can do well in my schoolwork	1	2	3	4	5	6	7
34. What I learn at school will be useful one day	1	2	3	4	5	6	7
35. I sometimes do things other than study the night before an exam so I have an excuse if I don't do so well	1	2	3	4	5	6	7
36. I'll keep working at difficult schoolwork until I think I've worked it out	1	2	3	4	5	6	7

Lifelong

Motivation and Engagement Scale – High School

Andrew J. Martin PhD

Disagree Strongly	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree	Agree Strongly
1	2	3	4	5	6	7

PLEASE CIRCLE ONE NUMBER FOR EACH STATEMENT	Disagree Strongly						Agree Strongly
37. When I do tests or exams I don't feel very good	1	2	3	4	5	6	7
38. Often the main reason I work at school is because I don't want my teacher to think less of me	1	2	3	4	5	6	7
39. I usually stick to a study timetable or study plan	1	2	3	4	5	6	7
40. If I work hard enough, I believe I can get on top of my schoolwork	1	2	3	4	5	6	7
41. It's important to understand what I'm taught at school	1	2	3	4	5	6	7
42. I sometimes put assignments and study off until the last moment so I have an excuse if I don't do so well	1	2	3	4	5	6	7
43. In terms of my schoolwork, I'd call myself a worrier	1	2	3	4	5	6	7
44. When I study, I usually study at times when I can concentrate best	1	2	3	4	5	6	7

THAT IS THE END OF THE SURVEY

PLEASE CHECK YOU HAVE ANSWERED ALL THE QUESTIONS

THANKS

APENDIX B

INTERVIEW PROTOCOL

Student Engagement

Student Interview

By participating in this interview you are giving your voluntary consent for the researcher

to include your responses in the data analyses. Your participation in this research is

strictly voluntary, and you may choose not to participate without fear of penalty or any

negative consequences. Individual responses will be treated confidentially. No

individually identifiable information will be disclosed or published, and all results will be

presented as aggregate, summary data. If you wish, you may request a copy of the results

of this research by writing to the researcher at: mike.ruyle@bsd7.org, or 406-581-1656.

Mike Ruyle

ruyle34@gmail.com

Thank you for your voluntary participation in this research study.

Mike Ruyle, Doctoral Student - Montana State University

1. Can you describe for me how are you engaged in your own learning?

2. Can you describe how what you learn in school is valuable and relevant to your
   life?

3. What do you feel holds you back in your learning?

4. What would you like to change about school?

Academic Optimism and Transformational Leadership

Teacher Interview

By participating in this interview you are giving your voluntary consent for the researcher to include your responses in the data analyses. Your participation in this research is strictly voluntary, and you may choose not to participate without fear of penalty or any negative consequences. Individual responses will be treated confidentially. No individually identifiable information will be disclosed or published, and all results will be presented as aggregate, summary data. If you wish, you may request a copy of the results of this research by writing to the researcher at: mike.ruyle@bsd7.org, 406-581-1656.

Thank you for your voluntary participation in this research study.

Mike Ruyle, Doctoral Student - Montana State University

1. Can you describe what you typically do after a lesson?

2. Can you give me an example how you are able to take all students to a higher level?

3. How does your building leadership inspire people to buy in to their vision?

4. Can you describe how your leadership team takes risks that often result in positive outcomes?

5. Can you give an example how your leadership team encourages and celebrates innovation?

APENDIX C

MULTIFACTOR LEADER QUESTIONAIRE

MLQ

Multifactor Leadership Questionnaire
Rater Form

Name of Leader: _____Date: _____
Organization ID #: _____Leader ID #: _____

This questionnaire is to describe the leadership style of the above-named individual as you perceive it. Please answer all items on this answer sheet. **If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.** Please answer the questionnaire anonymously.

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits the person you are describing.

Use the following rating scale:

Not at all (0) Once in a while (1) Sometimes (2) Fairly often (3) Frequently, if not always (4)

1. Provides 0 1 2 3 4
2. Re-examines critical assumptions to question whether or not they are appropriate..................... 0 1 2 3 4
3. Fails 0 1 2 3 4
4. Focuses... 0 1 2 3 4
5. Avoids... 0 1 2 3 4
6. Talks about their most important values and beliefs... 0 1 2 3 4
7. Is absent…... 0 1 2 3 4
8. Seeks differing... 0 1 2 3 4
9. Talks optimistically about the future... 0 1 2 3 4
10. Instills pride in me for being associated with him/her... 0 1 2 3 4
11. Discusses.. 0 1 2 3 4
12. Waits 0 1 2 3 4
13. Talks 0 1 2 3 4
14. Specifies.. 0 1 2 3 4
15. Spends time teaching and coaching... 0 1 2 3 4
16. Makes.. 0 1 2 3 4
17. Shows.. 0 1 2 3 4
18. Goes... 0 1 2 3 4
19. Treats... .... 0 1 2 3 4
20. Demonstrates... 0 1 2 3 4
21. Acts... 0 1 2 3 4
22. Concentrates.. 0 1 2 3 4
23. Considers... 0 1 2 3 4
24. Keeps.. 0 1 2 3 4
25. Displays... 0 1 2 3 4
26. Articulates.. 0 1 2 3 4
27. Directs... 0 1 2 3 4
28. Avoids.. 0 1 2 3 4
29. Considers... 0 1 2 3 4
30. Gets me.. 0 1 2 3 4
31. Helps me.. 0 1 2 3 4
32. Suggests.. 0 1 2 3 4
33. Delays.. 0 1 2 3 4
34. Emphasizes.. 0 1 2 3 4

