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A Case Study of a Teacher-Student Mentor Adoption Program at the Elementary Level

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A Case Study of a Teacher-Student

Mentor Adoption Program

at the Elementary Level

by

Timothy Shane Benson

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A Dissertation submitted to the Education Faculty of Lindenwood University in

partial fulfillment of the requirements for the degree of

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Mentor Adoption Program

at the Elementary Level

by

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Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

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Abstract

The purpose of this study was to determine if positive teacher-to-student relationships impacted student academic performance. This case study involved examination of the results of data collected from 43 students who participated in a mentor adoption program initiated with the intent to enhance positive teacher-to-student relationships for the 2013-2014 school year. Archival data of students who participated in the mentor adoption program were compared to data from a stratified group of students who did not participate in the mentor adoption program. Data from English language arts (ELA) and mathematics (MA) Missouri Assessment Program (MAP) scale scores, attendance rate, and number of discipline referrals were compiled and analyzed using paired-samples t-tests. The results of the study showed students who participated in the mentor adoption program demonstrated a significant increase in MAP ELA scale scores, increase in MAP MA scale scores, and significant decrease in the number of discipline referrals. Students who did not participate in the mentor adoption program showed significant improvement only in MAP MA scale scores. Perceptual interview data were gathered and analyzed from 10 teachers who participated in the mentor adoption program to determine teacher perceptions and feelings about the program. The results indicated teachers believed the mentor adoption program had value and should be continued in Elementary School A. The analysis of these data showed student academic performance was significantly impacted by the use of a mentor adoption program in Elementary School A.

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Chapter One: Introduction

Schools throughout the United States are continuously seeking ways to improve the quality of education offered to students (Hess, 2014). Research has shown in order for schools to improve, each school must have highly effective teachers (McEwan, 2002), a high student attendance rate (Sparks, 2010a), and effective classroom management strategies (Marzano, 2013a). Schools are implementing a multitude of strategies presented as most impactful to school improvement and often investigate strategies which may be successful in one school but not in another school. Observations often demonstrate differences from building-to-building or even student-to-student (Parsons, Dodman, & Burrowbridge, 2013). This research project involved a case study of an elementary mentor adoption program implemented to develop teacher-to-student relationships and examined how developing teacher-to-student relationships may affect improvement of overall student performance.

In reality, the key to any strategy's effectiveness may be the personal relationships teachers create with students. Teacher-to-student relationships are an integral component of effective teaching (McEwan, 2002). When sincere effort is put forth by teachers to create positive relationships with students, students will respond by improvement in areas of academics, attendance, and discipline issues (Sterrett, 2012). Pressure from federal and state government for schools to improve continually creates a need for schools to find ideas and strategies to enhance chances for improvement (Weiss, 2014). Teacher-to-student relationship-building programs may provide a high return of improvement while the overall cost may be minimal.

Background of the Study

Across the nation, schools have been continually seeking ways to improve student performance (Rydeen, 2010). Both federal and state laws dictate goals and standards to which schools are held accountable. Many times, funding is directly dependent upon meeting standards which are dictated by law (Koppich, 2010). Because funding depends on meeting standards, schools throughout the nation are pressured to incorporate new programs and ideas to benefit student improvement, many times without fully investigating the research (Marsh & McCaffrey, 2011). By tying funding to obtainment of federal and state standards, government has inadvertently initiated a cycle of failure within schools (Koppich, 2010). Schools tend to bounce from one program, textbook, and instructional strategy to another in hopes of finding the most impactful strategy to help reach standards set by both federal and state governments (Marsh & McCaffrey, 2011).

A particular program may work in one school or for one student but may fail miserably in a school just down the road or for a student in the next classroom. Because effectiveness of programs and tools varies from school to school and child to child, schools are encouraged to investigate available research to observe any common variables. Research conducted by Marzano (2011) has shown positive teacher-to-student relationships to be one such variable. Marzano's (2011) research linked positive teacher-to-student relationships to improvement in instruction, student attendance rate (Sparks, 2010a), and discipline issues (Marzano, 2013b).

Research has shown students who attend schools in which positive relationships are built between teachers and students have higher grade point averages (GPAs), higher

attendance rates, and fewer discipline referrals (Allen et al., 2013). The characteristics most often found in schools with positive environments are teacher support for student efforts and student work preparing students for the future (Allen et al., 2013). The research results were magnified when students felt a high level of trust with teachers (Allen et al., 2013). The same results were magnified and displayed when teachers showed genuine concern for students personally, as well as for student academic progress (Allen et al., 2013).

Elementary School A's leadership team discussed ideas with staff to develop an improvement plan to navigate the school toward its vision in one year, three years, and five years. A committee was formed to set goals and to examine research-based strategies to aid in academic improvement for Elementary School A. One teacher from each grade level, one special education teacher, and one Title I teacher were chosen to serve on the committee. The committee was directed to set both short-term and long-term goals for Missouri Assessment Program (MAP) score results, attendance rate, and character building for students. Short-term goals for the MAP assessment scores included program implementation of Acuity and Reading Plus benchmarks.

The leadership team analyzed Elementary School A's data and found major differences when comparing individualized education plan (IEP) students to non-IEP students. The leadership team chose to focus school improvement plans on an alternative, which prioritized motivation of students. The team paid deliberate attention to students within the free and reduced price meal and IEP subgroups. The data showed the subgroups, as a general rule, to have lower attendance rates, to score lower on standardized assessments, and to have a higher number of discipline referrals. With this

plan the question became, how could the staff do a better job of motivating the students? Elementary School A chose to create a plan to promote efforts to build closer relationships with students who come from the free and reduced priced meal and IEP subgroups.

Focusing attention on students within the subgroups, the staff of Elementary School A was asked to do three things to help improve relationships with students. First, teachers were asked to adopt at least two but not more than five students who were not on the current year roster. Adoptees could be students with whom common interests were shared or who had been on a previous year roster. When teachers adopted students, teachers were then asked to serve as a mentor to help students feel wanted and needed at Elementary School A. In order to encourage a more inviting atmosphere, teachers could participate in activities with students such as checking homework, eating breakfast, giving treats for good work, or creating a daily check system between teacher and student. Teachers were asked to call the adoptee's parents to explain the expectations and goals Elementary School A was trying to accomplish. Teachers were also asked to call parents of students who were absent from class each day. Last, teachers were asked to send a newsletter or group e-mail weekly with classroom information such as schedules and lesson plans.

To measure effectiveness of the mentor adoption program, data were collected and analyzed to observe any changes in student grade level assessment performance after participating in a teacher mentor program. Data were analyzed to determine if any differences were found between students who did and did not participate in the mentor adoption program in terms of academic achievement, attendance rate, and discipline

referral improvement. Analysis of academic achievement was completed using MAP scores as well as other assessment scores. Attendance rate improvement and discipline referral reduction were measured by using the Elementary School A Student Information System (SISK12). The effectiveness of the mentor adoption program and relationship of positive teacher-to-student relationships to student performance improvement were investigated specifically for students from free and reduced price meal and IEP subgroups.

Conceptual Framework

Perhaps one of the best-known models of behavior theory is Maslow's hierarchy of needs (Nohria, 2006). Maslow's hierarchy of needs places human needs in levels beginning with physiological needs such as food, water, and air (Nohria, 2006). The next level is safety, which focuses on security and health (Nohria, 2006). Belongingness is the third level, and states as a human grows, one will need love and friendship (Nohria, 2006). Maslow's hierarchy of needs then progresses through two more levels, which are esteem and self-actualization (Nohria, 2006). The last two levels include self-confidence, morality, and creativity (Nohria, 2006). Maslow's hierarchy suggests a human's basic behavior is built on these principles (Nohria, 2006). Nohria (2006) also suggested Maslow's hierarchy of needs should be updated by using the latest research on the human brain. Some of the latest research suggests humans are driven by four emotional motives (Nohria, 2006). The motives are the drive to acquire, bond, comprehend, and defend (Nohria, 2006). These four motives have been used to harness human behavior to improve productivity and innovation (Nohria, 2006).

By studying Maslow's hierarchy of needs and Nohria's (2006) research, it is obvious both theories include a common component. Humans require relationships with other humans. Maslow's hierarchy of needs level of belongingness and Nohria's drive of bonding both require human-to-human contact (Nohria, 2006). The theories were elaborated on by Birchfield (2012), who suggested when the human-to-human contact includes encouragement, productivity will increase.

Theories such as Maslow's hierarchy of needs set the foundation for early educational research on teacher-to-student relationships. Research conducted in this study was based on early education theorists such as Rosenthal and Jacobson, who hypothesized student achievement was directly related to teacher expectations (Rosenthal & Jacobson, 1968). Rosenthal and Jacobson performed behavior observations and discovered expectations and teacher-to-student relationships to be directly correlated (Rosenthal & Jacobson, 1968). Theories that link human behavior to academic achievement have altered how and why schools use different techniques and strategies to help improve student achievement (Marzano, 2011).

One of the original studies conducted by Rosenthal and Jacobson (1968) involved an intelligence test given to an entire elementary school student body. Then, 20% of the students were randomly selected without regard to an intelligence test (Rosenthal & Jacobson, 1968). Rosenthal and Jacobson then told teachers the randomly-selected 20% of students showed unusual potential for intellectual growth (Rosenthal & Jacobson, 1968). At the end of the academic year, the entire student body was re-tested (Rosenthal & Jacobson, 1968). The 20% of students who Rosenthal and Jacobson randomly selected and labeled as intelligent showed a much greater increase on test results than did the

remaining 80% of students (Rosenthal & Jacobson, 1968). The teachers also rated students who were labeled as having unusual potential for intellectual growth as more intellectually curious, happier, and in less need for social approval (Rosenthal & Jacobson, 1968).

In today's society, schools are focal points of the community. Because of this, schools' focus may be better served if widened to include student academic improvement and common good for all citizens (Marshall, 2013). A large percentage of rural Americans live in poverty conditions; therefore, positive relationship building may serve more than one purpose: improvement in academics, attendance rate, and fewer discipline referrals, as well as building a sense of belonging for students (Baker & Narula, 2012). By conducting this research, effects of the teacher-to-student mentor adoption program were quantitatively measured to understand how positive relationship-building may be a possible avenue to improve students both academically and socially.

Statement of the Problem

Efforts for improvement are a continual task for schools around the United States. A multitude of research has suggested building of positive teacher-to-student relationships and mentoring programs enhance school improvement efforts (Allen et al., 2013). Elementary School A initiated several research-based strategies during the 2013-2014 school year. Included in the research-based strategies was initiation of a mentor adoption program. In order to sustain improvement efforts, Elementary School A must attempt to measure effectiveness of incorporation of each strategy. The assessment of available data was necessary for the primary investigator to determine effects of the mentor adoption program on student performance within Elementary School A.

Purpose of the Study

The purpose of this research was to examine whether differences exist between students who participate in teacher-to-student relationship-building programs and students who do not participate in the programs. If a difference exists between the two groups of students, what is the impact on student academic performance? This study involved the quantitative measurement of any differences in MAP scores, attendance rates, and discipline referrals of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program. By statistically measuring impacts of adult mentoring on student performance, the research data may better inform administrative decisions to direct efforts for school improvement.

The researcher examined the effects teacher-to-student relationships have on academic performance. The research project involved the quantitative measurement and comparison of a purposive sample group of students, who participated in a mentor adoption program in the 2013-2014 school year, with a stratified sample group of students who did not participate in the program. The academic performance was measured through data taken from student MAP assessment scores, attendance rates, and discipline referrals. By using a *t*-test, the primary investigator determined if a significant difference in student academic performance existed between students who participated in the mentor adoption program and students who did not participate in the mentor adoption program in Elementary School A (Fraenkel, Wallen, & Hyun, 2015).

The primary investigator also analyzed perceptual data of teachers who participated in the mentor adoption program. One teacher from each grade level, special education department, special class department, and the Title I department were

randomly selected. Each of the randomly selected teachers was interviewed by the data collector. The data collector recorded and transcribed the interviews. The primary investigator analyzed and coded the transcriptions to determine teacher perception of the mentor adoption program.

Independent and Dependent Variables

According to Fraenkel et al. (2015), case study research should be used to look for any noticeable patterns or regularities a particular case may currently have or may have created. The case study method was chosen for this research project to determine if a mentor adoption program had any effect on student performance in academics, attendance, and discipline. Elementary School A participated in a mentor adoption program during the 2013-2014 school year, and in order to gain insights as to whether the mentor adoption program had any impacts on student academic performance, the case study method of research was chosen (Fraenkel et al., 2015). Archival and perceptual data were used to measure the results.

For this research, the independent variable was application of the mentor adoption program initiated by Elementary School A during the 2013-2014 school year. The application of the independent variable effect was quantitatively measured by the change in dependent variable data. The independent variable was applied with intentions to promote student improvement in areas such as academic achievement, attendance rate, and discipline referrals.

Further, the dependent variables included academic achievement, attendance rate, and number of discipline referrals. The dependent variables were chosen because each can be quantitatively measured using archival data supplied by the Missouri Department of Elementary and Secondary Education (MODESE) and SISK12. The data were then

used to measure effects of implementation of the mentor adoption program on student performance in Elementary School A for the 2013-2014 school year. By using existing student data, Elementary School A may be enabled to make informed decisions for school improvement plans.

Research questions. The following research questions guided the study:

1. Is there a significant difference in performance of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program on the Missouri Assessment Program (MAP) in English language arts (ELA) and mathematics (MA)?

$H1_0$: There is no significant difference in the performance of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program on the Missouri Assessment Program (MAP) in English language arts (ELA) and mathematics (MA).

2. Is there a significant difference in the attendance rate of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program?

$H2_0$: There is no significant difference in the attendance rate of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program.

3. Is there a significant difference in the number of discipline referrals of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program?

H3₀: There is no significant difference in the number of discipline referrals of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program.

4. What is the perception of the mentor adoption program effectiveness of teachers who participated in the mentor adoption program?

Definition of Key Terms

For the purposes of this study, the following terms were defined:

Purposive sample. A purposive sample is a nonrandom sample selected because prior knowledge suggests it is representative, or because those selected have the needed information (Fraenkel et al., 2015).

Student information system kindergarten-12 (SISK-12). SISK-12 is the computer software system used by Elementary School A to collect and store student data.

Stratified sample. A stratified sample includes selecting a sample in such a way that identified subgroups in the population are represented in the sample in the same proportion as they exist in the population (Fraenkel et al., 2015).

Limitations and Assumptions

Limitations. According to Fraenkel et al. (2015), case study research methods have some limitations. The most profound is due to the independent variable having already been manipulated (Fraenkel et al., 2015). The manipulation may cause the primary investigator's focus to be to narrow and to only be concerned about the particular case being studied (Fraenkel et al., 2015). Because of the manipulation, many controls may not have been in place (Fraenkel et al., 2015). Some of the controls to consider are

the controls of extraneous variables, controls to internal validity, and controls of experimental treatments (Fraenkel et al., 2015).

The control of extraneous variables within the research was limited, because students who participated in the mentor adoption program were not randomly chosen. The students were chosen according to a set of criteria which included low performance on the ELA and MA portions of the MAP assessment, low attendance rates, and a high number of discipline referrals. The majority of students who participated in the mentor adoption program belong to Elementary School A's super-subgroup. The super-subgroup is made up of students who receive free and reduced price meals and/or who have an IEP. In general, the super-subgroup students live in poverty and may have made the relationship-building process between teachers and students more difficult. Therefore, the selection bias of the sample group may have affected the results of the data.

Another limitation of this research study was the population restricted to the setting of Elementary School A. Only 55 students participated in the mentor adoption program. If a student did not participate in the program, it did not necessarily mean a positive teacher-to-student relationship was not created. Effective teachers create relationships with students even though a mentor adoption program has not been established.

The fact the mentor adoption intervention strategies were teacher-dependent and not all performed in the same manner may have potentially impacted the data results. Because of the uniqueness of each individual teacher and student, each adoption took on its own identity. Quantitative measurement of the student improvement may be skewed by the quality of the teacher-to-student relationship.

The research may also be limited because teachers did not voluntarily participate in the mentor adoption program. Elementary School A teachers were required to participate in the mentor adoption program. Because participation in the mentor adoption program was required of teachers, a deep and meaningful teacher-to-student relationship may not have been developed. Because of the possible lack of meaningful relationship, valid statistical quantitative data may have been difficult to obtain.

A related possible limitation to this study is attribution, or the act of attributing positive events and outcomes to variables which may have external forces of impact (Abry, Rimm-Kaufman, Larsen, & Brewer, 2013). For instance, effective teachers already exhibit characteristics that promote positive teacher-to-student relationships (Abry et al., 2013). A limitation of causal inference may negate to remove factors which may attribute student success to alternative explanations (Abry et al., 2013). Further, effective teachers may not have created teacher-to-student relationships at a higher quality or quantity because of participation in the mentor adoption program. In contrast, the teachers who are effective may have been limited because of only being able to adopt two to five students.

Assumptions. For this study, the primary investigator assumed all Elementary School A teachers made a sincere effort to create a meaningful relationship with adopted students through the mentor adoption program. The primary investigator assumed participating Elementary School A teachers were professional and utilized acquired skills and strategies to build the relationships. Furthermore, the primary investigator assumed participating teachers made a sincere effort to select students who were deemed at high risk of low academic achievement. The high-risk factors were low achievement on

standardized test scores, low attendance rates, and/or a high number of discipline referrals.

Another assumption was that factors such as weather played a neutral role in student academic change. Weather factors caused Elementary School A to miss 28 days of school during the 2013-2014 school year. The primary investigator assumed academic performance change was affected neutrally for both the purposive and stratified sample groups.

It was assumed students who were adopted were willing participants in the mentor adoption program. Students may not desire to build relationships with persons in authority. There was an underlying assumption teachers used learned strategies to help students feel more at ease with the mentor adoption program. The conjecture was that both teachers and students gave a sincere effort to promote the success of the mentor adoption program.

The primary investigator assumed families of adopted students supported the mentor adoption program initiated by Elementary School A. Negative family support may have impacted the teacher-to-student relationship process. The primary investigator further assumed teachers followed instructions to contact and explain the mentor adoption program to parents. Participating teachers were instructed to explain goals of the mentor adoption program and any potential benefits students may receive. Teachers were also instructed to maintain weekly contact with parents of adopted students.

