

CONFRONTING CHALLENGES AND ENGAGING SUCCESS; NINTH-GRADE
ACADEMIES

A Doctoral Thesis Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
Of the Requirements for the Degree

Doctor of Education
in Professional Leadership

by

Yolonda L. Sneed

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March 2018

Dedication

There is nothing like a praying mother. I thank God for my mother, Vivian Williams Sneed, who is my number one supporter. Philippians 4:13 state, "I can do all things through Christ which strengthens me." I say thank you Lord for the strength you have given me. Thank you mother for your encouragement and motivation and for teaching me the value of education. Look at what a single parent can do! To my sister, Yolette L. Sneed, who is always completely honest with me and shows unconditional love. Yolette, you have been an inspiration. To the memory of my dad, Walter Sneed Jr. who would be so proud if he could see me now. Thank you to my entire family for your love and support.

Acknowledgement

I have been blessed to work with many remarkable people who have supported me in this journey of higher education. I would like to thank Barbra Crook, who gave me my first administrative job and who inspired me to be a compassionate administrator. Thank you to Ralph Funk for sharing his vision, always being encouraging and motivating. A special thank you to Dr. Deborah Stewart, for your continued leadership and guidance. Thank you for keeping me lifted, believing in me, and for being willing to serve on my committee. Thank you to Dr. Nate Session for not only working with edits but for the hours of support and guidance.

Additionally, thank you to Dr. Steve Busch, for sharing his story with me and encouraging me to peruse the doctoral program. I would like to thank Dr. Julie Fernandez, my first chair. Thank you for helping me develop my thoughts and ideas. Thank you to Dr. Anthony Rolle, my second chair, for jumping in and guiding me through the process.

Finally, I would like to acknowledge the University Of Houston Department Of Educational Leadership and Policy Studies. It has been an honor to be a part of this program of study. I appreciate the work and leadership Dr. Virginia Rangel has provided as the committee chair. Thank you for helping me with shaping the direction of this study. Most of all, I would like to thank my other committee members, Dr. Lynn Gillman-Rich, Dr. Anthony Rolle, and Dr. Deborah Stewart.

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Abstract

Background: Too many freshman students struggle during their first year in high school, which can result in their dropping out of school. Ninth grade academies, in which ninth grade students are clustered together for one year, have been one way high schools have sought to support students' success.

Purpose: The purpose of this quantitative mean comparison study was to compare academic achievement at one high school with a ninth-grade academy to a similar school in the same district that does not have a ninth grade academy.

Methods: The study used a series of independent samples *t* test to compare ninth grade students' average test scores for Algebra I, Biology I, and English I between the two similar campuses over the span of five years.

Findings: The schools had similar performance in Algebra for all five years. In Biology, the school with the ninth grade academy outperformed the traditional high school all five years and significantly outperformed the traditional high school in four out of the five years. In English I, the school with the ninth grade academy significantly outperformed the traditional high school all five years since 2013. There was a trend of steady increases over the five-year period, but no increasing in the difference in the scale scores between the two schools for English I.

Conclusion: There were significant differences in the mean scores between the two schools over a five year period with the school that implemented the ninth grade academy scoring higher in most years, for most of the subjects. However, the data suggest that the extent to which the ninth grade academy impacted scores on state testing was moderate.

The gap in performance between the two schools remained unchanged over a five-year period.

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Chapter I

Introduction

Freshman students are faced with having to take state mandated assessments in order to graduate from high school. A large number of freshman are being unsuccessful because of a lack of effective interventions. According to the National Center for Education Statistics (2017), approximately one million students will fail to complete high school this year, which increases those students' risk of unemployment, poverty, health issues, incarceration, and drug abuse. For this reason, high School dropouts cost millions of dollars in dependency on social programs (National Center for Education Statistics, 2017). Furthermore, fifteen percent of high schools in the United States are considered dropout factories (National Center for Education Statistics, 2017), which means that these schools are failing to graduate over half of their students.

Students who drop out of school experience low academic success for many reasons. According to Walsh (2002), "if students have been somewhat disenchanted with school thus far, their experience in the ninth grade may be a determining factor in whether they graduate from high school" (p.1). Walsh further went on to state that if students had been disappointed with their middle school experience, the ninth grade experience could very well be a determining factor in ninth grade retention.

In *Isolating 9th Graders*, Reents (2002) stated "entering the ninth grade can be one of the most emotionally difficult, most academically challenging times in children's lives. In fact, researchers have identified ninth grade as the most critical point to intervene and prevent students from losing motivation, failing and dropping out of school" (p. 17).

Freshman students are failing to be academically successful during their first year in high school resulting in their early exit. Identifying and creating ways to promote student success upon entering the high school environment are needed. It is estimated that approximately 30% of students who enter high school will not graduate within four years (Green & Winters, 2005). The gap in the existing research literature is in identifying ways to help students and parents understand the importance of being successful in the ninth grade. Researchers have linked the size of the high school to ninth grade performance. High schools tend to be much larger than middle schools. This shift to a larger environment can be overwhelming for ninth graders (Grossman & Cooney, 2009). Wheelock and Miao (2005) reported that the nation's graduation rate is in steady decline. An increasing percentage of students are not graduating from high school within a 4-year or even a 5-year time frame. A related cause for concern is the increase of students who are retained in the ninth grade and fail to progress into the tenth grade on time (Wheelock & Miao, 2005).

This lack of academic success is the main reason students fail to complete high school (National Center for Education Statistics, 2017). As a result many schools have begun implementing interventions aimed at increasing the academic success of freshman students. The design of the ninth grade academy involves focusing efforts on creating a staff with a strong interest in working with ninth grade students to meet their overall educational needs. Based upon the needs of incoming freshman, a transition process to teach the needed skills for ninth grade students to be successful in high school is essential. The academy within this high school plans on teaching ninth grade students how to function through ninth grade by following a path to graduation. This Texas ninth

grade academy's ambition is to set high expectations, intervene early when needed, and provide a support system to both students and parents. Parent involvement plays an important role in their students' success. Many times parents have not received a formal education or have had a positive educational experience, both of which may make it difficult for parents to guide their student(s) properly through the educational process. The importance of a successful transition from middle school to high school cannot be emphasized enough. Schools should make an attempt to inform parents of the significance of the middle school to high transition (Cooper & Markoe-Hayes, 2005; Reents, 2002). When parents are involved in the transition process, they tend to stay involved with their children throughout high school (MacIver, 1990; Mizelle, 2005). Researchers have provided evidence that parent involvement leads to higher grades, improved test scores, better attendance, more positive attitudes and behavior, and higher graduation rates (Cooper, 1999; Mizelle, 2005). Successful high school transitions programs depend on middle school and high school administrators, counselors, and teachers working together to share information about the programs, courses, curriculum, and requirements of their respective schools (George, Stevenson, Thomason, & Beane, 1992; Mizelle, 2005). Teachers' objectives within this academy are to address academic concerns and to develop instructional strategies for students in all academic classes.

These areas to help improve high school graduation rates would include reducing student absences, decreasing discipline issues, and lowering retention rates. These areas of improvement are the main focus of students who do not graduate in four years.

According to Haney (2004), ninth grade academies materialized in the mid-1990s as a strategy for high schools to improve student academic performance by addressing the

academic and social needs of ninth-grade students. Nationally, many students fail to complete enough requirements to successfully transition from ninth to tenth grade, and ninth grade is also a year during which many students drop out of school. Research in urban districts suggests that as many as 40 percent of students fail to get promoted from ninth to tenth grade on time, and fewer than 20 percent of those students recover from failure and go on to graduate. Nationwide analyses show a sharp increase in the proportion of students enrolled in ninth grade over the last 30 years, indicating an increasing number of students who fail to move on. The rate at which students appear to drop out between ninth and tenth grade has tripled over the same period.

Many researchers in education have identified ninth grade as a pivotal point for students. The transition from middle school to high school comes with a number of academic and social challenges for students. The middle school environment is typically smaller and more of a developmental type of nurturing environment, and can serve as a support system for the needs of adolescent students, whereas the high school is less supporting of the emotional needs of students. Students beginning high school, more often than not, experience increased stress and behavior problems along with a decrease in grades, attendance, interest in school, and participation in extracurricular activities (Alvidrez & Weinstein, 1993; Barone, Aguirre, & Trickett, 1991; Gillock & Reyes, 1996; Graber & Brooks-Gunn, 1996; Isakson & Jarvis, 1999; Reyes, Gillock, Kobus, & Sanchez, 2000). Students also enter high school with feelings of loneliness and anonymity (Blyth, Simmons, & Carlton-Ford, 1983). Many middle school students also are neither cognitively nor emotionally ready for the transition from the middle school setting to the high school setting. As a result, students tend to become disengaged and

lose interest in academics (Roderick & Camburn, 1999). As Grade 8 students transition from their middle school environment and arrive in a new, larger, and unfamiliar high school, the feelings of uncertainty and separation without proper orientation may arise for some students. Without the proper orientation, information, and support, prior to the transition into high school, incoming ninth grade students may experience high school as an impersonal and unsupportive place, which may cause students to turn to unconstructive behaviors to find fulfillment. (Oakes & Waite, 2009). Reents (2002) also stated that more ninth grade students drop out of school because they get lost in the large high school setting and have less attention paid to them as individuals. Thus, the transition from eighth grade in middle school to ninth grade in high school may be very difficult for many incoming freshmen.

As a result of these challenges, ninth grade has been identified as ripe for interventions to boost student motivation and prevent dropping out (Akos, 2004; Ascher, 2006; Reents, 2002).

One response that schools have adopted is to reform the structure of the traditional high school to guide ninth grade students as they transition into the high school environment. Research by MacIver (1990) found that when middle school students were given an opportunity to participate in a high school transition program, there was a decrease in students who were retained in the ninth grade. A ninth grade academy program is designed as an intervention or support to ease the transition from middle school to high school and to provide ninth grade students with the skills needed to be successful during the first year of high school (Reents, 2002). Several variations exist with regard to organizing ninth grade academies. This one Texas high school aims to incorporate a

separate facility in which only incoming ninth grade students will be housed within a smaller unit of the larger high school. The goal of this reorganization effort is to provide a smaller learning community in which the needs of the ninth grade students can be better addressed.

Background of the Problem

The problem of ninth grade students not being successful as they transition from middle school to high school has become a major concern because numerous researchers (e.g., Smith, 2006) have provided evidence that ninth grade retention rates and failures rates are higher than at any other grade. Pugh (2003) noted the decrease in the nation's 4-year graduation rate was primarily because of problems that began in the ninth grade. Pugh (2003) also stated that ninth graders account for more than one third of the students who drop out of school. Researchers have established that the underlying problems of these students occur in the areas of low achievement, poor attendance, and increased behavior problems (Kerr, 2002; Neild & Stoner-Eby, 2008). Hertzog and Morgan (1999) contended that a shortage of academic transition programs caused dropout rates to increase for freshman.

The transition from middle school to high school has a devastating influence on student academic performance, attendance rates, and the number of disciplinary referrals received by incoming freshman (Barone, Aguirre-Deandreis, & Trickett, 1991; Hall, 2007). In other words, the ninth grade experience is one of the most difficult and most academically challenging times in a student's life. Ninth grade students face many challenges once entering high school, which include not attending school regularly, higher levels of academic failures, and higher percentages of students leaving school

before graduation, more than any other grade level. In *Breaking Ranks* (1996), systemic changes are needed to develop a successful transition from eighth grade to ninth grade. More importantly, in *Breaking Ranks* a recommendation was made for the implementation of a comprehensive transition program to support students as they transition into high school (Walker, 2009).

School districts are searching for solutions to address the needs of ninth grade students, by either separating ninth grade students from the other grades or developing small learning community schools within a school. When students enter middle school, the environment is completely structured and repetitive. Routines are clearly established or practiced until students are able to follow procedures. Teachers frequently monitor student academic progress and parents are frequently contacted when an academic intervention is needed. However, once these students enter high school in the ninth grade, academic freedom and decision making becomes the student's responsibility. High school requires a high expectation and places more responsibility on the student, usually at a time where parental support often decreases (Riddle, 2000).

Two major concerns about ninth grade students are their high levels of immaturity and irresponsibility, along with an increase in the number of students who end up repeating the ninth grade. Also, a limited number of teachers want to teach ninth grade students because ninth grade students have a high number of disciplinary infractions, which may include being tardy, skipping class, and misbehaving in class (Hertzog, 1998). Teachers are also concerned that the communication and interactions with parents is at a basic minimum. Currently, with the State of Texas Assessment of Academic Readiness (STAAR) state accountability system in place, teachers need an opportunity to work with

ninth grade students to address individual student needs. With the implementation of the ninth grade academy at one Houston suburban high school, all teachers will be provided with an opportunity to focus on areas of academic concerns. This implementation will be followed up through the vertical teaming that is enhanced in each academic department (International Center for Leadership in Education [ICLE], 2004).

The Freshman Academy

The freshman academy is designed to ease the transition from middle school to high school, by creating a supportive environment for incoming ninth graders (Comprehensive School Reform Quality Center, 2005; Hertzog & Morgan, 1999, ICLE, 2004). The freshman academy has been created to personalize the learning environment and high school experience based on the student's developmental needs in an effort to teach them how to successfully adapt to high school and gain the knowledge and skills necessary to complete high school (Cotton, 2001; Fields, 2005; ICLE, 2004).