35. Expresses.. 0 1 2 3 4
36. Expresses.. 0 1 2 3 4
37. Is effective..0 1 2 3 4
38. Uses methods.. 0 1 2 3 4
39. Gets me... 0 1 2 3 4
40. Is effective.. 0 1 2 3 4
41. Works.. 0 1 2 3 4
42. Heightens...0 1 2 3 4
43. Is effective.. 0 1 2 3 4
44. Increases... 0 1 2 3 4
45. Leads... 0 1 2 3 4

In order to protect the instrument's copyright, only five questions are to be published in their entirety. Thus one question is selected to align with each of the five factors comprising transformational leadership.

Question 2 – Intellectual Stimulation
Question 6 – Idealized Influence (Behaviors)
Question 9 – Inspirational Motivation
Question 10 – Idealized Influence (Attributes)
Question 15 – Individualized Consideration

APENDIX D

SCHOOL ACADEMIC OPTIMSIM SCALE

SAOS

SAOS

Directions: Please indicate your degree of with each of the statements about your school from **strongly disagree** to **strongly agree**. Your answers are confidential.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. Teachers in this school are able to get through to the most difficult students.	①	②	③	④	⑤	⑥
2. Teachers here are confident they will be able to motivate their students.	①	②	③	④	⑤	⑥
3. If a child doesn't want to learn teachers here give up.	①	②	③	④	⑤	⑥
4. Teachers here don't have the skills needed to produce meaningful results.	①	②	③	④	⑤	⑥
5. Teachers in this school believe that every child can learn.	①	②	③	④	⑤	⑥
6. These students come to school ready to learn.	①	②	③	④	⑤	⑥
7. Home life provides so many advantages that students are bound to learn.	①	②	③	④	⑤	⑥
8. Students here just aren't motivated to learn.	①	②	③	④	⑤	⑥
9. Teachers in this school do not have the skills to deal with student disciplinary problems.	①	②	③	④	⑤	⑥
10. The opportunities in this community help ensure that these students will learn.	①	②	③	④	⑤	⑥
11. Learning is more difficult at this school because students are worried about their safety.	①	②	③	④	⑤	⑥
12. Drug and alcohol abuse in the community make learning difficult for students here.	①	②	③	④	⑤	⑥
13. Teachers in this school trust their students.	①	②	③	④	⑤	⑥
14. Teachers in this school trust the parents.	①	②	③	④	⑤	⑥
15. Students in this school care about each other.	①	②	③	④	⑤	⑥
16. Parents in this school are reliable in their commitments.	①	②	③	④	⑤	⑥
17. Students in this school can be counted upon to do their work.	①	②	③	④	⑤	⑥
18. Teachers can count upon parental support.	①	②	③	④	⑤	⑥
19. Teachers here believe that students are competent learners.	①	②	③	④	⑤	⑥
20. Teachers think that most of the parents do a good job.	①	②	③	④	⑤	⑥
21. Teachers can believe what parents tell them.	①	②	③	④	⑤	⑥
22. Students here are secretive.	①	②	③	④	⑤	⑥

Directions: Please indicate the degree to which the following statements characterize your school from **Rarely Occurs** to **Very Often Occurs.** Your answers are confidential.

	Rarely	Sometimes	Often	Very Often
23. The school sets high standards for performance.	①	②	③	④
24. Students respect others who get good grades.	①	②	③	④
25. Students seek extra work so they can get good grades.	①	②	③	④
26. Academic achievement is recognized and acknowledged by the school.	①	②	③	④
27. Students try hard to improve on previous work.	①	②	③	④
28. The learning environment is orderly and serious.	①	②	③	④
29. The students in this school can achieve the goals that have been set for them.	①	②	③	④
30. Teachers in this school believe that their students have the ability to achieve academically.	①	②	③	④

APPENDIX E

TEACHER SENSE OF EFFICACY SCALE

TSES

Teacher Sense of Efficacy Survey

Directions:

This survey is designed to provide information on how successful Learning Facilitators feel that they are in doing various teaching activities. The results will be used in a formative manner to improve the implementation of Lindsay's Performance Based System, including professional development activities. Your survey participation is very important to be sure that we have accurate and useful data. Thank you for taking the time to complete it.

