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The Impact of Freshman Transition Programs on Achievement

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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 here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

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Abstract

The purpose of this study was to examine the potential effects a freshman transition program has on high school success rates. Results could provide the basis for freshman transfer strategies and help academic success following the No Child Left Behind mandate. The research question asked was: Did program complexity have an impact on the success of freshman students, measured by number of failing grades, percentage of discipline referrals assigned, and attendance rates?

To answer the question, the researcher studied three homogenous high schools in the greater St. Louis area. These three freshman transition programs varied in complexity provided for incoming students. The length of study was over four academic years, from 2009 through 2013.

There were three hypothesis studied in order to determine if the complexity of the freshman transition programs had an effect on performance outcomes for incoming students, with regards to attendance, number of discipline referrals and failing grades.

> A combined statement of the hypotheses is: The attendance rate, discipline referral rate, and grade point averages are different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs and between the pre-to-post comparisons of the most complex (East High School) program.

In this study, the data did not support significant changes in the student outcomes of attendance rates, discipline referral rates, nor failing grade rates, for each of the three high schools studied, East, West, and South, despite the varying levels of complexity in the freshman transition program implemented at each school

No significant differences were established through use of ANOVA, Chi Square tests for Independence, and z-tests for difference in proportions applied to secondary data generated by the three schools through the years 2009 to 2013.

Table of Contents

List of Tables

List of Figures

Chapter One: Introduction

Freshman Transition Programs Improve Academic Learning

At the time of this writing, schools throughout the country have been scrambling to meet the requirements resulting from the No Child Left Behind (NCLB) mandate, enacted in 2001. School districts pursued many different avenues to meet these challenges. Professional learning communities, professional development, and revisions of curriculum are a few examples of strategies chosen as schools moved to keep up with their changing student needs. These strategies translate into actual programs, some of which were most effective for transitional freshman students. High school students who undertake a transition program were less likely to be discipline problems and more likely to have academic success (Haviland, 2005). This research study investigated the impact of transition programs used in three medium-sized Midwestern high schools on the attendance, academic performance, and disciplinary referral rates of the freshman participants. These measures were a part of the academic improvement mandates in NCLB and the then-current Missouri School Improvement Plan (MSIP 5).

Across the board, students participating in a freshman transition program were more likely to achieve academic goals (Hertzog & Morgan, 1998). Hertzog and Morgan (1998) reported that students decided during the first few weeks of their freshman year if they intended to continue their high school education. However, there were significant gaps in the research on the topic. This included research on school-related factors, such as school size, grade configuration, and student composition (Barber & Olsen, 2004).

At the time of this writing, many different freshman transition programs existed throughout the nation. The programs had varying effects on student achievement. Some

research showed schools with two or fewer transition practices had higher attrition and dropout rates when compared to schools with three or more transition practices (McIntosh & White, 2006). Furthermore, the middle school period was a significant predictor for all outcomes (Weiss & Baker-Smith, 2010). Research on pedagogy and student learning generally found middle schools deficient in preparing students for high school, when ninth-grade outcomes were examined (Cook, MacCoun, Muschkin, & Vigdor, 2008).

Role of schools in serving the community. One can begin an examination of the history of freshman transition programs by looking at the roles school districts played in serving the community. Since the 1900's, schools took on different roles, beyond simply educating students in traditional subjects. These roles included distribution centers where vaccines for diseases such as polio were administered in the 1950's. More recently many provided afternoon and evening after-school programs, in some cases doubling as adult education centers (McIntosh & White, 2006). This maximized the use of the building and allowed school districts to serve the community. There was an increased push at state and federal levels for continued academic improvement from mandates such as NCLB. Everything that helped a child succeed academically, even those supports outside the traditional classroom structure, helped meet these academic requirements. Simply stated, transitions programs helped students succeed in high school.

Significance of Freshman Transition for Success in High School

The National Center for Education Statistics (NCES) reported an annual nationwide dropout rate of half a million students beginning in 2001, a 6% increase from the previous two years. However, the nationwide graduation rate was 72.6% for 2001-

2002 with an increase 73.9% for 2002-2003 (as cited in Seastrom, Hoffman, Chapman, & Stillwell, 2005, p. 2). There was a flat line in graduation rates from 1990 to 2005. This caused educators to look at possible solutions. Research showed that ninth graders had the lowest grade point averages and most missed more classes than all other classifications of high school students. Furthermore, they had the majority of failing grades and misbehaviors, when compared with other high school grade levels (Fritzer & Herbst, 1996). Fritzer and Herbst reported that 22% of students repeated ninth grade classes (Fritzer & Herbst, 1996, p. 7). This may explain why the ninth grade had the highest student population growth rate. The U.S. average percentage of freshmen who continued to graduate from public schools in 2005-2006 was 73.2% (Sims, 2010, p. 25). After dropping to 73% in 2005–06, the graduation rate increased nearly 8 percentage points, to 81% in 2011–2012 (Stetser & Stillwell, 2011, p. 4).

It appeared that the ninth grade was pivotal in success or failure of high school students. This was a time when challenging sequential courses must be completed over a four-year period. Most high schools required at least three years of math for graduation. Students were expected to be prepared for beginning this sequence at the middle school level. High school math courses included: Algebra I and II, Geometry, and possibly beginning-level calculus. The theory and knowledge was progressive, making it difficult for students to master Algebra II, unless they had successfully completed Algebra. In addition, the required credits needed to graduate increased, and standardized exams, including a comprehensive final exam, made these classes a long-term challenge (Schemo, 2004).

Several strategies were used to combat the problems perceived to begin in ninth grade. One of the problems involved simple communication. A key element for all freshman transition plans to be successful was teacher and student communication. For any plan, middle school students and their parents would need to be informed of the increased expectations and requirements of put in place by the high school. Many times, increased expectation in performance was not communicated to the parents and new students. Middle school and high school teachers should communicate clear expectations to incoming freshman in order to facilitate a smooth transition. The challenge was how school leaders could best prepare and communicate.

A 60-school study undertaken by the Southern Regional Education Board, revealed over half of the high school teacher participants had never met the middle school teachers (as cited in Cooney & Bottoms, 2002). This did not allow for the opportunity to discuss students or the district curriculum (Cooney & Bottoms, 2002). Ideally, there should be several meetings planned for middle school and high school teachers. Further, the same study revealed that over 50% of high school teachers felt that incoming students had insufficient background knowledge before entering high school (Cooney & Bottoms, 2002). Middle school teachers needed to prepare students for high school. Some middle schools raised standards to prepare students for high school. Furthermore, some schools identified students who would not be ready to perform high school work by the eighth-grade (Akos & Galassi, 2004). There should be several meetings planned for middle school and high school teachers to refine and share information.

Transition programs were valued by outside organizations, such as the United Way. In some school districts, successful transition programs were funded by the United

Way. In Bloomington, Illinois, for example, 18 programs received United Way funding in 2012. The funding processes intended to address unmet community needs (Swiech, 2012). The hope was the result of more students graduating in four years. Productive students theoretically became productive adults, who contributed to society. High school principal Moore announced the Transition 101 program (Swiech, 2012). This summer transition program was one of six high school preparation programs to be funded for the first time. A total of 61 programs received United Way funding over a two-year period, which began in July 2012 (Swiech, 2012, p. 1). This funding was allocated through a community volunteer completion study. The study identified problems and presented programs to assist high schools and families to make the transition to high school more successful. Over $6 million was allocated for these programs (p. 1). Redman served as the United Way's Community Impact Cabinet Chairwoman. The programs that received funding were designed to meet the needs identified in the Bloomington, Illinois community. There were nine overall programs designed to prepare students for high school. This was an example of a community realizing the significance of freshman transition programs (Swiech, 2012).

Purpose of the Study

The purpose of this quantitative study was to examine the impact of freshman transition programs on three measures of student success contained in both NCLB and MSIP5. This study was designed to compare three demographically similar high schools located in the outer suburbs of a major Midwestern city. These schools were of similar size and contained in similar-sized districts. However, each of the three high schools had constructed and implemented freshman transition programs of different complexities. By

comparing the actual results of the students affected by these programs during their freshman year it was hoped that future school efforts could be made more effective. In an era of shrinking budgets it was important to learn whether the time, effort, and money devoted to freshman transition programs was actually effective.

Rationale

Between years 1998 to 2015, many schools initiated some type of freshman transition program to help students with the transition from junior high or middle school to high school. This type of program became necessary because researchers found that many freshman students knew before the first month of school whether or not they would be graduating from high school (Dillon, 2008). Due to the wide variance in existing programs across the nation, not much was known about the impact of program complexity upon freshman transition success. It was hoped a comparison of the success of the freshmen in three demographically similar high schools in the three districts evaluated by both NCLB and MSIP5 would provide insight into which components were of the most value and whether there was a statistically significant difference in effectiveness of minimal through fully-developed freshman transition programs.

Freshman transition programs had two goals to be met in order to be considered successful. First, these programs tried to provide a smooth transition for students entering their high school careers. Furthermore, the transition programs were intended to provide a welcoming and accepting environment for all freshmen students. The second goal was of importance because of the concept of acceptance. In the lives of teenage students, being accepted and feeling comfortable was important (Dillion, 2008). The freshman transition program allowed students to experience, in advance the campus they would be attending

for the next four years. In addition to this, freshman students were able to meet others who had similar interests and needs. Other additions to freshman transition programs allowed parents to be a part of the process by having meetings and open houses for freshman parents before the start of the school year.

School districts throughout the country differed when it came to which transition program was best for their students and staff. The transition program needed to be in place at the beginning and form a cornerstone for a successful freshman year. Furthermore, the plan should be divided into three or four different subsections. In other words, just organizing a freshmen study hall, or offering summer school for incoming freshmen was not enough to ensure students would be successful in high school. The combination of a summer school program, freshmen study hall, character education, and upper classmen mentoring was perceived to give a school district a better chance of reaching its goals, when it came to a freshman transition program.

The literature review revealed numerous programs claiming to successfully improve the freshman transition experience, such as the United Way-funded ones found in Illinois (Swiech, 2012). The researcher's review revealed no literature stating that the freshman transition programs were unhelpful. However, the literature was almost silent on the issue of program complexity as a factor freshman student success. Simply stated, there was a gap in the literature about whether any freshman transition program would bring success or whether there was a perceived minimum threshold of components needed to achieve improvement. This study may help fill that gap in literature.

Definition of Terms

Discipline referral. Teachers or administrators assigned a student a warning, after school detention, in-school suspension, or out-of-school suspension based on student behavior and past discipline history. Administrators had the ultimate authority when it comes to student discipline (Study District Policy Manual, 2009).

Dropout Rate. Dropout rate, in this study, was calculated by the following formula:

$$\frac{\text{dropout \#}}{\text{September enrollment \# + transfers in \# – transfers out \#}}$$

Grade Point Average (GPA). GPA, in this study, was based on a 4.0 scale. Grade Point Average was calculated by assigning a number to each grade and then averaging the assigned numbers. On a 4.0 scale an A = 4, B = 3, C = 2, D = 1, and F = 0.

Graduation Rate. In this study, graduation rate was calculated by the following formula:

$$\frac{\text{\# graduates * 100}}{\text{9th-12th cohort dropout \# + \# graduates}}$$

Individual Education Plan (IEP). An IEP was a legal document prescribed for special need students based on learning, emotional, or behavior disabilities. This document ensured modifications were made to help the student be successful in school (USDOE, 2015).

Missouri Assessment Program (MAP). The MAP was a series of tests that measured whether students in Missouri were meeting the Show-Me Standards. (Missouri Department of Elementary and Secondary Education [MODESE], 2014b).

Missouri School Improvement Program (MSIP). MSIP reviewed 524 school districts in Missouri within a five-year review cycle. The reports covered areas of resource, process, and performance. Every year approximately twenty percent of Missouri's school districts were evaluated (MODESE, 2014a).

No Child Left Behind (NCLB). NCLB was signed in 2002 by President Bush to provide new accountability measures for all U.S. public schools. It was based on the goal that all children would be proficient in reading and math by 2014. The law required that all children be taught by 'highly qualified' teachers. This law also stressed improvement in communication and safety for students (USDOE, 2003).

Professional Learning Community (PLC). PLC stimulated ongoing, collective inquiry into teaching and learning. It involved everyone in highly visible learning experiences in which participants learned from one another. There were four pillars that made up a professional learning community: mission, vision, values, and goals (DuFour, 2004).

Show-Me Standards. The Show-Me Standards were part of the legislation brought forth from the Outstanding Schools Act of 1993. Missouri developed a new assessment system for its public schools. The Show-Me Standards were made up of 40 'content' standards and 33 'process' standards. These standards were guides for what students should know at their appropriate grade levels (MODESE, 2014c).

Hypotheses

This study was guided by one research question. The research question was: Did program complexity have a significant impact on the success of freshman students? The study was structured around a comparison of three programs of different complexity

levels, with an examination of three student outcomes. This led to the creation of the following hypotheses.

Hypothesis 1

H_1: The attendance rate means are different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs and between the pre-to-post comparisons of the most complex (East High School) program.

Hypothesis 2

H_2: The discipline referral rate means are different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs and between the pre-to-post comparisons of the most complex (East High School) program.

Hypothesis 3

H_3: The grade point averages are different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs and between the pre-to-post comparisons of the most complex (East High School) program, as indicated by the number of failing grades earned.

Limitations

There were limitations to this study. The first was while the three high schools that participated in the study were demographically similar, they were not exactly the same. Each was in a different school district that had unique, though similar, policies and procedures in place. Each was in a different, though similar, town. Secondly, the programs described in the methodology included differing levels of complexity. There

was not one-to-one correspondence between the components included in each of the three programs, such that each had some components in common with the less complex and most complex programs, adding some additional components, with the most complex adding still others. A third limitation was the study was completed in three schools in the Midwest. It is possible schools from other regions in the country may have different outcomes based on regional differences. A fourth limitation was maturation of the population. When dealing with student ages 14 through 16, it must be taken into account that these students will mature because of experiences gained through a semester or even a quarter of the school year. Also, just the aging process may have affected any data collected for this study. It was difficult to control for the effect of maturation on the overall results. A fifth limitation was the location of the students' room and the teacher in the classroom. Student achievement may vary depending on the location of their class. Students who worked in a poorly lit room or a room that was often noisy because of internal or external noise could have affected student scores. These were test environmental variables. Also, teachers who allowed for more noise in their rooms were less likely to write up discipline referrals for students, than teachers who demanded low-level classroom noise (Boone, Hartzman, & Mero, 2006). The sixth limitation was a possible collection bias. Collectors of data may skew the information they have available to support their theses. A perfect example of this might be an administrator who gets a referral from a teacher and instead of acting on it as an official referral; the administrator could take the student aside and talk with him or her. This will not be recorded as an official referral because the principal dealt with it in an unofficial manner. The final limitation was the potential impact of the parents on their students' successes. When

implementing challenging program, it must be taken into account how well something will be implemented. If parents, for example, gave their sons and daughters more direction and attention about their studies at home, typically student achievement and discipline problems may take a positive turn. Conversely, if students were not getting extra help they needed to be successful outside of the school setting, scores and behaviors could suffer.

Summary

This research study was designed and implemented to determine if there was a significant difference in the measurable outcomes in demographically similar high schools, when implementing freshman transition programs with varying levels of complexity. A review of the literature determined that little research had been completed to compare this element of the success equation for freshman transitioning from their middle grades to their freshman year in high school.

Freshman transition programs existed across the country and received support from communities in general and school districts in particular. Often these programs focused on trying to maintain a level of communication that was often lost as the students experienced high school for the first time. By comparing three demographically similar high schools with three levels of program complexity on three different criteria, it was hoped that future program construction could be better informed.

