# IMPACT OF FRESHMAN TRANSITION INTERVENTIONS ON NINTH GRADE ACADEMIC ACHIEVEMENT 

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by
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Impact of Freshman Transition Interventions on Ninth Grade Academic Achievement

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#### Abstract

Emily Spake Brown. IMPACT OF FRESHMAN TRANSITION INTERVENTIONS ON NINTH GRADE ACADEMIC ACHIEVEMENT. (Under the direction of Dr. Deanna Keith) School of Education, April, 2010.

The purpose of this study was to examine the impact of various freshman transition interventions on student academic achievement. Specifically, this study aimed to measure academic success by focusing upon ninth grade End of Course Test (EOCT) scores. The data were collected using a researcher-developed survey. After securing permission from all superintendents, the survey was electronically mailed to all high school principals within the state of Georgia. Among participating systems, the survey response rate was 78.4 percent. Based upon expert opinion, the twenty individual intervention items were categorized into three domains. The domain data were analyzed using analysis of variance (ANOVA). The researcher also ran correlative analysis. The results of this study indicated that no statistical significance existed regarding the implementation of freshman transition interventions and ninth grade EOCT scores. These results have probable implications for public school systems within the state of Georgia as how to best design the most effective programming for incoming ninth graders. Additionally, this information can assist educators, both at the district and state level, in designing the most effective and cost-effective strategies for transition intervention.


Keywords: ninth grade, transition, high school retention, interventions, at-risk

## Dedication

While in the midst of trials, it can be so difficult to see the end result, but as always Lord, I stand in awe of your incredible plan and timing. "Being confident of this very thing, that he who began a good work in you will be faithful to complete it until the day of Christ Jesus" Phillipians 1:6.

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The two of you are the lights of my life. Thank you for supporting me as I complete this journey. I pray that all of us will reap the benefits of this labor.

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## Chapter 1: Introduction

In response to the No Child Left Behind Act of 2001 and in an effort to increase student achievement, educators are implementing various measures to reduce dropouts, increase test scores, and promote academic success. Current research suggests the most pivotal point of need for intervention in education is the transitory period from middle school to high school (Smith, 1997, Alspaugh, 1998).

## Statement of the Problem

The transition from middle school to high school is a time of great turmoil in the lives of adolescents, for current research suggests that students not only lose familiar friends and teachers, but also suffer great academic losses (Alspaugh, 1998a). Ninth graders experience more retentions, dropouts, and academic failures than all other grade levels (Alspaugh, 1998a; Alspaugh 1998b; Smith, 1997). Current research suggests the reason is the transition from middle school to high school (Caskey, 2006). Middle school offers very structured classes, with teachers frequently monitoring progress, allowing for mistakes and revisions. Students move together from activity to activity. High school allows students much more freedom in decision making and academic responsibility. Teacher expectation rises, while parental involvement falls. The majority of students are not prepared for this freedom and responsibility (Akos, 2004). In fact, British
researchers estimate that "ten percent of students suffered serious problems after the transition to secondary school" (Akos, 2004, 213). In the day of accountability and standardized testing, this great academic failure and increase in dropouts cannot continue. In order to salvage Adequate Yearly Progress (AYP), schools must take action to remedy the disconnect between middle school and high school.

## Purpose of the Study

This study was designed to determine if a difference exists between Ninth Grade End of Course Test scores for students who have experienced varying levels of freshman transition intervention implementation. The study also aimed to identify whether or not a relationship exists between specific freshman transition interventions and ninth grade academic achievement. The study aimed to measure academic success by focusing upon ninth grade retention rates and ninth grade End of Course Test (EOCT) scores. The implications of this study will assist administrators in designing the most effective transition programming for their incoming ninth graders.

## Conceptual Framework

The conceptual framework for the study was based upon Albert Bandura's (1989) theory of efficacy. Bandura purported that initial success breeds further successes. By ensuring students have a successful beginning to high school, a successful academic finish is much more likely. Similarly, those students who experience failure in the transition from middle school to high school will more than likely face many more failures throughout their academic careers (Bandura, 1989). Based upon Bandura's theory of efficacy, success in the ninth grade year almost ensures continuing success
throughout the course of students' high school careers, while ninth grade failure will breed further failures for the students (Bandura, 1989). The high school must appropriately transition students to ensure maximum success for upcoming ninth graders.