There are two sections to the survey: Teaching Assignment and Teaching Activities. In the Teaching Assignment section, you will be asked to state the grade span that you teach (K-4, 5-8, or 9-12) and the school where you teach. In the Teaching Activities section, there are 23 questions about how successful you believe you are in doing various teaching activities.

All responses are anonymous and confidential. All reporting will be done in groups at the grade span or school level. No results will be reported where there are fewer than 5 respondents in that group.

The survey should take you about 15 minutes to complete. Please complete the survey in one sitting as you will not be able to return to it after you start.

Teacher Sense of Efficacy Survey

Teaching Assignment Questions

Please answer the following two questions about your teaching assignment.

* 1. Which grade level span do you teach?

- ○ K-4
- ○ 5-8
- ○ 9-12

* 2. At which school do you teach?

- ○ Jefferson Elementary School
- ○ Lincoln Elementary School
- ○ Washington Elementary School
- ○ Kennedy Elementary School
- ○ Roosevelt Elementary School
- ○ Reagan Elementary School
- ○ Lindsay High School
- ○ JJ Cairns Continuation High School

Teacher Sense of Efficacy Survey

Teaching Activities Questions

In the next three sections, please answer the following 8 questions (23 total) about how successful you feel that you are in doing each teaching activity described. We would like you to answer every question; however, if there is a question that you do not understand or does not appear to apply to what you do, you can use the N/A column.

*3. Use a 9-point scale to answer the questions. "1" is the least or lowest feeling of success and "9" is the most or highest feeling of success.

How successful are you at...

	1 Not at all	2	3 Not very often	4	5 Sometimes	6	7 Very often	8	9 Almost always	N/A
1. using a variety of assessment strategies?	○	○	○	○	○	○	○	○	○	○
2. providing an alternative explanation or example when learners are confused?	○	○	○	○	○	○	○	○	○	○
3. crafting good questions for your learners?	○	○	○	○	○	○	○	○	○	○
4. implementing a variety of instructional strategies in your classroom?	○	○	○	○	○	○	○	○	○	○
5. responding to difficult questions from your learners?	○	○	○	○	○	○	○	○	○	○
6. gauging learner comprehension of what you have taught?	○	○	○	○	○	○	○	○	○	○
7. providing appropriate challenges for very capable learners?	○	○	○	○	○	○	○	○	○	○
8. providing support for accelerated learning for underperforming learners?	○	○	○	○	○	○	○	○	○	○

Teacher Sense of Efficacy Survey

Continuing from the previous section, please answer the next 8 questions about how successful you feel that you are in doing each teaching activity described. We would like you to answer every question; however, if there is a question that you do not understand or does not appear to apply to what you do, you can use the N/A column.

* 4. Use a 9-point scale to answer the questions. "1" is the least or lowest feeling of success and "9" is the most or highest feeling of success.

How successful are you at...

	1 Not at all	2	3 Not very often	4	5 Sometimes	6	7 Very often	8	9 Almost always	N/A
9. developing a class culture that minimizes disruptive behavior?	○	○	○	○	○	○	○	○	○	○
10. working with your learners to maintain norms (rules) that make for a productive classroom?	○	○	○	○	○	○	○	○	○	○
11. establishing a classroom culture that promotes productive self-directed learning when learners are working on independent activities?	○	○	○	○	○	○	○	○	○	○
12. establishing a classroom culture that promotes productive collaborative work?	○	○	○	○	○	○	○	○	○	○
13. working with your learners to establish effective and efficient routines in your classroom?	○	○	○	○	○	○	○	○	○	○
14. getting learners to believe they can do well in school?	○	○	○	○	○	○	○	○	○	○
15. helping your learners value learning?	○	○	○	○	○	○	○	○	○	○
16. motivating learners who show low interest in school?	○	○	○	○	○	○	○	○	○	○

Teacher Sense of Efficacy Survey

Continuing from the previous section, please answer the final 7 questions about how successful you feel that you are in doing each teaching activity described. We would like you to answer every question; however, if there is a question that you do not understand or does not appear to apply to what you do, you can use the N/A column.

* 5. Use a 9-point scale to answer the questions. "1" is the least or lowest feeling of success and "9" is the most or highest feeling of success.

How successful are you at...

	1 Not at all	2	3 Not very often	4	5 Sometimes	6	7 Very often	8	9 Almost always	N/A
17. assisting families in helping their children do well in school?	○	○	○	○	○	○	○	○	○	○
18. improving the performance of a learner who is failing?	○	○	○	○	○	○	○	○	○	○
19. helping your learners think critically?	○	○	○	○	○	○	○	○	○	○
20. fostering learner creativity?	○	○	○	○	○	○	○	○	○	○
21. getting through to the most difficult learners?	○	○	○	○	○	○	○	○	○	○
22. When providing instruction to a group of learners who are working in the same Content Level, how successful are you at adjusting your lesson to meet individual learner needs?	○	○	○	○	○	○	○	○	○	○
23. When working with learners at multiple Content Levels in your classroom, how successful are you at facilitating learning at all group levels?	○	○	○	○	○	○	○	○	○	○

APPENDIX F

MOTIVATED STRATEGIES FOR LEARNING QUESTIONAIRE

MSLQ

Motivated Strategies for Learning Questionnaire

Please rate the following items based on your behavior in this class. Your rating should be on a 7- point scale where 1= not at all true of me to 7=very true of me .