Chapter Two: The Literature Review

Introduction

Studies have shown that ninth grade is a pivotal point in a student's academic career. Data from the U.S. Department of Education revealed that 60% of freshmen from 1,700 schools nationwide made it to graduation (as cited in Dillion, 2008, p. 29). In the state of Missouri for school year 2010-2011 the average freshmen graduation rate was 85% (U.S. Department of Education [USDOE], 2014, p. 1). Entering ninth grade could be one of the most academically challenging times in a young person's life. The students were usually dealing with self-esteem issues, developmental changes, and environmental shakeup. School districts across the country were faced with the possibility of ninth-grade students failing high school, and eventually dropping out. Success or failure during the freshman year set the tone for the student's entire high school career (Hertzog & Morgan, 1998).

Across the country, official reports of high school students dropping out of school did not reflect the extent of a national education problem. The nation's graduation rate was in decline, and a number of students were not graduating in four, or even five years. The major concern was the number of students who were stuck in the ninth grade bottleneck, who failed to progress to the 10th grade. Furthermore, when some arrived at the 10th grade, they were not on the appropriate time of arrival, or credit level. NCLB created an emphasis on graduation rate. However, data from the previous 30 years showed that graduation rates had fallen steadily since 1984 (Wheelock & Miao, 2005.) There was a huge dip in enrollment numbers from eighth grade to ninth grade. In some states, such as Florida, as many as 32% less students were enrolled in grade 9 than in

grade 8. The same type of data was true for grades 10 through 12. These grades, across the board, had fewer enrollment numbers when compared to ninth grade.

It was important to understand the enrollment issues related to this grade level, and take steps to ensure this problem was eradicated. First, use of current data for school improvement and NCLB requirements was important. Full graduation should become a big part of district and building improvement plans. Next, graduation rates should be made a central objective to the mission of every high school. Many students felt they did not belong in secondary schools. It was the responsibility of the schools to enhance student commitment, as well as offer learning experiences worth their commitment. Finally, it was important to consider a range of support services to strengthen the move from eighth to ninth grade. The idea of repeatedly helping students, in order to prevent failure, was important. Schools needed to find a way to give extra academic support, along with behavioral and attendance assistance to help students succeed.

There was research completed to find out what students expected from high school, and how they experienced the transition from middle to high school. Expectations about high school were perceived to be important in three ways (Stein & Hussong, 2007). Many students' expectations may have shaped their experiences of high school. Course selection, becoming a member of an activity, club, or sport, and participation were just a few examples. Second, expectations may have served to help students cope and understand their high school experiences. Those students who expected negative things would happen focused on them even more after they occurred. This possibly led to negative thoughts about their high school experiences. Finally, problematic expectations may have helped in identifying points of needed intervention. Sometimes a student

believed he or she was not capable of doing the work or coming to school. Programs and procedures could be put into place to curb negative expectations and experiences. Another research study proposed that students hold positive expectations about high school. Furthermore, these positive expectations predicted more positive experiences a year later (Stein & Hussong, 2007). These foundations appeared to culminate at the eighth grade, when students were successful and having a more positive middle school or junior high experience.

The freshman year was pivotal to continue educational success, and could determine whether students succeeded, or desperately fell behind other classmates (Black, 2004). When dealing with difficult issues, such as dropout rates, educators often came up with alternative ideas to meet the challenges of the day. The increase in the dropout rate occurred at a time when there was an emphasis on competing in a global world and getting a college degree (Nield, Balfanz, & Herzog, 2007).

Freshman transition programs were operating for the decade previous to this writing, in one way or another to provide help to the students affected by the movement to secondary education. There were different types of freshman transition programs. It was the belief of many educators that freshmen needed to be isolated from other high school students in order to be successful. According to the United States Department of Education's (2014) National Center for Education Statistics, there were 128 ninth grade standalone schools operating during the 1999-2000 school year (as cited in Stetser & Stillwell, 2014). By 2011, that number doubled. This was due, in large part, to the data available to school districts about the success rate of these centers. While ninth grade-only centers were the answer for some schools, often a blend of activities and programs

provided the necessary groundwork to help students entering high school find success. These programs varied, but often consisted of a combination from the following:

- Transition Course
- Academic Teaming
- Open Admission for Athletics and Extra-Curricular Activities
- Ropes Course where Students Rely on One Another
- Freshmen Awards
- Parental Involvement
- Student Mentors

This list contains a few programs developed and implemented to help students transition to the high school. It eventually came down to the school district resources, and the district's ability to implement such programs.

Freshman Centers

The aspect of being welcome at school, having friends in class, making new friends, and hanging out with the right people led to a new social structure for ninth grade students. A sense of belonging needed to be developed (Isakson & Jarvis, 1999). Moving from a small school to a larger school, can be overwhelming. This experience was worse for ninth graders entering a large comprehensive school. In addition to this, the challenge to adjust became more difficult for students enrolled in a school district that had numerous students coming from different middle schools. Some middle school students transitioned from within the district, and others were from private choice schools. Some research found that large comprehensive high schools had little support available for ninth graders new to the district (Kerr, 2002).

During the 2004-2005 school years, Crownpoint High School adopted a school-within-a-school model that established a freshman academy. The academy provided support for incoming freshmen. In this concept, freshman students shared very few classes with upperclassmen. Furthermore, the ninth grade class ate together at lunch and occupied a certain space within the high school facility. The results of this model for ninth grade were significant. Graduation rates soared within four years to 98%, and state-mandated tests for reading and math exceeded state and district averages (Kerr, 2002).

Aldine Independent School District in Houston, Texas, operated four ninth-grade centers. One study reported that freshman with their own campus occupied a campus that helped students become better acquainted with the rigors of a high school curriculum and mature in the process (Reents, 2002).

The superintendent of the district considered the freshmen centers a success based on the following information:

1) Dropout rate at the ninth-grade level decreased dramatically.
2) Attendance rate increased.
3) More students were earning credit and were classified as 10th graders when they went to high school.
4) More ninth-grade students were involved in extra-curricular activities. (Reents, 2002, p. 15)

The ‘freshman wing’ concept at Findlay High School in Ohio took typical freshman centers to a new level. Findlay High School administrators analyzed data that showed 29% of incoming freshman students failed at least one class during the first semester. Freshmen were required to take core courses, and they were typically some of the

toughest and most rigorous academic classes a student had to take in high school (Smith, Akos, Lim, & Wiley, 2008).

Findlay High School decided to move all freshmen and the resources necessary to operate their coursework into one center. One report stated that some positive impacts of downsizing were improvements in attendance, student achievement, behavior, teacher morale, and parental contact (DeWees, 1999). Findlay High School created a top 10 list for the foundation of the freshman wing. The list included an annual freshman teacher retreat to promote bonding, plan, and energize professional learning communities by developing common practices (McIntosh & White 2006). This type of activity was rare and did not appear in other freshman transition programs. The other top 10 items created were perceived as typical for a freshman wing. These included a set of core teachers, principals, and counselors with common lunch periods, who worked together to develop intervention strategies, plan student activities, and develop professional learning communities. The list also included allowing students and teachers to have common lunch periods and allowing special freshman lunchroom activities to help keep motivation up for both students and teachers (McIntosh & White, 2006). Approximately 500 freshmen, annually, became part of the 'wing.' The wing produced many parent comments on the difference it made for their children in transitioning to the high school. Freshmen parents were glad to see that, in addition to increasing student achievement, the ninth-grade students became connected and involved in high school activities.

The first piece of data analyzed for the freshman wing was the total number of students failing classes, and to what degree. The class of 2003 was the last class not to participate in the freshman wing program. Their data indicated that 42% of the students

were failing one class, and at least 37% were failing two or three classes. In years 2004, 2005, 2006, and 2007 the data showed the number of students failing multiple classes decreased by at least 10% or more (McIntosh & White 2006, p. 47).

Next, data on attendance was analyzed to see if attendance increased as a result of the more family-style atmosphere in the freshman wing. Again, the class of 2003 was the baseline class, and it had a 94.19% attendance rate. The following classes in, years 2004 through 2007, increased attendance by at least one percentage point every year. Also, it should be noted that the number of students expelled in the class of 2003 was 20. The next four years yielded continual decrease in student expulsion, and by the class of 2007 the number had fallen to three (McIntosh & White 2006, p. 48).

It was easy to understand why student, teacher, and parent perceptions were positive. Statistics bore out the positive impact of the freshman transition program at Findlay High School. Even though freshman wings or schools-within-a-school were statistically successful for a number of years, some negative aspects of these programs need to be discussed. Often school districts would make a freshman center building location off of the main campus to lessen overcrowding at the high school. They sometimes combined eighth-graders and ninth-graders at a facility, as it was less costly for the school district (McIntosh & White 2006).

Ideally, ninth-grade students needed to be isolated to help students gain a sense of belonging, and feel they were in a caring and nurturing environment. Combining freshmen with eighth-graders hurt the growth and maturity level that freshmen needed to reach in order to transition to the high school setting. Chmelynski (2004) said that the most successful freshman wings were stationed in a separate part of their future high

school. A negative aspect of the implementation of freshman centers came from a perception of the relationships that were built. Some researchers commented that conflict could develop from the commitment a teacher felt toward the school versus commitment to the smaller unit, which could lead to rivalries (DeWees, 1999).

In situations where the freshman were housed in a different building, Gewertz (2009) stated that teachers began to worry about how they must move from one school to another, or lose autonomy. Freshman teachers may have felt they operated separately from the rest of the high school, and felt they were under a set of rules different from other teachers in the building. This rivalry relationship could filter down to the students themselves. Ninth-grade students, or other students in the high school, could develop an adversarial attitude towards one another. The aspect of cost must also come into play when deciding if establishment of a freshman wing was the right design for transitioning students to the high school. Finally, the perceived impact of the freshman programs played an important role in the development of true success. “Therefore, it is to our advantage to develop programs and initiatives that fit as seamlessly as possible into our school cultures” (Habeeb, 2013, p. 18).

Many freshmen were excited about coming to the high school and looked forward to the new chapter in their lives (Mizelle, 2005). When a school district decided to open and operate a freshman wing, it was important that those working with ninth-grade students were dedicated. Often teachers, administrators, or counselors would be thrown into situations they were ill equipped to handle. Successful freshman centers needed teachers who were committed to freshman students and wanted to be a part of their

successes. These freshmen centers focused on the philosophy of their freshmen academy to match individual needs to their particular freshman class (Clark & Hunley, 2007).

A study was completed at a large Midwest comprehensive high school with a student population around 2,300 (Klem & Connell, 2004, p. 263). In this district there were three middle schools that sent their students to two high schools. Caucasian and Native American students made up the majority of the student population at these high schools. Free and reduced lunch percentages ranged from 32.7% to 75.5% for the middle schools that fed the two high schools (p. 265). The high school did not have a freshman transition program in place. However, the district decided to determine the factors that had the greatest influence on the transition from eighth grade to ninth grade. This was done through a questionnaire distributed to freshmen after their first semester of high school (Klem & Connell, 2004).

Students who participated in the study were asked to respond to 30 questions with a scale choice that included the following: 1, ‘really doesn’t help’; 2, ‘doesn’t help’; 3, ‘helps’; and 4, ‘really helps.’ The students were also given a yes or no type of question along with a short answer question (Klem & Connell, 2004). There were over 495 students who responded to the survey (p. 262). The data showed that going to class every day and having friends in those classes were factors in the students’ opinions. The next important factors rested with the teachers. It was assumed that through relationships with teachers and other school adults, adolescents established a sense of school belonging and internalized the norms and values of the school as a social institution (Klem & Connell, 2004). Teachers who explained material well, who demonstrated caring, and were easy to talk to had a high correlation to a student’s success in his or her transition to the high

school. This was also an indirect reflection on teachers' abilities to care and motivate students to attend classes. Motivating and exciting students for learning began with teachers planning engaging lessons and incorporating into the lessons a variety of strategies and various modalities for student engagement (Stronge, 2002).

Some surprising non-factors in students' success transitioning to the high school included: having a mentor, having tutors help with work, and being in a larger school. The response that 'being in a larger school' did not affect most students negatively goes against most research that was available. Newman's study revealed that feeling lost and forgotten was not unusual (Newman, Newman, Griffen, O'Connor, & Spas, 2007). Such feelings were understandable, especially if the feeder school was a small one and friendships were exclusive. When freshman entered high school, they had to adjust to older students and the increased social and academic pressures that came with being in high school.

Developmentally, many students were poorly prepared to navigate such a demanding transition from middle to high school (Montemayor, Adams, & Guilotta, 2000). Some schools chose to introduce 'Service-Learning Mentoring' as a strategy to help freshmen and then-current high school seniors. The seniors acted as personal mentors to incoming freshmen. Those interactions helped freshmen become active in after-school activities, join service-learning opportunities, and feel connected to the social fabric of their high schools (Sims, 2010). Other schools found ways to help mentor freshmen in order to enable an increase in GPA scores, lower absenteeism, lower discipline problems, and lower the dropout rates. Dropping out was perceived as a devastating consequence of youths' frustration with the demands of schooling (Somers,

Owens, & Piliawsky, 2009). Student frustration and environmental stressors may have contributed to the youths' dropping out of high school (Crowder & South, 2003).

Drop-out prevention was an important area of study because society's cost for individuals who dropped out of high school was estimated into billions of dollars (Buckley, Storino, & Sarni, 2003; Rouse, 2005). The students of urban schools had unique needs that varied from traditional students in other school settings. Urban students were exposed to problems that pushed learning into the background. According to Rice and Roelke (2003), urban school children approached a crisis point.

A Multiple Program Approach

According to Mizelle (2005), transition programs that supported students most effectively kept them in school and on track to graduate with their peers. They also offered varied activities (Mizelle, 2005). Mac Iver, Young, and Washburn (2002) thought that communication with students and providing them social support while involving their parents was imperative. Also, making sure that middle school and high school educators took time to learn about each other's curriculum made for an easier student transition. (Mac Iver, Young, & Washburn, 2002).

There were different ways to provide students with information on the new school they would attend. It was considered best to start educating eighth-graders about their new school in the spring semester. It was also important to educate high school teachers about the incoming freshmen. This should include a freshmen watch list that alerted staff about grades, attendance, and test scores in order to target student needs (Gewertz, 2009).

One way the sharing of information for both groups could be accomplished was holding an assembly at the middle school or high school and bringing together high school counselors, administrators, and students to disseminate information and answer any questions posed by the middle school students (Mac Iver et al., 2002). Another option available to administrators was to offer eighth-grade students a visit to the high school to shadow a high school student for a class period or two. This allowed future high school students to begin to know at least one student and one teacher at the high school. It also allowed the students an opportunity to see what a high school classroom and setting was about. This hopefully laid fears and anxiety to rest. Many schools did not have the time or resources to plan effective student shadowing. The basic program could include letting incoming freshmen tour the school when they come to pick up their schedules for the fall semester. An additional activity could be a back-to-school night for incoming freshmen. This would be an opportune time to answer questions and give out important information about the coming year (Mac Iver et al., 2002).

Parent Education

Unfortunately, parent involvement in their students' education typically dropped off significantly by eighth grade, and often dropped even more during students' transition from middle school to high school (Cooper, Lindsay, & Nye, 2000). This trend could reverse if schools and teachers worked to keep parents involved (Epstein 1996). According to Nield (2009), students want a bridge to success in high school. By incorporating students' parents in the process, the likelihood of student success rises.

In order to meet the needs of parents, schools began holding parent nights in the spring semester of their child's eighth-grade year. These parent nights included

administrators talking about what was expected from the students as far as discipline, student dress, and homework. Key contributors included counselors, who would explain concepts, such as credit requirements. In addition to this, the school nurse reviewed information relevant to reporting sickness and medicine distribution. Finally, the activities directors provided an overview all of the activities students could join. The meeting also helped the parents know what groups had relevant expertise (Cooper, et al., 2000).

Parent support was the paramount social support system during adolescence. It was directly related to an adolescent's academic success, positive self-image, self-esteem, self-confidence, and overall mental health (Newman et al., 2007). There were studies conducted that suggested that perceived parental involvement through socialization of educational values had the strongest association with improved GPA and classroom encouragement (Fan & Chen, 2001; Newman et al., 2007). Studies also recognized that psychosocial forms of parental involvement may be more developmentally appropriate and effective in helping teens achieve educational success over practice-based involvement in school activities (Green, Walker, Hoover-Dempsey, & Sandler, 2007; Wei-Bing & Gregory, 2010).