The structure of the freshman academy is prescribed, in most cases, by current research. More often than not, in freshman academies students are housed in small, student and teacher interdisciplinary teams, with the team's classrooms located in close proximity to each other, most of the time in a separate section of the school. McIntosh and White (2006) noted a variety of research-based strategies for the implementation of a freshman academy. This variety of approaches are used by school administrators to help to promote academic achievement, decrease high levels of absences, and lower the amount of discipline referrals acquired by the students in the ninth grade. A freshman academy should include: core teacher teams, which are interdisciplinary teams to share consistent rules and interventions strategies. These teacher teams differentiate

instruction, and create interdisciplinary lessons, they will share the same students and share a common planning time and freshman students and teacher will share a common lunch time. Freshman academies are designed by their structure, and the teaming concept (Interdisciplinary teams). The freshman academy teachers share students across interdisciplinary teams, which allows core content areas to focus on the needs of a specific set of students. These teams meet weekly to review the progress of students on their teams and to discuss strategies to help students achieve.

Allensworth and Easton (2007) reported that student course performances among ninth grade students were related to relationships with teachers, the rigor and connection of classroom instruction to their perceived future, and the cohesiveness of the faculty members associated with the school. These researchers further concluded failure rates were lower at schools where students indicated a positive, meaningful relationship of support, and trust among students and teachers.

Additionally, the freshman academy should consist of freshman administrative staff, a principal and a counselor in which are housed in the academy. The freshman counselor work with the middle school counselor when these students are in the eighth grade for the appropriate placement of student course assignments. The freshman principal, counselor, and intervention specialist collaborate to monitor behavior concern and meet academic needs when students need additional help. According to McIntosh and White (2006), these components are present within the middle school. With the incorporation of these strategies into the freshman academy, school administrators create an opportunity to teach incoming freshmen how to transition effectively to high school.

Statement of the Problem

The problem that this study will address is the alarming number of freshman students who are having to repeat the ninth grade due to failing state mandated tests. Students are not being serviced academically and wind up dropping out of school as a result. This study will analyze the academic performance of ninth grade students on state mandated testing at two suburban demographically similar high schools. The effectiveness of a ninth grade academy in helping to increase student achievement at the freshman level will be examined. Few high school transition programs have been rigorously evaluated and the effectiveness of these approaches has yet to be demonstrated. Some promising practices have been identified in the research literature to help organize a plan to integrate ninth graders fully into high school. Researchers have provided clear evidence that the first year of high school is a critical year. The transition into high school is often characterized as a time when students experience a decrease in attendance and academics (Barone, Aguirre-Deandreis, & Trickett, 1991). As such, schools need to adapt new ways to support students in their first year of high school (National High School Center, 2007). Reents (2002) noted that one approach to address the challenges facing incoming freshmen is the creation of freshman academies that are set apart from the rest of the high school. Cotton (2001) determined that students who attended small learning communities achieved at a higher level than students who attended larger schools. Cotton (2001) further recognized the effects of smaller learning communities on school environment and the students' sense of attachment to the school.

Purpose of the Study

The purpose of this study is to examine the effectiveness of a school possessing a ninth grade academy as measured by student success outcomes on state mandated testing over a five-year period and to compare students' performance to students at a similar school that does not have a ninth grade academy. This study seeks to test whether the presence of a ninth grade academy has an impact on student success rates on State Testing in Algebra I, Biology I, and English I for a 5 year period.

Research Question

The following research question guided this study:

1. To what extent is the existence of a ninth grade academy positively related to student achievement on State Mandated Testing over a 5 year period at Suburban Texas High School as compared to a school with similar demographics that does not have a ninth grade academy?

Hypotheses

Based on that research question, the following hypotheses will be tested:

H1: Student success rates on state mandated testing is significantly different between schools.

H0: Students success rates on state mandated testing is not significantly different between schools.

Conceptual Framework

Researchers Alexander and George (1981) admitted in their research of the ninth grade academy that the reason to remove the ninth grade students was not for

academic reasons but for more practical ones. Some of the reasons were to eliminate overcrowding, control tardiness and truancy, and to lower the number of disciplinary infractions. However, this study will look strictly at the academic benefits of structuring a ninth grade academy. Specifically the longitudinal data of two schools will be compared over a 5 year period in regard to state testing. The goal is to see if there is a significant difference in the academic performance between the two schools on state mandated testing. Before the implementation of the ninth grade academy Houston Suburban High School was doing better than Texas Suburban High school in some areas. However, if over the 5 year period the gap suddenly widened, this would support evidence that the ninth grade academy had a positive impact. The reverse is also an indication that the ninth grade academy was harmful to the academic performance of freshman students. Andrea S. Irvin (2013) and Yvonne Robinson (2013) will provide the framework for this study.

Irvin used a quantitative causal-comparative method to explore the effects of Ninth Grade Academies to further student success in comparison to traditional high school structures in the state of Georgia. Irvin noted that students who attended traditional high schools that didn't have ninth grade academies had better attendance, a higher graduation rate, and did better on state mandated testing than did students who attended schools with ninth grade academies (Irvin, 2013). The results of this study would suggest that ninth grade academies don't work. But the researcher also noted that there were problems with the initial implementation of the ninth grade academy. Teachers were not adequately trained, in many cases, there was not a designated area of the building for ninth grade students, Teachers of ninth grade students were not given

time to plan across curriculum and students were not scheduled in homogeneous ninth grade classes (Irvin, 2013). In many cases students were scheduled in classes that had ninth grade repeaters present in the class. Further, the district failed to provide support for the campus in the implementation of the ninth grade academy. The initiative fell apart as time went on (Irvin, 2013).

Yvonne Robinson (2013) compared the student achievement prior to and after the implementation of a freshman academy at a school in East Tennessee using mixed methods. Robinson (2013) used student performance data from state mandated assessment scores for Algebra I and English I. She examined the failure rate of freshman prior to and after the implementation of a Freshman Academy. The data was then analyzed using a chi square statistical analysis method as well as interviews of the staff. The researcher found a significant difference in the end of course exam scores for Algebra I and English I after the implementation of the Freshman Academy (Robinson, 2013). It is also important to note what the qualitative portion of the study concluded. The isolation of the freshman from the older students was essential to the socioemotional development however, it decreased the positive interactions and mentoring by the older students (Robinson, 2013). The freshmen were moved to a group of portable buildings on the same campus as the other students. One participant commented:

...although the students are isolated for core classes, they are still influenced by upper classmen during electives. This created complicated issues for the freshmen that the freshman academy was supposed to decrease due to isolation of the freshmen. However, this limited isolation did provide an opportunity for freshmen to demonstrate their new found maturity and confidence

in a limited capacity. (Robinson, 2013, p.43).

The academic gains observed in the study did not outweigh the socioemotional negative effects for many participants (Robinson, 2013).

Despite the socioemotional negatives of the Robinson study and the negative academic results of the Irvin study, both studies point to the fact that if the ninth grade academy is implemented with fidelity to separating the freshman students and to providing training and support to the staff responsible for implementation, academic success can be increased. One surface this studies might seem to contradict one another. However, they are both instructive regarding the implementation and maintenance of a true and effective ninth grade academy.

Methods

The methodology that will be used to conduct this study will be a mean comparison analysis; t-test. The researcher will use scale score data from Texas Suburban High School and Houston Suburban High School to calculate a mean score for both campuses on state mandated testing over a 5 year period. These schools both have similar demographics and programs. The presences of a ninth grade academy at Houston Suburban High is the only significant difference between the two schools. The t-score will be used to determine if there is a significant difference between student performance on state testing between these two schools.

The Significance of the Study

Ultimately, this study will determine if Suburban Houston Suburban High School is having greater academic success at the freshman level as compared to another campus with similar demographics for a 5 year period. Although research literature exists

regarding the effects of middle school transitions to high school on student academic achievement and behavior, not revealed in the literature is the effectiveness of the ninth grade center as an intervention. It is critical to determine the effectiveness of transition programs designed to help incoming ninth grade students become successful while in high school. The rationale behind this is that the ninth grade year is viewed as the most critical year in determining whether or not students will graduate from high school.

The establishment of a freshman academy should constitute a support system for all incoming freshman students. The purpose of this quantitative mean comparison study is to evaluate the effectiveness of this ninth grade academy with respect to academic achievement and behavior.

Limitations of the Study

This study is limited to one ninth grade academy within a Houston Suburban high school. The study will be restricted to student data for incoming ninth graders within the high school. Additional data will be collected for first time ninth grade students taking End of Course Test (EOC) and State of Texas Assessment of Academic Readiness (STARR). Therefore, the data collected will only be over a five year period. Additionally, a limitation will be looking for ways to separate the reclassified ninth grade information and data from those students who are actually incoming freshmen.

- Limitations of the design and sampling

Assumptions

While doing this study the researcher made certain assumptions. The researcher assumed that the data received from Suburban Texas ISD is valid. For the purposes of this study the researcher also assumes that the instrument used for state testing is both

reliable and valid. Finally the researcher assumes that all teachers at the ninth grade center and comparison school are highly qualified in their areas of expertise. The researcher also made the assumptions that systems and processes that were implemented at the implementation phase of the ninth grade academy were implemented with fidelity for all five years.

Definition of Terms

State Mandated Testing – STAAR, or End of Course (EOC) assessments are used to measure students' academic performance in core high school courses and are part of the graduation requirement. (TEA, 2013)

Freshman Academy – Ninth grade center and ninth grade academy are used interchangeably in the research that will be presented for this study. For the purposes of this study the term freshman academy will be used except for when quoted in the review of literature in the next chapter. A ninth grade academy is a comprehensive freshman transition program for all incoming ninth grade students. Most ninth grade academies are housed on the traditional campus and they have their own leadership team which consists of an assistant principal, a counselor, an academic achievement specialist, and interdisciplinary team of teachers, in which all share the same group of students and have a common planning period. Each interdisciplinary team serves approximately 125-130 students. These teams have a common planning period in which they are expected to discuss students' academic and socioemotional needs (Alvidrez & Weinstein, 1993; Barone, Aguirre, & Trickett, 1991; Gillock & Reyes, 1996; Graber & Brooks-Gunn, 1996; Isakson & Jarvis, 1999; Reyes, Gillock, Kobus, & Sanchez, 2000).

Texas Academic Progress Report (TAPR) – This report is published annually for each public and charter school in the state of Texas showing the school's academic achievement and demographics as well as staff and program budget expenditures (Texas Education Agency, 2017).

Small Learning Communities – A small learning community is made up of a group of core area teachers who have a common planning period and service the same students. Each small learning community has an administrator and a counselor attached to it. Administrators and counselors may oversee multiple small learning community in one isolated setting. In some research presented in this study the term small learning community is used interchangeably with Ninth Grade Academy. For the purposes of this research and for clarification these are two separate terms. While a ninth grade academy is deemed a small learning community by most scholars the ninth grade academy that we are examining is made up of multiple small learning communities. This is why clarification is needed (Alvidrez & Weinstein, 1993; Barone, Aguirre, & Trickett, 1991; Gillock & Reyes, 1996; Graber & Brooks-Gunn, 1996; Isakson & Jarvis, 1999; Reyes, Gillock, Kobus, & Sanchez, 2000).

Reclassification – Students who are prevented from being promoted to the next grade level due to academic failure which results in a lack of credits being earned toward graduation. After each year high school students are expected to earn a certain amount of credits. Students receive 1 credit for each course they pass. Freshman typically take between 6 to 7 classes. They would be expected to earn one credit for each. Freshman how earn less credits must retake courses until they pass them (Texas Education Agency, 2017).

Promotion – All students who have passed core classes and are promoted to the next grade each year because they earned the required amount of credits. The number of credits a student must earn to be promoted is a local decision and varies from school district to school district. For the purposes of this study a freshman must earn one credit for each class they make above a 70 on their final average (Texas Education Agency, 2017).

Student interventions – A student intervention is anything administrators, teachers, or counselors do to help a student perform better academically or behaviorally (Marzano, 2012).

Conclusion

This quantitative mean comparison study will be divided into five chapters. Chapter 1 will serve as an introduction and overview of the ninth grade academy, the methodology used in the dissertation, definition of terms, and the significance of the ninth grade problem. In Chapter 2 of this study, relevant literature will be reviewed regarding ninth grade transition practices. In Chapter 3, the methodology and research design will be discussed. Data analysis and results of this quantitative mean comparison study will be presented in Chapter 4. Finally, the findings will be discussed and interpreted in the context of the existing research literature, along with implications for school leaders and recommendations for further research, in Chapter 5.

Chapter II

Literature Review

The purpose of this study is to examine the effectiveness of a school possessing a ninth grade academy in regard to student success outcomes on state mandated testing over a 5 year period compared to a similar school that does not have a ninth grade academy. In this review of literature related to the subject being addressed in this study, the researcher will present studies that support the existence of a ninth grade academy, studies that concluded that there is not significant effect on academic performance related to a ninth grade academy, and studies that present alternatives to the implementation of a ninth grade academy. First a brief history of ninth grade academies.

Background of Ninth Grade Academies

As the United States began searching for ways to improve student achievement, the United States Department of Education (2001) published a report focusing on top educational priorities. A Nation at Risk, published in 1983 stressed the importance of educational reform. It brought attention to low student achievement as the critical issue in American schools. With this information the focus was to improve student achievement through rigorous statewide academic standards and a challenging curriculum. In return, many states and school districts began to evaluate ways to promote student achievement (Chubb, 2003).