## Research Questions

This study was designed to answer the following research questions:
$\mathrm{RQ}_{1}$ : Is there a significant difference in End of Course Test scores as a result of various levels of transition intervention implementation?

Null Hypotheses as related to Research Question One:

1. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of relational transition interventions.
2. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of relational transition interventions.
3. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of instructional transition interventions.
4. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of instructional transition interventions.
5. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of structural transition interventions.
6. There will be no significant differences in Ninth Grade Algebra I End of Course test scores of students who have experienced varying levels of structural transition interventions.
$\mathrm{RQ}_{2}: \quad$ Is there a significant difference in End of Course Test scores as a result of various demographic indicators?

Null Hypotheses as related to Research Question Two:

1. There will be no significant differences in scores on the Ninth Grade Literature and Composition End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
2.: There will be no significant differences in scores on the Algebra I End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population,
the school's current Title 1 status, and the school's current AYP accreditation.
$\mathrm{RQ}_{3}$ : Is there a relationship between scores on the Ninth Grade End of Course Tests and specific freshman transition interventions?

Null Hypotheses related to Research Question Three:

1. There will be no relationship between Ninth Grade Literature and Composition End of Course Test scores of students who have experienced varying levels of freshman transition interventions.
2. There will be no relationship between Algebra I End of Course Test scores of students who have experienced varying levels of freshman transition interventions.

## Research Method and Data Analysis

The methodology of the current study was designed to clearly delineate the most effective course for implementing freshman transition interventions and academic successes. The researcher conducted a quantitative study to determine whether or not a relationship exists between interventions, EOCT scores, and student demographics. Descriptive frequency data is included to best illustrate the scope of schools and types of interventions used within participating schools. The researcher used the Analysis of Variance (ANOVA) to identify any relationships among domain means. The researcher also ran correlative analyses to further inquire into any possible statistical significance. The findings from this study have the potential to serve as indicators of successful transition programming, as well as identify areas in which further research is needed.

## Definitions

The following definitions are presented to clarify and provide specific vocabulary referenced throughout the study.

## End of Course Tests (EOCTs):

Criterion-referenced tests that assess the statewide curriculum of specific high school courses to ensure that standards are being met. Currently, the state of Georgia mandates that a student's final grade in an EOCT course be determined by including the EOCT score as 15 percent of the course's final grade.

Students' individual EOCT scores in the areas of Algebra I and Ninth Grade Literature and Composition will be assessed for the purpose of determining academic achievement. The EOCT is a state-mandated assessment for the population that will participate in the study. All ninth grade students take the EOCT at the completion of the individual courses (Physical Science, Algebra I, and Ninth Grade Literature \& Composition). The Georgia Department of Education Testing Division (2006) indicates that the EOCT is used to provide a valid measure of the educational services provided by Georgia educators. Within this assessment, educators are able to ascertain the levels of mastery of the Georgia Performance Standards. By using this assessment, the researcher will be able to effectively measure and compare academic achievement among schools. (Georgia Department of Education, 2006,1)

## Retention Rate:

A retention rate is the percentage of students who do not successfully complete a grade level in a one-year period. The specific number of courses which must be passed depends upon the number of credits offered and the minimum number of credits which must be successfully completed.

## Ninth Grade Academy:

A specific intervention designed to help aid the transition from middle school to high school. The philosophy behind the Ninth Grade Academy concept, although varied among schools, is centered around several common characteristics: repeated exposure to high school expectations during middle school, development of a communication plan which includes all stakeholders, early identification of students at risk of failure, and the use of instructional and organizational strategies that focus on learning and motivation (Fields, 2005).

Adequate Yearly Progress (AYP):
The foundation of the accountability programming developed from the federal education initiative, No Child Left Behind (NCLB). Current federal law requires that each state implement and modify standards ensuring academic achievement and accountability for all students.