Summary

Multiple variables were applied to and used for the first time in Elementary School A during 2013-2014. Elementary School A initiated use of the Journeys Reading

Series, ability grouping, and professional learning communities during the 2013-2014 school year. Any and all of these initiatives may have affected student academic, attendance rate, and discipline issue data. The validity of the statistical data may have been compromised. The use of multiple variables may have made obtaining valid data on the effects of the mentor adoption program difficult and may have limited research results.

In order to continue school improvement, Elementary School A began to dissect research-based strategies to incorporate. While dissecting the research, the importance of building positive teacher-to-student relationships became apparent. The research findings revealed strong relationships between teachers and students would promote improvement in academic performance of the students (Marzano, 2011). Elementary School A then began to initiate a plan to create a mentor adoption program which allowed teachers the opportunity to develop relationships with students.

Data from a stratified control group of students who did not participate in the mentor adoption program but have similar demographics and were qualified to participate were statistically compared to data of a purposive sample of students who did participate in the mentor adoption program. In addition to analysis of the archival data, perceptual data were collected and analyzed to glean teacher perceptions of the mentor adoption program. The analysis of data may help inform Elementary School A in future efforts in school improvement.

Chapter Two: Literature Review

Research was conducted to examine whether or not a mentor adoption program implemented in Elementary School A for the 2013-2014 school year had an effect on student academic performance. To aid in analysis of results of the mentor adoption program, a thorough compilation of literature was reviewed. Topics reviewed included teacher-to-student relationship effect, both in general and as the teacher-to-student relationship pertains to students of different ages. A review was conducted of mentoring programs and relationship-building interventions.

Other possible variables which may affect student academic performance were also reviewed including the effects of poverty on academic performance. The impact teacher-quality has on student academic performance was examined. Lastly, the influence of curriculum alignment on student academic performance was reviewed as a possible variable.

Conceptual Framework

The conceptual framework of this research is based on a prevalent human behavior theory known as Maslow's hierarchy of needs (Nohria, 2006). Education involves much teacher-to-student contact. Understanding human behavior may make teachers more efficient in the efforts to motivate students to learn. Maslow's hierarchy of needs says humans have an order of needs starting with basic physiological needs such as food, water, and shelter (Nohria, 2006). The human needs progress through levels which focus on safety and reach a point where a sense of belongingness becomes important for humans to continue to mentally grow, mature, and learn (Nohria, 2006). This sense of belongingness drives teacher-to-student relationships (Nohria, 2006). Researchers have

suggested the most efficient teaching occurs when a strong teacher-to-student relationship exists (Barile et al., 2012).

The techniques and strategies used in teaching have continued to evolve as the understanding of human behavior evolves. According to Sparks (2013), students' ability to learn directly correlates to the feelings of safety and comfort the students feel. Furthermore, students' ability to learn correlates with the strength of teacher-to-student relationships within the schools (Sparks, 2013). Fields of study such as neuroscience and cognitive psychology have produced research suggesting successful schools are academically challenging while maintaining a strong sense of community (Sparks, 2013). School climates that do not show a strong sense of community are not as successful at educating students of all ages (Sparks, 2013).

Studies on early educational research led to a hypothesis that teacher-to-student relationships do actually have an effect on student academic performance (Rosenthal & Jacobson, 1968). Academic performance may be measured by improved grades and assessment scores, increased attendance rates, and a decline in discipline issues. Some of the earliest research of this hypothesis was conducted by Rosenthal and Jacobson (1968). Rosenthal and Jacobson researched the effect of teacher expectations on student performance (Rosenthal & Jacobson, 1968). The thought that students usually live up to what is expected of them is known as the "Pygmalion effect" (Rosenthal & Jacobson, 1968). Educators unknowingly place expectations on students all the time; each time a teacher receives a new set of students, he or she will place expectations based on incomplete information (Rosenthal & Jacobson, 1968). This, in turn, causes teachers to

communicate with students in a way that creates an atmosphere of either success or failure (Rumain, 2010).

Teachers may base expectations on prior knowledge of the student, knowledge of the student's family, race, religion, socio-economic class, or looks (Rosenthal & Jacobson, 1968). The expectations form the basis for how teachers interact with students (Rosenthal & Jacobson, 1968). Interactions, both verbal and nonverbal, give students a sense of whether or not teachers believe students can succeed or fail (Rosenthal & Jacobson, 1968). Success or failure depends on whether teacher-to-student interactions are positive or negative (Rosenthal & Jacobson, 1968).

This "Pygmalion effect" has been tested by an experiment conducted by Rosenthal and Jacobson (1968). During the Rosenthal and Jacobson study, students from grades one through six in a San Francisco elementary were said to have been IQ tested and found to be on the verge of a period of rapid intellectual growth (Rosenthal & Jacobson, 1968). In actuality, students whose test scores did not support they were intellectually on the brink of educational growth had been randomly selected from 18 classrooms (Rosenthal & Jacobson, 1968). The selected students then spent an academic year with unsuspecting teachers (Rosenthal & Jacobson, 1968). At the end of the year, the test group had made significant gains of two IQ points in verbal ability, seven IQ points in reasoning, and four points in overall IQ (Rosenthal & Jacobson, 1968). The experiment results led researchers to claim the high expectations of teachers had caused rapid growth on IQ scores (Rosenthal & Jacobson, 1968).

As Rosenthal and Jacobson conducted more research, they found expectations were coming to fruition because of the way teachers reacted to students (Rosenthal &

Jacobson, 1968). When teachers have high expectations, the tendency is to unknowingly give students invisible cues that promote learning (Rosenthal & Jacobson, 1968). Some of the cues include more wait time to answer questions, more specific feedback, and the display of more approval (Rosenthal & Jacobson, 1968). Also when teachers have high expectations of students, teachers tend to touch, smile, and more often give out praise to the students (Rosenthal & Jacobson, 1968).

Some of the research community claimed that Rosenthal and Jacobson only tested positive expectations and did not include negative expectations (Brophy, 1983). In a 1983 study, Brophy found negative teacher expectations could be very harmful to student learning. Brophy (1983) listed eight concrete forms of negative expectations that cause harm to student learning. The forms include giving up easily on students, criticizing more often for failure, praising less often for success, praising inappropriately, neglecting to give any feedback following responses, seating in the back of the room, and generally paying less attention or showing less interest in low-expectation students (Brophy, 1983). Research has found the "Pygmalion effect" works in both positive and negative facets of learning (Brophy, 1983).

Teacher-to-Student Relationships

The early research of teacher expectations conducted by Rosenthal, Jacobson, and Brophy opened the doors to research of teacher-student relationships and what effect the relationships have on promoting academic performance (Brophy, 1983). Reichart and Hawley (2009) conducted a study of 1,500 male students and 1,000 teachers, of both genders, from 18 schools in over six countries. Participants were asked to describe an especially memorable classroom lesson (Reichart & Hawley, 2009). The researchers

concluded that with one common component, a strong teacher-to-student relationship, students achieved at a higher level (Reichart & Hawley, 2009).

A more in-depth follow-up study was designed by Reichert and Hawley (2013). The researchers partnered with the International Boys' Coalition and included 35 schools in over six countries (Reichart & Hawley, 2013). In the study 1,200 boys and 1,100 teachers were asked to describe one productive teacher-to-student relationship and one unproductive teacher-to-student relationship (Reichart & Hawley, 2013). The results indicated boys who were anxious and had negative opinions of the classroom were relaxed by teachers through relational gestures (Reichart & Hawley, 2013). Some of the gestures were improvising to meet individual needs, demonstrating mastery of the field in which one teaches, promoting high expectations, being aware of student talents, sharing student interests, allowing for differing student opinions, and displaying vulnerability as a teacher (Reichart & Hawley, 2013).

Researchers have shown students who attend schools in which positive relationships are prioritized between teachers and students have higher grade point averages (GPAs), higher attendance rates, and fail less often (Allen et al., 2013). Schools which prioritize teacher-to-student relationships have teachers who display characteristics such as strong support for student efforts and expectations that student work is preparing students for the future (Allen et al., 2013). Research results were magnified when students felt a high level of trust with the teacher (Allen et al., 2013). The same magnified results were displayed when teachers showed concern for the student personally as well as for student academic progress (Allen et al., 2013).

Research from three Puerto Rican all-male schools showed students could perform at a high academic level, even though the students were from the working class (Garrett, Antrop-González, & Vélez, 2010). The results of surveys, test scores, and school records provided data for the research project (Garrett et al., 2010). The purpose of the study was to identify characteristics which may cause a student to feel more positively towards school (Garrett et al., 2010). When students believe teachers care, respect, and offer praise, students are more likely to like school, which in turn, will cause students to achieve higher academically (Garrett et al., 2010).

In interview-based studies conducted by Sadowski (2013), teacher-to-student relationships were found to be a key factor in helping at-risk students overcome adversity. Sadowski (2013) interviewed 19 young immigrants about how the young immigrants handled challenges of moving to a new country. In a follow-up study, Sadowski (2013), along with colleagues from Harvard's Graduate School of Education, interviewed 30 youth who belonged to a Lesbian, Gay, Bi-sexual, and Transgender (LGBT) group. During Sadowski's (2013) studies, teacher-to-student relationships emerged as an integral aspect of the youth's relational network.

Teacher-to-student relationship effects on early childhood students.

Academics. According to Munro (2008), most state regulations target the assessment of early childhood education on structural aspects of classrooms such as class size, teacher professional degrees, and curriculum. Munro (2008) cited Robert Pianta, director of the National Center for Research on Early Childhood Education and professor of psychology at the University of Virginia, as suggesting the focus for early childhood education assessment should target dynamic factors in the classroom. Dynamic factors

would include the child's classroom experience and interactions (Munro, 2008).

Assessment should focus on how experiences and interactions affect student learning

(Munro, 2008).

In the National Institute of Child Health and Human Development's study of

Early Child Care and the National Center for Early Development and Learning's Multi-

State Study of Pre-Kindergarten, the research analyzed results from nearly 4,000 early

childhood classrooms (Pianta, Belsky, Houts, & Morrison, 2007). Pianta et al., (2007)

found early childhood students spent almost 10 minutes listening and watching for every

minute spent engaged in learning activities. Teacher-to-student relationships were one

key factor in improving early childhood education (Munro, 2008). Early childhood

students have been found to learn at higher rates when the students feel respected, safe,

and when teachers are sensitive to needs of the children (Munro, 2008). Early childhood

students also learn at a high rate when teachers use constant feedback and have high

expectations (Munro, 2008).

In a study conducted by Patrick, Mantzecopoulos, Samarapungavan, and French

(2008), 110 kindergarten children were quantitatively and qualitatively measured on

academic achievement, motivation for science, teacher-to-student relationship, science

learning, and teacher-to-student interactions. The researchers found students with the

characteristic of being highly motivated perceived teacher-to-student relationships as

being more positive in nature (Patrick et al., 2008). It was also found teacher-to-student

relationships and interactions affected early elementary students multi-directionally

(Patrick et al., 2008). Students who viewed relationships and interactions as positive

were more highly motivated as compared to students who viewed relationships and

interactions as negative (Patrick et al., 2008). The researchers were hesitant to conclude

relationships and interactions caused high levels of motivation within students and

instead suggested teacher-to-student relationships and interactions to be correlational

(Patrick et al., 2008).

  Attendance rate. In a report entitled "Present, Engaged, and Accounted For,"

conducted by the National Center for Children in Poverty at Columbia University,

research was conducted to analyze early childhood absenteeism's effect on children's

long-term education (Jacobson, 2008). It was found nearly 10% of kindergarteners and

first graders were chronically absent (Jacobson, 2008). The percentage was found to be

higher among schools that serve a high percentage of children who live in poverty

(Jacobson, 2008). Students who were found to be chronically absent were also found to

score lowest on reading, math, and general knowledge (Jacobson, 2008). The researchers

explored possible reasons of absenteeism and found the most common causes to be a lack

of basic resources and a history of negative experiences in which neither child nor parent

felt welcome at school (Jacobson, 2008).

  Paredes and Ugarte (2011) conducted a study to measure whether or not a

minimum attendance policy was an effective tool to use to enhance learning. The

researchers analyzed data from public primary schools in Chile and found two results

(Paredes &Ugarte, 2011). Results established student attendance directly affects student

academic performance and that student academic performance did not continue to fall as

a student continued to be absent from school (Paredes & Ugarte, 2011). Students who

were absent at least nine days in a school year had a 23% deviation on standardized test

scores (Paredes & Ugarte, 2011). Additionally, after 13 absences students did not continue to decrease in deviation on standardized test scores (Paredes & Ugarte, 2011).

The dramatic effects of absenteeism have caused many schools to create interventions to curb student attendance problems. Some interventions include more family outreach (Sparks, 2010b). Many schools are assigning a staff member to become an attendance monitor (Sparks, 2010b). The attendance monitor calls the parents of children who are absent as well as calling doctors of children when the children claim to be sick (Sparks, 2010b). Schools are also creating early morning childcare to allow parents to drop children off at work shift changes (Sparks, 2010b). Interventions have been found to be effective because of relationships created between school and the child's family (Sparks, 2010b).

Discipline. In a study conducted by Yoleri (2013), research was conducted to attempt to find the impact behavior problems had on school adjustment. In the study, 136 five- and six-year-old children were qualitatively measured based on three behavior problems (Yoleri, 2013). The problems were hostile-aggressive, anxious-weepy, and hyperactivity-distractibility (Yoleri, 2013). All three of the behavior problems were found to have high predictability on school adjustment (Yoleri, 2013). The researchers found students who fell within each of the three problem behavior categories achieved statistically lower academically (Yoleri, 2013).

Schools that strive to lessen effects of problem behavior may want to take preventative measures. Abry et al. (2013) suggested the implementation of responsive classroom approach to be a strategy many elementary schools initiate to improve student academic performance. The responsive classroom approach designs classrooms which

optimize conditions to create an atmosphere to promote elementary students' social and academic adjustment (Abry et al., 2013). In a responsive classroom, a teacher may implement practices such as morning meetings in which students focus on building relationships with peers (Abry et al., 2013). Teachers may also use modeling techniques which specifically target teacher feedback to students (Abry et al., 2013). Students may also have the opportunity to choose topics and lessons in order to peak student interest (Abry et al., 2013).

Teacher-to-student relationship effects on middle school students.

Academics. The changes occurring in children between the ages of 11 and 15 can cause a very difficult time period for middle school students. Cognitive and emotional portions of the brain develop at different rates (Vawter, 2010). Social portions of the brain develop between the ages of 11 and 15 in females and in the late teens and early 20's in males (Vawter, 2010). Middle school-aged children's brain development may have dramatic consequences for middle school teachers (Vawter, 2010). Middle school students tend to misread adult expressions and see anger in adults, when no anger is intended (Vawter, 2010). Middle school-aged students also have an attention span of only 10 to 12 minutes; furthermore, there is little evidence middle school-aged children can be trained to have a longer attention span (Vawter, 2010). Because of the brain development middle school-aged children are experiencing, middle school teachers are encouraged to adjust teaching techniques and strategies to educate middle school-aged students (Vawter, 2010).

Middle school-aged students have difficulties transitioning from elementary school to middle school (Brackett, Rivers, Reyes, & Salovey, 2012). The difficulties may

cause significant stress for both females and males. Difficulties have been linked to student-to-peer relationships and conflict with authority as major stressors (Brackett et al., 2012). Studies have also shown academic outcomes tend to decline due to lower motivation and more negative attitudes of middle school-aged students (Brackett et al., 2012). Interventions may be necessary for middle school-aged children. A few of the more successful strategies are focused on building small communities around the student (Brackett et al., 2012). To implement this cooperative learning, focus on teacher-to-student relationships and use of teaming are encouraged (Brackett et al., 2012).

In a study by DeFur and Korinek (2009), 74 middle school-aged children responded to five focus group questions about perceptions of middle school education. The students were found to be forth-coming with opinions (DeFur & Korinek, 2009). Sense of belonging and community were found to greatly influence middle school-aged children's opinions of the school experience (DeFur & Korinek, 2009). During the study, researchers found middle school-aged children have little patience with incompetent teachers or administrators who permit teacher incompetence (DeFur & Korinek, 2009). Middle school-aged children most valued teachers who enjoyed the job of teaching and continually built up student self-esteem (DeFur & Korinek, 2009). Many of the students expressed opinions of teachers being the best aspect of school (DeFur & Korinek, 2009). Teachers who were identified as the best part of school often portrayed qualities such as having active and engaging lessons (DeFur & Korinek, 2009). The lessons were also found to be meaningful to students (DeFur & Korinek, 2009). Many times lessons were taught by group discussion so middle school-aged children could voice opinions (DeFur & Korinek, 2009).

Kiefer, Ellerbrock, and Alley (2014) conducted interviews of 24 study participants to determine which teacher characteristics most support academic improvement specifically for middle school-aged students. Results from the study, conducted in a large, urban middle school, showed three teacher characteristics to influence academic achievement (Kiefer et al., 2014). Teachers who (a) promoted positive teacher-to-student relationships; (b) had high expectations for students; or (c) developed instructional practices for individual students greatly influenced academic achievement (Kiefer et al., 2014). Furthermore, when more than one of the characteristics was present, academic achievement was even more influenced (Kiefer et al., 2014). Results indicated that although middle school-aged children are becoming more independent and responsible for individual learning, teachers set the tone for adolescent experiences (Kiefer et al., 2014).

Attendance rate. In a study conducted by Dube and Orpinas (2009), 99 students' attendance rates were analyzed. The students were in grades three through eight and classified as being chronically absent (Dube & Orpinas, 2009). The researcher classified student absences into three categories (Dube & Orpinas, 2009). The first category was students who missed school to avoid stressful situations such as adverse social situations, bullying, or evaluative situations (Dube & Orpinas, 2009). The study found 17.2% of students fell into the avoidance of stressful situations category (Dube & Orpinas, 2009). The category classified as gaining parental attention or tangible award included the largest percentage of students (Dube & Orpinas, 2009). Further results revealed 60.6% of students fell in the category of gaining parental attention or tangible reward (Dube & Orpinas, 2009). The remaining 22.2% of students had no classification (Dube & Orpinas,

2009). Students in more than one category had a higher number of behavior difficulties and occurrences of traumatic events such as victimization (Dube & Orpinas, 2009).