Peer Support

The importance of younger-to-older student connection in the transition process from middle to high school was often overlooked by educators. According to the Search Institute, "Schools that nurture positive relationships among students are more likely to realize the payoff of more engaged students and higher achievement levels" (Cotton, 2001, p. 17). This focus was reinforced by research findings that suggested academic

achievement was strongly influenced by the quality of a student's social environment and by how strongly the student felt attached to school (Cotton, 2001). Schools were turning to nontraditional activities to address this connection to incoming students. Activities such as e-mail pen pal programs, social media, group meetings with counselors, and summer social events worked well for incoming freshmen. "More than anything, peer mentoring is about forming relationships" (Frank, 2011, p. 66). The National Association of Secondary School Principals [NASSP] urged schools to develop strategies to ensure that each student was known well at school. In addition to this, a student's progress should be closely monitored, and all students should have academic and social support (Frank, 2011).

A Chicago area high school developed a freshman advisory program run by sophomores, juniors, and seniors from the high school, in order to provide students the social support they needed to be successful. The program's slogan was 'Doing well and being well'. This was a perfect slogan to emphasize the dual purpose of enlightening freshmen academically, as well as socially (George, Stevenson, Thomason, & Beane, 1992). The advisory program replaced the freshman study hall that was previously in place. The advisory program's success was based on reducing first-year failure rates and increasing participation in extracurricular activities. The freshmen failure rates for the first semester of 2002-2003 was 37%. The following school year, 2004-2005, the percentage of students who failed a class dropped to 23%. Also, the percentage of freshmen students who participated in an extra-curricular activity was 72% in the 2002-2003school year, and moved to 78% the following year, 2004-2005 (George et al., 1992).

The numbers were encouraging because the goals of fewer failures and increased activity were tabulated. Another segment complemented the transition program, as it brought middle school and high school educators together. Successful high school transition programs depended on middle and high school administrators, counselors, and teachers working together to share information about the programs, courses, curriculum, and requirements of respective schools (George et al., 1992). Ongoing communication and joint transition planning among administrators, school counselors, and teaching staff at all middle and high schools in a feeder group was essential (Holcomb-McCoy, 2011).

The ability to have middle school and high school administrators, counselors, and teachers form a vertical team to assess and align curriculum was imperative to the success of all students. The vertical team allowed middle school teachers to better understand the progressive level needed for each student to be successful at the high school level. An added benefit of the vertical team was it was already in place to support and develop transition activities (George et al., 1992).

Examples and Applications of Transition Programs across the United States

There were many applications and ways to implement transitions, as applied in schools across the United States. The differences in the various programs were often due to filling the needs of the community, as an educational institution. Ninth grade was considered a critical year for academic performance. It was a make-or-break year in terms of ultimate high school success for the incoming ninth graders. Middle schools must prepare students adequately for their high school years. Various school districts built freshman transition plans to try to improve the success rate of the incoming freshman students.

For example, the George Middle School in Pasadena, Maryland, put in place a curriculum drawn from several disciplines. The curriculum created challenging learning plans. Scores on the eighth-grade tests rose. The school was praised for these improvements. Additionally, there were fewer social problems or referrals during the first year (Smith et al., 2008). Another school in Mississippi, Northwest Rankin Middle School< combined the seventh and eighth grade classes to form a two-year program. The result was an increase in math and reading scores (Smith et al., 2008).

Perceptions of students entering the high school for the first time were explored. An effort to study perceptions of students entering high school discovered some early impressions. One student had heard stories, such as pennies being thrown at freshmen, or a freshman being sent to the fourth floor in a three-story building. She heard these stories as an eighth-grade student preparing to leave Edison middle school for high school in Champaign, Illinois (Haag, 2000). The student reported she was scared, and she was afraid that everything about high school was going to be very different from middle school. However, things were not as bad as she feared, thanks to a new program called Central Jumpstart. Often the incoming freshmen coming were scared, which may lead to negative behaviors, according to one math teacher at Central (Haag, 2000).

Several teachers and counselors came up with goals for the new Central Jumpstart program that included time management, study skills, and academic review. Recommendations came from suggestions made by teachers and counselors. They also included input from about 40 students (Haag, 2000). It should be noted that Central Jumpstart was not designed for disabled or special needs students, who often had their

own specific transition plans. Rather it was simply for students who might need a little extra support in making the transition from eighth grade to high school (Haag, 2000).

Covey's (1998) book, titled *The Seven Habits of Highly Effective Teens*, was used as a basis for Central Jumpstart. The math and English curriculum of this book were used in the development of the transition program. One of the concepts covered by the book that was stressed in the program was balance. A math teacher at Central had the kids draw pie charts to help teach them about balancing time with friends, family, school, and other extracurricular activities. This helped the students see who they were, and plan to allocate more time for areas that needed more attention than they may have originally thought (Haag, 2000).

Mentors were also used as a part of the Central Jumpstart program (Haag, 2000). During the first week of school, incoming freshmen heard from older high school students about activities, extracurricular clubs, sports, and library orientation. A special visit from a University of Illinois basketball star who graduated from Central was held with new freshmen. Students kept a copy of the Covey (1998) book at the end of the two-week orientation (Haag, 2000).

The Central Jumpstart program was not mandatory for all students. Fatima, a student, agreed that the program was fun and a great learning experience. It helped to introduce her to new friends. The program demonstrated the significance of time management skills and mentoring from more experienced students and others to help freshman be successful during their first year in high school (Haag, 2000). Other programs have been implemented to help freshmen make the transition.

Transition programs in California. Jessica McLain was filled with awe as she looked on her large freshman campus (Mehta, 2008). Jessica claimed to be nervous because of the larger school, and larger enrollment. However, she was somewhat sheltered by the transition program nestled in small learning communities, and sometimes separate campuses. Diaz was the supervisor of the Pasadena Unified School District. He noted how many ninth graders were faced with the same problems and did not make it to the 10th grade (Mehta, 2008). The statistics were not in Jessica's favor.

More than 30% of high school students quit before graduation (Mehta, 2008, p. 1). The majority of this dropout took place in ninth grade. These were the results of a 2006 study by the nonprofit Editorial Project in Education Research Center, located in Bethesda, Maryland (Mehta, 2008). The center noted that California had 468,000 high school seniors in 2006. This was down by 81,000 since the class entered ninth grade in 2004 (Mehta, 2008, p. 1). Finkelstein (2004) stressed the significance of students not having to play catch up by having a strong start in the freshman year.

Previous to the study regarding the Central Jumpstart program, high schools tested different strategies for freshman students, which included mentors, summer programs, and extra study time. However, a new strategy of giving newcomers their own learning environment showed success. Through this strategy, teens experienced a double whammy of bridging adult growth with the added pressure of transitioning to high school. In addition, school and social life demands became dramatically increased. Poor academic performance during freshman year was not acceptable, according to newer standards. This was because grades earned were the number one factor used to predict future high school success (Mehta, 2008). Furthermore, it was shown that students

needed to start college preparation early to meet the requirements to get into California's public universities.

One potential part of a transition plan was that school districts were building separate facilities for students in their freshman year in California. This appeared to be successful as it was a strategy used in Alabama, Texas, and North Dakota (Letrello & Miles, 2003). The off-site facility provided a smaller more controllable environment for the critical freshman year. However, building this site was expensive and not all school districts could afford to do this. To replicate success of an off-site freshman center, they could create small learning communities in a separate part of the original campus. These communities had teachers versed in transition, and upperclassmen that mingled with freshmen and provided student experienced input. The courses and extra-curricular activities were planned so that upperclassmen and freshman could learn together (Letrello & Miles, 2003).

Logan High School started ‘Freshman Families.’ The freshmen took classes with the same English, math, biology, and life skills teachers. They got to know their teachers and the other students better, and they got to know themselves better. This allowed a student-to-teacher ratio of 20-to-1 (Mehta, 2008). One student, Jennifer, attended a Freshman Academy orientation in an attempt to recruit new members for the pep squad. Her only regret was that she wished the Freshman Families program had been implemented earlier, when she was first attending as a freshman. She claimed the work was harder, but programs like this helped students make the transition from eighth grade to high school easier (Mehta, 2008). The transition program was successful in California’s high schools.

Transition program in New York. According to a Buffalo news article, the size of the school is significant (O'Brien, 2000). Within the article, one educator, Kovach, reported that schools with more than 1000 students were less likely to be able to create a sense of community. Hamburg District was located in New York and employed the strategy of smaller class size and groupings to counter the effects of transition to high school. Most Hamburg High School students knew the school's colors and the nickname of the football team by ninth-grade. However, they may not have been as good at juggling six courses taught by six different teachers in a class session meeting for less than an hour per day. Of course, the extra pressure of getting lost in a large school did not help matters. Research showed that students in smaller schools had a better sense of community and did better academically. This was similar to the previously discussed plan implemented in California, as they wanted the student not to be swamped by a huge class population (O'Brien, 2000).

Hamburg had a $54,000 grant from the US Department of Education. The district planned to create a smaller learning environment for freshman. The smaller school setting garnered higher attendance and graduation rates. It also resulted in more positive student attitudes about school and learning and increased involvement in extracurricular activities. There were fewer discipline problems, improved morale, and an overall safer learning environment (O'Brien, 2000, p. 1).

Although the middle school that fed into the high school had 900 students, the staff employed team teaching, with the team core academic teacher in charge of groups of students. Hamburg High School had 400 more students, at around 1300 total. The federal grant was targeted at schools with more than 1000 students, therefore Hamburg qualified.

The final statistics were shared with other schools, in order to provide modeling studies (O'Brien, 2000, p. 1).

Since 2002, New York City School District closed more than 20 failing high schools, opened more than 200 new secondary schools, and implemented a centralized high school admission process in which approximately 80,000 students a year indicate their school preferences form a wide-ranging choice of programs (Bloom, Thompson, & Unterman, 2011, p. 5). Small schools of choice (SSC) were opened between 2002 and 2008 to help high school students at all levels of achievement. The small schools operated with 100 students per grade and incorporated ninth through 12th graders. Data from this study included a positive outcomes. First, students who attended SSCs were 7.8 percentage points (39% compared to 46.8%) less likely to fail more than one core subject than their counterparts at traditional high schools in New York (Bloom et al., 2011, p. 9). Also, during the first year of high school, SSC enrollees earned almost one full credit more (0.9) toward graduation than did their control group counterparts (Bloom et al., 2011). It should be noted that in this study there was one cohort, for which there were four years of follow-up data. However, even the cohorts without a full four years of follow-up data continued to show signs of improvement in year two and three of high school.

Transition program in Philadelphia. Philadelphia was looking into reforming its high schools to better serve students over the course of many years. The Philadelphia Schools Collaborative in the 1990s and John Hopkins University's Talent Development High School Model from 1999 to 2005 were aimed at the whole school and included

focused interventions to assist ninth graders in the transition to high school (Research for Action, 2010).

Philadelphia high schools faced the same problems as many other high schools in big districts across America. First, they had great interventions to help students, but along the way something happened and no program was implemented with fidelity (Research for Action, 2010). This was true of past reforms involving Philadelphia high schools. There were five interventions for Philadelphia ninth-graders that were still used across all types of high schools in the state. First, student orientations were conducted to help establish one type of school culture. Next, Philadelphia schools made sure to create ninth grade teacher teams to help build relationships and teacher collaboration. Also, teachers were assigned to work in the ninth grade teams because they were good at instruction and ensuring their students reached higher academic achievement levels. The fourth intervention was based on the fact that the high schools needed to catch students up to grade level, and therefore would use a double dose of math and English to help accelerate their learning. Lastly, and probably the most important, was the use of individual student data to help assess learning and provide information on whether to forge ahead with the curriculum or take time to reteach (Research for Action, 2010). Washington, Tennessee, and Hawaii offered some different strategies.

Transition programs in Washington, Tennessee, and Hawaii. Eighth-graders in Washington's Project Graduation may have been a little cocky, as they were the big fish in the middle school. They would become the guppies the following year in high school and needed help to keep their grades and attendance in order. State leaders recognized there were students that needed extra help going into the ninth grade.

Washington state's Project Graduation strategies included identifying seventh and eighth grade students who needed extra help and providing them access to a four-to six-week summer program. Another strategy revolved around the use of block scheduling, which was used to transition math and language arts, as well as used for career and technical education courses in the ninth-grade (Christie, 2008)..

The block scheduling strategy allowed schools to personalize the high school experience and expand the middle school experience. Teachers were to be working in teams to allow them to get to know the students better. Focusing in on the individual weak areas for students was key to the success of the Washington state program (Christie, 2008). Tennessee implemented similar measures.

The Tennessee State Board of Education adopted rules that encouraged schools to use students' eighth-grade Explore scores as a standard to identify students who were unprepared for high school. More importantly, the school system stepped in with assistance (Christie, 2008). The assistance strategies involved an entire facet of resources. Students were tutored by teachers, peers, and community members both during school and on the weekends. Also, programs were fast-tracked to bring ninth graders up to grade level, and these students were given extra time to master challenging courses (Christie, 2008).

Tennessee focused on identifying students with needs, as did Washington state (Christie, 2008). These policies were adopted by the Tennessee State Board of Education in 2008. School boards were allowed discretion in choosing which of the strategies worked best for them. Hawaii used a strategic plan that included a recommendation that ninth graders receive necessary instructional support services by implementing smaller

learning communities and increased access to tutoring (Christie, 2008). In addition to this, summer camps and even a website provided a single access point for information about postsecondary institutions. All of this demonstrated the importance of ninth grade transition policies in the success of students in high school (Christie, 2008). Other transition programs demonstrated the importance that parents played in the success of students in high schools.

School boards across the country tried to design programs to help freshmen successfully make the transition to high school from middle school. Some of the reviewed transition strategies included mentoring, building separate learning areas, support teams, help in math and English, and targeting specific students' needs. Various programs across the country from states ranging from Hawaii to Texas were reviewed. One of the most important factors in learning that was not addressed in the transition process was the importance of parents or guardians being involved in the process. Furthermore, how teachers feel about transition programs is also a consideration. These topics will be reviewed.

Parent and Teacher Involvement in Freshman Transition

In the Clovis, Washington program, parents and students were skeptical concerning a new redesign for a separate school for ninth graders to help them make the transition into high school. The task force recommended the redesign in late August of 2006 (Hartz, 2006). The idea was further investigated, as administrators and teachers noted positive results in progress of ninth graders who partook in transition programs. Furthermore, one middle school of seventh and eighth graders was considered for future inclusion in the program. The available research supported positive findings for separate

transition building for ninth graders (Hartz, 2006).

A small group gathered at Yucca High School in Clovis to see the drawings of the new ninth-grade center (Hartz, 2006). Parents, teachers, and administrators visited two other ninth-grade centers located in Texas and New Mexico. The final plans were reviewed during a January school board meeting. Following Board of Education approval, the Clovis School District superintendent implemented the new concept, to begin with the 2007-2008 school year.

It was reported that about one third of Clovis ninth graders proceeded to Yucca High School without all the credits they needed to be successful (Hartz, 2006). However, the redesign of the school created a better social and academic environment for all students. Some parents were concerned about how the dissenters would affect the sports program. Others considered the new district unsafe for students. The superintendent assured all parents and students that the new building was safe, despite challenges in the community. It was noted that teachers overwhelmingly supported the ninth-grade building and the transition it provided for students at Yucca High School (Hartz, 2006). According to a survey, teachers overwhelmingly supported the concept.