1. I prefer class work that is challenging so I can learn new things.

2. Compared with other students in this class I expect to do well

3. I am so nervous during a test that I cannot remember facts I have learned

4. It is important for me to learn what is being taught in this class

5. I like what I am learning in this class

6. I'm certain I can understand the ideas taught in this course

7. I think I will be able to use what I learn in this class in other classes

8. I expect to do very well in this class

9. Compared with others in this class, I think I'm a good student

10. I often choose paper topics I will learn something from even if they require more work

11. I am sure I can do an excellent job on the problems and tasks assigned for this class

12. I have an uneasy, upset feeling when I take a test

13. I think I will receive a good grade in this class

14. Even when I do poorly on a test I try to learn from my mistakes

15. I think that what I am learning in this class is useful for me to know

16. My study skills are excellent compared with others in this class

17. I think that what we are learning in this class is interesting

18. Compared with other students in this class I think I know a great deal about the subject

19. I know that I will be able to learn the material for this class

20. I worry a great deal about tests

21. Understanding this subject is important to me

22. When I take a test I think about how poorly I am doing

23. When I study for a test, I try to put together the information from class and from the book

24. When I do homework, I try to remember what the teacher said in class so I can answer the questions correctly

25. I ask myself questions to make sure I know the material I have been studying

26. It is hard for me to decide what the main ideas are in what I read

27. When work is hard I either give up or study only the easy parts

28. When I study I put important ideas into my own words

29. I always try to understand what the teacher is saying even if it doesn't make sense.

30. When I study for a test I try to remember as many facts as I can

31. When studying, I copy my notes over to help me remember material

32. I work on practice exercises and answer end of chapter questions even when I don't have to

33. Even when study materials are dull and uninteresting, I keep working until I finish

34. When I study for a test I practice saying the important facts over and over to myself

35. Before I begin studying I think about the things I will need to do to learn

36. I use what I have learned from old homework assignments and the textbook to do new assignments

37. I often find that I have been reading for class but don't know what it is all about.

38. I find that when the teacher is talking I think of other things and don't really listen to what is being said

39. When I am studying a topic, I try to make everything fit together

40. When I'm reading I stop once in a while and go over what I have read

41. When I read materials for this class, I say the words over and over to myself to help me remember

42. I outline the chapters in my book to help me study

43. I work hard to get a good grade even when I don't like a class

44. When reading I try to connect the things I am reading about with what I already know.

*Pintrich, R. R., & DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance, Journal of Educational Psychology, 82, 33-40.

APPENDIX G

CONSENT LETTERS

SUBJECT CONSENT FORM

FOR

PARTICIPATION IN HUMAN RESEARCH AT

MONTANA STATE UNIVERSITY

Student Engagement, Academic Optimism, and Transformational Leadership in the Performance-Based Model

Dear Educator:

You are being asked to participate in a research study that explores the relationship between transformational leadership behaviors and academic optimism in a personalized mastery educational setting.

Rationale of Research

Knowledge gained from this study may lead to understanding how transformational leaders affect the academic optimism of their school. Information from the study may improve professional development practices, as well as, teacher and principal training programs.

Procedures

Participation is voluntary and you can choose to not answer any questions you do not want to answer and/or you can stop at anytime. If you agree to participate in this study you will be asked to participate in 1 survey that consists of a total of 85 short questions. The survey is distributed through the online survey company Survey Monkey. The first set of questions for the survey is demographic in nature. You will be asked about your

years of experience, your race, gender, education level, and level of school at which you

currently lead (elementary, middle school, high school, K-12, or other). The rest of the

questions were developed from two surveys. The first survey is titled the Multifactor

Leader Questionnaire (MLQ). It is designed to assess the frequency of transformational,

transactional, and laissez-faire leader behaviors. The second survey is titled the School

Academic Optimism Scale (SAOS). The SAOS was developed to measure the academic

optimism of an individual. Completion of the survey should take about 20 minutes or

less.

Risks

There are no foreseen risks.

Benefits

The study is of no direct benefit to you.

Alternatives Available

If you do not wish to participate in this study, please simply delete this email. No data

will be collected from you or disseminated.

Cost to Participate

None

Questions?