The result of chronic absenteeism may be lower academic gains. In an analysis of the National Assessment of Educational Progress, results indicated 56% of eighth-grade students who score advanced on the NAEP reading portion in 2011 had perfect attendance the month before the test (Sparks, 2012). Only 20% of eighth-grade students scoring in the below basic level had perfect attendance one month before the assessment was administered (Sparks, 2012). The study also found one out of every four students who scored in the below basic category averaged missing at least five weeks of school in a school year (Sparks, 2012). The No Child Left Behind Act placed pressure on teachers to improve assessment results (Sparks, 2012). The added pressure resulted in students receiving an average of two to three more hours of instruction per week (Sparks, 2012). The difference in amount of instruction received may have magnified lower assessment scores (Sparks, 2012).

To promote middle school student participation in school, it is necessary to understand characteristics of the adolescent stage of human development. Adolescents have a diverse make-up, and students may be at either end of the maturing process (Vawter, 2010). Second, it is natural for adolescents to self-explore and self-define (Vawter, 2010). Adolescents also desire relationships with adults and peers alike and have a need to socialize (Vawter, 2010). Adolescents have a high energy level and need opportunities to achieve success (Vawter, 2010). By keeping adolescent characteristics in mind, educators may yield a higher rate of school participation from middle school students (Vawter, 2010).

Discipline. Middle school-aged students have difficulty learning in loud, chaotic, and poorly-managed classrooms (Marzano, 2013b). Meta-analysis research has shown classroom management to be the number one factor on student achievement (Marzano, 2013b). A more recent meta-analysis conducted by Marzano (2013b) found the teacher-to-student relationship to be the foundation of classroom management. Teachers who had a high-quality teacher-to-student relationship had 31% fewer discipline problems throughout the school year (Marzano, 2013b).

A study conducted by Díaz-Aguado Jalón & Martínez Arias (2013) involved the analysis of 22,114 Spanish adolescents from 12 to 18 years of age. Results of the study indicated students who were directly involved in bullying fell into five categories including non-participants, bullies, followers, victim-bullies, and victims (Díaz-Aguado Jalón & Martínez Arias, 2013). The study included data from physical, verbal, and cyber-bullying incidences (Díaz-Aguado Jalón & Martínez Arias, 2013). Díaz-Aguado Jalón and Martínez Arias (2013) found the bully group to mostly include boys who had a high rate of school-related behavior problems. Results showed bullies in general feel a high rate of hostility and a lack of support from teachers (Díaz-Aguado Jalón & Martínez Arias, 2013). The study also suggested the bully behaviors typically begin as reactions and may be prevented by positive teacher-to-student relationships at early ages (Díaz-Aguado Jalón & Martínez Arias, 2013).

Marzano (2013a) suggested several strategies to implement to create a classroom environment conducive to learning for middle school-aged students. The teacher should strive to establish clear expectations (Marzano, 2013a). Establishing rules and providing consequences that match student behavior will aid in establishing expectations (Marzano,

2013a). Teachers should also provide clear content and learning expectations (Marzano, 2013a). Classroom management can also be encouraged by teachers who exhibit appropriate levels of cooperation (Marzano, 2013a). To aid with cooperation, teachers are encouraged to learn to be flexible and to take personal interest in students (Marzano, 2013a). Teachers who demonstrate the ability to adapt and implement cooperative characteristics will more likely to be able to create an atmosphere conducive to learning for middle school-aged students (Marzano, 2013a).

Teacher-to-student relationship effects on high school students.

Academics. High school has been found to be important to American students. American high school students are performing at a lower rate than many countries which belong to the Organization for Economic Cooperation (Barile et al., 2012). For example, American students ranked 25 out of 30 nations belonging to the organization (Barile et al., 2012). Studies also indicated only 73% of American high school students graduate (Barile et al., 2012). Students who do not graduate have trouble gaining employment at high-paying jobs and tend to depend on social services for long periods of time (Barile et al., 2012). Statistics about high school students have led to an increased emphasis on strategies to improve academic performance and graduation rate for the American high school student (Barile et al., 2012).

Research has shown teacher-to-student relationship building to affect high school students positively in both academic and social settings (Goldner & Mayseless, 2009). High schools have begun to incorporate opportunities for teachers and students to build relationships. One way high schools are creating opportunity is with advisory programs (Goldner & Mayseless, 2009). Advisory programs are established to provide students a

small community in which a positive comfort level is gained by the student (Goldner & Mayseless, 2009). Students receive more teacher support because of low teacher-to-student ratio (Goldner & Mayseless, 2009). Advisory programs have shown mixed results in effectiveness (Goldner & Mayseless, 2009).

Another strategy schools are using is alternative grade spanning. The idea is to reduce the number of transitions high school students experience from kindergarten to grade 12 (Yonezawa, McClure, & Jones, 2012). Prolonged numbers of years together allow teachers and students more time to connect (Yonezawa et al., 2012). The small school approach is designed to have a more teachers per student to encourage relationship building (Yonezawa et al., 2012). Many large high schools are dividing into small high schools to facilitate teacher-to-student relationships (Yonezawa et al., 2012). The small school design has been successful in improving both academic performance and graduation rate when students have the choice of where to attend (Yonezawa et al., 2012).

The ninth-grade year has been found to be a reliable predictor when it comes to predicting success or failure of high school students (Roybal, Thornton, & Usinger, 2014). The transition from middle school into high school may affect students academically and socially (Roybal et al., 2014). Incorporation of ninth-grade transition programs has been found to reduce negative effects of this period of time (Roybal et al., 2014). A minimum of three interventions are needed to increase chances of program success (Roybal et al., 2014). Some of the interventions may include schedule planning between middle and high school teachers, parent involvement, homework help, incentives for both grades and attendance, small learning communities, and celebrating

student success (Roybal et al., 2014). Incorporation of a ninth-grade transition program may lead to an atmosphere in which all stakeholders benefit (Roybal et al., 2014).

   Attendance rate. High school absenteeism has been found to be a strong predictor of course failure and drop-out rate (Kennelly & Monrad, 2007). Research at Chicago Public Schools indicated 15% of freshman had high absence rates (Kennelly & Monrad, 2007). Students with high absence rates only graduate about 10% of the time (Kennelly & Monrad, 2007). The researchers also found students who miss five to nine days graduate 63% of the time compared to a graduation rate of 87% of students who miss fewer than five days (Kennelly & Monrad, 2007). High schools may create more family involvement and strengthen academic programs to ensure academic achievement (as cited in Kennelly & Monrad, 2007).

   High school students who are absent more than 10% of the time are found to be at high risk for poor academic performance and dropping out of school (Schoeneberger, 2012). Student success during the first year of high school predicts academic performance and drop-out rate (Schoeneberger, 2012). Monitoring progress of high school students on short-term benchmarks may reduce both absenteeism and student drop-out (Schoeneberger, 2012). Some of the benchmarks schools may monitor are attendance rate, failed courses, and grade point average (Schoeneberger, 2012). High school students who miss more than 10% of the time, fail at least one course in first semester, or have a grade point average of less than 2.0 during the first year of high school should be considered at-risk (Schoeneberger, 2012). Administering interventions increases probability of success for at-risk students (Schoeneberger, 2012).

Eryilmaz (2014) found teachers who were liked by students had a different set of personality traits than those teachers who were not liked by students. Eryilmaz (2014) both quantitatively and qualitatively analyzed data from 247 adolescents ranging from 14 to 16 years of age. The personality traits for teachers who were liked included the following: outgoing, conscientious, agreeable, drama-free, and open to communication (Eryilmaz, 2014). The teachers who were classified as not being liked demonstrated characteristics such as emotional instability, carelessness, hatefulness toward others, and suspiciousness (Eryilmaz, 2014). Teachers who were classified as being liked by students were more impactful on learning than teachers who were classified as being disliked (Eryilmaz, 2014). The teachers classified as liked by students were described by students as effective, excellent, and good at teaching, while teachers who were classified as being disliked were described by students as hated, amateur, and inefficient (Eryilmaz, 2014).

In order to create successful interventions, schools may want to focus on key areas such as school climate (Baroody, Rimm-Kaufman, Larsen, & Curby, 2014). Addressing school climate may facilitate an increased amount of student engagement and transition (Baroody et al., 2014). Another key area on which to focus is academic rigor (Baroody et al., 2014). High academic rigor increases chances high school students are prepared to meet challenges of the work field and college (Baroody et al., 2014). Effective teaching is also found to be instrumental in creating successful interventions (Baroody et al., 2014). Effective teachers have a strong influence on student success (Baroody et al., 2014). Lastly, schools may increase the amount of learning time (Baroody et al., 2014)

Discipline. In a 2004 survey by Public Agenda, results showed 75% of high school teachers would spend more time effectively teaching if classroom disruptions were reduced (Guardino & Fullerton, 2010). Disruptive behavior interferes with student engagement in the learning process (Guardino & Fullerton, 2010). The types of disruptive behavior include speaking out loud, out of turn, and getting out of the seat (Guardino & Fullerton, 2010). When strong teacher-to-student relationships were the norm and classrooms were well-organized, disruptions decreased and student learning increased (Guardino & Fullerton, 2010).

Wong and Wong (2014) suggested several strategies to promote a higher level of classroom management. First, teachers may spend time preparing classrooms and procedures to create a positive climate (Wong & Wong, 2014). To create appropriate procedures, teachers may spend time developing seating charts, room arrangements, storage plans, and classroom displays (Wong & Wong, 2014). Secondly, teachers may relay appropriate classroom expectations to students (Wong & Wong, 2014). Teacher expectations of attendance, tardiness, classroom disruptions, and student work should be developed with students (Wong & Wong, 2014). Third, teachers who deal with consequences consistently have more success (Wong & Wong, 2014). Last, procedures for both teacher-to-student and student-to-student communication may be developed to promote a higher level of classroom management (Wong & Wong, 2014).

Delman (2011) suggested additional ways to systemize classroom management to promote improvement in both learning and teaching. Delman (2011) proposed using peers to evaluate peer work and presentations. The use of positive peer pressure was shown by Delman (2011) to positively enhance learning and teaching. Another

recommendation by Delman (2011) included using peers to be involved in creating and presenting classroom rules and for the teacher to log and date each time a student was excused from class.

   Teacher-to-student relationship effects on continuing education students.

   Academics. A study was conducted to measure effects of teacher-to-student relationships to continuing education student academic performance by Micari and Pazos (2012). Micari and Pazos (2012) surveyed 113 organic chemistry undergraduate students to observe any correlation of teacher-to-student relationships to grades, course confidence, and science identity. Results from the study indicated when a positive teacher-to-student relationship was built both grades and student confidence were increased (Micari & Pazos, 2012). Positive teacher-to-student relationships were perceived by students when students felt reciprocated respect with the professor, a comfort level with the professor, and when the student looked up to the professor as a mentor (Micari & Pazos, 2012). The more positively students perceived the relationship, higher grades were made and course confidence rose; however, no correlation was found between a positive teacher-to-student relationship and science identity (Micari & Pazos, 2012).

   Myers and Thorn (2013) surveyed 119 students to measure how student motives for communication with the professor correlated to course effort or course workload. The five motives examined were relational, functional, participatory, sycophancy, and excuse-making (Myers & Thorn, 2013). Myers and Thorn (2013) found classroom effort to be directly correlated to four of the five motives. The motives found to be correlated to effort were relational, functional, participatory, and sycophancy; however, perception of

course workload was not found to be linked to any of the motives (Myers & Thorn, 2013). When positive relationships were perceived by students, academic stress was reduced and increased communication between the professor and student was observed (Myers & Thorn, 2013). Reduced stress and increased communication were linked to student levels of effort (Myers & Thorn, 2013).

Micari and Pazos (2012) offered some simple tactics teachers may employ to improve teacher-to-student relationships. Teachers who make time to learn the interests of students and even to participate with students in the interests may improve teacher-to-student relationships (Micari & Pazos, 2012). Teachers may also create time to learn about student interests to help guide student decisions on career goals (Micari & Pazos, 2012). Clarifying career goals not only displays genuine interest but aids student efforts for career development (Micari & Pazos, 2012).

A study by Skinner and Fowler (2010) indicated teachers may want to use humor to create a more positive atmosphere. Skinner and Fowler (2010) gave five reasons to use humor. Students outperform and retain instruction more when humor is used, and humor creates a positive atmosphere which not only aids in learning but also reduces discipline issues (Skinner & Fowler, 2010). By using humor, teachers will be able to maintain student attention and relieve stress from a difficult subject matter (Skinner & Fowler, 2010). Student achievement has been found to improve in difficult subjects when humor is used (Skinner & Fowler, 2010). Finally, teachers who use humor score better on course evaluations (Skinner & Fowler, 2010). By using humor, academic performance was improved for the majority of students (Skinner & Fowler, 2010).

Attendance rate. In a study conducted by Lyubartseva & Mallik (2012), attendance was found to be linked directly to academic performance for college students. Lyubartseva and Mallik (2012) assessed academic performance of college students from Southern Arkansas University and Cochise College and found students with a higher attendance rate scored higher on exams and other assignments. Correlation was found between attendance and final grades in each section assessed (Lyubartseva & Mallik, 2012). The research indicated 72.9% of students whose attendance rate was 95% or better received a B or above on the final grade (Lyubartseva & Mallik, 2012).

Attendance and attrition rates have been found to be linked to continuing education student perceptions of belongingness (O'Keefe, 2013). Lack of feelings of belongingness may include student perceptions of rejection and inability to adjust (O'Keefe, 2013). Attrition rate of full-time students is nearly 30% compared to 50% for part-time students (O'Keefe, 2013). Students who come from at-risk groups tend to have higher absenteeism and attrition rates (O'Keefe, 2013). Students are considered to be at-risk when students come from one of the following groups: ethnic minorities, academically disadvantaged, students with disabilities, low socioeconomic status, probationary, and first-generation continuing education students (O'Keefe, 2013).

Student perceptions of belongingness may be improved by universities employing strategies suggested by O'Keefe (2013). The first strategy is to have at least one adult make a connection with each student (O'Keefe, 2013). The connection may give students the perception of being cared for by the university (O'Keefe, 2013). The second strategy universities may employ is teacher-to-student mentorship, which can have a high impact on students trying to obtain similar career paths (O'Keefe, 2013). Last, counseling

centers may be useful in helping students deal with the many changes one endures during the freshman year (O'Keefe, 2013).

   Discipline.   Continuing education student motivation may be critical for effective and successful learning (Halawah, 2011). In a study conducted by Halawah (2011), 232 continuing education students from Taibai University in Saudi Arabia responded to a 30-question Likert survey. The survey included issues relating to motivation of continuing education students toward learning (Halawah, 2011). The results demonstrated teacher personality, teaching methods, and classroom management to be the key factors in motivating continuing education students (Halawah, 2011).

   Teacher personality was found to be the most influential factor in contributing to continuing education motivation (Halawah, 2011). Teacher personality consisted of factors such as enthusiasm, feedback, knowledge of subject matter, and professional attitude (Halawah, 2011). Teaching methods were found to be more effective when a variety of methods were used (Halawah, 2011). Classroom management was linked to motivation of continuing education students when teachers created an open and inviting atmosphere (Halawah, 2011). Motivation of continuing education students was found to be highest when teachers created a structured environment with high expectations (Halawah, 2011).

Mentor Adoption Programs

   In a review of research conducted on school-based mentoring programs, Sparks (2010c) found evidence that school-based mentoring programs have positive effects on students who participate. Positive effects were magnified for at-risk students (Sparks, 2010c). To meet school-based program criteria, the mentoring programs researched were

only conducted during the academic school year, involved one adult mentor per student, and had to include some sort of assessment on the student (Sparks, 2010c). Positive effects were shown in both social and academic outcomes (Sparks, 2010c).

Mentoring programs have shown to impact students who have been maltreated (Sparks, 2010c). Sparks (2010c) analyzed 615 maltreated students from Lorain County, Ohio. Students participated in a School Success Program conducted by Children's Services of Lorain County (Sparks, 2010c) Students who participated in the program improved overall grade point average from 1.74 to 2.56 in the first year (Sparks, 2010c). Students who participated in the School Success Program improved significantly when compared to students who did not participate in the School Success Program (Sparks, 2010c). Male students showed the most overall improvement (Sparks, 2010c).

A study conducted by Fruiht and Wray-Lake (2013) was intended to determine whether the variables (a) type of adult mentor or (b) time when the student began participation in the mentoring program had any significant impact on student academic success. Fruiht and Wray-Lake (2013) analyzed data from 2,409 students who were nationally representative of ethnic diversity. Results showed students who participated in the program displayed higher educational achievement when the mentor was a teacher (Fruiht & Wray-Lake, 2013). Students had the most academic gains when participation was after high school (Fruiht & Wray-Lake, 2013). Results also showed mentors who were kin or community members made a significant impact only on elementary students (Fruiht & Wray-Lake, 2013).

According to Sparks (2010c), mentoring relationships are more effective when teacher-to-student relationships become close, consistent, and enduring. Sparks (2010c)

also found mentoring relationships were difficult to sustain; however, Sparks gave several suggestions to help maintain mentoring relationships. The suggestions included selecting experienced mentors, requiring at least a 12-month commitment, training and giving structure to mentoring programs, monitoring programs and making necessary changes when things go wrong, involving parents, and evaluating programs periodically (Sparks, 2010c).

A longitudinal study was conducted on Israel's largest mentoring program, the Perach (Goldner & Mayseless, 2009). The Perach has been in place since 1974 and places disadvantaged children with university students (Goldner & Mayseless, 2009). In return, university students receive a small grant (Goldner & Mayseless, 2009). The researchers measured results of both protégé and mentor reports from the beginning and end of the planned mentoring session (Goldner & Mayseless, 2009). The study involved quantitative measurement of relationship qualities such as closeness, dependency, and unrealistic expectations (Goldner & Mayseless, 2009). The researchers concluded both social and academic positive progress was made when both protégé and mentor perceived a significant closeness of the relationship (Goldner & Mayseless, 2009). The study also showed adolescent need for dependence on a non-parental adult (Goldner & Mayseless, 2009).