History of the Ninth Grade Initiative

The federal government established the No Child Left Behind (NCLB) Act of 2001, which placed a high emphasis on student achievement in high schools. With the implementation on the NCLB Act, school districts across the states began to develop

ways to bridge the achievement gap in the promotion of ninth grade students (Herlihy, 2007).

Researchers Alexander and George (1981) state the decision to remove ninth grade students from the junior high or middle school was based on practical reasons instead of theoretical goals identified with middle schools. One reason was to eliminate overcrowding. In a study by George and McEwin (1999), provided a variety of reasons for the restructure of schools and implementing the 9-12 model for high school.

Research George and McEwin's study was undeviating from other researchers, in the fact that ninth grade student led the data in the number of times these students were tardy to school, as well as having the lowest attendance rates of the four grades. Further, ninth grade retention rates increased and students failed to obtain the number of credits needed to progress to the tenth grade. As a result of increased retention rates and low attendance, ninth grade student dropout rates increased. (Copeland, 2006; George & McEwin, 1999; Reents, 2002; Walsh, 2002).

Ninth grade students have been undergoing the difficult transition from middle school to high school. Over the last 30 years the national average for ninth grade retention has more than tripled from approximately 4% to 13%. This retention creates the "ninth grade bulge" and the "tenth grade dip" as fewer students are promoted to the next grade (Cook, Fowler, & Harris, 2008). Concerns in the ninth grade start when students fail to make a successful transition from the middle school to the high school setting (Akos & Galassi, 2004; Isakson & Jarvis, 1999; Miao & Wheelock, 2005; Mizelle & Irvin, 2000).

The dropout problem in the United States is a serious concern. In fact, the focus on graduation rates and dropout rates has increased considerably (Christenson & Thurlow, 2010). Christenson and Thurlow (2010) stated the No Child Left Behind Act placed an important emphasis on graduation rates, test performance, and the percentage of ninth grade students who earn a high school diploma within the four years of graduation. Stilwell and Hoffman (2008) and Swanson (2008) also stated that the American education system has a serious dropout problem. They also noted that it was challenging to obtain an accurate number regarding the actual student dropout crisis. Only about 7 in 10 students successfully complete high school. Data for 17,735 ninth grade students from a school district beginning in 2003-2004 through the 2004-2005 revealed that 6% of the students dropped out in the ninth grade (Sparks, Johnson, & Akos, 2010). Intervention programs such as ninth grade academies are needed to address the increasing dropout crisis and provide an intervention to target this concern.

Joftus (2002) stated fewer than 75 % of eighth grade students graduate from high school in five years. Reents (2002) and Rourke (2001) contended that ninth grade students should be introduced to the high school setting in a gradual manner, such as through the implementation of a freshman academy or a ninth grade community. Student transition to high school in the ninth grade is problematic, especially considering that about 45% fail to reach the tenth grade the following year. This transition difficulty results in fewer tenth grade students the following year and a larger ninth grade class (Black, 2004). These results can raise the dropout rate. Only 40% of students who are retained once, and 10% of students retained twice will graduate from high school (Hertzog & Morgan, 2001).

Christenson and Thurlow (2010) further stated that to lower the dropout rate substantially and to provide students the opportunity to earn a high-school diploma, interventions must focus on allowing student positive interactions with the professional staff and school peers to exist when students transition into the high school. An increase in the use of intervention programs has been documented. These school programs focus on addressing the causes of student dropouts as well as focus on dropout prevention, (Christenson & Thurlow, 2004). Duffrin (2003) has revealed that students who fall behind in earning credits during the ninth grade year were increasingly more likely to drop out than students who were promoted to the tenth-grade. Goldberg (2005) also stated that if students repeated the ninth grade at least two times, that students may have reached the age at which dropping out of school would not require the consent of the parent or violate compulsory attendance laws. Hoyle and Collier (2006) indicated that urban chief executive officers determined that urban social problems along with economic conditions, more rigorous curriculum requirements for graduation, and the growth of state assessment exams increased retention of students in the ninth grade. According to Hoyle and Collier (2006), state assessment exams have led to greater numbers of high school students being pushed out of school.

According to researchers (Kaplan, Peck, & Kaplan, 1997; MacIver & MacIver, 2007; Sparks, Johnson, & Akos, 2010), students who advance to the tenth grade have a better chance of remaining in school and reaching graduation. Archambault, Diamond, Coffey, Foures-Aalbu, Richardson, and Zygouris-Coe (2010) contended that several factors lead to struggling students' lack of academic success. According to these researchers, these factors could be addressed through the use of a caring faculty and staff.

personalizing the delivery of instruction and the documentation of students' mastery of concepts taught. One of the most important factors described involved the relationships between struggling students and a supportive faculty and staff. Fulk (2003) suggested the academic success that students experienced in their freshman year was extremely important to their completion of high school. He further stated that ninth grade was the first encounter by these students of having to earn passing grades in core courses and electives as well as earning a set number of credits to successfully move forward to the next grade-level. Satisfactory completion of core courses required for high school graduation was among the most challenging courses for ninth grade students (Smith, Akos, Lim, & Wiley, 2008). From 1999-2002, school districts in the state of Texas were appropriated an estimated \$170 million for the Ninth Grade Success Initiative (NGSI) to develop and design intervention programs for ninth grade students to remain in school and succeed academically (Texas Center for Education Research, 2002). As reported by Neild, Stoner-Eby, and Furstenberg (2008), the United States had a dropout crisis of alarming proportion. These authors went on to state that in large urban school districts, more than 50% of students failed to complete high school or earn a diploma within four years. Neild et al. (2008) concluded that a significant number of these students failed to accumulate the credits required to be promoted beyond the ninth grade.

Hertzog and Morgan (1998) noted that the freshman year of high school has been identified as a serious problem in today's educational system. Helping students make a smooth and successful transition to the ninth grade is one of the biggest challenges to administrators in today's education system. Programs to assist students in moving from

middle school to high school, however, are all but nonexistent. This lack of information hampers on the most crucial moves that students make in their life.

When considering the building of an isolated ninth grade academy or center, it has been suggested by superintendents whose school districts operate ninth grade facilities, suggest that they be located as near as possible to the high school site or in a self-contained section of the same building to decrease the cost. Hertzog discussed the advantages of an overlapping facility. He suggested that by placing ninth grade centers in the high school, provides time for ninth grade students to network with others in higher grade levels. He also pointed out that teachers should be aware of the traits of 14-year old students because they differ from the traits of 18-year old students.

Isolated campuses are more costly than sending all ninth grade students to a high school campus. Examples given were in a local district ninth grade center which operates on a \$4 million dollar budget and the Downington Area School District's ninth grade center has a budget of \$ 4.8 million dollars spent a year, and some school districts do not have a separate budget for individual schools. Rush Harrieta's Graham School District reported additional costs for personnel, such as principal, nurse, librarian and additional supplies. The right staff selection is also very important, because individuals should be selected who are willing and interested in working with ninth grade students. Administrators should search for persons to assist the leadership of the ninth grade academy/center to help support the program, such as counselors, assistant principals and other that understanding of this age group.

The focus on the transition from middle school to high school is critical to educators because difficult transitions at this stage in a student's educational career often

leads to lower levels of student academic achievement. Students who have a difficult time adjusting to the academic and social demands of high school experience higher rates of, academic failure, disciplinary problems, feelings of not belonging, and dropping out. (International Center for Leadership in Education).

Ninth Grade Interventions

There are several studies conducted that focused on other interventions to help freshman other than using a ninth grade academy. These studies will be presented here for the sake of comparison.

Benton (2012) wrote recommendations for school districts in regard to successful freshman transitions. Benton (2012) believes that districts should provide accurate and useful information to parents, collaborate with middle grade teachers, celebrate social success, and support academic success. Benton based his recommendations on a review of state wide studies aimed at improving freshman success rates.

The author came to this conclusion after having reviewed several studies that examined early indicators and what has been successful at lowering the dropout rate.

In 2012 Jeremy Burrus and Richard D. Roberts examined interventions that are being used across the country to prevent students from dropping out of school. They wrote that United States desperately needs to improve high school graduation rates, and they believe that it is a possible task if citizens and policymakers demonstrate the will to do it. “We do know how to identify the great majority of students on track to drop out, and we can identify the schools that are most likely to produce dropouts.” (Burrus and Roberts, 2012, p.18). The researchers believe that “dropout factories” which are schools with very high dropout rates, need to be the focus of any national intervention. They also

stressed in this article that psychosocial factors should not be ignored (Burrus and Roberts, 2012).

In 2014 The University of Chicago Consortium on Chicago School Research (UCCCSR) published a research summary reporting the long-term outcomes when schools focus on the ninth grade year. Schools across Chicago had initiated new strategies to improve that transition, making use of new data reports for monitoring and supporting students in real time, as well as ninth grade coordinators, and summer transition programs (UCCCSR, 2014). The study stated:

In Chicago, much of the work on ninth grade coalesced around the “on-track” indicator, developed by UChicago CCSR in the late 1990s. The on-track indicator provides a simple quantitative measure of whether ninth-graders are making adequate progress to graduation based on their credit completion and course failures. Specifically, a student is considered “on-track” if she has enough credits to be promoted to tenth grade and had earned no more than one semester F in a core course. Students who end their ninth grade year on track are almost four times more likely to graduate (UCCCSR, 2014, p.2)

The researchers in this study also contended that a student’s on-track status was more predictive of high school graduation than their race, ethnicity, level of poverty, or test scores. “The on-track indicator focused attention on a key developmental transition with a quantitative measure that could be easily calculated, monitored, and ultimately acted and improved upon.” (UCCCSR, 2014, p.2) The researchers found that efforts to identify these students who were not “on-track” and provide interventions greatly increased the graduation rates in Chicago public schools. Further, researchers also concluded that when

schools were proactive and implemented interventions before the student failed there was an even higher graduation rate for at-risk students (UCCCSR, 2014) The increase was especially high for African American males over an eight year period. African American males experienced a 28% increase in graduation rate and Latino males experienced a 25% increase in graduation rate. This study focused on data analysis, identification of students at risk, and early intervention. The study did not identify the implementation of a ninth grade academy as an intervention that was used in Chicago.

Cheryl R. Ellerbrock and Sarah M. Kiefer (2014) discussed the importance of middle-to-high school transitions and highlight the importance of selecting developmentally responsive teachers to work with freshman in order to create an environment in which they can be successful. This qualitative study highlighted the perceptions of the freshman lead teacher who was in charge of the Freshman Focus program at this particular school. This particular freshman teachers was selected to teach freshman because she was deemed to be developmentally responsive.

Mrs. Cartright, the freshman lead teacher, refers to the sense of community that was forged as a result of Freshman Focus. Findings indicate Freshman Focus created a ninth grade community of care that promoted positive teacher beliefs about students, stimulated responsive teacher-student relationships, and instilled academic and life skills. We can learn much from the experiences of those intimately involved with Westshore's Freshman Focus program. Five aspects were critical to supporting students: recruiting developmentally responsive teachers, encouraging a sense of cohesiveness, providing opportunities for students to practice academic and life skills, promoting a lasting community of

care beyond the conclusion of the course, and realizing the significance of one innovative program (Ellerbrock and Kiefer, 2014, p.4).

In the study the researchers defined being developmentally responsive as when students' basic psychosocial and developmental needs are responded to. The authors concluded that purposefully selecting developmentally responsive Freshman Focus teachers to teach ninth grade students played a central role in creating a successful ninth grade community of care (Ellerbrock and Kiefer, 2014, p.4). The authors went on to say "This article illustrates how one transition program, Freshman Focus, aided the transition into high school by promoting a community of care that supported students' basic and developmental needs, and fostered high quality teacher-student relationships." Ellerbrock and Kiefer, 2014, p. 7) It should be pointed out that this study had a limited number of participants and didn't report any quantitative gains made by students as a result of their having been in the Freshman Focus program.

Legters and Praise (2016), examined what they called the "Community of Practice Approach." According to them A Community of Practice Approach is an organized group of practitioners of a specific trade or craft who are concerned with improving the way they do their work Legters and Praise, 2016). This research brief describes all systems that were put in place and all professional developments that teachers attended in order to help freshman be successful at the South Florid School District. While this approach did have a positive effect on the staff, no positive effects on student's academic success was reported.

Taheera Blount (2016) wrote recommendations for school counselors to aid in preventing freshman from dropping out of school. Blount's (2016) literature review

explored the reasons why students drop out of school, identified predictive risk factors, and highlighted social indicators associated with students who drop out of high school. Her recommendations were; early identification of poor attendance, group interventions, academic support via peer tutoring, parental involvement, programmatic service delivery, transition program, and service learning. The author concluded the following:

School counselors have been charged with addressing program planning needs for all students, including at-risk students. With this notion, dropout prevention serves as a major concern for school counselors. Students transitioning to high school are often unprepared to face the many developmental, social, and academic challenges. The findings of the present literature review suggests there are several predictive risk factors for students dropping out of high school, including failure to be promoted to the next grade level, failing core academic courses, and excessive absenteeism. Additionally, the research suggests several red flags school counselors should be aware of to prevent students from dropping out of school, including socioeconomic status, high mobility, and disengagement from school (Blount, 2016, p.22).

The Impact of the Ninth Grade Academy

In the journal *School Administration* (March 2002), it was noted that separate schools for ninth grade students helps to ease the academic and social transition for high school-bound students. In many research studies, ninth grade students have been identified as the most critical point of intervention to help prevent student from losing maturation of worth, failing and discontinuing high school. An increasing number of ninth grade centers, academies, and schools within school are being created to help

eliminate some of the emotional challenges of ninth grade students. According to the National Center for Education Statistics, “There are 128 ninth grade-only schools were operating during the 1999-2000 school year, which is the most current of published data.