If you have any questions regarding this research project you may contact me, Mike

Ruyle (406-581-1656) or Travis J. Anderson (406-980-1251) at any time. The chairman

of our doctoral committees can answer any additional questions about the rights of

human subjects:

Dr. David Henderson (406-994-6424david.henderson3@montana.edu)

Dr. Art Bangert (406-994-7424; abangert@montana.edu)

or by the chair of the MSU Human Subjects Committee,

Dr. Mark Quinn, (406) 994-4707 (mquinn@montana.edu).

Confidentiality

Results from participation in this survey are coded and are confidential. No identification

of participants (i.e. email addresses) will be used in analyzing data. Published results

from this study will not include email addresses or any other information that may be

used to identify participants.

The Survey Monkey program keeps track of email addresses that have completed the

survey. If you choose to participate, you will be contacted by email to thank you for your

participation and to ask if you would like the results of the study upon project

completion.

Your Participation in this Research is Voluntary

You are free to stop participating in this study at any time. You may simply stop taking

the survey. Any incomplete surveys will be dropped from collected data. You may ask

me about the research procedures and I will answer your questions to the best of my

ability.

AUTHORIZATION: I have read the above and understand the discomforts,

inconvenience and risk of this study. By pressing the "I Agree" button at the

bottom of this page, I agree to participate in this research. I understand that I may

later refuse to participate, and that I may withdraw from the study at any time.

SUBJECT CONSENT FORM

FOR

PARTICIPATION IN HUMAN RESEARCH AT

MONTANA STATE UNIVERSITY

Student Engagement, Academic Optimism, and Transformational Leadership in the Performance-Based Model

Dear Student and Parent:

You are being asked to participate in a research study that explores the relationship between academic engagement and different educational models.

Rationale of Research

The purpose of this study is to examine whether student engagement is affected by the system of instruction in which they operate. Knowledge gained from this study may lead to understanding how teachers and educational leaders affect the level of student engagement in their schools. Information from the study may improve professional development practices, as well as teacher and principal training programs.

Procedures

Participation is voluntary and you can choose to not answer any questions you do not want to answer and/or you can stop at anytime. If you agree to participate in this study you will be asked to participate in 1 survey that consists of a total of 44 short questions. The survey is distributed through a paper/pencil format. The survey is titled The

Motivation and Engagement Scale (MES), and is designed to assess the engagement level

of students in their schooling. Completion of the survey should take about 15 minutes or

less.

Risks

There are no foreseen risks.

Benefits

The study is of no direct benefit to you.

Alternatives Available

If you do not wish to participate in this study, please simply do not return this survey. No

data will be collected from you.

Questions?

If you have any questions regarding this research project you may contact me at any time:

Mike Ruyle at (406) 581-1656 or (ruyle34@gmail.com).

Any additional questions about the rights of human subjects can be answered by the

chairman of my doctoral committee Dr. David Henderson at (406) 994-6424,

(david.henderson3@montana.edu) or by the chair of the MSU Human Subjects

Committee, Dr. Mark Quinn at (406) 994-4707 (mquinn@montana.edu).

Confidentiality

Results from participation in this survey are coded and are confidential. No identification

of participants (i.e. email addresses) will be used in analyzing data. Published results

from this study will not include email addresses or any other information that may be

used to identify participants.

Your Participation in this Research is Voluntary

You are free to stop participating in this study at any time. You may simply stop taking the survey. Any incomplete surveys will be dropped from collected data. You may ask me about the research procedures and I will answer your questions to the best of my ability.

AUTHORIZATION: I have read the above and understand the discomforts, inconvenience and risk of this study. I understand that I may later refuse to participate, and that I may withdraw from the study at any time.

_____I have read and understand the contents of this request and voluntarily wish to participate in this research.

_____I have read and understand the contents of this request and do not wish to participate in this research.

_____

Signature of Student   Date

Signature of Parent   `   Date

Parent Consent for Survey – 8th Grade Reading Level

SUBJECT CONSENT FORM FOR

PARTICIPATION IN HUMAN RESEARCH AT

MONTANA STATE UNIVERSITY

Project Title: Student Engagement, Academic Optimism, and Transformational Leadership in the Performance-Based Model

My name is Mike Ruyle and I am a researcher at Montana State University. I am working on a research study to try to learn about the how engaged your child feels in his or her classes.

This study is being done with the support of the Bozeman School District. It has been reviewed by the Bozeman School District and by the principal at your child's school.

If you decide to partake, your child will be asked to answer some questions in a short survey about how engaged and motivated they are in school. Completion of the survey should take about 15 minutes or less. You do not have to participate. Choosing to not participate will not impact your child's grade.

There are no known risks to your child for participating in this research. However, if they feel uncomfortable at any time, they can skip a question, or not finish the survey.

There are no benefits to your child related with their participation, and it will not cost you anything to complete this survey.

Your child can quit the study at any time. If they do choose quit or not participate, MSU researchers will not ask you to complete the survey.

After the survey is complete, we will protect your child's identity. Even though what we learn from this study could be used in a research report or journal article, all information will remain totally private.