In a review of research data, Avery (2011) concluded students who had a mentor during adolescence gained positive impacts on school-related areas. The impacts were larger when students were considered to be at-risk (Avery, 2011). The students who qualified as at-risk were students who had experienced substantial instability in relationships (Avery, 2011). Some of the school-related impacts included better attitudes

toward school, attendance, graduation rate, college attendance, and grade point average (Avery, 2011). Avery (2011) also concluded mentoring programs had positive impacts on moderating problem behavior such as reduced gang membership, physical fighting, and risk-taking. Additionally, the student's overall psychological well-being improved in areas of self-esteem, lower depression, and stronger ethnic identity (Avery, 2011). Finally, Avery (2011) found students who participated in mentoring programs gained physical benefits such as a decrease in drug use, fewer sexually transmitted diseases, more use of birth control, and an increase in amount of physical activity.

A study on student perceptions of caring teacher behaviors was conducted by Tosolt (2009). Tosolt (2009) intended to examine whether different races viewed caring teacher behaviors in different ways and investigated 825 students from one county in a mid-western state. Students were all in the sixth grade with nearly 29% being non-white (Tosolt, 2009). Tosolt (2009) concluded in order for students to receive benefits of positive teacher-to-student relationships, teachers must care for students with actions common in the students' culture.

A qualitative research study was conducted by Erdem and Aytemur (2008) to examine the level of trust protégés felt for mentors. Researchers conducted an interview-based study in which protégés were asked questions about mentors (Erdem & Aytemur, 2008). The data were examined to develop an understanding of factors that influenced the amount of trust a protégé had in the mentor (Erdem & Aytemur, 2008). Erdem and Aytemur (2008) also examined what factors would cause trust to become stronger and how trust affected the long-term relationship. In order for mentors to establish a high degree of trust with protégés, mentors need to have a high degree of competence in the

subject area, be consistent, be able to communicate, share common interests, and be able to share control (Erdem & Aytemur, 2008). The researchers also found factors which are detrimental to the amount of trust a protégé feels throughout the mentoring program (Erdem & Aytemur, 2008). The factors included university regulations and culture, mentor's personal values, and protégé characteristic differences from the mentor (Erdem & Aytemur, 2008). Protégés chose only certain mentor characteristics as examples of how to conduct business (Erdem & Aytemur, 2008). It was also found, when protégés felt a strong degree of trust, protégés chose a larger number of characteristics to use as examples of how to conduct business (Erdem & Aytemur, 2008).

Research has also shown significant positive benefits for graduate students who participate in a mentoring program (Bernier, Larose, & Soucy, 2005). Bernier et al., (2005) paired 10 Canadian college professors with groups of low-achieving college freshman students to conduct eight bi-weekly sessions of mentoring. The professor was given a personality test before beginning sessions to determine the type of relational style (Bernier et al., 2005). During the eight bi-weekly sessions, both professor and college student were given questionnaires to determine perceptions of program effectiveness (Bernier et al., 2005). The researchers found mentoring programs can have a significant positive impact on academic achievement (Bernier et al., 2005). The impact is affected by personality combinations of the mentor and student (Bernier et al., 2005). The combination which has the most significant impact is mentor-student pairs with opposite personality traits (Bernier et al., 2005). In other words, a mentor with strong attachment values such as dependency, relationships, and closeness works well with students who are dependent on adult mentors (Bernier et al., 2005).

Survey results have also indicated programs such as ACE Mentor Program of America have positive impacts for students (Jones, 2010). The ACE program was created in 1994 with the intent to introduce high school and graduate students to the fields of construction (Jones, 2010). Surveys showed 95% of students who participated felt the program was beneficial (Jones, 2010). The 2009 results showed students who participated in the program had a 97% graduation rate compared to 73% for the overall national average (Jones, 2010). Furthermore, 94% of students who participated in the program went on to enroll in college courses (Jones, 2010). The surveys also showed this program to be especially beneficial to minorities (Jones, 2010). Results revealed 59% of students who participated came from low-income families compared to 41% of students who participated in some type of after-school program nationwide (Jones, 2010).

Mentoring programs are not a permanent solution for children who have experienced neglect or abuse (Spencer, Collins, Ward, & Smashnaya, 2010). Even with prolonged or more frequent contact, substantial improvements were not always found (Spencer et al., 2010). The children who made the most progress were children who had multiple adult mentor contacts (Spencer et al., 2010).

Relationship-Building Interventions

Teacher-to-student interventions. In order to build teacher-to-student relationships, Marzano, (2011) suggested specific strategies. Some of these strategies include involvement of teachers and students together in extra-curricular activities, teachers and students eating lunch together in small groups at least a few times a week, and teachers providing consistent discipline policies with high expectations (Marzano, 2011). The goal of relationship-building strategies is for teachers to become more

connected with students on a personal level (Marzano, 2011). Teachers will be able to improve relationships with at-risk students with a more focused and intense use of relationship-building strategies (Marzano, 2011).

To further emphasize this point, Marzano (2011) noted if teacher-to-student relationships are strong, instructional strategies become even more effective, and when the relationships are weak very few students will receive benefits from the same instruction. Marzano (2011) further stated for teachers to improve positive relationships with students, teachers must work to incorporate relationship-building strategies. The teachers may improve personal relationships with students by being kind, showing interest, advocating for, and never giving up on the students (Marzano, 2011).

Mikami, Gregory, Allen, Pianta, and Lun (2011) found by intervening in teacher-to-student relationships and by providing professional development for teachers, both student motivation and academic performance may be improved. Results also indicated by improving teacher-to-student relationships, student-to-student relationships were improved (CASTL, 2014). This study involved observation of 88 teachers, half of whom received MyTeachingPartner™ professional development with the intent to improve teacher-to-student and students' peer relationships (CASTL, 2014). MyTeachingPartner™ is a system of professional-development supports developed through the Center for Advanced Study of Teaching and Learning (CASTL) at the University of Virginia (CASTL, 2014). The researchers observed and collected self-reported data from 1,423 high school students (CASTL, 2014). Results showed when teacher-to-student relationships were deemed positive by students, student-to-student

relationships improved (CASTL, 2014). The improvements were observed through positive peer interactions (CASTL, 2014).

Teacher-to-parent interventions. Teacher-to-parent relationships have been mandated by the No Child Left Behind Act (2002). This act requires schools to make an effort to keep parents well-informed of student progress (Keller, 2006). Schools are required to provide information such as teacher credentials and child placement in a language program (Keller, 2006). Title I schools are required to create a policy to work with parents and must spend at least 1% of the budget on parent involvement (Keller, 2006). The efforts are aimed at creating an environment to improve teacher-to-parent involvement (Keller, 2006).

Researchers have found probability for academic success is increased for children whose families are involved in the educational process (Whitmire, 2012). Academic improvement is measured on factors such as grades, test scores, enrollment in advanced placement courses, and graduation rates (Whitmire, 2012). Because children whose parents are involved have better social adjustment, fewer behavioral problems are observed (Whitmire, 2012). Academic achievement gains for students from all socioeconomic classes were found when parent involvement was the norm (Whitmire, 2012). The gains were amplified for low-income, African American, and Hispanic students (Whitmire, 2012).

Effective family engagement includes several key components. A sense of trust between parents and teachers will be present (Whitmire, 2012). Communication specifically addresses child performance and possible needs for improvement (Whitmire, 2012). Teachers build parent confidence by providing necessary materials for parents to

be able to help the child (Whitmire, 2012). Also, clear and definite roles for both the school and parents are created and communicated (Whitmire, 2012).

Low-income parents tend to participate less in educational efforts than parents from higher socioeconomic classes (Alameda-Lawson, Lawson, & Lawson, 2010). Low-income parents face demographic, psychological, and school-related obstacles (Alameda-Lawson et al., 2010). School-related obstacles may include scheduling meeting times during the work day or sending books home to read which are on too high of a reading level (Alameda-Lawson et al., 2010). To create a positive teacher-to-parent relationship, teachers may design programs which allow for differences among socioeconomic classes (Alameda-Lawson et al., 2010).

Epstein and Sheldon (2007) collected data on 18 schools. Data collected included attendance data, family involvement data, and attendance intervention data (Epstein & Sheldon, 2007). The data were collected for three consecutive years (Epstein & Sheldon, 2007). Epstein and Sheldon (2007) found a steady increase in attendance and a decrease in chronic absenteeism over the three years when an increased amount of family involvement was incorporated into school activities. The researchers also found increased daily attendance rate and lower student chronic absences when after-school programs were available to parents (Epstein & Sheldon, 2007).

According to Epstein and Sheldon (2007), to improve student success at school, schools should conduct partnership activities with parents in six areas. The first area is to help parents with parenting skills to improve the home environment (Epstein & Sheldon, 2007). Secondly, schools should establish a mode of communication which allows parents an opportunity to respond to schools (Epstein & Sheldon, 2007). The third area is

to provide tutorsing not only for students but also for parents, so parents can help children with homework (Epstein & Sheldon, 2007). Schools should teach specific skills to parents to use while parenting one's child (Epstein & Sheldon, 2007). Fifth, schools need to recruit family members to serve as community representatives on decision-making committees (Epstein & Sheldon, 2007). The last area is schools could use community resources to enhance the education of students (Epstein & Sheldon, 2007).

Teacher-to-parent relationships may be of value to the educational process because of the influence relationships have on classroom management. A study conducted by Public Agenda ("A Call to Order," 2008) indicated 61% of teachers and 63% of parents believe many discipline problems may be prevented by teachers enforcing small rules before large problems occur. Teachers and parents both support the notion just a few students cause most problems ("A Call to Order," 2008). Behavior issues are becoming a problem. Nearly one in three teachers has left the profession because of inability to cope with behavior issues ("A Call to Order," 2008).

According to Molnar (2013), family involvement may be of aid in preventing and coping with behavior issues. Teachers who have knowledge of parental practices better understand what steps to take when behavior problems arise (Molnar, 2013). Families with children who have behavioral problems often exhibit characteristics such as in-consistency, harsh punishments, little positive reinforcement, and lack of problem-solving skills (Molnar, 2013). Teachers who gain insight into parental tendencies increase the probability of effectively handling behavioral issues which may arise with students (Molnar, 2013).

Molnar (2013) suggested teachers should be proactive. Contacting parents before behavioral issues arise may avert many problems (Molnar, 2013). Another step teachers may take is to educate and clearly explain classroom rules to parents (Molnar, 2013). Teachers could also keep parents involved by planning classroom activities at a variety of times to accommodate work schedules (Molnar, 2013). Last, involving parents in planning processes for future school years may aid in consistent classroom management for teachers whom, students may have in the future (Molnar, 2013).

Developing Mentoring Programs

One recent intervention example is the incorporation of social and emotional learning school-based intervention (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). A recent meta-analysis involved comparison of 270,034 elementary to high school-aged children to measure attitudes toward school, learning skills, and academic performance (Durlak et al., 2011). The researchers found an 11-percentile gain in academic growth and improvement in the measurement of attitudes toward school and learning skills (Durlak et al., 2011). The study resulted in five recommendations to make any type of social and emotional learning intervention more successful (Durlak et al., 2011). The recommendations included the following: adults should have high expectations while supporting student work, teachers should be committed to the bonding process with the student, and teachers should use proactive classroom management and maintain an orderly classroom (Durlak et al., 2011).

With a growing amount of data showing school-based mentoring programs improve student academic performance, initiation of mentoring programs is on the rise. Research-based practices have been documented to contribute to successful development

of school-based mentoring programs and include two stages (Komosa-Hawkins, 2009).

When developing a school-based mentoring program, one should begin by addressing

each of the following issues in Stage I (Komosa-Hawkins, 2009). First, seek involvement

from authority figures such as school boards and superintendents (Komosa-Hawkins,

2009). Secondly, identify the mentoring program's purpose and goals (Komosa-Hawkins,

2009). Thirdly, explore and use as many community resources as possible, such as Big

Brothers and Big Sisters (Komosa-Hawkins, 2009). Last, match mentor and mentee to

specific criteria to meet the specified purpose (Komosa-Hawkins, 2009).

Implementation of school-based mentoring programs will be more successful

when meeting the following Stage II criteria (Komosa-Hawkins, 2009). Student

recruitment should strive to be specific to reflect program goals (Komosa-Hawkins,

2009). Mentor recruitment is encouraged to target the entire community resource while

providing mentor training and support to give direction on program goals and mentor

roles (Komosa-Hawkins, 2009). Develop criteria to match mentors and mentees to

provide for the greatest chance of a successful outcome (Komosa-Hawkins, 2009).

Schedule mentoring sessions and provide an agenda with expectations clearly outlined

(Komosa-Hawkins, 2009). Celebrate and recognize any positive outcomes (Komosa-

Hawkins, 2009). Finally, program evaluation is critical in the implementation process

(Komosa-Hawkins, 2009).

Students have a desire for caring and concerned teachers and to be engaged in

learning through non-traditional instructional practices (Marzano, 2013a). Furthermore,

Marzano (2013a) suggested teachers be trained while keeping student perceptions in

mind. The student perceptions may be used as a mentoring tool to obtain both strengths

and weaknesses of novice teachers (Marzano, 2013a). The data obtained would then be used to provide guidelines to prepare professional development for the teacher (Marzano, 2013a).

Variables Which Affect Student Performance

      Students from poverty. Poverty is a worldwide problem which affects children in several different areas of their lives. Poverty affects family functions, development of children, and educational outcomes (Kohler et al., 2013). Poverty contributes to a state of chronic stress for both children and families (Kohler et al., 2013). The chronic stress interferes with children's abilities to adjust both socially and developmentally (Kohler et al., 2013). The lack of ability to adjust places children in a category of at-risk for academic, social, and health problems which undermine educational achievement (Kohler et al., 2013).

      Children living in poverty face obstacles that children living in middle and upper classes do not encounter. Children living in poverty are significantly more likely to suffer from depression or anxiety (Armstrong, 2010). Children living in poverty also have greater incidences of behavioral issues and less positive educational engagement levels (Armstrong, 2010). The same factors also lead children living in poverty to exhibit a higher level of school failure, lower standardized test scores, chronic absenteeism and tardiness, and lower graduation rates than children living in the middle and upper classes (Armstrong, 2010).

      Specifically, Jensen (2013) pointed out major differences between children living in poverty and children living in middle and upper classes. First, children living in poverty are less likely to receive both proper nutrition and sufficient exercise to sustain a

healthy lifestyle (Jensen, 2013). Children who live an unhealthy lifestyle have difficulties listening, concentrating, and learning (Jensen, 2013). Unhealthy lifestyles also affect behavior in children who live in poverty (Jensen, 2013). The children may be suffering from low-blood sugar, which causes low energy, or high-blood sugar, which causes hyperactivity (Jensen, 2013).

Vocabulary is another difference between children living in poverty and children living in middle and upper classes. According to Jensen (2013), children living in the upper class hear three times as many words as children living in the lower class by age four. The amount of words a child hears early in life greatly affects the child's vocabulary (Jensen, 2013). A limited vocabulary reduces chances children living in poverty will be as academically successful as children living in middle and upper classes (Jensen, 2013).

Teachers frequently see students living in poverty as being lazy (Jensen, 2013). This lackluster effort and defeated posture is more of a learned behavior stemming from generations of financial hardships and depressive conditions (Jensen, 2013). Teachers will often observe slouching, slumping, and signs of depression (Jensen, 2013). Many times, the mindset of children living in poverty view future outcomes as being more negative than positive (Jensen, 2013). Children living in poverty have much lower academic expectations (Jensen, 2013). The work ethic and lowered expectations children living in poverty bring to school does not always stem from the home environment and may be altered by school culture (Jensen, 2013).

Children living in poverty often learn using different techniques than children who live in upper and middle classes (Payne, 2009). Children living in poverty often use

situational learning technique in which children learn by reacting to one's individual situation (Payne, 2009). When children living in poverty go to an environment where formalized schooling is introduced, context for the student living in poverty is changed and therefore learning is difficult (Payne, 2009). Children living in poverty learn from relationships, language, and tasks, while students who come from the upper and middle classes learn from laws and symbols (Payne, 2009). Children who live in poverty have learned to be incredible problem solvers just to be able to survive (Payne, 2009).

Even though children who live in poverty are often disadvantaged, many of the students are capable of performing academically at a higher level than expected. The students who live in poverty are frequently stereotyped both individually and by socio-economic class (Chenowith & Theokas, 2013). The stereotyping may cause educators to miss observing strengths and weaknesses of both the individual and culture (Chenowith & Theokas, 2013). When strengths and weaknesses of students who live in poverty are missed, adverse consequences may be the result (Chenowith & Theokas, 2013). The consequences are low expectations, failure to examine school culture which may exacerbate the difficulties, and a misdiagnosis of learning problems for children who live in poverty (Chenowith & Theokas, 2013).

According to Chenowith and Theokas (2013), children who live in poverty are better able to meet academic challenges when teachers alter conventional practices. First, teachers are encouraged to respect both culture and language of the child (Chenowith & Theokas, 2013). Second, teachers should incorporate student background experiences while exposing students to new experiences (Chenowith & Theokas, 2013). Last, teachers need to teach school culture to students (Chenowith & Theokas, 2013). The

three practices are made more effective when teachers are able to perform tasks in a personal manner (Chenowith & Theokas, 2013).

Schools and teachers cannot make up for any inequalities society has produced, but measures can be taken to produce a more equal opportunity for children who live in poverty to succeed academically. One measure to be taken is incorporation of early childhood services (Gorski, 2013). Early childhood interventions have been found to produce positive social and academic outcomes (Gorski, 2013). Students who live in poverty and are able to participate in early childhood services are found to perform better in health, mental health, school, and social aspects (Gorski, 2013).

To investigate interventions which may produce a more equal educational opportunity for students who live in poverty, educators may need to observe educational practices internationally. Morgan (2012) suggested the United States may close the achievement gap of all students by mimicking teacher development programs of countries that outperform the United States on international tests. Some programs used by high-performing countries require beginning teachers to observe a mentor teacher for as many as 20 hours per week (Morgan, 2012). Another teacher development program in Singapore recruits future teachers from the top third of a class and offers the recruits 100 hours of government-paid professional development per year (Morgan, 2012). Teacher development programs in countries which outperform the United States also place high-performing teachers with students who need it most (Morgan, 2012). Beginning teacher placement is typically with students who live in poverty (Morgan, 2012). Furthermore, many of these countries provide government funding for continuing teacher education (Morgan, 2012).