Another local school district in Houston, TX has a population of 53,000 student decided to open four ninth grade centers during the 1998-1999 school year, to primarily keep from getting lost in the classrooms and the corridors of heavily populated high schools which at the time, housed as many as 1,900 to 2,300 high school students. This local surrounding district suggested that by providing ninth grade students with their own campus, it helped them to become better aquatinted with the rigors of high school curriculum and also helped the students to be more mature. This superintendent stated that ninth grade students dropped out of school because of lack of attention given to them and many times, they got lost in the high school setting.

In this particular school district, the dropout rate decreased and the attendance rate increased. The Superintendent reported more students earned credits that allowed them to move on to the tenth grade. Test scores and student behavior also improved. This school district in 1996-2001 earned a “Recognized” rating from the Texas Education Agency for their performance on the Texas Assessment of Academic Skills tests, dropout rates and attendance. Several districts have reported success rates in their districts due to the opening of ninth grade academies.

In a different surrounding school district a superintendent supervised a district of 44,000 students. This superintendent said the need for his district’s ninth grade centers grew out of the need to provide a strong academic foundation to prevent students from dropping out of school. The two ninth grade centers opened in 1998. The superintendent

states, "With a smaller enrollment and a community concert, special attention can be focused on particular groups." The superintendent also stated that "ninth graders have the largest failure rate when academic success is not experienced and throughout individualization and learning teams, the failure and dropout rates are reduced. Students become involved in more school activities and develop a bond and a relationship with teachers that help to easily identify the student's special needs.

Based on a 1990 study by the National Institution of Child Health and Human Development, ninth grade transition programs have a positive influence on preventing negative behaviors such as alcohol and drug use, sexual activity and crime. Hertzog believed it is most important to isolate ninth grade students, although some school districts choose to isolate students at other grade levels rather than in the ninth grade. He also believed the success of ninth grade students would will help them remain in school. In a study conducted in which the Harter Adolescent Self-Perception Inventory was used, out of 10 domains, students leaving from the eighth grade in the fall had a noticeable drop in the area of behavior, global self-worth, physical appearance, and job competence. Hertzog stated "The only domain in which there was a statistically significant increase from grade 8 to 9 had a close friendship. The ninth grade students stayed close to each other. They found comfort in those students like them."

However in a related study, Hertzog indicated that Lozeau, a colleague from another state, did not obtain statistically significant differences using the inventory and the same grade level as Hertzog, although Lozeau continued his study beyond the fall of the school year into the spring. He documented that boys had the lowest self-perception

about their physical appearance and girls had the lowest self-perception of their global self-worth by the spring of their ninth grade.

Hertzog contended that the development of a ninth grade academy was only one facet of transition from middle to high school. He recommended that school districts develop a program that begins in the fall of the eighth grade year and follows through at least until the spring of the ninth grade year. He says this would be part of the process in the development of a ninth grade academy.

Successful Ninth Grade Academies. The objective of the ninth grade success initiative is to increase the graduation rates of public school students by reducing the number of students who are retained in the ninth grade, and reduce the number of students who drop out in the ninth grade (TEA, 2001). This initiative serves as an examination of the effects of providing students with additional support as they transition into the ninth grade (Halberg, Swanlund, & Hoogstra, 2011). According to a March 2011 study by the United States Department of Education, “the absence of rigorous large-scale studies on the factors associated with a successful ninth grade transition, high school level guidance has a weaker research base” (US Department of Education, Study of Promising Ninth Grade Transition Strategies, p. 7). Therefore, the structure and environment of high school has been the focus to increase personalized support for ninth grade students and to create better conditions for teaching and learning. The implementation of a ninth grade academy is structured to support closer relationships between students and teachers, encourage higher attendance to school and improve academic pass rates (U.S. Department of Education, 2011).

In Texas, the Texas Education Agency initiated The Texas Ninth Grade Transition and Intervention Program. The Texas Ninth Grade Transition and Intervention Program is a statewide initiative designed to provide support to students as they transition into the ninth grade. This policy/program was created because ninth grade is known as a pivotal year for students to remain on track to graduate. As noted earlier, more students fail in the ninth grade than any other grade in high school (Allenworth & Easton, 2007).

It is perceived the ninth grade is provided with less support, and infrequent monitoring from teachers and principals. Generally, ninth grade students like school less than they did in middle school (Barber and Olsen, 2004). In addition to the academic demands of high school, students are faced with a variety of academic challenges. Not only learning how to adjust to the rigorous curriculum, these students as first time freshman take an English I End of Course exam with 63 multiple choice questions, three short answer questions, and two essay questions. These students only have 5 hours to complete this test which is a graduation requirement. Prior to Texas House Bill 5, these students who were first time freshman had two separate test for reading and writing with 4 hours to complete test which was also a graduation requirement. If first time ninth grader students struggle during the ninth grade year and the ninth grade has the largest dropout rate, then why do we educators incorporate a graduation requirement during their transition year when this is their most critical time? This study seeks to examine if the presence of a ninth grade academy shows growth in student achievement on state mandated testing.

The Texas Ninth Grade Transition and Intervention (TNGTI) was implemented to support students transitioning into ninth grade. This process includes an early warning

data system that is used to monitor the participants throughout the school year, and to determine researched-based interventions to meet student needs. This policy was designed to investigate the effectiveness of the support through the TNGTI. Additionally, the TNGTI program compared the success of student who participated in TNGTI with students who did not participate in TNGTI. The program also compared the performance of students who participated in the TNGTI to similar students who did not participate in in the TNGTI.

The policy instrument used for the TNGTI program was the System-Changing approach. The system-changing policy instrument provides a programmatic approach to target students who are in need of extra support. This system-changing approach allows for a flexible and custom fit instructional programs that will align with the general instructional plan for meet the needs of all students.

Individuals and groups who might be politically aligned with the TNGTI will be the students participating in the program, the school district and the campus to determine the effectiveness of the program on each campus and how it compares to students who are involved as well as students who are not involved and policymakers and stakeholders who are invested in academic success. Most of all, the political group involved would be the Texas Education Agency due to the fact this is a statewide policy initiative.

The people and groups who have a stake in the policy would be state legislators, district leaders, campus principals, teachers, parents, students and all stakeholders involved in preparing students for a successful future. Students have a large stake in this policy, because TNGTI is designed to reduce the dropout rates and support students in graduating on time. The benefits of the TNGTI are to increase student attendance, help

students achieve higher academic success, reduce the number of ninth grade failures, and help students develop positive relationships with teachers. A recommendation for the TNGTI would be to enhance the program organization and implementation of the program on a high school campus. This would include consistent communication with parents, students, staff, campus and district administrators as well as collaboration with all stakeholders, rigorous academic program planning before implementation, and developing a system to evaluate the effectiveness of the program. Other recommendations include development for additional outreach from community to support student success by creating a strong parent involvement as part of TNGTI, and selecting quality staff possessing the skills and the desire to work with targeted students, and also provide professional development opportunities for staff members working with ninth grade. According to a report to the Texas Education Agency, the TNGTI provided no information describing the process for activity implementation or linking program characteristics to student outcomes. Future research should examine the consistency of how districts implemented ninth grade success initiative programs, as well as, whether successes or challenges in the first stages of implementation has an effect on academic programming and student performance, and what was the impact of particular programs or activities on student outcomes.

In 2012 James Edward Osler and Carl Waden examined the use of innovative solutions to conduct an in-depth investigation on the success and viability of 9th Grade Freshman Academies, Centers, and Center Models to aid in the retention of at risk students in North Carolina. The research methodology used in this study was mixed methods (Osler and Waden, 2012). Osler and Waden (2012) concluded that along with

other interventions, at-risk students did see growth in their performance on state mandated testing in Algebra I and English I after the implementation of a ninth grade academy. However because of the implementation of other initiatives to help these students it is unclear if the ninth grade academy was the sole reason for the improvement (Osler and Waden, 2012).

Mary Eileen Taylor Osborne (2012) examined the success of ninth grade academies using both qualitative and quantitative methods. Her study explored the process by which a suburban, east coast, public high school designed and implemented a ninth grade transition program despite significant budget constraints (Osborne, 2012). The study concluded that although participation in the program did not result in significant decreases in the number of absences or courses failed, students who participated in the program had fewer suspensions and increased performance on the state biology exam (Osborne, 2012). Her findings taken together with student and faculty feedback about the design and implementation of the program provided the foundation for specific modifications to the existing program.

In 2014, Timothy L. Healey examined best practices for the implementation of a successful ninth grade academy by questioning a panel of educational leaders. This was a qualitative study had 21 participants. The results of the study indicated that successful freshman transition programs needed to address both academic and social/emotional needs of students. Healey (2014) went on to conclude that the data provided evidence that principals need to take great care in teacher quality, instructional practices, and a systematic approach to monitoring the performance of ninth grade students as well as

ensuring students make a positive connection with an adult in the school in order to be successful.

Charles Henry Chandler, Jr. (2015) studied the barriers faced by incoming freshmen students at a particular high school. In this study Chandler (2015) surveyed the freshman class using an instrument developed by himself and other staff members at the school. Data were obtained from a Likert-type scale, which addressed the academic, social, and

procedural concerns of students and Johnson High School (Chandler, 2015). The results of this study showed that students didn't care for the isolation of the freshman academy and preferred to be in a larger setting. Chandler (2015) states:

...students feel that they are in the most healthy transition environment when they are in a larger environment. This environment is one where they are surrounded by educators who provide a quality education and motivate them to be successful. According to the data, "getting good grades" ranked the highest among positive aspects of the transition to high school. Students also stated they would like to feel more welcome and comfortable in the high school environment. *Teacher concern* and *sense of belonging* appeared to be equally important among both boys and girls. These issues would help students become or remain intrinsically motivated to focus on school. Alternatively, students still relied on their parents as the major source of support during the time of student transitioning, as students felt that coaches, administrators, and counselors were ranked second and third in relation to student success (p.69).

It should be noted that this is one of the few studies in the literature that actually asked the students how they felt about a freshman academy.

Unsuccessful Ninth Grade Academies. Chris Bennett (2012) compared two different school systems; Clark County and Lewis County Schools. Schools in Lewis County do not have ninth grade academies while schools in Clark County do. The study examined three variables of achievement: growth on English I End of Course test, attendance (number of days absent), and discipline (number of incidents accumulated). These variables were then analyzed using three different methods which include *t*-test, correlation, and a growth comparison (Bennett, 2012). Bennett (2012) found that with regard to achievement, no significant difference existed in student perceptions or performance data and no relationship existed when comparing performance to perception within each district. However, Bennett (2012) also found the longitudinal data showed that Clark County students are closing the gap in the average growth disparity on the English I End of Course test since the implementation of the freshman academy. The study also found that there was no effect on attendance between the two schools (Bennett, 2012). There was a difference in discipline incidences with Clark County schools having fewer. There was also a significant correlation in student perceptions of discipline at both schools. Despite several areas in which there were no significant differences between schools systems Bennett (2012) concludes:

The freshman academy model in Clark County Schools serves as a cost-effective intervention strategy beneficial to students and teachers. As leaders press forward in analyzing data, refining strategies, and implementing best practices, Clark

County Schools will continue to make the high school transition a successful experience for students (p.87).

This study had mixed results but the researcher was optimistic about the outcome and hoped to inform practice in the future.

The U.S. Department of Education's Institute of Education Sciences funded a study in 2009 that used researchers from MDRC and Johns Hopkins University partnered with Florida's Broward County Public Schools (BCPS). This study was an independent evaluation of the district's initiative to implement Ninth Grade Academies (NGAs) in every district high school. The results of this study were published in 2013. The study found strong district leadership during the initial implementation process but it seemed to wane as years passed. The investigation also uncovered substantial variation in the overall quality and duration of NGA implementation across schools, however, with strong and sustained implementation of multiple components occurring in just three schools (MDRC, 2013). The MDRC (2013) went on to conclude:

The district's definition of NGAs focused on structural components in each school — ninth-grade administrative leadership, dedicated ninth-grade space, dedicated ninth-grade faculty, and interdisciplinary teacher teams. Improving ninth-grade curriculum, instruction, and student supports were not a direct focus of the initiative. In fact, other reforms in these areas aimed at improving student outcomes competed with NGA implementation. Only three high schools achieved strong implementation. Ten achieved a threshold level of implementation, and five fell below threshold. Most schools did not improve from the first to the second or third year (p.75).

The authors of this study came to the conclusion that there was an implementation gap and that the district failed to provide funds or technical assistant during the implementation process. (MDRC, 2013). Three schools were able to see gains but the MDRC credited leadership more so than the effects of the academy itself as the cause. The MDRC conducted another study in 2016 in which they concluded; "...it can be difficult for schools to fully implement the components of the NGA model without expert assistance: Three years after their creation, only half the NGAs in the study had all four structural components of the model in place" (MDRC, 2016, p.38). This organizations comprehensive study of ninth grade academies in Florida uncovered several issues with implementation, allocation of resources, and leadership that are instructive to other ninth grade initiatives around the country.