Another example showed that ninth graders were often not prepared for high school underscored the significance of transition programs, with the main goal to prepare ninth graders for the transition to high school. Michael Cain was normally an above average student. However, an ‘F’ in ninth grade math was a wake-up call as to the importance and difficulty high school brings to ill-prepared students. Choosing almost any other freshman at Anderson High School in Texas where Michael attended would support that many of his classmates experienced the same problem (Jayson, 1995). He

also did not realize that he would have homework almost every night. Middle school was a lot easier for him, and teachers were a lot more lenient.

The overall Austin School District records revealed that 50% of the freshman would receive at least one ‘F’ in one class within the first six weeks of school. These records dated back to 1984 and showed consistency for this statistic. These grades were important towards graduation, and the number of F's soared to 67% (Jayson, 1995). There could be a number of different problems that contributed to this result. The district needed to look into why more students were failing, as the number was increasing, not decreasing.

The school district looked into the problem of passing coursework. They specifically targeted the transition strategy. This strategy made the movement from middle school to high school easier for students. It included what students needed to know in order to be successful in high school. The plan was uniform; to give students an early start to success in every area. The plan began in kindergarten and ended with a successful graduation from high school as its goal. Teachers needed to have the same standard for consistency in order to send the correct message to parents, students, and the educational community (Jayson, 1995). This took some time and included the components discussed in this section.

There was contact and dialogue between the middle school and the high school. Communication was the key, and included progress reports (Jayson, 1995). The record-keeping for surrounding Austin school districts was not exact enough, and in some cases nonexistent. Georgetown High School reported a 22% failing rate. Hays High School reported a rate of 40% of its students with at least one ‘F’ in one or more courses during

the freshman year (Jayson, 1995). However, West Lake High School showed only 15% of its students with one ‘F’ for freshman, since transition efforts have been put in place over the past decade (Jayson, 1995).

Eanes School District, where West Lake High School was located, offered afterschool tutoring and close monitoring of student progress. Counselors helped in the transition to high school by going over a complete four-year plan and doing career surveys at the eighth grade level. A local state park was used where older students met with eighth graders and helped mentor them as to what they could expect in high school (Jayson, 1995).

Lammel, the director of high school services for the NASSP, thought the Austin School District concerns were justified. He noted a trend across the nation of difficulty for students making the transition from middle school to high school (Jayson, 1995). The two major areas of concern were curriculum expectations and homework assignments. Restructuring of the high school and eighth grade transition were the primary focus. One of the transition strategies included a required study skills class. This helped the students adjust to a less structured high school environment. The high school environment typically included a stricter academic standard and an educational philosophy that required students to be more responsible for their academic work (Jayson, 1995).

President of the Austin school board, Rider, said that the district needed to revise curriculum, monitor elementary school progress, and improve the overall transition programs into high school. The more than 50% ‘F’ rate for freshman was mostly due to transition issues (Jayson, 1995). Students needed to be prepared and have all the basic skills necessary in order to be successful in high school. Students who were not prepared

contributed to an increased dropout rate. Texas dropout rate statistics showed that ninth-grade was the timeframe when the majority of dropouts took place (Jayson, 1995). Students were often promoted on to the next grade due to a Texas rule prohibiting schools from failing students in more than two grades between kindergarten and eighth grade. Austin area middle schools and high schools were working on ways to ease the transition from eighth grade to high school. This school district chose to focus on block scheduling, summer school programs, and organizational or study skills classes to help with the transition from middle to high school (Jayson, 1995).

Parent Involvement in Transition

The importance of parents involved with teaching reading beginning in first grade was been documented (Epstein, 1996). This level of parental involvement was important for many school programs. This involvement added power and impact to the goals of administrators, school boards, and teachers. Many parents tried to work with teachers and administrators once school conflicts arose. This kept a good working relationship and helped the students learn how to deal with conflict issues. Ironically, the students who needed more help typically had parents who were often more supportive (Epstein, 1996). All parents wanted the same thing for their children. They wanted the best education they could afford and they wanted to feel like their children were being treated right at school. These were all life skills that would help students and parents become more successful at what they do, get along better at work in social situations, and enhance the entire learning process; which was a main part of becoming educated.

One strategy to promote parental involvement and enhance the transition from eighth grade to higher school was to make sure everybody had the same goals (Carter &

Healey, 2012). One Virginia program began early in the spring when parents and guardians of eighth graders had an orientation that took place at Osbourn Park High School in Manassas. This was connected to the middle schools in a coordinated process. Middle school counselors were key players, as they helped select students' ninth-grade courses. The goals were clearly defined and everyone was relaxed and focused to help plan the transition. The strategy was to help parents help their students. Middle school teachers provided 10 simple suggestions for successful transition to high school (Carter & Healey, 2012). The list made sense for educators and clarified goals for those who needed help. This opened a gateway that allowed parents to interact, ask questions, and feel empowered in the educational process. More importantly, it helped the transition from eighth to ninth grade. It helped parents meet teachers, administrators, and counselors on a level playing field and allowed working together (Carter & Healey, 2012).

Osbourn Park provided professional development for teachers to meet the minimum requirements of their certification areas as educators. In a sense, the orientation meeting was a form of professional development for parents. Many parents were concerned with day-to-day struggles, such as making a living. They thought education was up to the teachers and administrators. They did not know how powerful they were in the transition process, and professional development for parents helped them realize that power. "Keep in mind we have a small community of parents who are not as well versed in language and math. More assistance is needed to help students with those particular problems" (Carter & Healey, 2012, p. 12).

Educational leaders could provide assistance to parents with a plan to help students in the transition from eighth grade to high school. One of these strategies was to

show how to build relationships to communicate needs effectively to administrators. Another strategy was to help parents monitor their students' progress. Teen supervision was extremely important at this stage of learning. Straight 'A' students could benefit from teen supervision, as it was more a monitoring service. Carter and Healey (2012) described a six step process to help parents in the education role with their children (Carter & Healey, 2012).

The first step was to make a plan. The students and parents were asked to think about where they should be after high school. Next, education needs were assessed to achieve students' future goals. Help was provided in where to look for information. This part of the transition plan helped students and parents in deciding which specific classes were needed for students to enter college, or transition to their desired workplace after graduation (Carter & Healey, 2012).

The second step was for the student to get organized. A daily planner and homework planner kept a routine that helped students achieve their tasks. This could have been as simple as planning Saturday trips to the library, or designating spending time studying every evening from 7:00 to 9:00 (Carter & Healey, 2012).

The third step was to form positive school relationships. It helped staff and students to have good relationships. Misunderstandings were usually easier to solve when voices were calm and goals were focused (Carter & Healey, 2012).

A fourth step was for parents to get involved. Parents needed to know the importance of family student and school involvement. Students would not get lost in a large school during the transition if there was a strong parent-school involvement (Carter & Healey, 2012).

A fifth step was to provide supervision. Although students wanted to be grown up in their freshman year, they were not grown. Parents helped students set appropriate boundaries. The boundaries often included curfew limits (Carter & Healey, 2012).

The sixth step was for parents to monitor student progress. Parents needed to carefully monitor the progress of attendance, academics, and social activities during the ninth-grade. Online monitoring information was used to continuously communicate both academic and attendance information to parents at any time. Parents should not be afraid to talk to teachers at any time concerning their child's development and grades (Carter & Healey, 2012).

These were six steps that helped the parent with their child's academic transition from eighth to ninth grade. The beauty of the six steps was the fact that they could easily be accomplished with a little effort. With the emergence of online progress monitoring, that more districts had available as the idea became more popular, parents and students remained aware of important high school goals, like attendance, discipline, and grades (Carter & Healey, 2012).

Quotes and Suggestions of Students Entering Ninth Grade

In a peer-reviewed work, Cushman (2006) collected data from 16 eighth graders concerning some of their perceptions of ninth grade transition to two large Indiana high schools. These quotes from the survey responses captured the hopes, fears, and perceptions of eighth graders making the transition to high school (Cushman, 2006). The first student, Brian, expressed that things in school were going to change:

> When you get to ninth grade, there's no more playing. You got to get about your work. You gotta find a study habit. You gotta do the right thing. Because after

> ninth grade, that determines where you're gonna be in life. How you gonna get paid, and how you gonna get treated — upper-class, lower-class. High school is going to follow you throughout your whole life. (Cushman, 2006, p.47)

Other students spoke to social stigma, being bullied, subgroups, teacher time and dedication, as follows. Ashley stated, “My brother said that they have a certain day that they throw the freshmen and some sophomores in trashcans or in the creek, lock them out of their classrooms, hit them, pick on them” (Cushman, , 2006, p.47).

Academics were also a concern of many of the students. Geoffrey said:

> I thought that with getting us ready for all the tests, we were going to have a hard time with math and language arts. But first [teachers] just review what you learned last year. Then they might add something that will help make it easier, like an easier method of doing fractions. (Cushman, 2006, p.48)

The transition to ninth grade was significant for students. Older friends and siblings told students and warned them about things that will happen. They were warned about greater challenges, bullies, cliques, and the importance of social status. This case study of 16 students from Indianapolis, Indiana, was conducted just weeks after ninth graders attended large high school. Many faced new challenges as these quotes revealed.

They believed that high school would be huge and confusing, unless they knew they were heading to the smaller high school. They also believed the work would be harder and that there would be more of it. Their fears included the amount of free time they would have and social stigma.

Summary

Numerous accounts of freshman transition programs existed throughout the country. These transition programs were rarely implemented as a stand-alone project. In order for a seamless transition from middle school to high school to occur, a school must incorporate numerous programs for incoming freshmen students. Various school districts decided that there is no 'one' way to help students with their transition to the high school. Even though there is no one way to do this, certain aspects of transitioning to the high school must be met for students to be successful. Other reports showed that students were less likely to drop out of high school if they began to experience academic success, or developed an academic relationship with teachers and peers within the school setting (Dynarski & Gleason, 2002). Academic success and connections to their new school were two main student goals of transition programs throughout the nation.

Freshmen had the lowest grade point average, the most missed classes, held the majority of failing grades, and created more misbehavior referrals than any other high school grade level (McCallumore & Sparapani, 2010). Budgets and funding were always at the forefront of what school districts could or could not do for their students. Schools pooled their resources to ensure students find success in high school. Some schools decided that a freshmen center or academy was the best use of their resources. These centers used a considerable amount of time and personnel to set up and get them going.

The results of transition program implementation showed that the efforts were well worth the cost. A number of districts implemented summer school programs, after school study help, and seminar periods (Kennelly & Monrad, 2007). Other districts decided to use a couple of different programs or activities to give students the help they

needed to be successful in high school. These programs included the following: a high school orientation night, student shadowing programs, beginning of year orientation, and a student visitation to the appropriate high school (during the eighth-grade year). The aspect of making students feel connected to other students could be met by a freshmen advisory program, email pen pal programs, or upperclassmen mentoring program. The latter could take place during visits to the high school. Finally, connecting parents to their child's new school could be very important to the success of students. Parents should have a night to meet administrators, teachers, and counselors. Furthermore they could partake in a forum to ask questions and know their children will be safe and supervised by the high school staff.

The transition from the middle school to the high school is a milestone in students' lives. Most students rise to the challenge with no problems. Some freshman students struggled with their new surroundings and expectations. Schools should be prepared with the necessary programs already in place to insure their first year success.

Chapter Three

Introduction

The purpose of this quantitative study was to examine the impact of freshman transition programs on three measures of student success: attendance rate, behavior referral rate, and grade point average. This study was designed to compare three demographically similar high schools located in the outer suburbs of a major Midwestern city. The schools were of similar size and contained in similar-sized districts. However, each of the three high schools had constructed and implemented freshman transition programs of different complexities.

The three high schools examined in this study were similar in many ways. All three high schools had one school that fed the eighth-grade students to the high school. West and East high schools operated a traditional sixth through eighth grade middle school setting, while South High School was fed through an eighth-grade-only school. All three high schools faced the same student issues and successes, while the students and parents were from similar backgrounds, and therefore had closely related demographics.

The Case at East High School

The freshman transition program was established at East High School, the school with the most complex program, to provide a smooth transition from middle school to high school. Another goal of the program was to provide a welcoming and accepting environment for all freshmen students. Administrators, counselors, and teachers made up a committee to look into which type of program could be set up to help freshmen make the transition.

In the spring of the 2004-2005 school year, East High School decided to implement a freshman transition program. In February of 2005, an administrator and a counselor from the high school met with eighth-grade students on two different occasions. Also, a parents' orientation night was set up to involve parents in planning the transition of their children to the high school. In May, incoming freshmen were invited to the high school. At this time students were shown a sketch about moving to the high school, and then were able to shadow a student for a class period.

The freshman transition program at East High School began with contacting eighth-graders in the spring semester before the start of their freshman year in high school. The faculty and staff made efforts to bring these students to the high school for meetings, including their parents. The staff at East High School also offered a summer school class, which was used as an orientation for incoming freshmen. All of these activities combined in an effort to improve the relationships between students and staff. Table 1 displays an activity timeline used by East High School.

Table 1.

Activity Timeline: East High School

February	Parents Orientation Night
February	Visits to the Middle School
February	Visits to the Middle School
May	Incoming Freshmen visit the high school
June	Summer School Orientation Class
August	Freshmen Registration
September	Get to know your Peer Mentor
October	Peer Mentor Meeting
December	Peer Mentor Meeting
February	Peer Mentor Meeting

In the summer of 2005, freshmen level, two-week summer school classes were available for incoming freshmen. These classes were intended for students to learn about studying and organizational, test-taking, and note-taking skills. The planning committee felt students would be able to learn more about the school and personnel at the school. During class time, teachers from all four core subject areas were brought in to give an example lesson. This showed students the kind of material they would be learning during their freshmen year at East High School. Even though this summer school class was a great idea, it was not announced to the students and parents early enough. Therefore, very little interest was generated. The classes did not have enough students, so the activity was discontinued for summer school.

East High School completed freshmen registration in August. This gave freshmen and their parents time to have a guided tour, check their locker assignments, get paperwork, and peruse the freshmen newsletter. At the beginning of the year, all freshmen were assigned a peer mentor who met with them throughout the year.

Secondary data from East High School was used in this study to represent academic and behavioral measures of student achievement, attendance, and discipline referrals, as the school with the most complex freshman transition program. In 2005, East High School implemented a freshman transition program, with goals to help deter students from becoming discipline problems. Figures 1 and 2 show the numbers of failing grades for the 2004-2005 freshmen, as well as the 2005-2006 freshmen, who received the benefits of a freshman transition program.

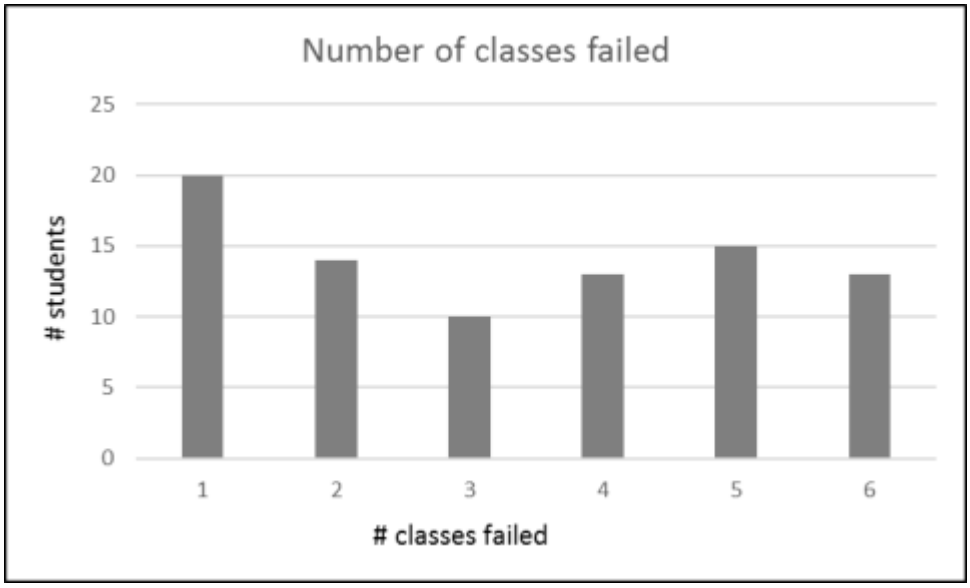

Figure 1. *East High School 2004-2005: Failing classes among transitioning freshmen.*

In 2004-2005 freshman students were not exposed to a freshman transition program. This group of students showed 83 out of 221 with at least one failing grade their freshman year. As indicated in Figure 1, many students received multiple failing grades.