Cuthrell, Stapleton, and Ledford (2010) investigated best practices for preparing teachers to give instruction to students who live in poverty. Since the majority of new teachers are placed with students of high need, better teacher development programs should be designed (Cuthrell et al., 2010). One may develop a more efficient teacher development program by focusing on three areas (Cuthrell et al., 2010). First, instructional design may be improved by providing more and pertinent practicum experiences (Cuthrell et al., 2010). The authors suggested starting in the sophomore year and continuing the practicum with students of high needs (Cuthrell et al., 2010). Second, program design should include development of multiple strategies through modules and resource centers that are specific to teaching students who live in poverty (Cuthrell et al., 2010). Third, instructors should model the strategies throughout the teacher development program (Cuthrell et al., 2010).

Payne (2008) suggested teachers should create an atmosphere of respect with students from poverty to help enrich the teacher-to-student relationship. To create this atmosphere, teachers should examine student backgrounds to determine how the student learns best (Payne, 2008). Teachers should also teach students from poverty school culture, formal school language, and how to ask questions (Payne, 2008). Because students from poverty may not have background experiences to produce mental models of teaching, teachers should provide these students with opportunities to expand their thinking (Payne, 2008). One way to provide opportunities is for the teacher to create relationships with family members of students from poverty and to form a network of support (Payne, 2008).

Research indicates students who come from low socio-economic situations

benefit from social and emotional learning interventions (Iizuka, Barrett, Gillies, Cook, &

Marinovic, 2014). Social and emotional learning interventions have been shown to aid

all students in learning to cope, developing positive self-concept, and learning to socialize

(Iizuka et al., 2014). The outcomes were magnified for students who come from low

socio-economic situations (Iizuka et al., 2014). This study involved application of the

FRIENDS social and emotional learning intervention to students from a low socio-

economic status area (Iizuka et al., 2014). The FRIENDS Programs are a series of

resilience programs developed by Paula Barrett aimed to promote resilience and prevent

anxiety and depression (Iizuka et al., 2014). Results showed the students to have reduced

anxiety and positive reception to the program (Iizuka et al., 2014).

Further studies of social and emotional learning interventions revealed the

interventions may have a greater impact by taking a different approach (Jones &

Bouffard, 2012). Jones and Bouffard (2012) suggested teachers should integrate and

reinforce social and emotional learning skills throughout daily instructional time. This

would allow social and emotional learning lessons to be more time-efficient and would

detract less from the academic curriculum (Jones & Bouffard, 2012). This would also be

a low-cost way to incorporate social and emotional learning as an intervention (Jones &

Bouffard, 2012).

According to Gorski (2013), educators with a greater sphere of influence may

want to incorporate strategies which are larger in scope. The strategies are to create a

relationship with outside agencies such as health clinics and farms, reduce class sizes,

increase health services, and advocate for pre-school (Gorski, 2013). Incorporation of the

strategies will help children living in poverty to participate in school on a more equal

level (Gorski, 2013).

      Teacher effectiveness. McEwan (2002) described 10 traits which effective

teachers portray. First, effective teachers are goal-oriented and mission-driven about

student learning (McEwan, 2002). The effective teacher strives for goals while

maintaining a positive and realistic attitude at all times (McEwan, 2002). This person

shows leadership qualities to create new ways for students to learn (McEwan, 2002).

One of the qualities that cannot be learned is a teacher's ability to be able to multi-task

and stay on schedule (McEwan, 2002). The effective teacher has a style which suits

one's individual personality (McEwan, 2002). This person is able to motivate people and

especially students (McEwan, 2002). The instructional techniques this teacher uses are

effective, because the educator continues to learn new and inventive ways to present the

lessons (McEwan, 2002). The effective teacher also communicates with students on

terms which the student understands (McEwan, 2002). Finally, this teacher is able to

relieve stress at the end of the day (McEwan, 2002). McEwan (2002) suggested effective

teachers demonstrate these qualities the majority of the time.

      Iordache (2014) described teacher competence as consisting of three areas of

competency. The three areas are pedagogical, psychosocial, and managerial competency

(Iordache, 2014). For a teacher to be pedagogically competent, the teacher will

demonstrate knowledge of developmentally appropriate practice (Iordache, 2014). The

teacher will be able to communicate, motivate, and influence students (Iordache, 2014).

The teacher will also possess the ability to evaluate and design instructional activities to

prepare students to be able to self-educate (Iordache, 2014). The psychosocial and

managerial competencies overlap and consist of the ability to organize and create appropriate learning environments (Iordache, 2014). The ability to cooperate with peers and students will be evident, as well as the ability to focus and assume responsibility (Iordache, 2014).

One variable proven to affect student academic performance is teacher effectiveness. A study conducted included value-added analysis by measuring teacher impact on standardized scores over several years (Rebora, 2012). One million students were tracked from fourth grade through adulthood (Rebora, 2012). Students who were taught by teachers with higher value-added measures scored consistently higher on standardized tests (Rebora, 2012). The students, on average, gained $50,000 income after being taught by a teacher with high value-added measures for just one year (Rebora, 2012). Students who were taught by teachers with high value-added measures also showed gains on college graduation rates and savings (Rebora, 2012).

Student math scores were examined over the time period of grades three through six (Sanders & Rivers, 1996 as cited in Barrett, 2011). Teachers, of the examined students, were then divided into equal groups, according to the amount of test score improvement (as cited in Barrett, 2011). The researchers found students who were taught by teachers in the top fifth of effectiveness for three consecutive years scored 50% higher than students who were taught by teachers in the bottom fifth of effectiveness (as cited in Barrett, 2011). Furthermore, students with low and high capabilities and from minority ethnic groups made similar improvement in academic achievement (as cited in Barrett, 2011). First-year teachers were found to be least effective, and students scored best when taught by teachers of the same race (as cited in Barrett, 2011).

Teachers who are considered high-quality have more impact on learning than race, socioeconomic level, or class size (Bushaw & Lopez, 2010). A common characteristic of teachers who are considered high-quality, is the ability to engage students (Bushaw & Lopez, 2010). Many high-quality teachers promote active participation by giving students meaningful learning tasks (Bushaw & Lopez, 2010). Students who are taught by teachers, who promote academic learning time, outperform students who are taught by teachers who do not promote academic learning time (Bushaw & Lopez, 2010).

Another common characteristic high-quality teachers share is teacher efficacy. Teacher efficacy is when teachers share the belief that by working together with other teachers, major improvements of student academic performance will be made (Derosier & Soslau, 2014). The collective teacher efficacy of schools creates an environment in which students may succeed (Derosier & Soslau, 2014). Studies have shown collective teacher efficacy to be a more reliable predictor than student demographics (Derosier & Soslau, 2014).

Effective teachers have high expectations for students (Speigel, 2012). Speigel (2012) gave six steps educators should take to help promote high expectations in the classroom. The educator should watch students to discover more about how each student prefers to engage (Speigel, 2012). By doing this the teacher will be able to observe what each student is capable of doing (Speigel, 2012). Second, the educator should listen to understand what motivates each student; this listening may reveal how the student views the educator and his or her classmates (Speigel, 2012). Third, the educator should engage and communicate with the students but should not give advice or opinions (Speigel,

2012). Fourth, teachers should experiment with how they react to a student's actions to form a process of communication that child prefers (Speigel, 2012). Fifth, time should be spent each week outside of the educator's role as a teacher to form a relationship that is real to the student (Speigel, 2012). After the educator learns student interests, the teacher may view school through student eyes and design relevant instruction (Spiegel, 2012). Last, teachers should reflect on previous educational experiences and model instruction on what has worked in the past (Spiegel, 2012).

Further study on teacher expectations was conducted by Intxausti, Etxeberria, and Joaristi (2014). This study group consisted of 302 immigrant families who had children enrolled in public schools (Intxausti et al., 2014). The researchers found parents have higher expectations than teachers for immigrant students enrolled in public schools during the first few months of attendance (Intxausti et al., 2014). However, teachers typically influenced parental expectations and parental expectations were often lowered to coincide with teacher expectations (Intxausti et al., 2014). The study involved analysis of teacher and parent expectations such as formal learning, professional level, language achievement, and social relationships (Intxausti et al., 2014).

In a study conducted by Collie, Shapka, and Perry (2011), results showed teacher job satisfaction, teacher efficacy, and teacher sense of stress were affected by the teacher perception of the social-emotional climate of the school in which the teacher worked. The researchers interviewed 664 elementary and secondary teachers in British Columbia and Ontario, Canada (Collie et al., 2011). It was found teacher perceptions of student motivation and behavior had the most impact on teacher performance (Collie et al.,

2011). Both student motivation and behavior were able to predict teacher stress, job-related satisfaction, and teaching efficacy (Collie et al., 2011).

Jennings, Frank, Snowberg, Coccia, and Greenberg (2013) found teacher efficacy to be directly influenced by stressful situations. The study involved comparison of a group of 50 teachers who participated in a professional development program designed to educate teachers how to reduce stress to improve the classroom learning environment (Jennings et al., 2013). Results showed teachers who participated in the professional development to improve significantly in areas such as overall well-being, efficacy, burnout, and time-related stress (Jennings et al., 2013). Results also indicated student learning improved as teacher stress decreased (Jennings et al., 2013).

Steps can be taken to improve the overall quality of teachers in the educational field. Schools may create a value-added system to measure teacher quality (Barrett, 2011). The value-added system should use more than test scores as teacher measurement and may include student surveys and supervisor observations (Barrett, 2011). Supervisors also should promote professional development for beginning teachers as well as monitor ethical behavior of all teachers (Barrett, 2011).

According to Dessoff (2012), teacher quality may be improved when three commitments are made by teachers and administration. Commitment to individual student feedback has been found to improve student academic performance (Dessoff, 2012). Feedback may be verbal or nonverbal, but must be specific and should include both academic and nonacademic elements (Dessoff, 2012). The second commitment involves administrators focusing teacher evaluation systems on improvement of quality of teachers (Dessoff, 2012). Historically, evaluation systems have focused on

management and practice, not necessarily on effectiveness of teaching strategies (Dessoff, 2012). Lastly, teachers must focus on building student background knowledge (Dessoff, 2012). Background knowledge differs greatly depending on student demographics and culture (Dessoff, 2012).

Curriculum. Curriculum is the subject or topic being studied in school. Many types of curriculum have been documented. Research has shown curriculum alignment to be a key component to improving academic performance (Squires, 2012). When taught, written, and tested curriculum all align, student achievement has been shown to increase significantly (Squires, 2012). Taught curriculum refers to instruction students actually receive (Squires, 2012). Written curriculum are the written standards which guide instruction (Squires, 2012). For best results on state assessments, written curriculum should reflect state standards (Squires, 2012). Tested curriculum refers to state, school, and teacher-made assessments (Squires, 2012). Aligning taught, written, and tested curriculum not only allows students to perform well on state assessments but also engages student interests (Squires, 2012).

Curriculum alignment is a significant obstacle for schools (Squires, 2012). According to research, "Lack of excellence in American schools is not caused by ineffective teaching, but mostly by misaligning what teachers teach, what they intend to teach, and what they assess as having been taught" (Squires, 2012, p. 133). According to Squires (2012), alignment of curriculum may be difficult for some schools to obtain. Schools that want to create district standards find aligning written and taught curriculum to tested curriculum difficult (Squires, 2012). Because of the difficulty some schools have aligning curriculum, Marzano compiled state and national standards into a book called

"*Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education*" (Squires, 2012). Marzano's compilation allows comparison of curriculums to check for alignment to state and tested standards (Squires, 2012). Schools may also check textbook company alignment by using Marzano's tool (Squires, 2012).

Researchers have found when taught curriculum is aligned with tested curriculum, student test scores improve (Squires, 2012). The improvements were found to be true for both high- and low-aptitude students (Squires, 2012). Low-aptitude students showed more significant gains than did high-aptitude students on academic performance when taught curriculum aligned with tested curriculum (Squires, 2012). Furthermore, it was found when taught, written, and tested curriculums were aligned and combined with a teach, test, re-teach, test model, even more significant gains in academic improvement were found (Squires, 2012).

School districts that wish to improve student academic progress may align district curriculum to state standards and assessments. Districts may also design curriculum with tasks in place, so measurement of each objective may be obtained (Squires, 2012). To ensure written curriculum is aligned with taught curriculum, districts may design a management system (Squires, 2012). Last, districts need to assess curriculum by using common assessments throughout the district (Squires, 2012).

The implementation of the Common Core State Standards (CCSS) has been an ongoing process to improve and align curriculum over the past several years (DiGisi, 2013). DiGisi (2013) introduced six steps to help with the implementation which could aid with implementation of any alternative curriculum. First, compare the new curriculum with the current district curriculum to determine what changes need to be

made (DiGisi, 2013). Second, communicate with teachers to determine what professional development may be needed to incorporate the new curriculum (DiGisi, 2013). Next, communicate to all stakeholders the rationale for implementation of the new curriculum (DiGisi, 2013). Then address the framework of the new curriculum and align to district schedules and pacing guides (DiGisi, 2013). Subsequently, communicate with teachers the possibility that updated instructional strategies may be needed to teach the new curriculum (DiGisi, 2013). Finally, continually evaluate and critique the new curriculum to determine if any further change is needed (DiGisi, 2013).

Summary

Multiple research studies have been conducted on teacher-to-student relationships. Researchers have shown the incorporation of teacher-to-student relationships affects academic performance to varying degrees (Barile et al., 2012). Teacher-to-student mentorships can be an effective way to build relationships between teachers and students (Sparks, 2010c). The teacher-to-student relationship was not found to be the only factor which may affect academic performance. Poverty, teacher effectiveness, and curriculum were also found to affect academic performance (Payne, 2008). Research methodology to determine effects of the mentor adoption program at Elementary School A for 2013-2014 school year will be outlined in Chapter Three.

Chapter Three: Methodology

The primary investigator studied effects a teacher-to-student relationship-building mentor adoption program had on academic performance of students from Elementary School A. Academic performance was quantitatively measured and compared between a purposive sample group of students who participated in a mentor adoption program in Elementary School A for the 2013-2014 school year and a stratified sample group of students who did not participate in the mentor adoption program. The stratified group of students had similar demographics and was qualified to participate in the mentor adoption program. Academic performance was measured through student MAP assessment scores, attendance rates, and discipline referrals. A parametric t-test of statistical significance was used to determine whether there is a statistically significant difference between before and after academic progress for the means of the two sample groups (Fraenkel et al., 2015).

According to Fraenkel et al. (2015), case study research should be used to look for any noticeable patterns or regularities the particular variables may have created. The case study method of research was chosen for this research project to provide data to be able to measure the effects of a mentor adoption program on student performance in academics, attendance, and discipline issues. The population, with the independent variable of participation in the mentor adoption program, had already been established, and therefore, the variable did not have to be administered at a later time. For this reason, archival and perceptual data were used to measure results.

Problem and Purpose Overview

Efforts for improvement are a continual task for schools around the United States. A multitude of researchers have suggested building positive teacher-to-student

relationships and mentoring programs enhances school improvement efforts (Reichert & Hawley, 2013). Elementary School A initiated several research-based strategies during the 2013-2014 school year. Included in the research-based strategies was initiation of a mentor adoption program. In order to sustain improvement efforts, Elementary School A must attempt to measure effectiveness of incorporation of each strategy. The assessment of available data was necessary for the primary investigator to determine effects of the mentor adoption program on student performance within Elementary School A.

The purpose of this research was to examine differences between academic performance of students who participated in the mentor adoption program and students who did not participate in the mentor adoption program. The researcher quantitatively measured the differences in MAP scores, attendance rates, and discipline referrals of students who participated in a mentor adoption program to students who did not participate in a mentor adoption program in Elementary School A during the 2013-2014 school year. The study also involved examining perceptual data obtained through an interview process of teachers who participated in the mentor adoption program. By statistically measuring impacts of adult mentoring on student performance, the use of research data better informed administrative decisions to direct efforts for school improvement.

Research questions. The following research questions guided the study**:**

1. Is there a significant difference in performance of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program on the Missouri Assessment Program (MAP) in English language arts (ELA) and mathematics (MA)?

H1₀: There is no significant difference in the performance of students who

participated in a mentor adoption program and students who did not participate in a

mentor adoption program on the Missouri Assessment Program (MAP) in English

language arts (ELA) and mathematics (MA).

2. Is there a significant difference in the attendance rate of students who

participated in a mentor adoption program and students who did not participate in a

mentor adoption program?

H2₀: There is no significant difference in the attendance rate of students who

participated in a mentor adoption program and students who did not participate in a

mentor adoption program.

3. Is there a significant difference in the number of discipline referrals of students

who participated in a mentor adoption program and students who did not participate in a

mentor adoption program?

H3₀: There is no significant difference in the number of discipline referrals of

students who participated in a mentor adoption program and students who did not

participate in a mentor adoption program.

4. What is the perception of the mentor adoption program effectiveness of

teachers who participated in the mentor adoption program?

Research Design

Elementary School A dispersed APR data to the Elementary School A leadership

team to research possible causes of low attendance, poor super-subgroup performance on

the MAP assessment, and high discipline referrals. The team consisted of the elementary

principal, curriculum director, and three lead teachers. The leadership team recognized

pinpointing causes would help in developing a school improvement plan which could be successful. The research of possible causes primarily included disaggregation of Missouri Department of Elementary and Secondary Education (MODESE) supplied data and classroom-generated assessment data. The research data were disaggregated during meetings with both the leadership team and entire staff of Elementary School A.

As the Elementary School A leadership team researched data, it was discovered the majority of super-subgroup students who scored low on MAP assessments correlated with students who had attendance rates below 90% and had a high number of discipline referrals. While researching possible improvement plan options, the leadership team found an economical and beneficial plan to set in motion would be to improve relationships between teachers and students. Research has indicated positive teacher-to-student relationships improve several outcomes which include academic, behavioral, physical, social, and emotional areas (Yonezawa et al., 2012). Outcomes were found to be amplified for both low-income and minority students (Payne, 2008). The demographic make-up of Elementary School A super-subgroup makes the relationship-building process important.

To further emphasize this point, research by Marzano (2011) noted if teacher-to-student relationships are strong, instructional strategies become even more effective, and when relationships are weak, few students receive benefits from the same instruction. Marzano (2011) elaborated on this point to state for a teacher to improve positive relationships with students, teachers may build personal relationships by never giving up on students and by being kind, showing interest, and advocating for students.

The leadership team proposed to focus Elementary School A's energy on building better relationships between staff and students, as well as with student families. The leadership team chose an alternative with the understanding no program or instructional tool is a perfect solution to poor academic performance. The leadership team's research displayed a weakness of motivating students within Elementary School A. The leadership team proposed to teachers to raise expectations for both teachers and students with prioritized attention to be paid to super-subgroup students.