Maria A. Cetta (2013) examined whether first-year high school experience in a freshmen academy influenced academic achievement for students from economically disadvantaged backgrounds. To accomplish this she used causal comparative ex post facto quantitative design using pre- and posttest scores was utilized to explore the impact of a ninth-grade academy on the achievement of these students. Mathematics and language arts literacy PSAT raw scores for 144 first-time ninth-grade students during the years 2008-2009 and 2009-2010 were used as the pretest posttest examined and analyzed using independent samples *t* tests for statistical significance (Cetta, 2013). The researcher found that there was not significant difference in student achievement due to the implementation of a ninth grade academy (Cetta, 2013). The author concluded that more research needed to be done.

Andrea S. Irvin (2013) used a quantitative causal-comparative method to explore the effect of Ninth Grade Academies to further student success in comparison to Traditional Comprehensive High School structures in the state of Georgia. This study concluded that students who attended Traditional Comprehensive High Schools that didn't have ninth grade academies had better attendance, a higher graduation rate, and did better on state mandated testing than did students who attended schools with ninth grade academies (Irvin, 2013). The results of this study would suggest that ninth grade academies don't work in the state of Georgia. However, the researcher presented several other variables that may have played a role in the outcome of the study. The researcher conclude that a multiyear study needed to be conducted to get an idea if gains had been made since the inception of the ninth grade center (Irvin, 2013). The researcher also pointed to problems with the initial implementation of the ninth grade academy (Irvin, 2013).

Eric Venson Davis (2014) sought to investigate reasons why students leave high school before completion and whether the current interventions in the ninth grade academy are effective in decreasing the dropout rate at a local high school in northeast Louisiana.

This was a case study in which data were collected through interviews from 15 teachers who taught in the ninth grade academy and minutes from team meetings. Data were analyzed through coding and identification of emergent themes (Davis, 2014). The results of the study indicated that the tutoring program, adult mentor program, and credit recovery program did have an impact on keeping students in school but were not significant enough to have improvement in reducing the dropout rate (Davis, 2014).

While conducting this study Davis (2014) identified the need for additional staff development to help teachers at the ninth grade center implement interventions to increase the academic success of the students. Davis (2014) concluded the following:

With teachers switching to a new curriculum and trying to adjust themselves to it, there has not been enough time to train teachers on new strategies for engaging all students within the classroom. Through effective staff development in meaningful, engaged learning, the strategies learned would be a huge asset in engaging students and helping students remain in school (p.74).

The results of these interventions is yet to be reported.

Conclusion

The literature on the effectiveness of the freshman academy is inconclusive. For every study that demonstrates the success of a freshman academy there is another study that shows no significant impact of the intervention. The literature is filled with freshman academies that failed because of a lack of leadership, no resources, lack of training, and infidelity of implementation. The academies that succeeded were very different but they do have a few things in common. All the academies that succeeded, meaning that there was a significant increase in students ' academic success after they were implemented, had effective leadership, clear mission, support for students socioemotional development, academic interventions that teachers received professional development to implement, and there was a designated area with an assigned administrator and counselor. Each successful academy also had small learning communities built into the freshman academy. In the next section the methodology used to conduct this study will be discussed.

Chapter III

Methodology

The purpose of this quantitative mean comparison study is to compare freshmen achievement on state mandated testing between two schools over a five year period. One school possessed a freshman academy and the comparison school did not during this period of time. The following research question guided this study: To what extent is the existence of a ninth grade academy positively related to student achievement on State Mandated Testing over a 5 year period at Suburban Texas High School as compared to a school with similar demographics that does not have a ninth grade academy? In this chapter the methodology will be explained in detail after a description of the site and the participants.

Setting

The school district for this research study is the largest Recognized school district as well as being the third largest school district in Texas. It covers 186 square miles of land that has experienced phenomenal residential and commercial development. According to district records, the district has doubled in size in the last 10 years (Texas ISD, 2017). This development has transformed it into one of the area's largest metropolitan communities. At the start of the 2014-2015 school year, the school district had a student enrollment of 112,957 students, with 44.13% Hispanic, 27.46% White, 16.49% African American, 8.8% Asian, and 2.38% Multi-racial (see Table 1). This school district's enrollment has grown to nearly 113,000, bringing with it greater student body diversity and a drop in the percentage of White students, along with increases in the percentages of Hispanic and African American students. Projections indicate that

enrollments will continue to expand and diversity will continue to bring increased economic challenges, since students come to this district from all socioeconomic groups.

In 1972, this school opened its doors to sophomores and freshmen. The school began building an extensive history of academic achievement and success. The first principal opened an innovative school that included movable walls, open classroom areas, a Commons area, and modern laboratories and shops. Beginning with just two grade levels totaling 597 students, the high school population has expanded to over 3,300 students, under the guidance of the school's fifth and current principal. The school's ninth grade academy was opened during the 2012-2013 school year.

Table 1.

2014-15 Texas Academic Report Demographics for District and Target High School

Demographics	District	Texas Suburban	Houston Suburban
African American	16.5%	19.6%	11.9%
Hispanic	44.0%	55.8%	55.0%
White	27.5%	12.3%	19.9%
Native American	0.7%	0.4%	0.7%
Asian	8.8%	10.3%	11.0%
Eco.Dis.	49.2%	63.1%	51.0%

Table 1 shows a comparison of demographic data between the two schools in this study. Both schools have similar demographics however, Texas Suburban High School has slightly more economically disadvantaged students.

Design

This is a mean comparison study comparing students at two similar schools that were not randomly selected. The mean scale scores for state assessments will be analyzed

using t-test analysis over a 5 year period (2013 to 2017) for a school that has a ninth grade academy and a school that doesn't have a ninth grade academy. The two schools are similar in every area demographically and programmatically with the exception of the presences of a ninth grade academy. Despite TSHS having slightly more economically disadvantaged students then HSHS the Texas Education Agency deems these two schools comparable for accountability purposes (Texas Education Agency, 2017). The goal is to determine if there is a significant increase in the difference in student performance on state testing during testing that occurred between 2013 and 2017 school years.

Participants

The study used a convenience sample of students from two schools in one suburban district. The school district will be referred to as Houston Suburban School District, and the campuses will be referred to as Houston Suburban High School and Texas Suburban High School. At Houston Suburban High School, there is a ninth grade academy that has been in existence for the past five years. At Texas Suburban High School there has never been a ninth grade academy. These schools were chosen because they are similar in demographics and socioeconomic status. In the state of Texas, schools are compared to each other that are similar. Each school is grouped along with 40 other schools that are alike for accountability reasons. Houston Suburban High school and Texas Suburban High School are both in the same comparison group for state accountability. The participants in this study are freshman students over the last five years from two schools. The total number of participants was 5050 students. The total number of student cases from Houston Suburban High School was 2445. The total number of student cases from Texas Suburban High School was 2605.

Measures

The independent variable for this study will be the two campuses. The dependent variables in this study will be the state mandated tests that students must take at both these high schools during their freshman year. They are: Algebra I, English I, and Biology I. The scale scores for each student in each group will be utilized. The scale score for these assessments ranges from 1000 to 7000. The cut score, which changes from year to year, is normally around 3700. The scale score is the conversion of the raw score into a scale that is common to all test forms for that assessment according to TEA (2017). The scale score takes into account the difficulty level of the specific set of questions on which it is based. It quantifies a student's performance relative to the passing standards or proficiency levels. "Scale scores allow direct comparisons of student performance between specific sets of test questions from different test administrations." (TEA, 2017, p. 2)

Analysis

Data analysis consists of the procedures for gathering, organizing, and calculating the test results (Creswell, 2002). In a quantitative study, the researcher prepares and organizes the data. The preparation involves "assembling all data, transforming it into numeric scores, creating a data file for computer or hand tabulation, and selecting a computer program to use in performing statistical tests on the data" (Creswell, 2002, p. 222). Students were compared within each year. A t-test was performed for each year the test was administered.

The data were analyzed using an independent sample *t* test. The independent-samples *t* test compares the means between two unrelated groups on the same continuous.

dependent variable (Creswell, 2002). The researcher first checked to make sure that the data being analyzed can actually be analyzed using an independent t -test. This needed to be done because it is only appropriate to use an independent t -test if the data meet the six assumptions for an independent t test to give valid result (Lund Research, 2013).

Software Package for the Social Science (SPSS) and Microsoft Excel were used to test these requirements to ensure that the data would yield valid results. The first assumption is that the dependent variable should be measured on a continuous scale. In order to meet this requirement the scale scores of the students was used (Lund Research, 2013).

The independent variable should consist of one categorical variable comprising two independent groups (Lund Research, 2013). This was satisfied because the two high schools served as the independent variables. There also should be an independence of observations, which means that there is no relationship between the observations in each group or between the groups themselves (Lund Research, 2013). Microsoft Excel was used to eliminate any student that attended both schools and took the test at each. Re-testers were not included for evaluation. Only first time testers were used. This further reduced the possibility that there would be a student who appeared in both sets of data. There should be no significant outliers (Lund Research, 2013). Outliers are simply single data points within your data that do not follow the usual pattern. Outliers can have a negative effect on the independent t -test, reducing the validity of your results (Creswell, 2002).

The dependent variable should be approximately normally distributed for each group of the independent variable (Lund Research, 2013). The normality of the distribution was tested for using the Shapiro-Wilk test of normality, using SPSS. The

findings of this test will be reported in Chapter 4 for each year of data between 2013 and 2017. This was also tested for in SPSS using Levene's test for homogeneity of variances. The results of this will be reported in Chapter 4.

After the data met all six requirements SPSS was used to calculate the mean for each independent variable and the t-score, which indicated if the mean was significant. The following hypotheses guided this study:

$H_0: \mu_1 = \mu_2$ ("the two scale score means are equal")

$H_1: \mu_1 \neq \mu_2$ ("the two scale score means are not equal")

The hypotheses that guided this study are non-directional. By running the Independent samples *t* test the researcher determined if there was a significant difference in the mean scores for each test for the past five years between the two groups (μ_1 and μ_2). Once the data were entered and all the requirements were met, SPSS gave the mean and standard deviation for each group on each test for each year. It also gave the number of people in each group (n). The n value was checked for each comparison to ensure there were no missing data.

For each comparison SPSS calculated the degrees of freedom to determine the rejection region. Degrees of freedom describe the number of scores in a sample that are free to vary. For an independent samples *t*-test the following calculation will be used:

$$Df = n_1 + n_2 - 1$$

The software SPSS also gave the results of Levene's test for equality of variances. This tested whether the variance of scores for the two schools was the same. The outcome of the test determined which of the *t*-values that SPSS provided was the correct one to be used. The significance (Sig.) was .05. If the significance level of Levene's test

was $p=.05$ or less this meant that the variances for the two groups was not the same and therefore the data violated the assumption of equal variance (Pallant, 2007). SPSS provided an alternative t-value which compensated for the fact that the variances were not the same. After the Levene's test for equality of variances had informed the researcher of which value of significance to use the researcher then determined if the values was above or below .05. If the significance values was above .05 there was no significant difference between the two schools on that particular state mandated test for that particular year. However, if the value of significance was equal to or less than .05 there was a significant difference in the mean scores of state mandated tests for that particular year. The means of the two schools were then examined to determine which was higher. The output table from SPSS was then placed into chart form to be explained in chapter 4.

Procedures

The independent variables in this study were the two schools being compared. Houston Suburban High School which has a ninth grade academy and Texas Suburban High School. The dependent variables were the students' scale scores on three state mandated tests which include Algebra I, Biology I, and English I. Data will be over a 5 year period.

The data was requested from the testing and accountability department of Houston Suburban ISD. The data for each school was sent via email to the researcher as a series of Microsoft Excel documents. The researcher downloaded the files from the email server and deleted any data that identified individual students. This data included students' names, identification numbers, addresses, telephone numbers, and all

demographic designations. After this was done the researcher deleted the percentage scores of the students. Only the scale scores for each test was used. After this was done the data was imported into SPSS. Once all the data was imported the researcher tested to ensure that the data met all six requirements for the data to be use for the independent t test. After this was done the independent t test was administered for each test, for all five years of data collection using SPSS.

Limitations

This study is limited to one ninth grade academy within a Houston Suburban high school. The study will be restricted to student data for incoming ninth graders within the high school. Additional data will be collected for first time ninth grade students taking End of Course Test (EOC) and State of Texas Assessment of Academic Readiness (STARR). Therefore, the data collected will only be over a five year period between 2013 and 2017. Additionally, a limitation will be looking for ways to separate the reclassified ninth grade information and data from those students who are actually incoming freshmen. This was accomplished by manually removing these students from the data base before it was analyzed.

Conclusion

The purpose of this study was to examine freshman achievement on state mandated testing between two schools over a five year period. Houston Suburban High School, which has a freshman academy and Texas Suburban High School, which does not have a freshman academy were compared. Individual student scale scores on state mandated testing was use as the standard of comparison. The goal of this study was to see if there was as significant difference in achievement between to two schools. To

accomplish this the independent samples t test was used. SPSS and Microsoft Excel aided the researcher in analyzing the data and ensuring that results were valid. In the next chapter the results of the analysis will be presented.

Chapter IV

Analysis of Data

The purpose of this quantitative mean comparison study was to examine whether there were differences in student achievement between a school possessing a ninth grade academy and a similar school that did not have a ninth grade academy. The following research question guided this study:

1. To what extent is the existence of a ninth grade academy positively related to student achievement on State Mandated Testing over a 5 year period at Suburban Texas High School as compared to a school with similar demographics that does not have a ninth grade academy?