In Figure 2, the freshmen students for 2005-2006, the first year of implementation of the freshman transition program, only had 47 students with a failing grade. This class had an enrollment of 230 students, and all students were involved in the freshman transition program.

Figure 2. *East High School 2005-2006: Failing classes among transitioning freshmen.*

One interesting aspect of the bar graph in Figure 2 is the fact that zero freshman students in the 2005-2006 school year received six failing grades for the year. In 2004-2005 there was a larger number of students who received four or more failing grades. Those numbers stabilized after the freshman transition program was put into place.

A second goal was to lessen underachievement in the high school setting. East High School was situated in a blue collar, working class community that had experienced continuous growth. With growth came educational problems that continued to alarm teachers and administrators.

The major issue facing teachers and administrators was incoming freshmen struggled with their workloads. The same group made up the majority of disciplinary problems for teachers and administrators. East High School investigated ways to better serve the freshman class. East High School implemented the transition program to help incoming freshmen be more successful. Research showed that, connecting eighth graders

to students and teachers helped make strong and mutually respectful relationships (Cushman, 2006). In other words, giving incoming freshmen opportunities to talk and meet with students and teachers helped relieve the stress created by moving up to the high school setting.

The Case at West High School

Secondary data from West High School was used in this study to represent academic and behavioral measures of student achievement, attendance, and discipline referrals as the school with the least complex freshman transition program. At the time of this writing, West High School had no freshman transition program in existence. Comparing West High School with East High school yields similar demographic data. The similarities occurred in the categories of population, numbers of failing freshmen, and numbers of discipline problems. To the researcher, it appeared that freshman transition programs could be important to insure the future success of West High School. In the researcher's opinion, West High school leadership could benefit from a study of freshman transition programs and, hopefully develop a strong commitment to a transition plan in the near future. For purposes of this study, since West High School was not implementing a freshman transition program, it provided sample control data.

West High School was a rural high school one hour outside of St. Louis, Missouri. West High School experienced problems and had available resources similar to East High School. West High School was interested in starting a freshman transition program. West High School administrators reviewed the potential impact starting a freshman transition program would have on students. Furthermore, they studied the

feasibility of whether they could garner similar results to East High School with a transition program.

The Case at South High School

Secondary data from South High School was used in this study to represent academic and behavioral measures of student achievement, attendance, and discipline referrals as the school with the less complex freshman transition program. South High School was about 30 minutes outside of St. Louis, Missouri. South High School had remnants of a previously implemented freshman transition program. South High School worked with students from the eighth grade center the spring before they reached the high school on topics, such as course offerings, scheduling, and answers to general questions. Often, student ambassadors from the high school were sent to the eighth grade center to provide informational presentations on what the expectations were for students enrolled at South High School. In addition, there was a student/parent information night before eighth grade students decided which classes would take during their freshman year at South High School.

South High School's population was holding steady at approximately 950 students (Table 6), and it was experiencing a more diverse student population (Table 7). South was starting to move away from its small town existence and becoming more of a suburban community. This required that administrators meet the demands of this new diversity. South High School needed to find ways to educate all students that lived within its borders. South High School was in line with state averages for attendance and graduation rates. It was the belief of central office and administrators that a freshman

orientation program needed to continue in order to help all incoming freshmen, because it would be the second transition in two years for them since leaving the middle school.

In summary. West High School was in a growing region of Missouri, which included a more diverse student population than other two areas. West was beginning to move away from its small town existence, as it became a more suburban community. This required that administrators meet the demands of this new growth and diversity. West High School needed to find ways to educate all students that lived within its borders. West High School was in line with state averages for attendance and graduation, at the time of this writing. At the same time, West High School had experienced an increase in both dropout rates, and disciplinary issues. It was the belief of central office executives and administrators that a freshman orientation program needed to be implemented to reverse these trends.

An evaluation of successful, and not so successful programs, at other schools needed to be noted. East High School was located in Jefferson County, and like West High School was experiencing rapid growth and similar problems, which affected new students.

East High School and West High School had similar numbers of administrators, counselors, teachers, students, and resources. Demographically, they were a similar test group. For the year previous to this study, East High School had implemented a few ideas.

Subjects/Sampling Procedures

In this study, the samples consisted of secondary data gathered from four years of freshmen students at East (most complex), West (least complex), and South (less

complex) high schools. Students at East High School were exposed to numerous activities of the freshman transition program (Table1). The West and South High School freshmen classes of 2010 through 2013 were demographically similar to East High School freshmen class. This study may determine if the success at East High School, contributed to by the freshman transition program, could feasibly be re-created at West and South high schools. Table 2 illustrates that while all three high schools were similar in overall enrollment size, they fluctuated in the number of freshmen enrolled.

Table 2.

Freshman Enrollment: South, East, & West High Schools; 2009 - 2013

	South H.S.	East H.S.	West H.S.
2009-2010	253	235	264
2010-2011	276	209	237
2011-2012	300	254	257
2012-2013	237	256	233

There were some aspects of East, West, and South high schools which were similar, but did not seem to match up perfectly. The numbers and percentages of free and reduced lunch were a good example. The free and reduced numbers were similar for West and South high schools, with numbers a little lower for East High School. East and West high schools were trending upward for in free and reduced lunch measures, while South High School remained close to flat in movement. When considering whether a program was going to work for a school different from the one studied, it was important to make sure the students, economic status, and other outside factors were taken into consideration. Tables 3, 4, and 5 display the numbers and percentages of free and reduced lunch within the studied schools for the years 2009 through 2013.

Table 3.

East High School Free & Reduced Lunch Numbers & Percentages

School Year	Number of Free/Reduced	Percentage of Free/Reduce
2009-2010	197	21.7%
2010-2011	248	27.9%
2011-2012	263	29.6%
2012-2013	301	34.1%

Table 4.

West High School Free & Reduced Lunch Numbers & Percentages

School Year	Total # of Free/Reduce	Percentage of Free/Reduce
2009-2010	328	34.4%
2010-2011	354	37.9%
2011-2012	377	39.9%
2012-2013	397	43.7%

Table 5.

South High School Free & Reduced Lunch Numbers & Percentages

School Year	Total # of Free/Reduce	Percentage of Free/Reduce
2009-2010	426	39.2%
2010-2011	375	37.2%
2011-2012	381	38.3%
2012-2013	345	35.8%

East High School was the only high school in its district. This high school, which consisted of grades nine through twelve, shared its campus with the middle school. East High School was comprised of 906 students, in 2010, and recorded a steady annual population increase from 2011 to 2013 (Table 6).

West High School was also the only high school in its district. The high school was fed by one middle school, which was located a little less than a mile from the high school. At the time of this writing, West High School served 946 students, in 2013 (Table 6), with a population that seemed to be growing again. The population increase resulted in a new elementary school and additions to the high school. South High School was trending downward during the six years in a row, previous to this study.

The population increase in the surrounding areas over the several years previous to this study was also reflected by the increase in student enrollment for East and West high schools in the six years previous to this study, as seen in Table 6.

Table 6.

High School Enrollment for East, West, & South High Schools: 2008 - 2013

	2008	2009	2010	2011	2012	2013
East	966	903	906	886	888	906
West	1006	953	934	944	908	946
South	1188	1132	1084	1008	983	963

Ethnicity is reported in Table 7. Besides ethnicity, the breakdown of a school district as it relates to age is important. These indicators are used for the planning and direction of any district. Both East and West showed growth in the number of residents coming to their respective areas. Only South showed a decrease in the number of young children residing in the area. The prime ages, with regard to this study are 1 through 19 years of age.

Table 7.

Ethnicity Percentage for East, West, & South High School: 2010

	East	West	South
White Alone	97.5	93.9	88.4
Black or African American Alone	0.25	2.1	8.4
American Indian or Alaska Native	0.25	0.6	0.6
Asian Alone	1.08	0.7	0.5
Hawaiian/Other Pacific Islander Alone	0.02	0.1	Z
Two or More Races	0.81	3.7	1.5
Hispanic or Latino	1.23	3.7	1.9

Note: Information from 2010 Census.

Tables 8, 9, and 10 show the growth of the areas from 2000 to the year 2010. The information from these tables indicates families that have settled in the areas may often be young families with growing children.

In Table 8 differences are noted in total number of residents in the East School District area in the ‘under five’ category. This increase would affect the school district for years, and needed to be addressed through additional facilities and programs.

Table 8.

East High School Census Populations & Percent of Change

	2000	2010	Percent Change
Total Population	19,374	26,431	+36.43%
Under 5 Years	1,495	1,948	+30.30%
5-to-9 Years	1,675	2,012	+20.12%
10-to-14 Years	1,736	2,158	+24.31%
15-to-19 Years	1,535	2,003	+30.49%

In Table 9, the West School District area showed signs of growth in the age groups of ‘under 5 years’ and ‘five-to-nine years’. Because of this growth the school

district opened new facilities and constructed additions to most of the existing buildings in the district. One age group, '10-to-14 years', had no growth from 2000 to 2010. This is noted in contrast to growth in other age groups, before and after the '10-to-14 years' group.

Table 9.

West High School Census Populations & Percent of Change

	2000	2010	Percent Change
Total Population	12,188	15,770	+29.39%
Under 5 Years	789	1,130	+43.22%
5-to-9 Years	880	1,130	+28.41%
10-to-14 Years	1,072	1,072	0.0%
15-to-19 Years	919	1,069	+16.32%

In Table 10, the South School District area showed most categories decreased in size. While the total population increased in the 10 years previous by 3.31%, the young school age children percentage decreased as much as 13.9% in elementary age groups.

Table 10.

South High School Census Populations & Percent of Change

	2000	2010	Percent Change
Total Population	15,145	15,647	+3.31%
Under 5 Years	964	894	-7.26%
5-to-9 Years	1,115	960	-13.90%
10-to-14 Years	1,097	1,005	-8.39%
15-to-19 Years	1,058	1,057	-0.09%

When comparing districts, other data taken into account were the income for a typical household. This statistic showed the greatest differential between the three districts. East School District had a median household income, which exceeded not only

West and South Districts, but the Missouri and United States averages as well. Table 11 shows other differences between household incomes between all three of the districts.

Table 11.

Income Summary: East, West, & South High Schools

Household Income	East	West	South	Missouri	U.S.
Median	$68,666	$47,477	$54,569	$48,734	$55,970
Average	$75,072	$58,381	$61,823	$64,156	$74,974

Note: Information taken from 2010 Census.

The percentages of students attending East, West, and South high schools that were receiving free and reduced lunch was another example of differences in the demographics at the three high schools, as well as some similarity. There was a 13.8% difference between the highest and lowest of the three high schools in 2013 (Table 12). East and South high schools leveled off, while West continued to show an upward climb every year, for the five-year span. It should be noted that all three high schools were below the Missouri free and reduced lunch state average of 49.9% for 2013.

Table 12.

Percentage of Free & Reduced Lunch: 2009 - 2013

	2009	2010	2011	2012	2013
East H.S.	21.7	27.3	27.8	30.4	30.4
West H.S.	31.2	37.1	39.9	43.0	44.2
South H.S.	35.6	40.7	38.5	39.8	37.4
Missouri	43.7	46.9	47.8	49.5	49.9

The attendance rates for East and South high schools remained consistent for the five years spanned by the study (Table 13). West High School struggled with attendance. Its attendance was notably below the state average, while East and South high schools

mirrored the Missouri High School average. In the five-year span, East and South high schools made a 0.8% and 1% gain in attendance. On the other hand, West High School's attendance remained flat. Its attendance continued to run three percentage points below the Missouri High School average for the five year span.

Table 13.

East, West, & South High School Attendance Rate Percentages: 2009-2013

	2009	2010	2011	2012	2013
East High School	93.6	94.1	94.9	94.8	94.4
West High School	91.0	91.1	91.2	91.7	91.5
South High School	93.4	93.6	93.6	93.7	94.4
Missouri	94.0	94.3	94.4	94.7	94.6

External Validity

When applying the findings of East High School's freshman transition program as a comparison to West and South high schools, it should be taken into account the people and settings for which this study originated. The similarities between three high schools on the opposite sides of the region were strong. East High School, West High School, and South High School had similar numbers of students, staff, and resources. It was reasonable to generalize, since East High School had success with its freshman transition programs, West and South high schools could potentially do the same. West High School and South High School would need to take into account all the activities that make up the East High School freshman transition program to develop similar opportunities for their students.

Research Design/Procedure

The focus of this study was to determine if there was an increase in student

achievement and a decrease in discipline referrals brought on by contribution of a freshman transition program at East High School (most complex program). The other aspect of this study was to compare characteristics of East High School students to those of West (least complex program) and South (less complex program) high schools. The number of failing grades decreased, and the number of disciplinary referrals decreased at East High School during the two-year implementation of a freshman transition program that preceded the five-year data analysis applied in this study.

Methodology

Independent Variable. The independent variable of this research was the collection of special programs and numerous events designed to help ease student transition high school, referred to as the freshman transition program. The transition program at East High School was implemented during the first semester of the 2005-2006 school year.

Dependent Variables. The dependent variables for this study were the percentage of freshmen with at least one failing grade, the percentage of discipline referrals, and the attendance rates generated by incoming freshmen, represented by samples taken at each of three high schools representing different complexity of programming over a five-year time span.

An expected result of the study was that student achievement would increase and discipline referrals would decrease for the freshmen at East, West, and South high schools, as a result of the implementation of three different levels of complexity of freshman transition programming.

Hypotheses

This study was guided by one research question. The research question was: Did program complexity have a significant impact on the success of freshman students, measured by number of failing grades, percentages of discipline referrals assigned, and attendance rates? The study was structured around a comparison of three programs of different complexity levels examining three student outcomes. This led to the creation of the following null hypotheses.

Null Hypothesis 1

H_{10}: The attendance rate means are not different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs nor between the pre-to-post comparisons of the most complex (East High School) program.

Null Hypothesis 2

H_{20}: The discipline referral rate means are not different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs nor between the pre-to-post comparisons of the most complex (East High School) program.

Null Hypothesis 3

H_{30}: The grade point averages are not different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs nor between the pre-to-post comparisons of the most complex (East High School) program, as indicated by the number of failing grades earned.

Data was analyzed through use of Analysis of Variance (ANOVA) to accomplish comparison of three schools' outcomes at a time and to compare five years of year-to-year outcomes at a time for the most complex transition program. *Chi-Square* tests for homogeneity and *z*-tests for difference in proportion will be used for one-to-one comparisons, as needed.

Summary

This research was a quantitative study involving the freshman transitioning to East, West, and South high schools during the years 2010 through 2013. All the students at East High School partook in the programs described in Chapter Three. It must be noted that not all students participated in every activity described, but every student was involved with at least some portion of the freshman transition program at the most complex and less complex schools.

Chapter Four: Results

Introduction

The purpose of this quantitative study was to examine the impact of freshman transition programs on three measures of student success: attendance rate, behavior referral rate, and grade point average. This study was designed to compare three demographically similar high schools located in the outer suburbs of a major Midwestern city. The schools were of similar size and contained in similar-sized districts, with different complexity of freshman transitioning.

Freshmen students from all three high schools (East, West, and South) for school years 2009 through 2013, had attendance, failing grades, and discipline referrals included in analysis reported out in this section. A random sample of 30 students from each high school for each year examined was used to determine the effects of the freshman transition programs on student outcomes. After collecting data regarding attendance rates, failing grades, and discipline referrals, a summary of statistical analysis was completed for the population. Multiple tests were conducted to see if the data produced significant differences. The tests conducted for attendance included an ANOVA, *Chi Square* test for homogeneity, a *z*- test for difference in means, and a *z*- test for difference in proportion.