To implement improvement plans, the leadership team designed a data booklet for the entire staff. The booklet included MAP and program assessment scores, attendance rate, as well as discipline referral data for each student in each particular class. The team included data from each year the students had been tested. The team then distributed data to each teacher and instructed them to select at least two and not more than five students to adopt. The teachers were to use the data booklet to select students who were struggling with one or more measureable indicator. The measureable indicators analyzed were MAP performance, attendance rate, and discipline referrals. The procedures and rules for adoption were explained during a faculty meeting. The procedures were to build relationships and demonstrate to students the staff cares about each student. The Elementary School A leadership team also required teachers to call parents each time a student missed class and to send home a weekly newsletter with information such as homework assignments and upcoming events. The measures were taken to build better teamwork and relationships among staff, students, and parents.

For this research project, the case study research method was chosen to quantitatively measure effectiveness of the aforementioned mentor adoption program.

The case study method was chosen, because the researcher intended to gain insights of effects of a mentor adoption program on student performance in academics, attendance, and discipline issues. The population, with the independent variable of participation in the relationship-building program, had already been established, and therefore, the independent variable did not have to be administered at a later time (Fraenkel et al., 2015). For this reason, only archival and perceptual data were used to measure the results.

The selection of the two groups in this research study, which had the difference of the independent variable, set the basis for the case study. The independent variable was participation in the mentor adoption program. The comparison groups were then quantitatively compared by measuring dependent variables of academic achievement, attendance rates, and discipline referrals (Gay, Mills, & Airasian, 2012).

The primary investigator also analyzed perceptual data of teachers who participated in the mentor adoption program. The primary investigator had a data collector randomly select one teacher from each grade level, special education department, special class department, and the Title I department. Each of the randomly selected teachers was interviewed by the data collector. The data collector recorded and transcribed the interviews. The primary investigator then analyzed and coded the transcription to determine the teacher's perception of the mentor adoption program.

Population and Sample

The study population for this research was Elementary School A students in grades three through six located in south-central Missouri. Elementary School A received an Annual Progress Report score of 80.7% from the Missouri Department of

Elementary and Secondary Education for the school year ending in 2013. The study

population was broken into three sections per grade level. Elementary School A has

observed a downward trend in number of students scoring proficient or advanced on the

MAP assessment in communication arts, math, and science over the past three years.

Over the same time period, the number of students scoring below basic has risen. Also

during the time period, Elementary School A students who averaged at or above 90% in

attendance has dropped. Elementary School A has also observed a rise in discipline

referrals. For these reasons, the Elementary School A leadership team designed an

improvement plan which focused on teacher-to-student relationship building.

Elementary School A averaged 382 students for the school years running from the

2007-2008 school year through the 2012-2013 school year. Of surrounding schools,

Elementary School A has the highest percentage of students with an individualized

education plan at 18.73% of students. Elementary School A also has an above average

population, nearly 70%, of students who receive free or reduced lunches.

Additional data considered in preparing the Elementary School A improvement

plan included Acuity, Reading Plus, and DIBELS data. The data were collected from the

2010-2011 school year through the 2012-2013 school year. The additional data were

disaggregated and researched in-depth to find correlations between the additional data

and APR assessment, attendance rate, and discipline referral data.

For this research, a random sample group of 30 to 55 students was chosen from a

purposive population. The purposive population consisted of 55 students who

participated in a mentor adoption program at Elementary School A during the 2013-2014

school year. The random sample was chosen by placing the purposive population in

alphabetical order and then applying a de-identifying number to each name. The primary investigator then randomly selected 30 to 55 students from the de-identified list (Fraenkel et al., 2015).

For comparative purposes a stratified sampling group of 30 to 55 students was selected of students who did not participate in the mentor adoption program. A stratified sample group was selected with the same proportion of demographic variables as the random sample group. The number of male to female, number of students on free or reduced lunch, and number of students with an Individualized Education Plan (IEP) was matched to proportions within the sample group from the purposive population. The stratified sample group was also listed in alphabetical order and then assigned a de-identifying number before the selection process was administered. For research purposes no human participants were recruited, only archival data was used. All data collected were de-identified.

To ensure a reliable stratified sample group, the proportions of male to female, free and reduced price meal plan, and IEP students from the random purposive sample group was analyzed. The stratified sample group was placed into corresponding demographic categories and then randomly selected to meet exact demographic proportions to obtain as reliable data as possible.

The perceptual data were obtained from a population of 36 teachers who participated in the mentor adoption program. The participating teachers have a range in years of experience from one to 38 years. Both male and female teachers participated in the mentor adoption program. To ensure data validity the participating teachers were

randomly selected and interviewed by a data collector. The data collector also transcribed the recorded interviews before the primary investigator had access to the data.

Variables in the Study

      Independent variable. According to Fraenkel et al., (2015), the independent variable is a variable researchers study to collect data on effects the particular variable has on other dependent variables. For this research study, the independent variable was the mentor adoption program. Elementary School A chose a research-based plan to improve student performance. A part of the plan was implementation of a mentor adoption program. The mentor adoption program was designed to encourage positive relationship-building between teachers and students. Researchers have shown mentor adoption programs to be a valuable tool to create an atmosphere where students may improve academic performance, attendance rate, and reduce discipline issues (Sawchuck, 2009).

      The application of the independent variable, mentor adoption program, was applied during the 2013-2014 school year. Elementary School A initiated a plan in which 55 students were adopted by teachers. The teachers were asked to inform parents of the 55 students of the process. The mentor adoption program's intention was to incorporate a larger amount of time Elementary School A's teachers spent with students on a more personal level. For the mentor adoption program purposes, teachers were asked to adopt students who demonstrated characteristics of an at-risk student. The at-risk characteristics included low academic achievement, low attendance rate, tardiness, and high amount of discipline referrals. The teachers were instructed to participate in a variety of bonding activities with adopted students. The activities involved more one-on-

one time for teachers and students. The activities included but were not limited to times such as eating lunch or breakfast, students dropping by during teachers' prep hours, individual encouragement from teachers on assignments, and tutoring.

Dependent variables. For this study, the primary investigator assessed data to determine effects of the implementation of the independent variable, mentoring program, on multiple dependent variables (academic achievement, attendance rate, and discipline referrals). Multiple dependent variable assessment gave the primary investigator and Elementary School A an in-depth vision of effects the mentoring program incorporated by Elementary School A during the 2013-2014 school year had on overall academic performance (Bernhardt, 2009).

The first dependent variable to be assessed was academic achievement. The primary investigator analyzed achievement data and compared results from adopted students to a randomly selected purposive sample group. The academic achievement dependent variable was chosen, because the mentoring program was initiated by Elementary School A as a tool to improve overall student performance. The mentoring program targeted students whose 2012-2013 MAP data did not meet Elementary School A expected outcomes. According to Anderson, Nelson, Richardson, Webb, and Young (2011), teachers who create a social network and develop positive relationships with students will promote high academic achievement. Measuring the dependent variable, academic achievement, gave Elementary School A insight as to whether the mentoring program was successful in regards to student academic improvement.

The second dependent variable assessed was student attendance rate. The primary investigator analyzed attendance rate data and compared results from adopted students to

a randomly selected purposive sample group. The attendance rate dependent variable

was chosen, because according to Sparks (2012), chronic absenteeism is a reliable

predictor to future student achievement. The U.S. Department of Education's Early

Childhood Longitudinal Study indicated kindergarteners who were chronically absent

scored lower on reading and math test (Sparks, 2012). Furthermore, the same students

continued to score lower in reading and math tests in the fifth grade (Sparks, 2012).

Chronic absenteeism was also found to be a reliable indicator for future student drop-out

rates (Sparks, 2012). Measurement of the dependent variable, attendance rate, gave

Elementary School A data to effectively evaluate the mentor adoption program

incorporated during the 2013-2014 school year.

The last dependent variable to be assessed was number of discipline referrals.

The primary investigator analyzed data on number of discipline referrals and compared

results from the adopted students to a randomly selected purposive sample group. The

dependent variable, number of discipline referrals, was chosen because according to

Johnson and Hannon (2014), internal-external locus of control is a reliable indicator of

academic achievement. Students with lower degrees of this locus of control tend to have

a higher amount of discipline referrals (Johnson & Hannon, 2014). Therefore,

measurement of the dependent variable, number of discipline referrals provided reliable

data to evaluate the mentor adoption program effect on student performance

improvement in Elementary School A during the 2013-2014 school year.

The selection of the dependent variables academic achievement, attendance rates,

and number of discipline referrals provided enough data to allow schools a cross-

sectional view. The primary investigator used multiple measures of dependent variables

to obtain a more vivid picture of effects of the mentoring program. According to

Bernhardt (2009), measures of multiple data allow the primary investigator a better

understanding of where the school is and of some of the possible causes of the results.

The multiple data also provided a better understanding of results, both positive and

negative (Bernhardt, 2009). Finally, using multiple data sources helped predict future

outcomes, which helped prevent failure and ensure success (Bernhardt, 2009).

Instrumentation

This study involved two instruments for use of obtaining data to quantitatively

measure academic achievement for students who participated in a mentor adoption

program. The first instrument was the Missouri Assessment Program. Elementary

School A receives MAP assessment data yearly from the Missouri Department of

Elementary and Secondary Education. The second instrument used was the Student

Information System, Kindergarten through Twelfth Grade (SISK12). The SISK12 is the

student information system used by Elementary School A. The student information

system keeps a detailed record for both attendance rate and number of discipline referrals.

Academic measurement. The instrument used to measure the effect of the

mentor program on student academic achievement was the Missouri Assessment

Program. The state of Missouri requires the MAP to be administered by public schools

during an assessment window each spring (MODESE, 2015). The assessment data are

then made available to schools for disaggregating purposes in late summer (MODESE,

2015). For this research, data collected from the MAP results were quantitatively

measured to assess what effects the mentor adoption program had on student

performance.

Attendance rate measurement. The instrument used to measure attendance rate was the SISK12 student information system used by Elementary School A. The information system allowed the primary investigator to extract and compare attendance rate data of students who participated in the mentor adoption program to students who did not participate in the mentor adoption program. The results were then quantitatively measured to assess the effectiveness of the mentor adoption program on student performance.

Discipline referrals measurement. The instrument used to measure the number of discipline referrals was the SISK12 student information system. The student information system allowed the primary investigator to obtain a detailed account of the number of office discipline referrals. The primary investigator then quantitatively measured results to assess effects of the mentor adoption program on student performance. The primary investigator compared results of students who participated in the mentor adoption program to students who did not participate in the mentor adoption program.

Perceptual data measurement. The perceptual data were coded by the primary investigator using a numerical coding process. The primary investigator numerically coded each transcribed answer to interview questions based on key words and phrases provided. The numerical codes gave the primary investigator reliable data to analyze to determine the teacher perception.

Data Analysis

After the groups were selected, archival data from each group were retrieved and examined. Student MAP scores, attendance rates, and the number of discipline referrals

were collected from the 2012-2013 school year to establish a baseline. Then, the primary

investigator collected student MAP scores, attendance rates, and number of discipline

referrals from the 2013-2014 school year. The data were then compared and statistically

analyzed using a *t*-test (Fraenkel et al., 2015). Perceptual data were used to determine

participating teacher perceptions.

Ethical Considerations

Ethical research behavior was a priority for the primary investigator. Data from

the case study would become invalid if any biased or manipulated data were used to

measure results. Because the primary investigator served as an elementary administrator

for Elementary School A and to ensure confidentiality and anonymity, a data collector

extracted archival data for disaggregation for research purposes. All research data were

collected and de-identified by a data collector using a number code on the extracted data.

No human participant use was necessary; only archival data were used for research

purposes. The research conducted adhered to all National Institute of Health Office of

Extramural Research guidelines. The web-based "Protecting Human Research

Participants" training course was completed, and the certificate can be found in Appendix

A.

Summary

The primary investigator employed a case study research method to measure

effects of a mentor adoption program initiated in Elementary School A during the 2013-

2014 school year. The effects of application of the independent variable, mentoring

program, were measured by comparing differences of MAP results, attendance rates, and

number of discipline referrals between a purposive group of students who participated in

the mentor adoption program and a stratified group of students who did not participate in the mentor adoption program. Teacher perceptions were elicited to determine the effectiveness of the mentor adoption program. The primary investigator took measures to de-identify selected students and interviewed teachers to ensure confidentiality and anonymity.

Chapter Four includes discussion of data results of the case study. The data results from students who participated in the mentor adoption program are compared to the data results from students who did not participate in the mentor adoption program. Perceptual data are also shared. The statistical significance of data are analyzed and documented in Chapter Four. The results will be used by the primary investigator to make better-informed future school improvement decisions.

Chapter Four: Results

Teacher-to-student relationships have been hypothesized to be a key factor in providing a quality education to students. Past studies have provided both quantitative and qualitative data to measure the impact of teacher-to-student relationships (Allen et al., 2013). This researcher's goal was to determine if the mentor adoption program was successful by using the case-study method of research to measure the impact and effect of the particular mentor adoption program initiated by Elementary School A. The mentor adoption program was used as a strategy by Elementary School A to enhance teacher-to-student relationships and was implemented with the goal to improve student academic performance.

The purpose of this case-study was to better understand the impact the mentor adoption program had during the 2013-2014 school year. The first phase of data collection was to retrieve and analyze archival data. The archival data retrieved by a data collector consisted of 2012-2013 and 2013-2014 Missouri Assessment Program scale scores for both English language arts and math, 2012-2013 and 2013-2014 attendance rates, as well as 2012-2013 and 2013-2014 discipline referrals. The primary investigator compared and statistically measured the difference in results of the randomly selected group of 43 adopted students to the randomly selected stratified group of 43 students who were not adopted during the 2013-2014 school year. The second phase of data collection was to collect perceptual data. To do this, the primary investigator analyzed interview data collected by a data collector. The persons interviewed were a randomly selected set of 10 teachers who participated in the mentor adoption program during the 2013-2014

school year as mentors. The primary investigator coded the perceptual data which may lend to an understanding for improvement of the mentor adoption program.

A data collector randomly selected 43 students from a purposive group of students who participated in the mentor adoption program during the 2013-2014 school year. The comparison group was randomly selected using the stratified sampling method. The stratified sampling method was used to reduce the opportunity for demographics to play a role in the outcome of the results (Payne, 2008). Both groups contained 43 third- through sixth-grade students. The 43 students consisted of 12 sixth graders, 14 fifth graders, 10 fourth graders, and seven third-grade students. Twenty-two males participated compared to 21 females. For validity purposes, each grade level was also matched perfectly in regards to male-female numbers. Within the selected groups, 67% of the students participated in the free and reduced priced meal plans. The majority of the 67% receive free lunches. The last criteria the primary investigator used to stratify the groups was whether or not the student was on an individualized education plan. Only six students in each group receive an IEP. All four criteria used match closely to the average percentages of the entire population of Elementary School A.

Research questions. The following research questions guided the study:

1. Is there a significant difference in performance of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program on the Missouri Assessment Program (MAP) in English language arts (ELA) and mathematics (MA)?

$H1_0$: There is no significant difference in the performance of students who participated in a mentor adoption program and students who did not participate in a

mentor adoption program on the Missouri Assessment Program (MAP) in English

language arts (ELA) and mathematics (MA).

 2. Is there a significant difference in the attendance rate of students who

participated in a mentor adoption program and students who did not participate in a

mentor adoption program?

 $H2_0$: There is no significant difference in the attendance rate of students who

participated in a mentor adoption program and students who did not participate in a

mentor adoption program.

 3. Is there a significant difference in the number of discipline referrals of students

who participated in a mentor adoption program and students who did not participate in a

mentor adoption program?

 $H3_0$: There is no significant difference in the number of discipline referrals of

students who participated in a mentor adoption program and students who did not

participate in a mentor adoption program.

 4. What is the perception of the mentor adoption program effectiveness of

teachers who participated in the mentor adoption program?

Quantitative Results

 Academics. For question number one, the primary investigator examined

whether a difference existed between the performance of students who participated in a

mentor adoption program and students who did not participate in a mentor adoption

program on the Missouri Assessment Program (MAP) in English language arts (ELA)

and mathematics (MA)?

The primary investigator first analyzed and statistically compared 2012-2013 to 2013-2014 MAP data of the 43 students who participated in the mentor adoption program. Results show a statistically significant difference in student ELA scores before and after participation in the teacher-student mentor adoption program. Results of the paired-samples *t*-test show the mean score before adoption for ELA 2012-2013 ($M = 644.05$, $SD = 25.11$) and the mean score after adoption for ELA 2013-2014 ($M = 658.74$, $SD = 24.092$) at the 0.05 level of significance; $t(42)=5.16$, $p=0.00$. On average, student's mean scale scores on the MAP ELA test scores increased 14.69 points after adoption.

Table 1 displays the results for a paired samples *t*-test of ELA scores for those students who participated in the mentor adoption program. There was a significant difference in student mean scale scores before and after the teacher-student mentor adoption program; $p=0.00$.

Table 1

Paired Samples Statistical t-test of Adopted Mentees' MAP ELA Scores Before and After Adoption

		M	*N*	*SD*	*Correlation*	*t*	*df*	*p*
Pair 1	ELA 12-13	644.05	43	25.109	.7132	5.16	42	0.000
	ELA 13-14	658.74	43	24.092				

Note. Significant at the $p < 0.05$ level.

Further analysis reveals a significant difference in student MA scores before and after participation in the teacher-student mentor adoption program. Results of the paired-samples *t*-test show the mean score before adoption for MA 2012-2013 ($M=629.05$,

SD=32.36) and the mean score after adoption for MA 2013-2014 (*M* =646.05, *SD* =35.02) at the 0.05 level of significance; $t(42)$=4.90, p=0.00. On average, student's mean scale scores on the Missouri Assessment Program MA test increased 17.0 points after adoption.

Table 2 shows the results for a paired samples *t*-test of MA scores for those students who participated in the mentor adoption program. There was a significant difference in student mean scale scores before and after the teacher-student mentor adoption program; p=0.00.

Table 2

Paired Samples Statistical t-test of Adopted Mentees' MAP MA Scores Before and After Adoption

		M	*N*	*SD*	*Correlation*	*t*	*df*	*p*
Pair 2	MA 12-13	629.05	43	32.359	0.750	4.899	42	0.000
	MA 13-14	646.05	43	35.022				

Note. Significant at the $p < 0.05$ level.