The hypotheses tested were as follows:

1. $H_1: u_1 \neq u_2$: Student success rates on state mandated testing is significantly different between schools.
2. $H_0: u_1 = u_2$: Students success rates on state mandated testing is not significantly different between schools.

The independent variables in this study were the two schools being compared. Houston Suburban High School (HSHS) which has a ninth grade academy and Texas Suburban High School (TSHS) that does not have a ninth grade academy. The dependent variable was the students' scale scores on three state mandated tests which include Algebra I, Biology I, and English I. Data were collected for a five-year period, beginning in 2013 and ending in 2017. The average scale score of the two schools was analyzed by t-test

analysis using the software SPSS. Houston Suburban High School was assigned the number 1. Texas Suburban High school was assigned as the number 2. The scale score for each state mandated assessment was designated as “scale.”

Results

By running the Independent samples *t* test, the researcher determined if there was a significant difference in the mean scale scores for each test for the past five years. Once the data was entered and all the requirements were met, SPSS gave the mean and standard deviation for each group on each test for each year. The software gave the results of Levene’s test for equality of variances. This tested whether the variance of scores for the two schools was the same. The outcome of the test determined which of the *t*-values that SPSS provided was the correct one to be used. The significance (Sig.) was $p < 0.05$. If the significance level of Levene’s test was $p = .05$ or less this meant that the variances for the two groups was not the same and therefore the data violated the assumption of equal variance (Pallant, 2007). SPSS provided an alternative *t*-value which compensated for the fact that the variances were not the same. The alternative *t*-value was on the second row of the output table. After the Levene’s test for equality of variances had informed the researcher of which value of significance to use, the researcher then determined if the values was above or below .05. If the significance values was above .05 there was no significant difference between the two schools on that particular state mandated test for that particular year. However, if the value of significance was equal to or less than .05 there was a significant difference in the mean scores of state mandated tests for that particular year. The means of the two schools were then examined to

determine which was higher. The Figures below show a longitudinal comparison of the two schools over a 5 year period.

Both HSHS and TSHS are very similar when looking at performance in Algebra I as shown in Figure 1. Houston Suburban High School (HSHS) has a ninth grade center and Texas Suburban High School (TSHS) does not. In 2013 there was no significant difference in the mean scale scores for both campuses. The two campuses' scale scores only differed by 2 points. Over the years the schools have been very similar in regard to their Algebra I performance on state mandated testing. Of the five years, HSHS has outperformed TSHS two times. However only one time, in 2014, was the difference in the mean score in Algebra I significant. The other four years, the difference in mean scores was not significant between the two schools. Nothing has changed in regard to the scale score of the two schools since 2013 which is the first full year of the freshman academy at HSHS.

Figure 1. Algebra I Comparison

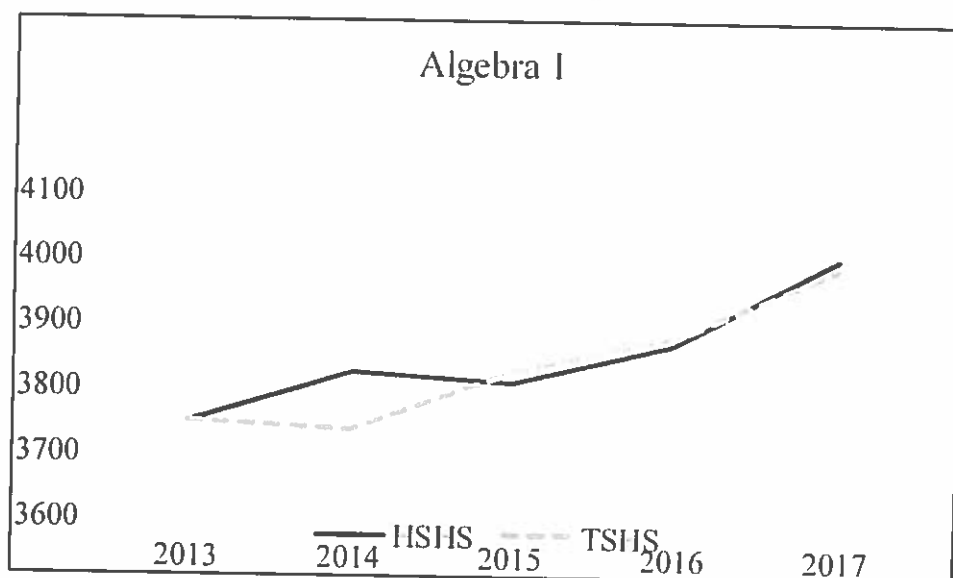


Figure 1 shows a longitudinal comparison between HSHS and TSHS over a five year period in Algebra I.

In Biology there were significant differences in the mean scale score between the two schools each year with the exception of 2015 as shown in Figure 2. HSHS outperformed TSHS in Biology all 5 years and they significantly outperformed them 4 out of the 5 years. The margin of gains has not shown a significant increase since the implementation of the freshmen academy in 2013.

Figure 2: Biology I Comparison

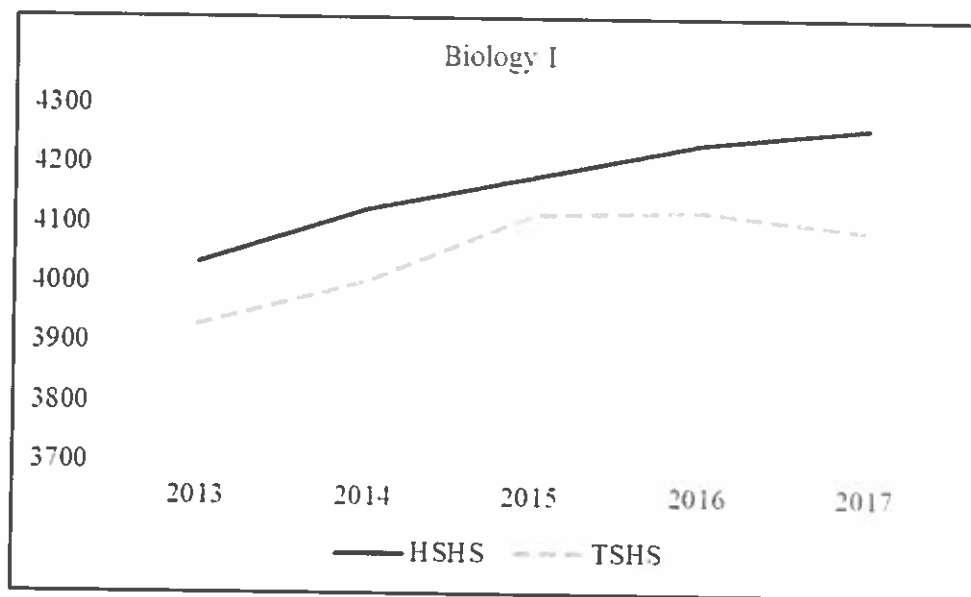


Figure 2 shows a longitudinal comparison between HSHS and TSHS over a five year period in Biology I.

In English I, HSHS has outperformed TSHS significantly all 5 years since 2013 as shown in Figure 3. Despite dominating TSHS, HSHS has shown steady increases in scale score since the implementation of the freshman academy in 2013 but so has TSHS. The

scale scores for HSHS have been steady much like the scale scores for TSHS. The researcher could identify a trend in the data of steady increases over the 5 year period but not increasing in the difference in the scale scores.

Figure 3: English I Comparison

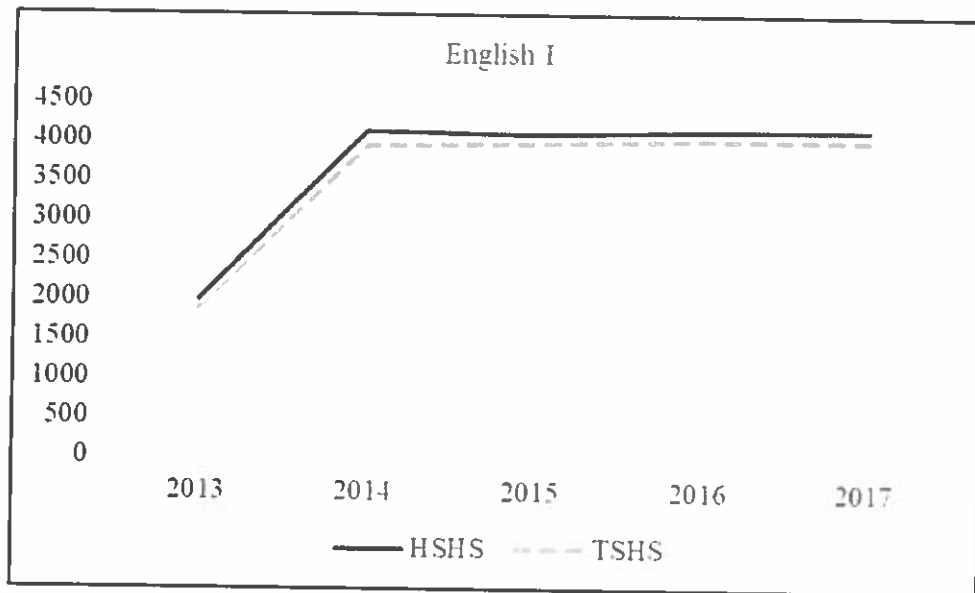


Figure 3 shows a longitudinal comparison between HSHS and TSHS over a five year period in English I.

Findings 2013

Table 2 shows that during the 2013 school year, 578 ninth grade students took the Algebra I end of course exam at HSHS and 496 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was -2.522 between the two schools and the standard deviation was 328.747 at HSHS and 313.022 at TSHS.

Table 2

2013 Algebra I Group Statistics

	Campus	<i>n</i>	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	578	3746.07	328.747	13.674
	Texas Sub High	496	3748.59	313.022	14.055

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Algebra I at HSHS and TSHS in 2013. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .352 ($p < .05$), therefore there was not a difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=3746.07$, $SD=328.747$) and TSHS ($M=3748.59$, $SD=313.022$) conditions; $t(1072) = -.128$, $p = .898$ ($p < .05$). This suggests there was not a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2013 school year on Algebra I end of course assessment.

During the 2013 school year, 834 ninth grade students took the Biology I end of course exam at HSHS and 686 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 105.958 between the two schools. The Standard Deviation for HSHS was 463.461 and 443.908 for TSHS.

Table 3

2013 Biology I Group Descriptive Statistics

	Campus	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	834	4033.96	463.461	16.048
	Texas Sub High	686	3928.01	443.908	16.948

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Biology I at HSHS and TSHS in 2013. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .143 ($p < .05$), therefore there was not a difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=4033.96$, $SD=463.461$) and TSHS ($M=3928.01$, $SD=443.908$) conditions; $t(1677.246)=4.521$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS, with HSHS scoring higher for the 2013 school year on Biology I end of course assessment.

During the 2013 school year, 1712 ninth grade students took the English I Reading and Writing end of course exam at HSHS and 1434 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 100.786 between the two schools. This was the last English I end of course assessment that was divided between Reading and Writing. The scores were combined for analysis.

Table 4

2013 English I Group Statistics

	Campus	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	1712	1983.34	298.689	7.219
	Texas Sub High	1434	1882.55	260.292	6.874

The results of the independent-samples t-test that was conducted to find the significance of the scale score for English I at HSHS and TSHS in 2013. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .001 ($p < .05$), therefore there was a difference in homogeneity of variance between the two groups. Because of this difference in homogeneity the researcher used the bottom row of results in the output table. There was a numerical difference in the mean scale scores for HSHS ($M=1983.34$, $SD=298.689$) and TSHS ($M=1882.55$, $SD=260.292$) conditions; $t(3139.074)=10.111$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2014 school year on the English I end of course assessment.

Findings 2014

During the 2014 school year, 526 ninth grade students took the Algebra I end of course exam at HSHS and 543 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 85.75 between the two schools. The standard deviation was very similar for this testing administration. There was only a 5 point difference between the schools

Table 5

2014 Algebra I Group Statistics

	Campus	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	526	3822.49	312.934	13.645
	Texas Sub High	543	3736.74	317.943	13.644

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Algebra I at HSHS and TSHS in 2014. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .615 ($p < .05$), therefore there was no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=3822.49$, $SD=312.934$) and TSHS ($M=3736.74$, $SD=317.943$) conditions; $t(1067)=4.443$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2014 school year on Algebra I.

During the 2014 school year, 856 ninth grade students took the Biology I end of course exam at HSHS and 753 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 122.188 between the two schools. The standard deviation for HSHS was 411.027 and for TSHS the standard deviation was 375.018.

Table 6

2014 Biology Group Statistics

	Campus	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	856	4124.05	411.027	14.049
	Texas Sub High	753	4001.87	375.018	13.666

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Biology I at HSHS and TSHS in 2014. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .015 ($p < .05$), therefore there was a difference in homogeneity of variance between the two groups. In this case the researcher used the bottom row of data output from SPSS. There was a numerical difference in the mean scale scores for HSHS ($M=4124.05$, $SD=411.027$) and TSHS ($M=4001.87$, $SD=375.018$) conditions; $t(1604.851) = 6.234$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2014 school year on the Biology I end of course assessment.

During the 2014 school year, 907 ninth grade students took the English I end of course exam at HSHS and 804 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 180 between the two schools. The standard deviation was 534.277 for HSHS and 411.742 for TSHS.