Results/Data Analysis-Attendance

Null Hypothesis 1

H_{10}: The attendance rate means are not different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs nor between the pre-to-post comparisons of the most complex (East High School) program.

The first test conducted was an ANOVA single factor applied to the six years of attendance data for East High School, the freshman transition program that was most complex and in existence for the longest time. This allowed a pre-to-post comparison of attendance, as well as a year-to-year comparison to examine potential differences. Results are recorded in Table 14.

Table 14.

East High School: Attendance Across 2007 - 2013.

Groups	*Count*	*Sum*	*Average*	*Variance*
07/08	30	2904	96.80	7.82
08/09	30	3639	93.80	25.91
09/10	30	2854	95.13	26.81
10/11	30	2849	94.97	11.07
11/12	30	2841	94.70	11.25
12/13	30	2857	95.23	17.36

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	16895.4	5	3379.08	0.899	0.483	2.266
Within Groups	653681	174	3756.79			
Total	670577	179				

Comparison of the *F*-test value, 0.899, to the *F*-critical value, 2.266, allowed non-rejection of the null hypothesis for East High School. There were no significant differences in attendance through the six-year span of implementation of the freshman transition program.

The same pre-to-post comparison of attendance, as well as a year-to-year comparison to examine potential differences was applied to four years of data for the less complex and least complex schools of West and South. Results yielded no statistical differences for those schools, as well. Non-rejection of the null hypothesis resulted from comparison of the *F*-test value, 0.939, to the *F*-critical value, 2.682, for West High

School and comparison of the *F*-test value, 0.942, to the *F*-critical value, 2.266, for South High School.

The next tests conducted were ANOVA single factor tests for each year of the study, to allow comparison of attendance for the three high schools, which allowed a comparison of the attendance outcomes for the most complex, less complex, and least complex freshman transition program. The test was conducted using four years of attendance data to determine if there was a difference in the attendance of students. Tables 15, 16, 17, and 18 represent the summary of the ANOVA single factor tests for attendance comparison of East, West, and South high schools.

Table 15.

East, West, & South High Schools: 2009-2010 Attendance.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	2854	95.13	26.81
West	30	2837	94.57	21.56
South	30	2783	92.77	76.53

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	91.622	2	45.811	1.100	0.337	3.101
Within Groups	3622.2	87	41.634			
Total	3713.822	89				

Comparison of the *F*-test value, 1.100, to the *F*-critical value, 3.101, allowed non-rejection of the null hypothesis for 2009-2010 (Table 15). There were no significant differences in attendance among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Table 16.

East, West, & South High Schools: 2010-2011 Attendance.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	2849	94.97	11.07
West	30	2723	90.77	308.74
South	30	2835	94.50	50.40

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	317.955	2	158.978	1.288	0.281	3.101
Within Groups	10735.833	87	123.400			
Total	11053.788	89				

Comparison of the *F*-test value, 1.288, to the *F*-critical value, 3.101, allowed non-rejection of the null hypothesis for 2010-2011 (Table 16). There were no significant differences in attendance among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Table 17.

East, West, & South High Schools: 2011-2012 Attendance.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	2841	94.70	11.25
West	30	2837	94.57	32.12
South	30	2860	95.33	16.64

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	10.067	2	5.033	0.252	0.778	3.101
Within Groups	1740.333	87	20.004			
Total	1750.400	89				

Comparison of the *F*-test value, 0.252, to the *F*-critical value, 3.101, allowed non-rejection of the null hypothesis for 2011-2012 (Table 17). There were no significant differences in attendance among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Table 18.

East, West, & South High Schools: 2012-2013 Attendance.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	2857	95.23	17.36
West	30	2804	93.47	48.40
South	30	2784	92.80	64.37

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	94.867	2	47.433	1.094	0.340	3.101
Within Groups	3773.633	87	43.375			
Total	3868.500	89				

Comparison of the *F*-test value, 1.094, to the *F*-critical value, 3.101, allowed non-rejection of the null hypothesis for 2012-2013 (Table 18). There were no significant differences in attendance among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Next, a *Chi Square* test for independence was conducted using 2009 through 2013 attendance data for all three high schools. The *Chi Square* test for independence was used to determine whether there was a significant difference between the observed frequencies in one or more categories, and indicate if results were dependent upon the school of attendance, and hence the level of complexity of the freshman transitioning program. Table 19 is a summary of the formula calculations for the *Chi Square* test for independence.

The null hypothesis for the *Chi Square* test for independence was: The student outcome of attendance rate is not dependent upon the level of freshman transition program applied.

Table 19.

Chi-Square Test for Independence.

Observed Values				
	2009-2010	2010-2011	2011-2012	2012-2013
East	95.10	94.90	94.70	95.20
West	94.50	90.70	94.50	93.40
South	92.70	94.50	95.30	92.80
Expected Values				
	2009-2010	2010-2011	2011-2012	2012-2013
East	95.05	94.31	95.79	94.75
West	93.35	92.62	94.08	93.05
South	93.90	93.17	94.63	93.60
Calculations				
	2009-2010	2010-2011	2011-2012	2012-2013
East	0.000	0.004	0.012	0.002
West	0.014	0.040	0.002	0.001
South	0.015	0.019	0.005	0.007
Chi Square test value				0.1215

Since the *Chi Square*-test value of 0.1215 was smaller than the *Chi Square*-critical value of 5.991, the null hypothesis was not rejected. Therefore, it did not matter statistically, for attendance purposes, which high school a student attended.

Since there were no differences in the pre-to-post, year-to-year, and school-to-school comparisons of attendance rates, further testing with *z*-tests for difference in means and *z*-test for difference in proportions were not necessary.

Results/Data Analysis-Discipline Referrals

Null Hypothesis 2

H_{20}: The discipline referral rate means are not different between the most complex (East High School), less complex (South High School), and the least complex

(West High School) programs nor between the pre-to-post comparisons of the most complex (East High School) program.

Freshmen students' discipline referrals from East, West, and South high schools were analyzed for school years 2009-2010 through 2012-2013. The first test conducted was an ANOVA single factor applied to the six years of discipline referral data for East High School, the freshman transition program that was most complex and in existence for the longest time. This allowed a pre-to-post comparison of discipline referral ratios, as well as a year-to-year comparison to examine potential differences. Results are recorded in Table 20.

Table 20.

East High School: Discipline Referrals Across 2007-2013.

Groups	*Count*	*Sum*	*Average*	*Variance*
07/08	30	1.43	0.05	0.01
08/09	30	1.53	0.05	0.01
09/10	30	1.50	0.05	0.00
10/11	30	1.27	0.04	0.01
11/12	30	1.50	0.05	0.00
12/13	30	1.27	0.04	0.01

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.002	5	0.000	0.075	0.996	2.266
Within Groups	1.126	174	0.006			
Total	1.129	179				

Comparison of the *F*-test value, 0.075, to the *F*-critical value, 2.266, allowed non-rejection of the null hypothesis for East High School. There were no significant differences in discipline referrals through the six-year span of implementation of the freshman transition program.

The same pre-to-post comparison of discipline referrals, as well as a year-to-year comparison to examine potential differences was applied to four years of data for the less complex and least complex schools of West and South. Results yielded no statistical differences for those schools, as well. Non-rejection of the null hypothesis resulted from comparison of the *F*-test value, 0.816, to the *F*-critical value, 2.682, for West High School and comparison of the *F*-test value, 2.326, to the *F*-critical value, 2.268, for South High School.

The next tests conducted were ANOVA single factor tests for each year of the study, to allow comparison of discipline referrals for the three high schools, which allowed a comparison of the discipline referral outcomes for the most complex, less complex, and least complex freshman transition program. The test was conducted using four years of discipline referral data to determine if there was a difference in the discipline referral rates of students. Tables 21, 22, 23, and 24 represent the summary of the ANOVA single factor tests for discipline referral comparison of East, West, and South high schools.

Table 21.

East, West, & South High Schools: 2009-2010 Discipline Referrals.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	1.43	0.046	0.006
West	30	1.33	0.043	0.005
South	30	5.2	0.167	0.053

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.313	2	0.156	7.096	0.001	3.097
Within Groups	1.987	90	0.022			
Total	2.301	92				

Comparison of the *F*-test value, 7.096, to the *F*-critical value, 3.097, allowed rejection of the null hypothesis for 2009-2010 (Table 21). There were significant differences in discipline referrals among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Since the ANOVA yielded differences between the three schools, each operating with a different level of freshman transition program, school-to-school comparisons with a *z*-test for difference in proportion were conducted. Comparison of discipline referral rates for East-to-West yielded a *z*-test value of 0.061; East-to-South yielded a *z*-test value of 1.522; and West-to-South yielded a *z*-test value of 1.573. Each of these was compared to a 95% confidence level, z-critical value of ±1.96, which did not identify a statistical difference between average discipline referrals among the three schools.

Table 22.

East, West, & South High Schools: 2010-2011 Discipline Referrals.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	1.53	0.05	0.01
West	30	3.00	0.10	0.03
South	30	2.53	0.08	0.06

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.036	2	0.018	0.541	0.584	3.098
Within Groups	3.011	90	0.033			
Total	3.047	92				

Comparison of the *F*-test value, 0.541, to the *F*-critical value, 3.098, allowed non-rejection of the null hypothesis for 2010-2011 (Table 22). There were no significant differences in discipline referrals among the three high schools representing the most

complex, less complex, and least complex implementation of the freshman transition program.

Table 23.

East, West, & South High Schools: 2011-2012 Discipline Referrals.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	1.50	0.05	0.00
West	30	1.93	0.06	0.01
South	30	1.63	0.05	0.02

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.003	2	0.002	0.124	0.884	3.098
Within Groups	1.156	90	0.013			
Total	1.160	92				

Comparison of the *F*-test value, 0.124, to the *F*-critical value, 3.098, allowed non-rejection of the null hypothesis for 2011-2012 (Table 23). There were no significant differences in discipline referrals among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Table 24.

East, West, & South High Schools: 2012-2013 Discipline Referrals.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	1.27	0.04	0.01
West	30	1.97	0.06	0.03
South	30	1.70	0.05	0.02

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.008	2	0.004	0.225	0.799	3.098
Within Groups	1.610	90	0.018			
Total	1.618	92				

Comparison of the *F*-test value, 0.225, to the *F*-critical value, 3.098, allowed non-rejection of the null hypothesis for 2012-2013 (Table 24). There were no significant differences in discipline referrals among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Next, a *Chi Square* test for independence was conducted using 2009 through 2013 discipline referral data for all three high schools. The *Chi Square* test for independence was used to determine whether there was a significant difference between the observed frequencies in one or more categories, and indicate if results were dependent upon the school of attendance, and hence the level of complexity of the freshman transitioning program. Table 25 is a summary of the formula calculations for the *Chi Square* test for independence.

Table 25.

Chi-Square test for Independence.

Observed Values				
	2009-2010	2010-2011	2011-2012	2012-2013
East	0.05	0.04	0.05	0.04
West	0.04	0.10	0.06	0.07
South	0.17	0.08	0.05	0.06
Expected Values				
	2009-2010	2010-2011	2011-2012	2012-2013
East	0.06	0.05	0.04	0.04
West	0.09	0.08	0.06	0.05
South	0.12	0.10	0.08	0.07
Calculations				
	2009-2010	2010-2011	2011-2012	2012-2013
East	0.002	0.001	0.004	0.001
West	0.022	0.008	0.001	0.002
South	0.024	0.003	0.006	0.004
Chi Square test value				0.0784

The null hypothesis for the *Chi Square* test for independence was: The student outcome of discipline referral rate is not dependent upon the level of freshman transition program applied. Since the *Chi Square*-test value of 0.784 was smaller than the *Chi Square*-critical value of 5.991, the null hypothesis was not rejected. Therefore, it did not matter statistically, for discipline referral purposes, which high school a student attended.

Since there were no differences in the pre-to-post, year-to-year, and school-to-school comparisons of discipline referral rates, further testing with *z*-tests for difference in means and *z*-test for difference in proportions were not necessary.

Results/Data Analysis-Failing Grades

Null Hypothesis 3

H_{30}: The Grade Point Averages are not different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs nor between the pre-to-post comparisons of the most complex (East High School) program, as indicated by the number of failing grades earned.

Freshmen with failing grades were recorded for the 2009-2010 school year through the 2012-2013 school year, and converted to proportions of failing grades earned out of the total number of grades earned, per student. .

The first test conducted was an ANOVA single factor applied to the six years of failing grades data for East High School, the freshman transition program that was most complex and in existence for the longest time. This allowed a pre-to-post comparison of failing grades, as well as a year-to-year comparison to examine potential differences. Results are recorded in Table 26.

Table 26.

East High School: Failing Grades Across 2007 - 2013.

Groups	*Count*	*Sum*	*Average*	*Variance*
07/08	30	0	0	0
08/09	30	1.21	0.04	0.01
09/10	30	0.86	0.03	0.01
10/11	30	0.86	0.03	0.00
11/12	30	0.93	0.03	0.00
12/13	30	0	0	0

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.027	5	0.005	0.871	0.501	2.263
Within Groups	1.166	186	0.006			
Total	1.193	191				

Comparison of the *F*-test value, 0.871, to the *F*-critical value, 2.263, allowed non-rejection of the null hypothesis for East High School. There were no significant differences in failing grades through the six-year span of implementation of the freshman transition program.

The same pre-to-post comparison of failing grades, as well as a year-to-year comparison to examine potential differences was applied to four years of data for the less complex and least complex schools of West and South. Results yielded no statistical differences for those schools, as well. Non-rejection of the null hypothesis resulted from comparison of the *F*-test value, 1.342, to the *F*-critical value, 2.268, for West High School and comparison of the *F*-test value, 0.952, to the *F*-critical value, 2.268, for South High School.

The next tests conducted were ANOVA single factor tests for each year of the study, to allow comparison of failing grades for the three high schools, which allowed a comparison of the failing grades outcomes for the most complex, less complex, and least

complex freshman transition program. The test was conducted using four years of failing grades data to determine if there was a difference in the failing grades of students. Tables 27, 28, 29, and 30 represent the summary of the ANOVA single factor tests for failing grades comparison of East, West, and South high schools.

Table 27.

East, West, & South High Schools: 2009-2010 Failing Grades.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	0.86	0.03	0.01
West	30	1.00	0.03	0.00
South	30	4.93	0.16	0.09

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.356	2	0.178	5.259	0.007	3.101
Within Groups	2.944	87	0.034			
Total	3.300	89				

Comparison of the *F*-test value, 5.259, to the *F*-critical value, 3.101, allowed rejection of the null hypothesis for 2009-2010 (Table 27). There were significant differences in failing grades among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Since the ANOVA yielded differences between the three schools, each operating with a different level of freshman transition program, school-to-school comparisons with a *z*-test for difference in proportion were conducted. Comparison of failing grades rates for East-to-West yielded a *z*-test value of 0.106; East-to-South yielded a *z*-test value of 1.781; and West-to-South yielded a *z*-test value of 1.700. Each of these was compared to a 95% confidence level, z-critical value of ±1.96, which did not identify a statistical difference between average failing grades among the three schools.

Table 28.

East, West, & South High Schools: 2010-2011 Failing Grades.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	0.86	0.03	0.00
West	30	2.86	0.10	0.05
South	30	2.43	0.08	0.06

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.074	2	0.037	0.950	0.391	3.101
Within Groups	3.384	87	0.039			
Total	3.458	89				

Comparison of the *F*-test value, 0.950, to the *F*-critical value, 3.101, allowed non-rejection of the null hypothesis for 2010-2011 (Table 28). There were no significant differences in failing grades among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Table 29.