The primary investigator then used the same process to determine the control group differences in Missouri Assessment Program ELA and MA scores from 2012-2013 to 2013-2014 school years. As seen in Table 3, there was not a statistically significant difference in student ELA scores before and after participation for the control group. Results of the paired-samples *t*-test show the mean score for ELA 2012-2013 (*M*=656.49, *SD*=42.780) and the mean score after adoption for ELA 2013-2014 (*M* =654.79, *SD* =44.691) at the 0.05 level of significance; $t(42)$=0.39 p=0.70. Table 3 shows the results

for a paired samples *t*-test of ELA scores for the control group. On average, non-adopted

students' mean scale scores on the Missouri Assessment Program ELA test scores

decreased 1.61 points from 2012-2013 to 2013-2014.

Table 3

Paired Samples Statistical t-test for the Control Group's (Non-Adopted Students) MAP

ELA Scores Before and After Adoption

		Mean	*N*	*SD*	*Correlation*	*t*	*df*	*Sig*
Pair 3	ELA 12-13	656.40	43	42.780	0.810	0.389	42	0.699
	ELA 13-14	654.79	43	44.691				

Note. Significant at the $p < 0.05$ level.

A statistical examination was then conducted to determine whether there existed a

significant difference in student MA scores before and after participation for the non-

adopted control group. Results of the paired-samples *t*-test show the mean score for MA

2012-2013 ($M = 651.53$, SD = 51.20) and the mean score for MA 2013-2014 ($M =$

666.28, $SD = 54.55$) at the 0.05 level of significance; $t(42)=4.73$, $p=0.00$. Table 4 shows

the results for a paired samples *t*-test of MA scores for the control group. On average,

non-adopted students' mean scale scores on the Missouri Assessment Program MA test

scores increased 14.75 points from 2012-2013 to 2013-2014.

Table 4

Paired Samples Statistical t-test for the Control Group's (Non-Adopted Students) MAP

MA Scores Before and After Adoption

		Mean	N	SD	Correlation	t	df	Sig
Pair 4	MA 12-13	651.53	43	51.197	0.927	4.734	42	0.000
	MA 13-14	666.28	43	54.547				

Note. Significant at the $p < 0.05$ level.

Attendance rate. In response to research question two, the primary investigator

conducted paired-samples *t*-tests (see Table 5 and Table 6) to examine whether a

statistically significant difference existed in attendance rate of students who participated

in a mentor adoption program compared to students who did not participate in a mentor

adoption program. First, the primary investigator compared student attendance data of

students who participated in the mentor adoption program from 2012-2013 to 2013-2014

school years (see Table 5). Students who participated in the mentor adoption program

had an average daily attendance of 94% for the 2012-2013 school year and 96% for the

2013-2014 school year. As measured by a statistical significance dependent on the value

of $p<0.05$, $p=0.07$ is not a significant difference in attendance.

Table 5

Paired Samples Statistical t-test for Adopted Mentees' Attendance Before and After

Adoption

	Mean	N	SD	Correlation	t	df	Sig
Attendance 2012-2013	0.94	43	0.056	0.518	1.843	42	0.072
Attendance 2013-2014	0.96	43	0.045				

Note. Significant at the $p < 0.05$ level.

As seen in Table 6, students who did not participate in the mentor adoption

program had an average daily attendance of 95% during the 2012-2013 school and 95%

for the 2013-2014 school year. As measured by a statistical significance dependent on

the value of $p<0.05$, $p=1.00$ is not a significant difference in attendance. However,

students who participated in the mentor adoption program did increase 2% in attendance

to bring them one percentile higher in average (96%) than the students who did not

participate in the mentor adoption program (95%).

Table 6

Paired Samples Statistical t-test for the Control Group's Attendance Before and After

Adoption

	Mean	N	SD	Correlation	t	df	Sig
Attendance 2012-2013	0.95	43	0.0386	.493	0.000	42	1.000
Attendance 2013-2014	0.95	43	0.0452				

Note. Significant at the $p< 0.05$ level.

Discipline referrals. In response to question number three, the primary

investigator conducted paired-samples *t*-tests (see Table 7 and Table 8) to analyze

whether a statistically significant difference existed in the number of discipline referrals

of students who participated in a mentor adoption program compared to students who did

not participate in a mentor adoption program for the 2012-2013 and 2013-2014 school

years. First, the primary investigator compared student discipline data for students who

participated in the mentor adoption program from 2012-2013 to 2013-2014 school years

(see Table 7). Students who participated in the mentor adoption program had an annual

discipline referral rate average of 1.26 for the 2012-2013 school year and 0.91 for the

2013-2014 school year. As measured by a statistical significance dependent on the value

of $p<0.05$, $p=0.03$ is a significant difference in discipline referrals.

Table 7

Paired Samples Statistical t-test for Adopted Mentees' Discipline Referrals Before and

After Adoption

	Mean	*N*	*SD*	*Correlation*	*t*	*df*	*Sig*
Discipline 2012-2013	1.26	43	2.150	0.901	2.294	42	0.027
Discipline 2013-2014	0.91	43	1.586				

Note. Significant at the $p < 0.05$ level.

As seen in Table 8, students who did not participate in the mentor adoption

program averaged 0.81 discipline referrals in 2012-2013 and 0.95 in 2013-2014. As

measured by a statistical significance dependent on the value of $p<0.05$, $p=0.29$ is not a

significant difference in discipline referrals.

Table 8

Paired Samples Statistical t-test for Control Group's Discipline Referrals Before and After Adoption

	Mean	N	SD	Correlation	t	df	Sig
Discipline 2012-2013	0.81	43	1.722	.878	1.062	42	0.294
Discipline 2013-2014	0.95	43	1.759				

Note. Significant at the $p < 0.05$ level.

Perceptual data. To begin the process of gathering perceptual data a letter (see Appendix A) was given to each teacher who participated in the mentor adoption program explaining the interview process. Then 10 randomly selected teachers who adopted students were invited to participate. The interview (see Appendix B) was designed to take no more than 20 minutes. Each teacher from the sample signed an informed consent form to affirm his or her participation was voluntary and involved no coercion (see Appendix C).

Interview themes. An examination of literature by Victoria Bernhardt (2009) revealed the importance of obtaining perceptional data to find how stakeholders view the learning environment. Bernhardt (2009) outlined how perceptional data may give insight into what changes can be made to improve the learning environment toward improved student learning. Bernhardt's (2009) Continuous School Improvement Model was used as a basis for the interview question themes:

1. Teachers' perceptions of the value of the mentor adoption program in relation to student academic performance.

2. Teachers' perceptions of the value of the mentor adoption program in relation to student and teacher relationship building.

3. Teachers' perceptions of needed improvements for the mentor adoption program.

A data collector removed all identifiers from the transcripts to ensure anonymity. Next, the primary investigator created a coding system to aide in reporting case study interview data. Each participant's interview was transcribed; transcripts were coded by common strands and by theme. Information from the coded documents was carefully compared to present a succinct description of each participant's perspectives in relation to the question themes.

Participant interview responses. After reading the interview transcripts, the primary researcher analyzed themes from which codes developed. These codes were then applied to the data, where the primary investigator analyzed narrative structure and contextual relationships and created matrices to more descriptively structure the data.

Question one. When each teacher was asked whether he/she believed the mentor adoption program had made a significant difference in student academic performance, the responses were similar. Figure 1 depicts a data analysis matrix for teachers' views of the impact of the mentor adoption program in regard to student academic performance. Results from question one correspond with theme one regarding value of the program and reveal all 10 of the teachers interviewed believed the teacher mentor adoption program made a significant difference in student academic performance. However, there were three expressions of concern which were not related specifically to academic

improvement but rather the perceptions of non-mentored students and teacher perceptions

of inadequacy.

Codes Indicating Positive Impact	Codes of Concern
….the students know that someone is monitoring their progress daily and that they care enough to check	…it is hard to mentor all of the students that need encouragement, so you end up with some students that feel left out.
…students feel that we as a group care about them. Sharing their successes with us makes them want to achieve more.	…the program could send the wrong message to students who excel. Last year, I had several students that I felt didn't try their hardest at certain things because they wanted to be adopted. It's difficult to explain to these students that the targeted students likely have little support from family
…the mentor adoption program has made a significant difference in the academic performance of our students	
… a great idea to give struggling students extra support. Some students do not receive any sort of praise or support from home. The mentor adoption program helps identify those students and provide the extra attention that they require	This year, personally, I have not made the time for my kids as much as last year.
….students know the teacher that has adopted them is checking their progress on a regular basis	
…One particular student of mine became better organized after receiving a notebook and a few folders. By not losing his work and having it to turn in, his grades improved a letter grade	

Figure 1. A data analysis matrix for teacher's view of the value of the program in regard

to student performance.

   Question two. The following answers were given in response to question two as

improvement suggestions for the mentor adoption program. Figure 2 illustrates results

from question two which correspond with teachers' perceptions of needed improvements

for the mentor adoption program. Data indicated the program would be improved with

uniform guidelines and set time procedures.

Codes for Improved Teacher Support & Communication or Change of Program Structure	Codes for Inclusion/Exclusion of Students
I believe we could improve the mentor adoption program by having more communication between the mentor and the classroom teacher and between the mentor and the student.	I think perhaps more discreet because many students that were not chosen get hurt and don't understand why they weren't. That part was hard on me.
Maybe having a meeting at the beginning of the year with all the teachers, where discussion can take place of who is adopted, who would really benefit from the adoption and ideas for different ways to help these adopted students.	It is good, but I hate it for the students who are not borderline or have amazing scores because they don't get adopted.
I believe the mentor adoption program should have more structure. It was difficult to know what to do because there were not any rules to the program.	I suggest that we simply continue to make sure at-risk students are identified and assigned to specific teachers in the building
I would allow teachers more monetary support.	I am wondering if it would be better to just verbally encourage all, instead of setting some apart by the giving of gifts. We all know those students that need the extra encouragement and that can be given quietly without setting them apart.
I would ask that the student meet once a week with their mentor and that they provide feedback to their mentor on how their week is going. The focus should be on assignment completion, grades earned, and choices that have been made.	
Maybe give more rules to protect teacher's time. We love the kids but it becomes more of a hassle when they are coming down every morning or during our prep when we are busy.	

Figure 2. A data analysis matrix for teachers' program improvement suggestions.

   Question three. Teachers were then asked what type of professional development

training they had received on relationship building. Results from question three revealed

all interviewed teachers, except one, felt an overall feeling of support yielded from prior

or ongoing professional development.

Codes for Adequate Professional Development	Codes for Professional Development Improvements
Teachers have ongoing PDC training that focuses on relationship building, which is crucial to the learning process.	I cannot think of any training on adoption programs just what I had in college on dealing with different types of students.
The plan was explained well and the program leader answered questions as we continued with the process. I like how many took their own ideas and shared in groups how and what they planned to do.	
Workshops offered some professional development.	
We had a very effective in-service this year that was very interesting and informative concerning relationships with people. This in-service was beneficial to our mentor adoption program because it helped us have a better understanding of the various personalities that our students have. The better we understand them, the better we can meet their needs.	
During various teacher workshops, we have received training on relationship-building. Recently, we had a speaker that discussed different personalities and helped each of us to better understand our personality. I felt that this was very helpful in relationship building. We have also received training regarding poverty, which I feel helps educators tremendously when attempting to from relationships with students.	
We learned about the importance of creating a classroom environment in which the students are a community of learners and the importance of acting in such a way that students know they are respected, cared about and always treated fairly	
In the teacher development program we discussed the value to a student that having a mentor can provide. The emphasis was on being supportive vs. judgmental.	

Figure 3. A data analysis matrix for teachers' view of professional development.

Question four. The data collector then asked interviewees to identify the highlight

of the mentor adoption program. Teacher responses may be seen in Figure 4.

Codes for Student Improved Personal Value and Self Esteem
The highlight of the program was when a parent of my mentor student said she believed the student worked harder on tests, homework, and grades because they knew I would be asking. In her words, it was "you and the program that made all the difference, not anything she had done".
The smile on the students' faces and the random hugs made me remember why I got into teaching.
Seeing their improvements.
I enjoyed sharing a meal with my adoptees and getting to know them better, and the daily encouraging that seemed to have a positive impact.
The highlight of the mentor adoption program has been being able to build and continue a relationship with students we had in previous years. It has made me feel like I am making a difference. Students need positive relationships with adults. The more adults, at-risk students develop a relationship with and are in contact with on a daily basis, the better chance they have at being successful.
I feel the highlight of the mentor adoption program was seeing my adoptees excited about learning and succeeding.
Those students who were making progress, but not as quickly as other students were recognized for their individual successes.
I enjoyed getting to know my adoptees on a more personal level.
The highlight so far took place when one of my students was overheard explaining to another why he should appreciate having a mentor. He was overheard saying, "No one ever cared about my work before".
Seeing how proud the kids were when they had something great to show me and how proud they were when they scored well.

Figure 4. A data analysis matrix for highlights of the mentor adoption program.

Results from question four coincide with coded theme two and teachers'

perceptions of the value of the mentor adoption program in relation to student and teacher

relationship building. All 10 teachers interviewed noted the highlight of the program was

the improved student esteem and personal value yielded from the teacher-to-student

relationship.

Question five. The final interview question asked teachers to determine whether they believed the mentor adoption program was a positive or negative experience and whether they would advocate for continuing the program. Data from question five revealed all 10 teachers who were interviewed believed the program was worthy and should be continued.

Summary

The primary investigator found the mentor adoption program to have made a significant impact on student academic performance in three of the four areas measured for the 2013-2014 school year. For this reason, null hypotheses $H1_0$, $H2_0$, and $H3_0$ were rejected. Students who participated in the mentor adoption program showed significant improvement in both ELA and MA scale scores on the MAP and decreased the number of discipline referrals. Improvement was also made in attendance rate but was not shown to be significant.

Students who did not participate in the mentor adoption program only showed significant gains in MA scale scores on the MAP. Students who did not participate in the mentor adoption program actually showed a decrease in ELA scale scores on the MAP, an increase in number of discipline referrals received, and remained constant on attendance rate. Furthermore, even though both groups showed significant gains in MA scale scores on the MAP, the students who participated in the mentor adoption program showed greater gains.

The perceptual data analysis results supported the archival data analysis. The perceptual data results showed teachers felt the mentor adoption program would

significantly impact student academic performance. Teachers also felt the mentor

 adoption program should be continued but could be improved by making the mentor

adoption program more uniform for all teachers and by providing additional training on

building relationships.

Chapter Five: Findings and Conclusions

After gaining approval to conduct this research (see Appendix D), the primary investigator designed this study to gain a deeper understanding of the impact a mentor adoption program had on student academic performance and to use this understanding to guide future decisions for implementing student academic improvement strategies. Chapter Five is focused on findings and conclusions resulting from a case study on the impact of a mentor adoption program on student academic performance. The primary investigator analyzed data on student academic performance from the 2012-2013 and 2013-2014 school years. This data included academic, attendance rate, discipline referral, and perceptual data. The primary investigator compared data from two sets of students, those who participated in the mentor adoption program and those students who did not participate in the mentor adoption program. The primary investigator gleaned perceptual data by interviewing a sample of 10 teachers who participated in the mentor adoption program as mentors.

Findings

As previously noted, the mentor adoption program was not the only instructional change between the 2012-2013 and 2013-2014 school years in Elementary School A. Elementary School A also initiated several other research-based strategies to encourage improvement in academic performance. To increase the validity for this study and to reduce the effect of extraneous variables, the primary investigator compared the 43 adopted students who participated in the mentor adoption program to a control group of students who did not participate in the mentor adoption program for only the 2013-2014 school year. To answer the research questions, the primary investigator determined the

difference in the performance of students who participated in a mentor adoption program and students who did not participate in a mentor adoption program on the Missouri Assessment Program (MAP) in English language arts (ELA) and mathematics (MA), attendance rates, and number of discipline referrals by conducting a paired-samples *t*-test.

Archival data. By focusing on student performance archival data, the primary investigator was able to find students who participated in the mentor adoption program made significant academic improvements. The relevant research supports the findings, as research shows strong teacher-to-student relationships enhance academic performance (Toste, 2012). In this particular case study, Elementary School A initiated a mentor adoption program with the intent to strengthen teacher-to-student relationships. The findings showed students who participated in the mentor adoption program to significantly improve in three of the four areas that were quantitatively measured, while students who did not participate in the mentor adoption program only showed significant gains in one area quantitatively measured. The areas measured were ELA MAP scale scores, MA MAP scale scores, attendance rates, and number of discipline referrals. Data were collected from both 2012-2013 and 2013-2014 school years. This case study will add to the current body of knowledge by supplying data on teacher-to-student relationships within schools of similar demographics. More specific data will be added to the current body of knowledge on mentor adoption programs.

Academic. Research has provided data to show positive teacher-to-student relationships improve student academic performance as measured by student scores on standardized tests (Allen et al., 2013). This case study added to current literature by providing data which support these theories. Data from this case-study indicate the 43

students who participated in the mentor adoption program showed significant improvement in both ELA and MA on MAP scale scores from the 2012-2013 to 2013-2014 school years. The students who did not participate in the mentor adoption program only demonstrated significant improvement in MA on the MAP from the 2012-2013 to 2013-2014 school years.

The results showed students who participated in the mentor adoption program made greater gains in mean scores in both ELA and MA on the MAP from the 2012-2013 to 2013-2014 school years. The students who participated in the mentor adoption program improved the mean scale score 14.69 points in ELA, while the students who did not participate in the mentor adoption program showed a decrease of 1.61 on the mean scale score in ELA. Even though both groups showed significant improvement in MA, students who participated in the mentor adoption program showed a larger increase in mean scale scores in MA. Students who participated in the mentor adoption program gained 17.00 points on the mean score in MA compared to a 14.75 point gain on mean score for students who did not participate in the mentor adoption program.

Attendance rate. Research has also provided data to support positive teacher-to-student relationships improve student academic performance as measured by attendance rates (Paredes & Ugarte, 2011). Results from this case study showed no significant gains were made in attendance rate by students who participated in the mentor adoption program during the 2013-2014 school year. However, students who participated in the mentor adoption program did improve attendance rate two percentage points rising from 94% to 96% from the 2012-2013 to 2013-2014 school year, while students who did not

participate in the mentor adoption program did not show any improvement in attendance rate and remained constant at 95% from 2012-2013 to 2013-2014 school year.