You should contact us if you have any questions about the study. If you do have questions that may help you decide whether or not to participate, please contact the researcher. The researcher should be able to answer your questions.

If your participation in this research directly results in emotional stress to your child, Bozeman High counselors will be available to provide assistance.

Researchers' Contact Information

Mike Ruyle (406-581-1656; ruyle34@gmail.com)

David Henderson (406-994-6424; dhenderson3@montana .edu)

(please see other side)

If you have any additional questions, you can contact the Montana State University

Institutional Review Board. The Institutional Review Board is the committee at Montana

State University that makes sure research is done in a safe and ethical way. You can call

the MSU Chairman of the Institutional Review Board, Mark Quinn at (406) 994-4707 if

you have any other questions.

===

AUTHORIZATION: I have read the above and understand the discomforts,

inconvenience and risk of this study. I, _____ *(printed*

name of parent), agree to allow my child to participate in this research. I understand that

he/she may later choose not to participate, and that they may quit from the study at any

time. I have received a copy of this form for my own records.

Signed: _____

Researcher: _____

Date: _____

Parent Consent for Interview – 8th Grade Reading Level

SUBJECT CONSENT FORM FOR

PARTICIPATION IN HUMAN RESEARCH AT

MONTANA STATE UNIVERSITY

Project Title: Student Engagement, Academic Optimism, and Transformational Leadership in the Performance-Based Model

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After the interview is complete, I will protect your child's identity. Even though what I learn from this study could be used in a research report or journal article, all information will remain totally private.

If you do have questions that may help you decide whether or not to participate, please contact me and I should be able to answer your questions.

If your participation in this research directly results in emotional stress to your child, Bozeman High counselors will be available to provide assistance.

Researchers' Contact Information

Mike Ruyle (406-581-1656; ruyle34@gmail.com)

My supervisor is Dr. David Henderson (406-994-6424; dhenderson3@montana .edu)

If you have any additional questions, you can contact the Montana State University

Institutional Review Board. The Institutional Review Board is the committee at Montana

State University that makes sure research is done in a safe and ethical way. You can call

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===

AUTHORIZATION: I have read the above and understand the discomforts,

inconvenience and risk of this study. I, _____ *(printed*

name of parent), agree to allow my child to participate in this research. I understand that

he/she may later choose not to participate, and that they may quit from the study at any

time. I have received a copy of this form for my own records.

Signed: _____

Researcher: _____

Date: _____

Student Consent for Survey – 8th Grade Reading Level

SUBJECT CONSENT FORM FOR

PARTICIPATION IN HUMAN RESEARCH AT

MONTANA STATE UNIVERSITY

My name is Mike Ruyle and I am a researcher at Montana State University. I am working

on a research project to try to learn about how motivated and engaged you are in your

classroom. I am asking you and other students to work with me to find out how school

motivates you and how teachers can work better to make classes a more interesting place

for you to learn.

If you decide you want to be in this study, you will be asked to complete a multiple

choice survey about how interested you are in your classes. Completion of the survey

should take about 15 minutes or less.

It is your decision if you want to be a part of this study. If you decide to quit the study,

all you have to do is not complete the survey. You can say no to being in the study and

you can quit at any time. If there are any questions you do not want to answer, you can

choose not to answer them. You will not get in trouble with your teacher or parents if you

do not agree to be in this study.

Other people will not know if you are in this study we will put things we learn about you

together with things we learn about other children, so no one can tell what things came

from you. When I tell other people about my research, we will not use your name, so no one can tell whom we are talking about.

Your parents or guardian have to say it's OK for you to be in the study and explain the study to you. After they decide, you get to choose if you want to be in the study. If you don't want to be in the study, no one will be mad at you. If you want to be in the study now and change your mind later, that's OK. You can stop at any time.

My telephone number is 406-581-1656. You or your parents can call me if you have questions about the study or if you decide you don't want to be in the study any more.

If you have any additional questions, you can contact the Montana State University Institutional Review Board. The Institutional Review Board is the committee at Montana State University that makes sure research is done in a safe and ethical way. You can call the MSU Chairman of the Institutional Review Board, Mark Quinn at (406) 994-4707 if you have any other questions.

We will give you a copy of this form in case you want to ask questions later.

(please see other side)

Agreement

I have decided to be in the study even though I know that I don't have to do it. My

parent(s) have explained the study to me, and have answered all my questions.

_____

Signature of Study Participant   Date

_____

Signature of Researcher   Date

Student Consent for Interview – 8th Grade Reading Level

SUBJECT CONSENT FORM FOR

PARTICIPATION IN HUMAN RESEARCH AT

MONTANA STATE UNIVERSITY

My name is Mike Ruyle and I am a researcher at Montana State University. I am working

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motivates you and how teachers can work better to make classes a more interesting place

for you to learn.