Table 7

2014 English I Group Statistics

	Campus	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	907	4109.75	534.277	17.740
	Texas Sub High	804	3929.73	411.742	14.521

The results of the independent-samples t-test that was conducted to find the significance of the scale score for English I at HSHS and TSHS in 2014. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .001 ($p < .05$)., therefore there was a difference in homogeneity of variance between the two groups. In this case the researcher used the bottom row of data output from SPSS. There was a numerical difference in the mean scale scores for HSHS ($M=4109$, $SD=534$) and TSHS ($M=3929$, $SD=412$) conditions; $t(1677.246)=7.852$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2014 school year on English I end of course assessment.

Findings 2015

During the 2015 school year, 565 ninth grade students took the Algebra I end of course exam at HSHS and 539 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was lower than the mean scale score at TSHS. The mean

difference was -16.5 between the two schools. The standard deviation for HSHS was 350.144 and 356.443 for TSHS.

Table 8

2015 Algebra I Group Statistics

	Campus Name	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	565	3808.98	350.144	14.731
	Texas Sub High	539	3825.53	365.443	15.741

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Algebra I at HSHS and TSHS in 2015. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .122 ($p < .05$), therefore there was no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=3808.98$, $SD=350.144$) and TSHS ($M=3825.53$, $SD=365.443$) conditions; $t(1102) = -.768$, $p = .443$ ($p < .05$). This suggest there is no significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2015 school year on Algebra I end of course assessment.

During the 2015 school year, 848 ninth grade students took the Biology I end of course exam at HSHS and 737 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 65.9 between the two schools. The standard deviation was 486.768 for HSHS and 459.169 for TSHS.

Table 9

2015 Biology I Group Statistics

	Campus Name	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	848	4180.29	486.768	16.716
	Texas Sub High	737	4114.36	459.169	16.914

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Biology I at HSHS and TSHS in 2015. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .660 ($p < .05$), therefore there was no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=4180.29$, $SD=486.768$) and TSHS ($M=4114.36$, $SD=459.169$) conditions; $t(1583)=2.761$, $p = 0.006$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2014 school year on the Biology I end of course assessment.

During the 2015 school year, 907 ninth grade students took the Biology I end of course exam at HSHS and 840 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 115.15 between the two schools. The standard deviation was 550.462 for HSHS and 530.719 for TSHS.

Table 10

2015 English I Group Statistics

	Campus Name	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	907	4078.66	550.462	18.278
	Texas Sub High	840	3963.51	530.719	18.312

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Biology I at HSHS and TSHS in 2015. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .704 ($p < .05$), therefore there was no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=4078.66$, $SD=550.462$) and TSHS ($M=3963.51$, $SD=530.719$) conditions; $t(1745)=4.445$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2015 school year on the English I end of course assessment.

Findings 2016

During the 2016 school year, 573 ninth grade students took the Algebra I end of course exam at HSHS and 488 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was slightly higher than the mean scale score at TSHS. The mean difference was -10.448 between the two schools. The standard deviation was 375.410 for HSHS and 391.363 for TSHS.

Table 11

2016 Algebra I Group Statistics

	Campus Name	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	573	3867.97	375.410	15.683
	Texas Sub High	488	3878.42	391.363	17.716

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Algebra I at HSHS and TSHS in 2016. . The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances, was tested using Levene's Test for Equality of Variance. The Significance (p) value of .519 ($p < .05$), therefore there was no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=3867.97$, $SD=375.410$) and TSHS ($M=3878.42$, $SD=391.363$) conditions; $t(1059) = -.443$, $p = 0.658$ ($p < .05$). This suggest there is no significant difference in the mean scale score of HSHS and TSHS with HSHS scoring slightly higher for the 2016 school year on the Algebra I end of course assessment.

During the 2016 school year, 876 ninth grade students took the Biology I end of course exam at HSHS and 714 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 116.75 between the two schools. The standard deviation for HSHS was 516.848 and 463.693 for TSHS.

Table 12

2016 Biology I Group Statistics

	Campus Name	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	876	4237.83	516.848	17.463
	Texas Sub High	714	4121.07	463.693	17.353

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Biology I at HSHS and TSHS in 2016. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .006 ($p < .05$), therefore there was no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=4237.83$, $SD=516.848$) and TSHS ($M=4121.07$, $SD=463.693$) conditions; $t(1588)=4.691$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2016 school year on the Biology I end of course assessment.

During the 2016 school year, 930 ninth grade students took the English I end of course exam at HSHS and 773 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 117.303 between the two schools. The standard deviation was 561.198 for HSHS and 521.997 for TSHS.

Table 13

2016 English I Group Statistics

	Campus Name	N	Mean	Std. Deviation	Std. Error Mean
	Houston Sub High	930	4130.73	561.198	18.402
	Texas Sub High	773	4013.42	521.997	18.775

The results of the independent-samples t-test that was conducted to find the significance of the scale score for English I at HSHS and TSHS in 2016. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .110 ($p < .05$), therefore there was a no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=4130.73$, $SD=561.198$) and TSHS ($M=4013.42$, $SD=521.997$) conditions; $t(1701)=4.432$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2016 school year on the English I end of course assessment.

Findings 2017

During the 2017 school year, 576 ninth grade students took the Algebra I end of course exam at HSHS and 554 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 17.125 between the two schools. The Standard deviation for HSHS was 389.165 and 410.533 for TSHS.

Table 14

2017 Algebra I Group Statistics

	Campus Name	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	576	4003.49	389.165	16.215
	Texas Sub High	554	3986.37	410.533	17.442

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Algebra I at HSHS and TSHS in 2017. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .192 ($p < .05$)., therefore there was no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=4003.49$, $SD=389.165$) and TSHS ($M=3986.37$, $SD=410.533$) conditions; $t(1128) = .720$, $p = 0.472$ ($p < .05$). This suggest there is no significant difference in the mean scale score of HSHS and TSHS with HSHS scoring slightly higher for the 2017 school year on the Algebra I end of course assessment.

During the 2017 school year, 861 ninth grade students took the Biology I end of course exam at HSHS and 751 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 174.178 between the two schools. The standard deviation for HSH was 527.162 and 507.064 for TSHS.

Table 15

2017 Biology I Group Statistics

	Campus Name	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	861	4263.80	527.162	17.966
	Texas Sub High	751	4089.62	507.064	18.503

The results of the independent-samples t-test that was conducted to find the significance of the scale score for Biology I at HSHS and TSHS in 2017. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .966 ($p < .05$), therefore there was a no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=4263.80$, $SD=527.162$) and TSHS ($M=4089.62$, $SD=507.064$) conditions; $t(1610) = 6.736$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2017 school year on the Biology I end of course assessment.

During the 2017 school year, 882 ninth grade students took the English I end of course exam at HSHS and 780 ninth grade students took the same assessment at TSHS. The mean scale score at HSHS was higher than the mean scale score at TSHS. The mean difference was 144.981 between the two schools. The standard deviation for both these schools was very close. They were only separated by 12 points.

Table 16

2017 English I Group Statistics

	Campus Name	N	Mean	Std. Deviation	Std. Error Mean
Scale	Houston Sub High	882	4151.06	527.876	17.775
	Texas Sub High	780	4006.08	515.824	18.469

The results of the independent-samples t-test that was conducted to find the significance of the scale score for English I at HSHS and TSHS in 2017. The assumption of homogeneity of variance, where the null hypothesis assumes no difference between the two group's variances was tested using Levene's Test for Equality of Variance. The Significance (p) value of .547 ($p < .05$), therefore there was a no difference in homogeneity of variance between the two groups. There was a numerical difference in the mean scale scores for HSHS ($M=4151.06$, $SD=527.876$) and TSHS ($M=4006.08$, $SD=515.824$) conditions; $t(1660) = 5.648$, $p = 0.001$ ($p < .05$). This suggest there is a significant difference in the mean scale score of HSHS and TSHS with HSHS scoring higher for the 2017 school year on the English I end of course assessment.

Conclusion

In this chapter the results of the data analysis were presented. Despite being even in Algebra I scale scores HSHS outperformed TSHS in Biology I and English I over a five year period. Moreover, there was an upward trend identified that demonstrated increased student achievement over that same time period between both campuses. These results will be interpreted and recommendations will be made in the next chapter.

Chapter V

The purpose of this study was to examine the impact and effectiveness of a Ninth Grade Academy in regard to student success outcomes on state mandated testing over a 5 year period compared to a similar high school that does not have a ninth grade academy. This study was used to determine if the presence of a ninth grade academy had an impact on student success rates on State Testing in Algebra I, Biology I, and English I for a 5 year period. The mean scale score of the two were compared using independent samples t-test methodology to determine if there was a significant difference in student achievement.

Summary of Findings

The problem that this quantitative mean comparison study examined was an effort to address the growing concerns and to strengthen the performance of Texas high schools, by identifying and creating ways to promote student success upon entering the high school environment. The researcher sought to answer the question: To what extent is the existence of a ninth grade academy positively related to student achievement on State Mandated Testing over a 5 year period at Suburban Texas High School as compared to a school with similar demographics that does not have a ninth grade academy? A review of related literature on this topic showed that ninth grade academies that were effective were implemented with fidelity in regard to adhering to best practices for implementation of a ninth grade center. The researcher found that there was a significant difference in the mean scores between the two schools over a five year period with HSHS scoring higher most years. However, it is evident that the extent to which the ninth grade academy impacted student achievement on state testing was minimal. These results are in

line with the results of several studies from the Review of Literature in Chapter 2 of this study (Healy, 2015; Osler and Waden, 2012; Bennett, 2012; MDRC, 2013; Cetta 2013).

Discussion

The researcher learned that although HSHS implemented a ninth grade academy to increase scores on state mandated testing not a lot has changed in regard to student achievement over a five year period. Despite outperforming TSHS consistently, HSHS has not shown a widening of the gap in student achievement that one would expect from the energy and time spent implementing a ninth grade academy. Therefore the extent to which student achievement was impacted by the presence of a ninth grade academy at HSHS was minimal.

Algebra I

The schools mirrored performance in Algebra one for all 5 years. The difference in scale scores was not significant. Over the years the schools have been very similar in regard to their Algebra I performance on state mandated testing. Of the five years, HSHS has outperformed TSHS two times. However only one time, in 2014, was the difference in the mean score in Algebra I significant. The other four years, the difference in mean scores was not significant between the two schools. Nothing has changed in regard to the scale score of the two schools since 2013 which is the first full year of the freshman academy at HSHS.

Biology I

In Biology there were significant differences in the mean scale score between the two schools each year with the exception of 2015 as shown in Figure 2. HSHS

outperformed TSHS in Biology all 5 years and they significantly outperformed them 4 out of the 5 years. The margin of gains has not shown significant increase since the implementation of the freshmen academy in 2013.

English I

In English I, HSHS has outperformed TSHS significantly all 5 years since 2013 as shown in Figure 3. Despite dominating TSHS, HSHS has shown steady increases in scale score since the implementation of the freshman academy in 2013 but so has TSHS. The scale scores for HSHS have been steady much like the scale scores for TSHS. The researcher could identify a trend in the data of steady increases over the 5 year period but no increasing in the difference in the scale scores between the two schools. The performance of the two schools seemed to mirror each other with the gap in performance remaining the same of the 5 year period.

Significance and Recommendations

The findings and recommendations in this study will benefit the students and faculty at HSHS and TSHS, it will also help them understand the effectiveness of the ninth grade academy as well as other initiatives implemented over the 5 year period studied. These recommendations are being made as a result of the data collected and analyzed for this study in light of the literature that was reviewed for this study. Because of this study, the school district will have data supporting why the implementation of the ninth grade academy must be done with fidelity. As a result of this study the district may choose to provide technical assistance to principals wishing to implement the ninth grade academy, or deny any further implementations of the ninth grade academy. The district

may also decide to allow all schools that have implemented a ninth grade academy to have regular round table discussions about the ninth grade academy and how it is working. The district could also mandate that the ninth grade academy be structured uniformly throughout all schools.

In 2014, Timothy L. Healey examined best practices for the implementation of a successful ninth grade academy. The results of the study indicated that successful freshman transition programs needed to address both academic and social/emotional needs of students.

Healey (2014) went on to conclude that the data provided evidence that principals need to take great care in teacher quality, instructional practices, and a systematic approach to monitoring the performance of ninth grade students as well as ensuring students make a positive connection with an adult in the school in order to be successful.

During the 5 year period that this study examined there were increases on state testing for both campuses. However, just as in the Osler and Waden (2012) study, because of the implementation of other initiatives to help ninth grade students, it is unclear if the ninth grade academy was the sole reason for the improvement. This is also true for HSHS and TSHS.

The results of this study also seem to line up to the outcome of a study conducted by Chris Bennett (2012) who used similar methods to compare two schools. One school in Bennett's study had a ninth grade academy and one did not. These were the Clark County and Lewis County Schools. Schools in Lewis County did not have ninth grade academies while schools in Clark County did. Bennett (2012) found that with regard to

achievement on state testing, no significant difference existed in student perceptions or performance on state mandated testing.

Cetta (2013) also had similar findings. The author concluded that more research needed to be done. However, the researcher presented several other variables that may have played a role in the outcome of the study. The researcher suggested that there may be a gap in implementation in the initial stages of the ninth grade academy. Based on this finding, it is important that schools focus on implementation with fidelity when installing a ninth grade academy.

Irving (2013) also found that there was no significant increase in student achievement in his study. However Irving conclude that a multiyear study needed to be conducted to get an idea if gains had been made since the inception of the ninth grade center (Irvin, 2013). The researcher also pointed to problems with the initial implementation of the ninth grade academy just as Cetta did in his study (Irvin, 2013).