    Discipline referral. Additionally, research provides data which support the theory that positive teacher-to-student relationships will reduce the number of classroom behavior issues which in turn will improve student academic performance (Delman, 2011). This case study supports this research by showing positive teacher-to-student relationships significantly impacted student behavior. Students who participated in the mentor adoption program decreased in the number of discipline referrals from a 1.26 average to a 0.91 average from 2012-2013 to 2013-2014 school years, while the students who did not participate in the mentor adoption program showed an increase in number of discipline referrals from 0.81 average to a 0.95 average from 2012-2013 to 2013-2014 school years.

    Perceptual data. The primary investigator also analyzed perceptual data obtained from teachers who participated in the mentor adoption program as mentors. The perceptual data were collected to obtain a more in-depth vision of the current mentor adoption program and how the mentor adoption program may be improved in the future. The five-question interview revealed several teacher perceptions about the mentor adoption program. The first and fifth questions addressed whether or not teachers thought the mentor adoption program made a significant difference in student academic performance and whether or not teachers advocate continuing the mentor adoption program in Elementary School A. All 10 teachers interviewed answered yes to these questions. The tone of answers to these questions was positive with many teachers stating specific improvement in student performance of their particular adopted students.

Two of the teachers noted the mentor adoption program was positive but some students seemed to feel left out because they were not adopted by a teacher.

The second interview question addressed teacher ideas to improve the mentor adoption program. Interviewees gave a wide range of answers to this question. However, a couple of themes were observed by the primary investigator. First, a large majority of teachers thought a more uniformed mentor adoption program would be beneficial. These interviewees felt a more uniform approach would allow the mentor adoption program to be more consistent and would lead to fewer students with the feeling of being left out of the mentor adoption program. Second, addressing the time element would benefit the mentor adoption program. Teachers found meeting adopted student needs difficult because of scheduling. When teachers adopted students who were not in the same grade level as the teacher, setting times for mentors to meet with adopted students became an obstacle.

Teachers gave mixed answers to the third interview question which referred to professional development on teacher-to-student relationships. Six of the 10 teachers interviewed noted sufficient opportunities for professional development on teacher-to-student training. The group of six teachers noted both professional development provided by Elementary School A and college-level training as opportunities for teachers to gain insight on how to develop teacher-to-student relationships. The group specifically noted recent professional development training provided by Elementary School A on personality styles and how to relate to different personality styles. Four teachers did not feel sufficient opportunities were provided by Elementary School A. The interview showed these teachers felt Elementary School A had not provided professional

development on relationship building between teachers and students. These teachers had the opinion that the only opportunity for professional development on teacher-to-student relationship building came from mandatory college-level training.

Interview question number four asked teachers to recall the most memorable moment of the mentor adoption program. Answers to question number four were positive with teachers stating a variety of highlights. One theme observed was teachers who participated in the mentor adoption program seemed to gain sincere enjoyment when the adopted student succeeded on a task. One teacher stated, "The mentor adoption program made me remember why I got into teaching." Another teacher said, "It [the mentor adoption program] makes me feel like I am making a difference." The tone of the answers to interview question number four provided the primary investigator insight to teacher perceptions about the mentor adoption program.

Case Study Findings

Researchers use case studies to learn more about specific cases (Fraenkel et al., 2015). This case study was designed to research and analyze data to provide the primary investigator with insight on the mentor adoption program Elementary School A initiated during the 2013-2014 school year. The analyses allowed for statistical measurement of any differences in student academic performance for students who participated in the mentor adoption program and those who did not participate in the mentor adoption program. The primary investigator was able to determine whether or not the use of the mentor adoption program made positive impact in student academic performance specifically for Elementary School A students. By collecting and analyzing the perceptual data, the primary investigator was also able to gain insight on what teachers

felt might improve the mentor adoption program for Elementary School A. The primary investigator will be able to include this data and teacher insights when preparing future improvement plans for Elementary School A. This data will both add to and are supported by current literature on teacher-to-student relationships.

Lessons Learned

By conducting this case study, the primary investigator was able to measure both archival and perceptual data quantitatively to obtain insight on the effects of positive teacher-to-student relationships. The primary investigator utilized a mentor adoption program to provide teachers and students with an avenue to promote the relationship-building process. A holistic analysis of the data resulted in several lessons learned.

First, when examining all sets of data together, the primary investigator was able to determine the mentor adoption program had a positive impact on student academic performance. Elementary School A initiated and exposed every student to several research-based strategies for the 2013-2014 school year. However, students who participated in the mentor adoption program significantly improved in three areas compared to students who did not participate in the mentor adoption program only improving in one area that was measured. This led the primary investigator to believe building positive teacher-to-student relationships to be an effective improvement tool.

Second, by analyzing the perceptual data, the primary investigator was able to gain insight into the mentor adoption program from the teacher point-of-view. As the primary investigator studied the perceptual data, two themes became evident. The first theme was that teachers value positive relationships with students. The data from this case study showed teachers believed the mentor adoption program made a positive

impact on student academic performance and were overwhelmingly in favor of continuing the mentor adoption program. The second theme the primary investigator gleaned from the perceptual data was that teachers believe the mentor adoption program would be more productive if the mentor adoption process was more uniform. The interviews revealed teachers felt pressure when trying to combine teaching duties with participating in the mentor adoption process.

Limitations of the Study

There were several limitations to this case study. First, Elementary School A included several research-based strategies in addition to the mentor adoption plan when developing the 2013-2014 improvement plan. By exposing each Elementary School A student to multiple strategies, it became difficult for the primary investigator to determine how much credit for improvement should be given to the mentor adoption program. The mentor adoption program may or may not have been responsible for improvement in all areas measured. Further area-specific research would have to be conducted to determine which research-based strategy deserved the most credit for student academic improvement.

Second, the teacher perceptual data revealed teachers value positive teacher-to-student relationships. While gaining this insight was beneficial to the primary investigator, it also made the primary investigator question whether or not the mentor adoption program increased the quantity or quality of teacher-to-student relationships within Elementary School A. Furthermore, it would be worthy to investigate whether teachers treated students who participated in the mentor adoption program any differently than students who did not participate in the mentor adoption program.

Another related limitation was the limited procedural guidance of the mentor adoption program. The perceptual data from teacher interviews revealed teachers felt more procedural guidance could be beneficial. With the limited procedural guidance each teacher was able to participate in the mentor adoption program with a different set of rules. Differences in application of the mentor adoption program may have affected the data results.

Case studies create limitations for research studies for the mere fact one is studying a specific case (Fraenkel et al., 2015). For this case study, Elementary School A had already begun participation in the mentor adoption program. Teachers were instructed to adopt students based on a set of criteria. The criteria included low performance on the ELA and MA portions of the MAP assessment, low attendance rates, and a high number of discipline referrals. While every precaution was taken to stratify the comparison group, the students who participated in the mentor adoption program were deemed a higher priority by teachers when selecting whom to adopt. The selection process may have been a limitation to this particular case study.

The last limitation may have been the 2013-2014 weather effect on student academic performance. Elementary School A dismissed school 28 times for hazardous weather. The student academic performance data may have been affected because students spent fewer days in school. Students who missed the 28 days received less instruction than during a normal school year. This led the primary investigator to question whether the data accurately measured student improvement. With the decrease in days attended, students had fewer opportunities to receive a discipline referral which may have impacted the validity of decreased referrals.

Recommendations for Further Studies

Schools and educational leaders continue to seek strategies to enhance student academic performance (Ager, 2012). Each school and educational leader has a unique set of circumstances and should select improvement strategies which fit his or her particular needs (Tejero Hughes & Parker-Katz, 2013). The empirical literature, as well as this case study data, support promoting teacher-to-student relationships to be a strategy that may improve student academic performance (Barile et al., 2012). One measure to be significantly impacted by positive teacher-to-student relationships is standardized test scores (Allen et al., 2013). The students who participated in a mentor adoption program in Elementary School A during the 2012-2013 and 2013-2014 school years significantly improved in both ELA and MA scale scores on the MAP, while students who did not participate in the mentor adoption program only significantly improved in MA on the MAP. Furthermore, students who participated in the mentor adoption program showed greater gains on the mean scale score in both ELA and MA on the MAP. With this case study data in mind, schools and educational leaders who are searching for student academic improvement strategies may promote positive teacher-to-student relationship-building strategies. In particular a mentor adoption program may be utilized by schools and educational leaders to encourage positive teacher-to-student relationships (Komosa-Hawkins, 2009).

Schools and educational leaders may also utilize a mentor adoption program to encourage improved student attendance (Komosa-Hawkins, 2009). This case study data showed Elementary School A students who participated in the mentor adoption program improved average attendance from 94% to 96%, while students who did not participate in

the mentor adoption program remained constant at 95% for the 2012-2013 and 2013-2014 school years. Research has shown students who attend school at a high percentage perform better in all areas of academics. By incorporating a mentor adoption program, schools and educational leaders will be better able to encourage positive teacher-to-student relationships which have shown to improve student attendance rates.

The mentor adoption program also made a significant impact on the number of discipline referrals students received during the 2012-2013 and 2013-2014 school years. Students who participated in the mentor adoption program in Elementary School A had a reduced number of discipline referrals from 2012-2013 to the 2013-2014 school years. Students who did not participate in the mentor adoption program actually showed a gain in the number of discipline referrals from 2012-2013 to 2013-2014 school years. Schools and educational leaders may use the mentor adoption program as a tool to reduce student discipline referrals. Researchers have shown student academic performance may be improved by reducing student discipline referrals (Delman, 2011).

The perceptual data showed strong teacher support for the mentor adoption program. According to the data provided by this case study, schools and educational leaders may incorporate a mentor adoption program to provide teachers with an avenue to promote positive relationship-building time with their students. By providing teachers with an avenue for the relationship building, schools may reap the rewards of improvement in student academic performance (Swafford, Bailey, & Beasley, 2014).

Further research in the area of teacher-to-student relationship building may include a longitudinal study to analyze student performance over more than two years. This case study only involved the analysis and compares statistical data over a two-year

period. By studying teacher-to-student relationships over a period of multiple years, a primary investigator may be able to detect differences in teacher effectiveness and trends for students with particular demographics. Also by researching multiple years of data a primary investigator may be able to detect teacher personality traits as well as student characteristics, which may contribute to promotion of positive teacher-to-student relationships.

Another suggestion for further research would be to include interviews of students who participated in the mentor adoption program and those who did not participate in the mentor adoption program. The perceptual data from the teacher interviews revealed teachers believed the mentor adoption program was beneficial for students. By conducting student interviews, the primary investigator would be able to gain student perceptions and compare to teacher perceptions. The primary investigator would include specific questions to students who did not participate in the mentor adoption program to determine if any negative consequences resulted from the students not being chosen to participate in the mentor adoption program.

Further research in the area of positive teacher-to-student relationship-building programs may also be beneficial to gain insight on how to improve student academic performance. Elementary School A was able to initiate a mentor adoption program which promoted significant improvement in academic performance. However, the mentor adoption program had very little procedural guidance. Further research into types of relationship programs and procedures of relationship-building programs may provide schools and educational leaders with more efficient use of resources, time, and funding to improve student academic performance.

Contributions to Research Literature

This study provided a comprehensive look into the benefits provided by a teacher-to-student relationship-building program via a mentor adoption program. Findings from the data support current literature on the topic of teacher-to-student relationship building. These case study data support current literature that positive teacher-to-student relationships enhance improvement in student academic performance. Furthermore, these data support the idea that teachers as well as students both value and benefit from positive teacher-to-student relationships. Lastly, this case study will add to and support data on teacher-to-student relationship-building programs, specifically through a mentor adoption program.

Final Reflections

Positive teacher-to-student relationships are a dynamic factor for student academic performance. Elementary School A implemented several research-based strategies for school improvement during the 2013-2014 school year. Elementary School A students were exposed to each research-based strategy implemented during the 2013-2014 school year. However, only 55 students were selected to participate in a mentor adoption program which was intended to provide an avenue to enhance teacher-to-student relationships. The intent of this case study was to detect any difference in student academic performance in students who participated in the mentor adoption program and students who did not participate in the mentor adoption program. Data sufficiently showed the mentor adoption program incorporated into the Elementary School A improvement plan to be a factor for improvement in student academic performance. Students who participated in the mentor adoption program showed gains in each of the

measured areas including MAP scores for both ELA and MA, attendance rates, and number of discipline referrals. Furthermore, the perceptual data gathered from teacher interviews reflected positive teacher feelings about the mentor adoption program.

In conclusion, today's educational trends tend to focus on teacher accountability and test scores. Schools continually search for research-based strategies to utilize to further improve the education offered to students. While explorations into new curriculums, teaching strategies, and better and newer technologies are of utmost importance, one must never overlook the value of cultivating a positive teacher-to-student relationship. Whether using an avenue such as a mentor adoption program or some other teacher-to-student relationship-building avenue, positive teacher-to-student relationships are built through thoughtful and purposeful effort. Data from this case study support current literature that shows positive teacher-to-student relationships affect learning outcomes, attendance rates, and classroom behavior in positive ways. Teachers can be assured by creating and nurturing positive relationships with students, teachers are directly impacting each student's future achievements and success.

Appendix A

Lindenwood University

School of Education

209 S. Kingshighway

St. Charles, Missouri 63301

Interview Letter: ████████████████

January 31, 2015

Dear Colleagues,

I am conducting a research study titled, *A Case Study of a Teacher-Student Mentor Adoption Program at the Elementary Level,* in partial fulfillment of the requirement for a doctoral degree in Educational Administration at Lindenwood University. The research gathered should assist in providing insight as to whether the students who participated in the mentor adoption program made any significant academic gains in the areas of MAP scores, attendance rates, and number of discipline referrals.

In order to obtain perceptual data, I am seeking your cooperation. A data collector primary investigator will randomly select ten teachers to interview. The teachers selected will include one teacher from each grade level, one special class teacher, one Title I teacher, and one special education teacher. Each person selected will be given a five question interview by a data collector. The data collector will record and transcribe the interview. The audio recording will then be destroyed. All persons interviewed and data collected will be de-identified by the data collector before the

primary investigator will be allowed access to the data. The primary investigator will at no time have access to the identification of persons participating in the interview process.

Participation in the study is completely voluntary. You may withdraw your consent at any time without penalty. The identity of the school district will remain confidential and anonymous in the dissertation or any future publications of this study.

Please do not hesitate to contact me with any questions or concerns about participation ██ You may also contact the dissertation advisor for this research study, Dr. Julie Williams, (phone: 417-256-6150 EXT. 4510) or e-mail: Jthompson3@lindenwood.edu). A copy of this letter and your written consent should be retained by you for future reference.

 Respectfully,

Timothy Shane Benson

Doctoral Candidate

Lindenwood University

Appendix B

Interview Questions:

1. Do you think the mentor adoption program has made a significant difference in student academic performance?

   If no, why?

2. What type of feedback would you give to improve the mentor adoption program at Elementary School A?

3. What training did you receive in your teacher development program on relationship building?

4. What was the highlight of the mentor adoption program?

5. Was the mentor adoption program overall a positive or negative experience and would you advocate for continuing the mentor adoption program?

Appendix C

Lindenwood University
School of Education
209 S. Kingshighway
St. Charles, Missouri 63301

Informed Consent for Participation in Research Activities

A Case Study of a Teacher-Student Mentor Adoption Program
at the Elementary Level

Principal Investigator _____Shane Benson__

Telephone: 417-█████████   E-mail: TSB705@lindenwood.edu

Participant_____

Contact info_____

1. You are invited to participate in a research study conducted by Shane Benson under the guidance of Dr. Julie Williams. The purpose of this research is to analyze the effects of positive teacher to student relationships to student academic performance.

2. Your participation will involve approximately 30 minutes of your time to answer 5 questions in interview form from a data collector. Your recorded answers will be transcribed and coded to obtain quantitative data. All participants will be de-identified by the data collector.

   Approximately 10 persons will be interviewed in this research.

3. There are no anticipated risks associated with this research.

4. There are no direct benefits for you participating in this study. However, your participation will contribute to the knowledge about ███████████████ Program and may help in research.

5. Your participation is voluntary. You may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

 6. We will do everything we can to protect your privacy. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study and the information collected will remain in the possession of the investigator in a safe location.

7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Shane Benson at 417-████████ or the Supervising Faculty, Dr. Julie Williams at 417-256-6150 EXT. 4510. You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs at 636-949-4846.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

_____   _____
Participant's Signature   Date   Participant's Printed Name

_____   _____
Signature of Principal Investigator   Date   Investigator Printed Name

Appendix D

LINDENWOOD

LINDENWOOD UNIVERSITY   ST. CHARLES, MISSOURI

DATE:	February 26, 2015
TO:	Shane Benson
FROM:	Lindenwood University Institutional Review Board
STUDY TITLE:	[698065-1] A Case Study of a Teacher-Student Mentor Adoption Program at the Elementary Level
IRB REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	February 26, 2015
EXPIRATION DATE:	February 26, 2016
REVIEW TYPE:	Expedited Review

Thank you for your submission of New Project materials for this research project. Lindenwood University Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the IRB.

This project has been determined to be a   project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the completion/amendment form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of February 26, 2016.

Please note that all research records must be retained for a minimum of three years.

If you have any questions, please contact Robyne Elder at (314) 566-4884 or relder@lindenwood.edu. Please include your study title and reference number in all correspondence with this office.

If you have any questions, please send them to IRB@lindenwood.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Lindenwood University Institutional Review Board's records.

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Vita

Timothy Shane Benson graduated in 1987 from the Alton R-IV school district in Alton, Missouri. From there he continued his education by attending Three Rivers Community College in Poplar Bluff, Missouri, and John Brown University in Siloam Springs, Arkansas, where he obtained his Bachelor of Science Degree in Education. He used this degree to become a physical education teacher and basketball coach. In 2001, Timothy Shane Benson earned his Master of Administration Degree from William Woods University of Fulton, Missouri. After 18 years of coaching, he became an assistant principal at the Alton R-IV School District and finished his Specialist of Administration Degree through William Woods University of Fulton, Missouri, in 2008. He has 23 years of experience in the educational field. During the past seven years he has served as the elementary principal in a rural school in southeast, Missouri.