East, West, & South High Schools: 2011-2012 Failing Grades.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	0.71	0.02	0.00
West	30	1.14	0.04	0.01
South	30	2.07	0.07	0.04

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.032	2	0.016	0.946	0.392	3.101
Within Groups	1.475	87	0.017			
Total	1.507	89				

Comparison of the *F*-test value, 0.946, to the *F*-critical value, 3.101, allowed non-rejection of the null hypothesis for 2011-2012 (Table 29). There were no significant differences in failing grades among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Table 30.

East, West, & South High Schools: 2012-2013 Failing Grades.

Groups	*Count*	*Sum*	*Average*	*Variance*
East	30	1.00	0.03	0.01
West	30	2.50	0.08	0.03
South	30	3.64	0.12	0.04

ANOVA

	SS	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.117	2	0.059	2.229	0.114	3.101
Within Groups	2.285	87	0.026			
Total	2.402	89				

Comparison of the *F*-test value, 2.229, to the *F*-critical value, 3.101, allowed rejection of the null hypothesis for 2012-2013 (Table 30). There were significant differences in failing grades among the three high schools representing the most complex, less complex, and least complex implementation of the freshman transition program.

Since the ANOVA yielded differences between the three schools, each operating with a different level of freshman transition program, school-to-school comparisons with a *z*-test for difference in proportion were conducted. Comparison of failing grades rates for East-to-West yielded a *z*-test value of 0.826; East-to-South yielded a *z*-test value of 1.277; and West-to-South yielded a *z*-test value of 0.487. Each of these was compared to a 95% confidence level, z-critical value of ±1.96, which did not identify a statistical difference between average failing grades among the three schools.

Next, a *Chi Square* test for independence was conducted using 2009 through 2013 failing grades data for all three high schools. The *Chi Square* test for independence is used to determine whether there is a significant difference between the observed frequencies in one or more categories, and indicate if results were dependent upon the school of attendance, and hence the level of complexity of the freshman transitioning

program. Table 31 is a summary of the formula calculations for the Chi Square test for independence.

Table 31.

Chi Square test for Independence.

Observed Values				
	2009-2010	2010-2011	2011-2012	2012-2013
East	0.03	0.03	0.03	0.03
West	0.03	0.10	0.04	0.08
South	0.16	0.08	0.07	0.12
Expected Values				
	2009-2010	2010-2011	2011-2012	2012-2013
East	0.03	0.03	0.02	0.03
West	0.07	0.06	0.04	0.07
South	0.12	0.11	0.07	0.13
Calculations				
	2009-2010	2010-2011	2011-2012	2012-2013
East	0.001	0.000	0.005	0.000
West	0.019	0.016	0.000	0.001
South	0.014	0.008	0.000	0.000
Chi Square test value				0.0660

The null hypothesis for the *Chi Square* test for independence was: The student outcome of failing grades rate is not dependent upon the level of freshman transition program applied. Since the *Chi Square*-test value of 0.0660 was smaller than the *Chi Square*-critical value of 5.991, the null hypothesis was not rejected. Therefore, it did not matter statistically, for failing grades purposes, which high school a student attended.

Since there were no differences in the pre-to-post, year-to-year, and school-to-school comparisons of failing grades rates, further testing with *z*-tests for difference in means and *z*-test for difference in proportions were not necessary.

Summary

In this study, the data did not support significant changes in the student outcomes of attendance rates, discipline referral rates, nor failing grade rates, for each of the three high schools studied, East, West, and South, despite the varying levels of complexity in the freshman transition program implemented at each school. East High School offered the most complex program and the longest implementation timeline. West High School offered a less complex program over a time period of four years. South High School did not implement a freshman transition program, and is referred to as the least complex program, as well as serving as a control comparison of the secondary data used for analysis. No significant differences were established through use of ANOVA, *Chi Square* tests for Independence, and *z*-tests for difference in proportions applied to secondary data generated by the three schools through the years 2009 to 2013.

Chapter Five: Discussion

Introduction

The development of the freshman transition program at East High School was implemented with the aspirations to increase student achievement and attendance rates and to decrease student discipline referrals. All three high schools developed different combinations of strategies to try and achieve these goals, through different levels of freshman transition programs for their incoming students. Because of the fact that all three high schools in this study had similar demographics, challenges, and goals, it made sense that all would have varying degrees of success with a program like freshman transition.

Recommendations

One recommendation is to increase the range of years of implementation and participation by East, West, and South high schools in the freshman transition program. For this study, the data represented outcomes from the 2009-2010 school year through the 2012-2013 school year for all three high schools. If more data were available, then long-term and longitudinal analysis could be improved. This larger data base gathered over time could allow decision-makers to tweak ideas and philosophies of the programs. This action would serve students better. It would be interesting to see how the first year freshman transition program differed from a program that had three or four years of growth and refinement.

Another recommendation would be to implement programs similar to that of East High School at West and South high schools. West, South, and East high schools were

similar in many ways. The results could be used to demonstrate proof of repeated success of the program in a different setting at another high school.

The information for this study was inferred from quantitative research. In the future, researchers will need to look at qualitative research. Qualitative research investigates the why and how of decision making. This is important and adds to the analysis of quantitative research, which answers the what, where, and when of decision making. The need for smaller, but more focused samples would be beneficial in determining why the freshman transition program was so beneficial to students who experienced it.

Summary

Hypotheses

This study was guided by one research question. The research question was: Did program complexity have a significant impact on the success of freshman students? The study was structured around a comparison of three programs of different complexity levels examining three student outcomes. This led to the creation of three hypotheses.

Findings for Hypothesis 1

H_1: The attendance rate means are different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs and between the pre-to-post comparisons of the most complex (East High School) program.

Hypothesis 1 was not supported. Analysis of data for this study did not find significant differences in attendance rates when comparing East, West, and South high schools to each other, nor when comparing attendance data year-to-year for each high

school individually. In addition, the attendance rate for a particular year in the timeline of the study did not depend upon the high school attended. Since each high school implemented a freshman transition program of different complexity and there were no significant results in comparisons of attendance data, results of the study cannot conclude that the type of freshman transition program contributed to attendance rates generated by any of the three schools. The researcher notes that there was no significant difference in attendance rates, therefore there was no increase in attendance, and there also was no decrease in attendance for the school with the most complex freshman transition program, nor for the school with no freshman transition program.

The attendance rates at all three high schools (West, East, and South), were not significantly different according to the data presented in this paper. When examining attendance, many factors play into the numbers. First, some students had a long history of chronic attendance issues, while others had extenuating circumstances that kept them from attending regularly. Also, with the dynamic of many families in society at the time of data collection for this study, many young people did not live with their mother or father. Often these students lived with other family members or friends. These types of situations often led to unmotivated students, and therefore attendance issues.

Another factor that played into attendance at different high schools were other programs that might be implemented to help schools optimize their MSIP 5 scores by reaching for the goal of having 90% of their students at school 90% of the time. In order to accomplish this, some schools held Saturday School, which allowed students to make up additional attendance by coming to school on Saturdays and working on the curriculum lost by excessive absences. In addition to Saturday School, some high schools

applied programs like Positive Behavior Interventions and Supports (PBIS), which used proactive strategies for defining, teaching, and supporting appropriate student behaviors to create positive school environments. Programs like these could possibly sway the data because some schools already used this as part of a greater discipline program in the school setting. Finally, incentives were another avenue some schools and school districts used to try and acquire proper behaviors and expectations from their students. These incentives could range from a token economy, where students could purchase small items with tokens received in a rewards program, to giving away big prizes for perfect attendance.

Still another factor that played into attendance numbers was that some schools used attendance as one factor for allowing students to be exempt from finals. Often this practice included not only attendance requirements, but grade and discipline requirements as well. On the other hand, some schools were against students being exempt from finals, because they felt it did not prepare students to be college and career ready. Another influence was that every school that did use attendance to help with determining if a student was exempt from finals was the fact that schools used different attendance numbers. For instance, some schools stipulated that students could not have a certain amount of days missed, or they used days missed along with the number of tardies a student accumulated during the semester or year. Still others used attendance based on the number of hours missed in a day or hours missed in a certain class. However, schools chose to use attendance as a factor for exemption from finals, it still played a role in the outcome of the data analysis for this study, since these issues could influence the desire

and drive for a student to show up, or not, for school based on different factors mentioned above.

Findings for Hypothesis 2

> H_2: The discipline referral rate means are different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs and between the pre-to-post comparisons of the most complex (East High School) program.

Hypothesis 2 was not supported. Analysis of data for this study did not find significant differences in discipline referral rates when comparing East, West, and South high schools to each other, nor when comparing discipline referral data year-to-year for each high school individually. In addition, the discipline referral rate for a particular year in the timeline of the study did not depend upon the high school attended. Since each high school implemented a freshman transition program of different complexity and there were no significant results in comparisons of discipline referral data, results of the study cannot conclude that the type of freshman transition program contributed to discipline referral rates generated by any of the three schools. The researcher notes that there was no significant difference in discipline referral rates, therefore while there was no decrease in discipline referral, there also was no increase in discipline referral for the school with the most complex freshman transition program, nor for the school with no freshman transition program.

In this particular analysis of the data no significant difference was found between the three different high schools, with analysis of multiple years of data. When dealing

with discipline, it is important to understand that there are many factors that are in play when dealing with changing the behaviors of students in the ninth grade.

First, not all handbooks were created equal, meaning that discipline rules and consequences at one school could look different than it may at another. Most schools have rules and consequences for major offenses like use of drugs and weapons, etc., that result in an out-of school-suspension. However, most run-of-the-mill discipline referrals were often dealt with in various ways, and with varying degrees of effectiveness. Some schools use teacher conferences, parent phones calls, or administrative conferences as a first line of defense against inappropriate behaviors. Often these sorts of actions do not result in an official discipline referral, and therefore could sway the discipline data when examining three different high schools and the number of office discipline referrals generated by each. Secondly, some administrators might get more than one write up or office referral on a student because of multiple offenses committed on the same day or very close together. Some administrators might 'roll' these multiple referrals into a single one and give discipline consequences based on just the one, or a combination of multiple offenses. Again, the data could be skewed based on the way different administrators and teachers handle different discipline situations.

Findings for Hypothesis 3

> H_3: The grade point averages are different between the most complex (East High School), less complex (South High School), and the least complex (West High School) programs and between the pre-to-post comparisons of the most complex (East High School) program, as indicated by the number of failing grades earned.

Hypothesis 3 was not supported. Analysis of data for this study did not find significant differences in grade point averages when comparing East, West, and South high schools to each other, nor when comparing grade data year-to-year for each high school individually. In addition, the grade point average for a particular year in the timeline of the study did not depend upon the high school attended. Since each high school implemented a freshman transition program of different complexity and there were no significant results in comparisons of grade data, results of the study cannot conclude that the type of freshman transition program contributed to grade point averages generated by any of the three schools. The researcher notes that there was no significant difference in grade point averages, therefore while there was no increase in grade point averages, there also was no decrease in grade point averages for the school with the most complex freshman transition program, nor for the school with no freshman transition program.

When working with grade point averages from three different high schools, with analysis of four years of data, there were no significant differences in the data suggesting that one school had students with better grade point averages because of the freshman transition program in place at the time of data gathering.

There were many different variables to look at when taking into consideration students' grade point averages. First, a researcher needs to take into account factors like class sizes, curriculum being taught, expectations of teachers and students, standards-based grading compared to traditional grading, etc. In many high schools there were drastic differences in class sizes and class make-ups. Some classes were considered a class-within-a-class (CWC). This was a teaching model in which one general education

teacher and one special education teacher work together with students in the class to provide extra help, and if needed, small group or one-on-one learning opportunities. While this seems like a great concept, there could be problems with this set up. First, because there were two teachers in the room, often counselors would schedule more students with an individualized education plan into the class roster, because of the extra support in the room. Also, that teacher might feel obligated to slow down her pace, in order to keep all students learning. This might make it easier for all students to score well on tests, and therefore have a better grade and grade point average.

Next, the different curriculum options students have to explore differs greatly from district-to-district and school-to-school. While most freshman were required to take the core subjects, they still have some options for electives. These elective options could help increase a student's grade point average or work to lower it depending on what they take. Hopefully, most students take classes than interest them, but others take 'blow off' classes in the hope that they do not have to work too hard for an 'A'.

At the time of this writing, more high schools were starting to experiment with standards-based grading. In this form of grading, students were required to show they understood certain concepts. When concepts were not mastered, students could have extended time and retest, if needed, to ensure they mastered that concept. In a traditional grading system teachers assign tests, quizzes, and homework for points and a student tries to accumulate as many possible points, in order to receive a high grade in class. With two different grading systems, and many variables to each one, assessing true knowledge and issuing an appropriate grade could be troublesome.

Some other items to consider when studying freshman transition programs include items that cannot be quantified. For example, a student's self-confidence could range from extremely high to extremely low, depending on many factors. A student's experiences at home and at school make a child feel excited and comfortable about a new challenge. Others shy away from such a challenge because they might have experienced a lack of success at other transitions in different timeframes in their lives.

Self-efficacy is defined as the belief in one's capabilities to achieve a goal or an outcome. Many times teachers or other school personnel could play a role in the student's ability to achieve a goal. These types of students put a lot of faith in their ability to reach an outcome, and when they do not they do not look for outside factors, but internalize the mistake and stride to improve upon it at a later date (Margolis & McCabe, 2006). The reverse could be said about students with low self-efficacy. These students often look to avoid interactions that challenge them to become better. They often do poorly over an extended period and therefore academic performance slides, which becomes part of a self-fulfilling prophecy. This is where teachers and school personnel play an important role. First, giving students opportunities to have mastery experiences helps boost student's self-efficacy (Margolis & McCabe, 2006). Next, allowing others in the classroom to be successful helps others in the room observe their peers being successful and helps build that success for everyone in the room. Finally, communication provided to students must be credible and the feedback must help students with directions and expectations to have successful outcomes. Many experiences like these help students with self-efficacy (Margolis & McCabe, 2006).

Another aspect of high school life that could be studied to help administrators understand the freshman transition process was the level of activity in all types of extra-curricular offerings. Many times school districts have a program evaluation completed on the extra-curricular activities offered throughout the district, and especially the high school. In these program evaluations there was often a study of a number of activities, number of participants, strengths, and growth opportunities. Often these evaluations fail to provide all the necessary information. Student Council, along with other clubs, is often forgotten in the midst of determining what interesting offerings do we provide our youth. It was important that all students, especially freshmen, feel a connection to their school. For many young people, extra-curricular activities were the glue that keeps students involved and motivated to keep them coming back day-in and day-out.

Potential Future Study

In order to help with meaningful engagement among our high school students, we must do a better job of linking work to college and career readiness. This was even truer in the critically important fields of science, technology, engineering, and mathematics (STEM). President Obama put forth a goal to have all adult Americans pursue at least one year of higher education or career training. The president felt this would allow America to regain its role as the world leader in college completion.

Project Lead the Way (PLTW) was the nation's leading provider of science, technology, engineering, and math (STEM) programs (PLTW, 2015). This organization provided a K-12 curriculum, high-quality teacher professional development, and outstanding partnerships that allowed students to be educated at a high level. At the high school level there were three different curriculum pathways students could explore. This

exploration helped tie students of every interest and every level of intelligence to their classes, and therefore to their school (PLTW, 2015). Engineering, biomedical science, and computer science were the three curriculum pathways offered in some of the most high performing high schools throughout Missouri and the United States. These types of programs were in over 6500 schools across America and were continuing to grow every year (p. 1). There have been some studies completed on students who have taken these courses and their impact on students' success (PLTW, 2015).

Tai (2012), a researcher from the University of Virginia, reported that PLTW had a positive influence on students' career interests and likelihood to continue their education. This was especially important for freshmen students to be able to access. If these students could take classes like these, what effect would they have on freshman transition programs? Another study was conducted by researchers at the Center for Urban and Multicultural Education at the Indiana University School of Education at Indiana University-Purdue University-Indianapolis. After they analyzed data for more than 56,000 Indiana high school graduates, they came up with the following: Researchers found that PLTW participation was significantly related to persistence into the second year of college, especially for those students who had taken three or more PLTW courses (Pike & Robbins, 2014). If students felt connected to classes and/or teachers, they typically attained at a higher level than those students who did not feel the same. High schools that offered Project Lead the Way curriculum and those who did not would be a great future study to see what, if any, impact they would have on freshman transition programs in Missouri and across the Nation.