The U.S. Department of Education's Institute of Education Sciences funded a study in 2009 examined the Broward County Public Schools. The study found that there was strong district leadership during the initial implementation process but it seemed to wane as years passed. The investigation also uncovered substantial variation in the overall quality and duration of ninth grade academy implementation across schools. Again it is clear from this study that initial implementation is very important.

Classes need to be kept pure. Only first time ninth grade students should be allowed to be in the same core class in a freshman academy. Lunches should be designed primarily for ninth grade students. Because of scheduling issues and convenience, the fidelity of implementation of the ninth grade academy has suffered at HSHS and may

explain why there was not significant difference in student achievement over the five year period examined in this study (US Department of Education, 2009).

Involving parents in interventions and giving them the opportunity to take an active role in making decisions in regard to student achievement is another recommendation. Being proactive and having parental involvement before a child fails is proven to be effective. The meetings must not just be discipline related but must also tie in academics and keep everyone focused on the student being successful (Osler and Waden, 2012).

Parents should be invited to the school and taught how to read student test results from the state. Parents should also be guided in how to help prepare their student for upcoming state mandated testing. The school should also prepare a study guide for parents to help their students at home. Parents have to be helped to understand high school and all the requirements that must be met. Parents must be educated about all the laws and policies that have to be adhered to. This would make parents partners of the school in providing the much needed support for ninth grade students (Osler and Waden, 2012; USDE, 2009; Irving, 2013).

Recommendations for Future Research

One of the limitations of this study was that only 2 schools were compared. Other schools like HSHS need to be studied in order to gain a fuller picture of the benefit of a ninth grade academy. Qualitative research needs to be conducted using the outcome of this study to determine what interventions TSHS used in order to continue to increase and

to determine what other interventions HSHS used beside the ninth grade academy. Quality of instruction needs to be studied at both schools.

Another limitation of this study was the time period for which the study was conducted. The next five years of data need to be studied to determine if the ninth grade academy will ever have a significant impact on student achievement. Furthermore, student discipline and its impact on student achievement at both schools needs to be examined. How did the ninth grade academy affect student discipline and was there a decrease as related to TSHS.

Conclusion

There is a great need for policy makers to examine the effectiveness of ninth grade academies and other interventions to help ninth grade students be successful. As noted in this study, student achievement in the ninth grade has a great impact on graduation. The counseling of ninth grade students should be addressed. The change from middle school can be difficult for the ninth student. Counseling supports should be in place for these students to be successful. Social supports should be put in place for ninth grade students that involve community members, grandparents, teachers, and parents.

The researcher predicted that there would be a significant difference in student achievement because of the presence of the ninth grade academy. Despite there being a significant difference in the mean scores over the five years studied, there was no significant gap between the performance of the two schools over that same period of time. The schools seemed to mirror each other in performance. It is clear by the outcome

of this study that the best practices for the implementation and ongoing maintenance of a ninth grade academy need to be adhered to. There needs to be more parental involvement in the ninth grade academy. Teachers and parents need to be on the same page regarding the goals of the ninth grade academy and both in support of it.

References

- Allensworth, E., & Easton J. (2007). *What matters for staying on-track indicator and graduating in Chicago public high school*. Chicago: Consortium on Chicago School Research
- Argyris, C. (1970). *Intervention theory and method: A behavioral science view* (2nd ed). Reading, MA: Addison-Wesley Publishing.
- Archambault, L., Diamond, D., Coffey, M., Foures-Aalbu, D., Richardson, J., & Zygouris-Coe V. (2010). *Research committee issues brief: An exploration of at-risk learners and online education*. Vienna, VA: International Association for K-12 Online Learning. Retrieved from ERIC Document Reproduction Service. (ED509620)
- Balfanz, R., Herzog, L. & MacIver, D.J. (2007). *Preventing Student Disengagement and Keeping Students on the Graduation Path in Urban Middle-Grades: Early Identification and Effective Interventions*. *Educational Psychologist*, 42(4), 223-235.
- Barone, C., Aguirre-Deandreis, A., & Trickett, E. (1991). Means- ends problems-solving skills, life stress, and social support as mediators of adjustment in the normative transition to high school. U.S. National Library of Medicine, 19, 207-225.
- Collier, M. D. (2005). An ethic of caring: The fuel for high teacher efficacy. *The Urban Review*, 37(4), 351-359.

Bennett, C.L. (2012) *The Freshman Academy Impact: A Comparison of Ninth Grade Structures*

Through Analyses Of Student Perceptions and Performance Data, Appalachian State University

Blount, T. (2016) *Dropout Prevention: Recommendations for School Counselors*, North Carolina

State University.

Burrus, J., Roberts, R.D. (2012) *Dropping Out of High School: Prevalence, Risk Factors, and*

Remediation Strategies, R&D Connections, No. 18, February 2012.

Cetta, M.A. (2013) *Ninth-Grade Academy Impact on Achievement of Students From Economically Disadvantaged Backgrounds*, Capella University.

Chandler, C.H. (2015) *Barriers to Freshmen Academy Effectiveness At One High School*, Capella University.

Christenson, S. L., & Thurlow, M. L. (2010). School dropouts: Prevention considerations, interventions and challenges. *Current Directions in Psychological Science*, 13(1), 36-39.

Collier, M. D. (2005). An ethic of caring: The fuel for high teacher efficacy. *The Urban Review*,

37 (4), 351-359.

Cook, C., Fowler, H., & Harris, T. (2008, October). *Ninth Grade Academies: Easing The*

Transition To High School. Retrieved from PUBLIC SCHOOLS OF NORTH CAROLINA State Board of Education Department of Public Instruction: www.dpi.state.nc.us/docs/intern-research/reports/9thgradeacademies.pdf

Cooper, C. (1999). Beyond the bake sale: How parent involvement makes a difference.

Learning

Point, 1(3) 4-8.

Cotton, K. (2001). *New small learning communities: Findings from recent literature*. Portland,

OR: Northwest Regional Educational laboratory.

Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson.

Davis, E.V. (2014) *Reducing The Dropout Rate Through A Ninth Grade Academy*, Walden

University.

Dorman, B. (2012) *The Supported Teen: Transitioning to High School*, Leadership. v41 n5 p22-

23, 25 May-Jun 2012

Duffrin, E. (2003). Freshmen who fail usually dropout. Consortium on Chicago school research. *Catalyst: Chicago Public Schools*. Chicago: Chicago Public Schools.

Ellerbrock, C.R., Kiefer, S.M. (2014) *Supporting Young Adolescents' Middle-to-High-School*

Transition by Creating a Ninth Grade Community of Care: Implications for Middle Grades Educators, Middle School Journal, January 2014

Epstein, J. (n.d.). Path to Partnership: What we can learn from federal, state, district and school

initiatives. *Phi Delta Kappan*, 72, 344-349.

Family Involvement Partnership for Learning. (1995, April). Retrieved from Partners in Learning: How schools can support family in support family involvement in education: <http://www.ed.gov/Family/schools.html>

Fulk, B. (2003) Concerns about ninth grade students' poor academic performance: One schools action plan. *American Secondary Education*, 31(2), 8-26.

Goldberg, M. (2005). Test mess 2: Are we doing better a year later? *Phi Delta Kappan*, 86(5), 389-395.

Greene, J., & Winters, M. (2005). Public High School Graduation and College-Readiness Rates 1991-2002. New York: Manhattan Institute for Policy Research.

Habeeb, S. (2013). The Ninth-Grade Challenge. *Principal Leadership*, 18-22.

Halberg, K., Swanlund, A., & Hoogstra, L. (2011, January). *Texas Ninth Grade Transition and*

Intervention (TNGTI) Grant Program. Retrieved from

www.tea.state.tx.us/index2.aspx?id=2898&menu_id=949

Haney, Walt, George Madaus, Lisa Abrams, Anne Wheelock, Jing Miao, and Ileana Gruia. 2004.

The Education Pipeline in the United States, 1970-2000. Chestnut Hill, MA: The National

Board on Educational Testing and Public Policy. Web site:
www.bc.edu/research/nbetpp/reports.html.

Mdrc.org. (2013).

http://www.mdrc.org/sites/default/files/Implementing_Ninth_Grade_Academies_FR.pdf

Healey, T. L.(2014) *The Essential Components of a Comprehensive Ninth Grade Transition*

Program: A Delphi Study, Virginia Polytechnic Institute and State University.

Hertzog, C., & Morgan, P. (1998). Breaking the barriers between middle school and high school:

Developing a transition team for success. *NASSP Bulletin*, 82(597), 94-98.

Irvin, A.S. (2013) *The Effect Of Georgia Ninth Grade Academies On End Of Course Test Scores,*

Graduation Rate, And Attendance, Liberty University.

Isakson, K. J. (1999). ;The adjustment of adolescents during the transition into high school: A

short-term Longitudinal study. *Jornal of Youth and Adolesence*, 28, 1-26.

J.L., E. (1995). School-family-communcity partnerships: Caring for the children we share. *Phi*

Delta Kappan, 76 (9), 701-712.

Kaplan, D., Peck, B. M., & Kaplan, H. B. (1997). Decomposing the academic failure dropout relationship: A longitudinal analysis. *Journal of Educational Research*, 90(6), 331-343

Kennelly, L., & Monrad, M. (2007). Approaches to Dropout Prevention: Heeding Early Warning

Signs With Appropriate Interventions. Washington, DC: National High School Center at the American Institutes for Research. Retrieved from National High School Center.

Lagter N., Praise L., Alterman E., Rapport S. (2013) Implementing Ninth Grade Academies in

Broward County, Florida, MDRC.

Legter, N., Praise, L. (2016) *A Community of Practice Approach to Support for Ninth-Graders in Urban High Schools*, MDRC.

Lund Research (2013) Independent t-test using SPSS Statistics

Retrieved from <https://statistics.laerd.com/spss-tutorials/independent-t-test-using-spss-statistics.php#procedure> on July 13, 2017.

MacIver, M. A., & MacIver, D. J. (2007). *The impact of comprehensive school reform with NSF-supported mathematics curricula on urban middle grades student mathematics achievement*. Unpublished manuscript.

MacIver, M. (2011). Moving Forward to Improve Graduation Rates in Baltimore City. Baltimore

Education Research Consortium.

MacIver, M.; Messel, M. (2012). Predicting High School Outcomes in the Baltimore City Public

Schools. The Council of the Great City Schools, Senior Urban Education Research Fellowship Series, vol. 7.

McIntosh, J. &. (2006). Building for freshman success: high schools working as professional

- learning communities. *American Secondary Education*, 34, 40-49.
- Mizelle, N. &. (2000). Transition from middle school into high school. *Middle School Journal*, 31(5), 57-61.
- Mizelle, N. (2005). Moving out of middle school. *Educational Leadership*, 62(7). 56-60.
- Neild, Stoner-Eby, and F Furstenberg. (2008). Connecting entrance and departure: The transition to ninth grade and high school dropout. *Education and Urban Society*, 40, 543-568
- Olster, J.E., Waden, C. (2012) *Using Innovative Technical Solutions as An Intervention For At Risk Students: A Meta-Cognitive Statistical Analysis To Determine The Impact Of Ninth Grade Freshman Academies, Centers, And Center Models Upon Minority Student Retention And Achievement*, Manager's Journal on School Educational Technology, Vol. 8 | No. 2 | September - November 2012
- Osborne, Mary Eileen. (2012). *Ninth Grade Transition: A Case Study of Tewksbury Memorial High School's Program*, College of Professional Studies Northeastern University Boston, Massachusetts.
- Plannant, J. (2007) *SPSS Survival Manual: Third Edition* McGraw Hill Education; New York.
- Reents, J. N. (2002). Isolating 9th graders. *School Administrator*, 59,(3), 14-19.
- Robinson, Yvonne L.(2013) *Freshman Academy at One School in East Tennessee: A Mixed Method Study*, East Tennessee State University Digital Commons.
- Smith, J. S., Akos, P., Lim, S., Wiley, S. (2008). Students' and stakeholders' perceptions of the

Somers, M.; Garcia, I. (2016) Helping Students Make the Transition into High School: The Effect of Ninth Grade Academies on Students' Academic and Behavioral Outcomes, MDRC.

Sparks, E., Johnson, J. L., & Akos, P. (2010). Dropouts: Finding the needles in the haystack. *Educational Leadership*, 46-49.

Texas Education Agency (2017) Understanding the Different Scores on STAAR.

Retrieved from

<http://tea.texas.gov/student.assessment/staar/performance-standards/> on January 7, 2018.

Texas Education Agency (2014) Campus Comparison Groups. Retrieved from

<https://rptsvr1.tea.texas.gov/perfreport/account/2014/group.srch.html> on January 15, 2018.

University of Chicago Consortium on Chicago School Research (2014) *Preventable Failure*

Improvements in Long-Term Outcomes when High Schools Focused on the Ninth Grade Year, University of Chicago.

Walker, K. (2009). Research Brief. *The Principal's Partnership*.

Wilcock, A. (2007). Coping with high school: A transition for students and parents. *Primary*

and Middle Years Educator, 5(2), 26-31.

Wheelock, A., & Miao, J. (2005, March). The Ninth Grade Bottleneck: An enrollment bulge in a

transition year that demands careful attention and action. Retrieved from The
School Administrator:

<https://www.aasa.org/SchoolAdministratorArticle.aspx?id=8728>

Marzano (2009)