If you decide you want to be in this study, you will be asked to complete a short

interview about how interested you are in your classes. Completion of the interview

should take about 15 minutes or less.

It is your decision if you want to be a part of this study. If you decide to quit the study,

you can say no to being in the study and you can quit at any time. If there are any

questions you do not want to answer, you can choose not to answer them. You will not

get in trouble with your teacher or parents if you do not agree to be in this study.

Other people will not know if you are in this study we will put things we learn about you

together with things we learn about other children, so no one can tell what things came

from you. When I tell other people about my research, we will not use your name, so no one can tell whom we are talking about.

Your parents or guardian have to say it's OK for you to be in the study and explain the study to you. After they decide, you get to choose if you want to be in the study. If you don't want to be in the study, no one will be mad at you. If you want to be in the study now and change your mind later, that's OK. You can stop at any time.

My telephone number is 406-581-1656. You or your parents can call me if you have questions about the study or if you decide you don't want to be in the study any more.

If you have any additional questions, you can contact the Montana State University Institutional Review Board. The Institutional Review Board is the committee at Montana State University that makes sure research is done in a safe and ethical way. You can call the MSU Chairman of the Institutional Review Board, Mark Quinn at (406) 994-4707 if you have any other questions.

We will give you a copy of this form in case you want to ask questions later.

(please see other side)

<u>Agreement</u>

I have decided to be in the study even though I know that I don't have to do it. My

parent(s) have explained the study to me, and have answered all my questions.

_____

Signature of Study Participant   Date

_____

Signature of Researcher   Date

APPENDIX H

LINDSAY ACHIEVEMENT DATA

CAHSEE - ELA

ELA CAHSEE Percent of 10th Graders Passing by Gender, 2005-06 to 2011-12 - LHS							
Percent Passed	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
All Students	63%	65%	67%	72%	67%	76%	78%
Male	56%	57%	59%	68%	61%	73%	71%
Female	69%	73%	74%	76%	72%	79%	86%

CAHSEE - MATH

Math CAHSEE Percent of 10th Graders Passing by Gender, 2005-06 to 2011-12 - LHS							
Percent Passed	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
All Students	72%	71%	75%	73%	73%	82%	70%
Male	71%	67%	73%	78%	71%	84%	65%
Female	74%	75%	77%	69%	75%	80%	75%

CELDT – AMAO1

Percent of Learners Meeting AMAO 1 from 2006-07 to 2011-12						
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12[2]
Lindsay Unified	43.1%	53.6%	48.4%	49.2%	53.9%	64.3%
Jefferson Elementary	38.3%	56.2%	45.4%	46.8%	47.2%	63.5%
Kennedy Elementary	[1]	[1]	[1]	[1]	[1]	66.1%
Lincoln Elementary	43.6%	56.6%	46.1%	47.6%	55.3%	59.4%
Reagan	[1]	[1]	[1]	[1]	[1]	58.2%
Roosevelt	[1]	[1]	[1]	[1]	[1]	76.2%
Washington Elementary	41.0%	49.4%	45.9%	50.9%	55.1%	65.2%
John J Cairns Continuation	12.0%	*	*	35.5%	46.9%	53.2%
Lindsay Community Day	*	*	*	*	*	*
Lindsay Senior High	54.8%	50.5%	50.2%	48.5%	53.1%	64.6%
Target	*48.7%*	*50.1%*	*51.6%*	*53.1%*	*54.6%*	*56.0%*

Met Target

*Too few students to report

CELDT – AMAO2

Percent and Number of Learners Meeting AMAO 2 from 2009-10 to 2011-12						
	2009-10		2010-11		2011-12	
	< 5 yrs	5 ys +	< 5 yrs	5 ys +	< 5 yrs	5 ys +
Lindsay Unified	12.20%	34.60%	13.40%	39.30%	21.50%	47.10%
Jefferson Elementary	7.60%	18.40%	8.60%	17.20%	18.60%	44.20%
Kennedy Elementary	1	1	1	1	24.70%	41.70%
Lincoln Elementary	16.60%	20.70%	16.60%	41.90%	23.60%	44.20%
Reagan Elementary	1	1	1	1	23.00%	35.90%
Roosevelt Elementary	1	1	1	1	27.10%	57.80%
Washington Elementary	12.30%	47.40%	15.00%	33.30%	17.90%	54.50%
Cairns (John J.) Continuation	*	12.90%	*	12.50%	*	39.10%
Lindsay Community Day	*	*	*	*	*	--
Lindsay Senior High	12.50%	39.70%	15.60%	41.40%	16.70%	48.90%
Target	*17.40%*	*41.30%*	*18.70%*	*43.20%*	*20.10%*	*45.10%*