Another great potential future study would be the impact that mental and physical health programs would have on the success of incoming freshmen. Adding a mental health component to school-based health education programs could enhance health behaviors, reduce depression and improve grades (Nauert, 2013). There were students who participated in health classes that emphasized nutrition, physical activity, and building cognitive behavior skills. Some of the benefits that came from this were lower body mass indexes, lower alcoholic consumption, and better social behaviors. They compared this group of students to students taking a normal health class and saw a difference in the areas mentioned above. The most impressive statistic was that students who had attended the more beneficial health class saw results last for an additional six months after taking the class. It also helped those students who were feeling depressed or going through other mental health problems. Experts say the intervention was welcomed as thirty-two percent of youths in the United States were overweight or obese, and suicide was the third leading cause of death among young people age 14 to 24 (Nauert, 2013, p. 1). Most school districts were not capable of providing mental health services to treat the number of students suffering from mental health issues. This class helped students to think about how they felt and behaved in the hope it would make them react a different way.

It would make a great future study to see the effects of a COPE: (Creating Opportunities for Personal Empowerment (COPE) and Healthy Lifestyles Thinking, Emotions, Exercise, Nutrition (TEEN) classes on incoming freshmen. If every freshmen was mandated to take this class as part of the first year at the high school level, what would be the results on behavior, grades, and social acceptance? If students felt better

about themselves, ate properly, and had the proper nutrition, versus those who had an average high school experience, the may be more likely to be successful in high school and beyond. Also, a district could mandate that those students moving from eighth grade to the high school take this summer class. Then they could see if those who did take the summer class had a better transition than those opting out or moving in after the summer. This could give vital information to teachers and administrators about the correlation between mental and physical health and how well a student transitions to the high school setting.

Another interesting twist on freshman transition programs that could be a future study scenario would be collecting the thoughts of freshmen parents about high school, education, and how much they like the teachers and administrators. It would be interesting to see if there was a correlation between what a parent believed and if that belief was carried on by his/her son or daughter. For a future study, it would be interesting to have a survey filled out by parents about the teachers and administrators, safety, curriculum, etc., about the high school. Then to compare that survey with the thoughts the students provided over the same exact questions could give insight to planning transitions. Next, one study consideration would be to have two different groups and put the ones that do not have faith in the high school in one group and the ones that do trust the school in the other. Finally, provide the same freshman transition program to both groups and see if those students whose parents were not big fans of the high school have success. Is it a self-fulfilling prophecy, or do students make their own choices when it comes to being successful in high school?

Finally, the last potential future study would be centered on standards based grading. For the last 50 or 60 years in education students have been graded by using a points system with the letter marks A, B, C, D, and F to decide what type of students they were. With standards-based grading, grades have meaning and they help parents, students and teachers understand what course objectives have been mastered by a student and which ones a student needs more help with. Just telling a parent or student that they have a C in a class does not let them know what objectives they have learned, and which need to be retaught in order to be proficient in those objectives, as well. Also, some students do well in school by doing their homework, working on extra credit projects and just trying to follow all rules and policies of the classroom and class. In standards-based grading, students were not graded on homework. Instead students were assessed formally and informally throughout the class to see what students knew and could show. Many times incoming freshmen were not the most responsible teenagers in a typical high school. Some schools were afraid to not give homework for a grade, for fear that students would not do problems and answer questions on their own. For many students, this type of responsibility would help raise the bar, and usually when students were asked to meet an expectation they would.

Another aspect that incoming freshmen had trouble with was the amount of paperwork they must produce. Often these homework assignments, worksheets, or notes were meant as busy work and had no real correlation to the objectives of the class. Instead, teachers would use these ‘assignments’ as ways to assess the students’ knowledge, and therefore the knowledge of all the class. Only when a majority of the students understand a given objective would a teacher more forward with a formal

assessment. This would be great to see how freshmen would react to having many experiences of success in their first year in high school. Often freshmen take a test and do not perform well and the teacher and student move on to the next thing in the textbook. The next step would be retesting and alternative assessing for those students still fighting to meet the proficiency level on a certain objective. The other students that have met this level could be challenged with more in-depth challenges or working on trying to connect multiple objectives with a project or assignment.

If we base our grades on standards, rather than attendance, behavior, or extra credit (which often has nothing to do with course objectives), we could actually help students grapple with the idea of quality and walk away with a higher degree of self-sufficiency. We could and should report information about student performance in areas like attendance and effort, but we could report it separately from academic achievement (O'Connor, 2007; Tomlinson & McTighe, 2006). It would be a great aspect to study when examining freshman transition programs to see if standards based grading had a profound effect on the success rate of incoming freshmen. This researcher believes it would because at its root was the idea of challenging students, but also giving them time to relearn and retest in order to accomplish the learning objective. Also, it shows both student and parent what true success looks like.

Summary

Data were collected on three high schools for freshman students for the school years 2009-2010 through 2012-2013. Through statistical analysis the, ANOVA, *Chi Square* test and the *z*-scores were generated. The data analysis revealed no significant

changes for the students who partook in the freshman class transition program in all three high schools during the 2009-2010 through 2012-2013 school years.

The freshman transition program at East High School was reviewed and revised each year, based on the needs of its students. West High School was planning on implementing some form of freshman transition program in the 2006-2007 school year and worked to have some elements of the East High School program. At the time of this writing, some of the programs East High School used have been incorporated to meet the needs of the students at West High School. More research needs to be collected to support the findings of this research. However, based on the success of East High School; West High School believed it would be able to reach similar results in the few school years following data collection for this study.

Conclusion

Tested in actual school setting, over time, and in numerous geographic areas; freshman transition programs improved the success rates of students entering high school in the United States; and therefore helped the NCLB Federal mandate.. The history of schools has always been to educate and to help serve the community. Freshman year is the most difficult for students. The student passes at once from a single setting room or one teacher to a regime of various rooms and teachers, and a series of wholly new subjects. The changes happened at the worst possible time for the student and his life; namely, adolescence. Courses, such as math continue into each year, and were built upon the previous year’s mastery. This is more intense in high school, and includes more hours of credit to be earned for high school graduation than for middle school. The high school years were the make-or-break years for most students. Absenteeism and failed grades

statistically were the highest for freshmen, when compared to any other high school class. Transition programs were designed differently for different parts of the country, and could be implemented in different ways. Transition programs were successful, and outside-of-school groups, like the United Way have funded transition programs due to their perceived importance in the success of a student's high school education, and in-light of community needs.

However, in this study the statistical results showed that East, West, and South high schools had no significant differences in attendance rates, discipline referral rates, nor failing grades despite the different transition programs that they offered. Two initiatives that school districts had been focused on for a number of years might have affected the 'flat' outcome of this study.

First, in 2012, the Obama Administration launched a Race to the Top competition at the school district level. Known as Race to the Top – District, this program would invest nearly $400 million in 2012 in schools to create new models to personalize learning for students, so that they could engage their interests and take responsibility for their successes ("Race to the Top", 2012, p. 1). This initiative worked to develop rigorous standards and better assessments while providing better data systems to deliver more information about individual student success. Also, this reform was interested in turning around the lowest-performing school districts.

Based on the national initiative, Race to the Top -, Missouri came up with its own education reform known as 'Top 10 by 20'. MODESE launched Top 10 by 20, a major improvement effort that aimed for student achievement in Missouri to rank among the top 10 states by 2020 (MODESE, 2015b). This student achievement had four goals:

1) All Missouri students will graduate college and career ready.
2) All Missouri children will enter kindergarten prepared to be successful in school.
3) Missouri will prepare, develop, and support effective educators.
4) MODESE will improve departmental efficiency and operational effectiveness. (MODESE, 2015b, p. 1)

Goal number one had many objectives that talked about the necessity for students to score at or above the proficiency level at increasing stages as we move closer to the year 2020. Also, it talked about students that score below basic on state assessments declining every year by one percent annually. This goal also puts pressure on school districts and high schools, in particular, to graduate more students annually, so the percentage rate continues to rise. It should also be noted that under goal number three, there was a standard for measuring student growth. Under goal number three educators would be evaluated on a factor of student growth in the year 2017. This part of the Top 10 by 20 initiative has played a big part in determining how school districts and school personnel were be judged, as this had never been a part of the educator evaluation system before.

As one could see from the national and state education reform initiatives, some of the variables in this study were already addressed through other means, besides freshman transition programs. School districts had been working to reach 100% proficient and advanced student achievement since 2002. They had also been concerned with the average daily attendance, so they continued to be reimbursed from the state. However, with the implementation of MSIP 5, schools were concerned with the fact that 90% of

their students needed to be at school 90% of the time in order to score more points for the home district on MSIP 5 evaluation 2013 (MODESE, 2015a, p. 4).. The Missouri School Improvement Program (MSIP) 5 works to prepare every child for success in school and life. MSIP 5 was the state's school accountability system for reviewing and accrediting public school districts in Missouri. MSIP began in 1990 and entered its fifth version in 2013 (MODESE, 2015a). The overall goal of MSIP 5 was that all Missouri students graduate ready for success in college or a career. School districts needed to meet student achievement, attendance, graduation, and college and career readiness benchmarks in order to maintain school accreditation. All of these school reform initiatives greatly changed how schools educated our students. While freshman transition programs were just one tool used to help our students be successful, it was still vital to the culture of all schools that chose to use them.

While it was important to have a transition program for incoming freshmen, the multitude or ferocity of the program did not seem to matter. The most important part to take from this study is that having a transition program would benefit all freshmen. Therefore, districts should concentrate on developing a program that is flexible and works with their students.

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Appendix A

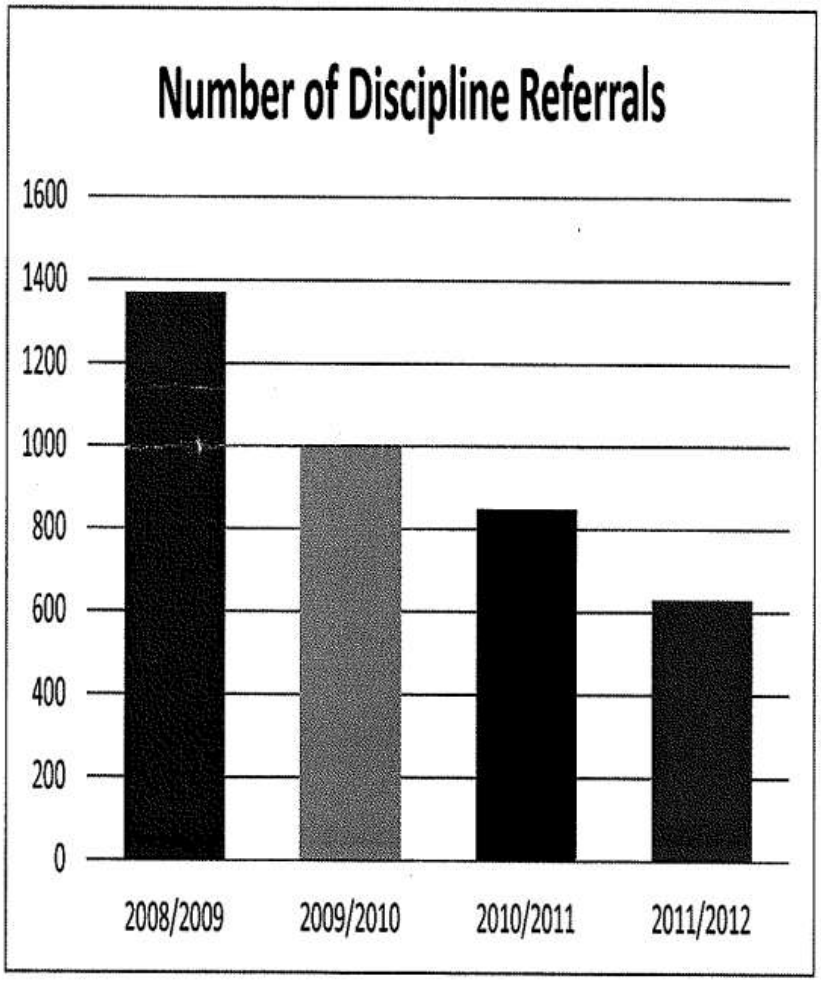

Figure A1. West High School: The number of discipline referrals for years 2008 through 2012.

Appendix B

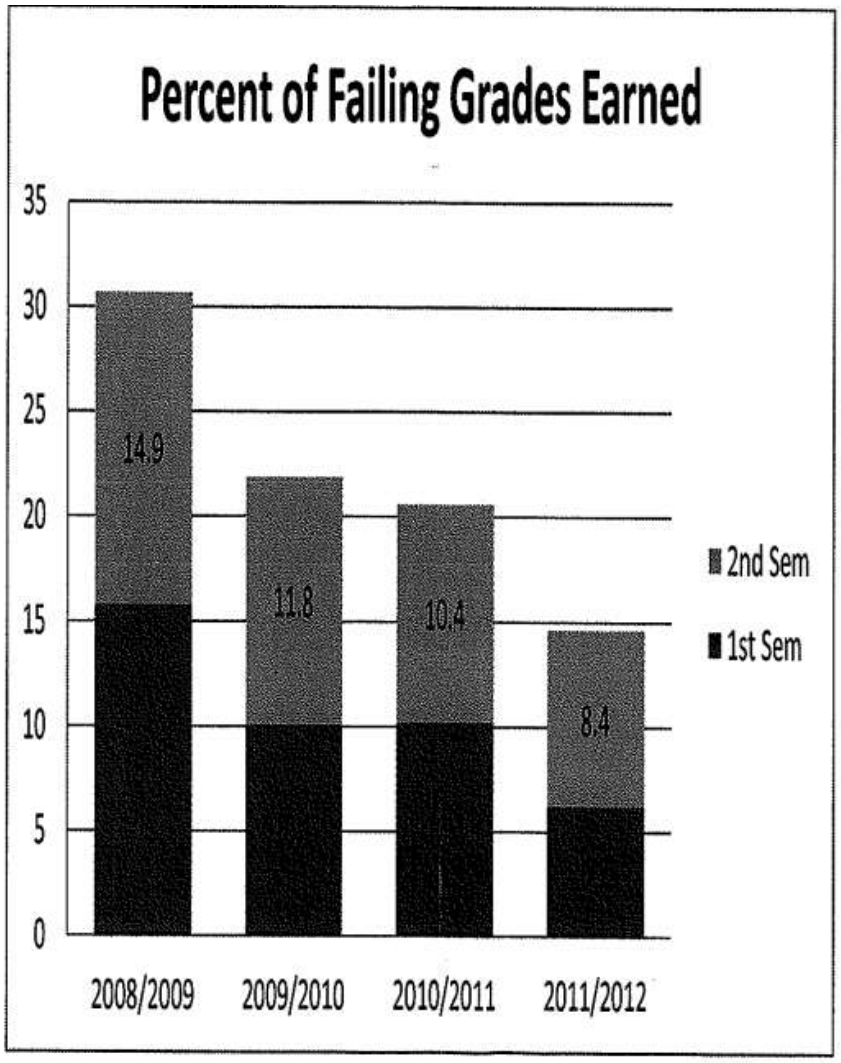

Figure B1. West High School: The percent of failing grades for years 2008 through 2012.

Vitae

Jeremy Way, author of this research study, was an assistant superintendent in the Meramec Valley R-III School District. He holds a Bachelor of Science in Business Administration from the University of Missouri-St. Louis. He earned a Master of Arts Degree in Educational Administration from the University of Missouri-St. Louis. This research project is the culmination of work leading to a doctorate from Lindenwood University in St. Charles, Missouri. During his professional career, the author served in public and private education as a business teacher, coach, assistant principal, head principal, and assistant superintendent.