Met Target

*Too few students to report

ELA CST

CST ELA Percent of Learners Proficient and Above by Grade, 2005-2012										
Year	Grade									
	Gr 2	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8	Gr 9	Gr 10	Gr 11
2005	16%	10%	25%	21%	18%	20%	18%	28%	17%	22%
2006	16%	13%	35%	21%	20%	18%	22%	26%	22%	25%
2007	18%	11%	31%	32%	16%	19%	21%	36%	18%	21%
2008	21%	7%	27%	24%	33%	21%	21%	32%	23%	17%
2009	21%	10%	32%	27%	25%	33%	28%	27%	24%	19%
2010	28%	11%	33%	27%	30%	22%	39%	43%	24%	26%
2011	33%	23%	41%	27%	28%	21%	29%	47%	32%	27%
2012	33%	13%	40%	35%	28%	32%	40%	40%	35%	35%

Highest % P/A over last 8 years

MATH CST – LHS

CST Math % of Learners Proficient and Above by Grade, Year, and PBS status - LHS				
Year		Course		
		Gr 9 Alg I	Gr 10 Geom	Gr 11 Alg II
2008	% Prof	11%	0%	1%
	# Tested	183	125	113
2009	% Prof	13%	6%	0%
	# Tested	204	93	100
2010	% Prof	16%	4%	3%
	# Tested	256	80	73
2011	% Prof	26%	24%	2%
	# Tested	287	94	52
2012	% Prof	3%	28%	17%
	# Tested	244	71	54

Prior to PBS
PBS

HSS CST – LHS

CST HSS % of Learners Proficient and Above by Grade, Year, and PBS status - LHS			
Year		Course	
		Gr 10 World History	Gr 11 US History
2008	% Prof	17%	19%
	# Tested	294	296
2009	% Prof	19%	22%
	# Tested	241	278
2010	% Prof	19%	29%
	# Tested	272	240
2011	% Prof	21%	28%
	# Tested	242	278
2012	% Prof	34%	30%
	# Tested	297	245

Prior to PBS
PBS

APPENDIX I

BRIDGER ALTERNATIVE PROGRAM ACHIEVEMENT DATA

CRT RESULTS

	07/08	08/09	09/10	10-11	11-12	12-13
# Students			12	15	28	14
Reading	64%	61%	44%	62%	64%	86%
Math	27%	27%	22%	17%	25%	29%
Science	23%	8%	11%	23%	14%	36
Writing	NA	20%	11%	26%	27%	NA

BAP INFORMATION

229 Students Accessed Bridger Services

End of Year

122 students attending core Bridger classes

Other Bridger classes (World History, Sustainable Systems)

17 – WH

31 – SS

Drops

59 Drops

13 - Transferred to other schools/records requested

1 – Returned FT to BHS

3 – Treatment

(1 returned to BAP)

1 - Youth Challenge

4 - Online School/Homeschool

28 – GED

     Earned - 21 (3 GEDs Earned from MYC)

     Actively Attending - 7

9 – Drop Outs (4%)

     (3 Attending GED Currently)

96% of BAP students graduate, remain in school, or are actively pursuing educational goals.

     1 student from 2012 graduating class earned diploma in summer of 2012.

     3 students from previous graduating classes earned GED in 2013.

APPENDIX J

INSTITUTIONAL REVIEW BOARD APPROVAL

INSTITUTIONAL REVIEW BOARD
For the Protection of Human Subjects
FWA 00000165

MONTANA STATE UNIVERSITY

960 Technology Blvd. Room 127
c/o Immunology & Infectious Diseases
Montana State University
Bozeman, MT 59718
Telephone: 406-994-6783
FAX: 406-994-4303
E-mail: cherylj@montana.edu

Chair: Mark Quinn
406-994-5721
mquinn@montana.edu
Administrator:
Cheryl Johnson
406-994-6783
cherylj@montana.edu

M E M O R A N D U M
....

TO: Mike Ruyle

FROM: Mark Quinn *Mark Quinn CQ*
             Chair, Institutional Review Board for the Protection of Human Subjects

DATE: January 28, 2014

SUBJECT: *Student Engagement, Academic Optimism, and Transformational Leadership in the
             Performance-Based Model* [MR012814]

The above proposal was reviewed by expedited review by the Institutional Review Board. This
proposal is now approved for a period of one-year.

Please keep track of the number of subjects who participate in the study and of any unexpected or
adverse consequences of the research. If there are any adverse consequences, please report them
to the committee as soon as possible. If there are serious adverse consequences, please suspend
the research until the situation has been reviewed by the Institutional Review Board.

Any changes in the human subjects' aspects of the research should be approved by the committee
before they are implemented.

It is the investigator's responsibility to inform subjects about the risks and benefits of the research.
Although the subject's signing of the consent form, documents this process, you, as the investigator
should be sure that the subject understands it. Please remember that subjects should receive a copy
of the consent form and that you should keep a signed copy for your records.

In one year, you will be sent a questionnaire asking for information about the progress of the
research. The information that you provide will be used to determine whether the committee will give
continuing approval for another year. If the research is still in progress in 3 years, a complete new
application will be required.