The purpose of AYP is to guarantee that all students are achieving academically by specifically highlighting particular standards among students, further divided into subgroups, to ensure no one group is under-achieving. In terms of sub-grouping, the state disaggregates data to highlight the achievement levels of students in the following categories: special education, minority, and
low socioeconomic status. AYP stems from the federal education initiative No Child Left Behind (NCLB). AYP highlights achievement of all students, both as a whole group and as subgroups. Data is disaggregated into subgroups to ensure all groups are succeeding academically.

AYP is measured by test participation, academic achievement, and a district-defined "second indicator", oftentimes attendance or graduation rate. Specifically, the state scores high schools based on the Enhanced Georgia High School Graduation Test in both Mathematics and Reading/Language Arts.

## Georgia Performance Standards (GPS):

Performance standards designed to "provide clear expectations for instruction, assessment, and student work" (Georgia Department of Education, 2006, para. 4). More specifically, the performance standards were designed to "define the level of work that demonstrates achievement of the standards (Georgia Department of Education, 2006, para. 2). The performance standard incorporates the content standard, which simply tells the teacher what a student is expected to know (i.e., what concepts he or she is expected to master). Additionally, it adds to these concepts by providing three additional items: suggested tasks, sample student work, and teacher commentary on that work (Georgia Department of Education, 2008).

## Small Learning Community:

A high school reform effort that uses the premise of "scaling down" a large school into smaller fractions. The smaller atmosphere can more readily
provide students with mentors, tutors and advisors; make learning more meaningful by linking it to life-experiences and community; and provide adequate time and support for mastery of knowledge and skills (National Conference of State Legislatures, 2007).

## Relevance of the Study

The results of this study have the potential to assist district and state administrators in determining the most effective transition interventions for students. Leadership preparation programs may also benefit by ensuring that courses adequately prepare leaders to create effective programming for students. Additionally, this information allows advocacy and outreach professional organizations for school leadership to design workshops and curricula that focus on the most effective areas needed in school improvement.

## Limitations

The following are limitations of this study:

1. The subjects are limited to high school principals within the state of Georgia employed by public high schools during the 2008-2009 school year. Their practices may not be congruent with implementation practices of other principals.
2. Intervention differences among schools could lend themselves to limiting this study; however, every effort will be made while writing the questionnaire to ensure specific, clear questions are given.
3. While every effort was made to include every public high school in the state of Georgia, several of the larger school districts do not allow outside researchers to conduct studies within their districts, thereby excluding some of the largest districts within the state.

## Organization of the Study

Chapter one of the dissertation included an introduction to current issues regarding ninth grade transitioning and the definition of the problem. The specific freshman transition interventions are based upon the literature review (See Appendix A).

Chapter two presents a review of the literature that serves as a foundation for this study. Topics include the Need for Transition Programming, Affective Effects, the Pubertal Connection, and a review of pertinent, specific interventions (School within a School/ Ninth Grade Academy Concept, Exposure to High School Expectations/ Orientation Sessions, Comprehensive Communication, Early Identification of At-Risk Students, Small Learning Communities, Explicit Study Skills Instruction/ Freshman 101, Test Preparation Curriculum, and Reward/Incentive Programs).

Chapter three contains a summary of the methodology used. The design of this study is quantitative; principals throughout Georgia were surveyed. Permission was sought from all 163 school districts. Once superintendent permission was granted, surveys were sent to all participating high schools ( $\mathrm{n}=79$ ). The survey was addressed to the principal of each school.

Chapter four contains an analysis of the data concerning specific freshman transition interventions that were implemented in each respective school during the 2008-

2009 school year. Using descriptive statistics and inferential statistics, relationships between EOCT scores and intervention implementation were examined.

Chapter five includes a summary of the findings and a discussion.
Recommendations for practice are made. The chapter concludes with recommendations for further studies.

## Chapter 2: Review of Literature

In this chapter relevant research is presented to provide a thorough understanding of ninth grade transition issues and specific interventions to alleviate transition problems. The chapter begins with a broad examination of transition issues, and then presents the argument for intervention implementation and possible historical reasons behind the transitory difficulties. The review concludes with a synopsis of several possible intervention strategies.

## Introduction

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 educational system, for,
while programs for transition between the home and the elementary school, and between the elementary school and the middle level are readily available in the literature, complete with program design and activities. Programs to assist students in moving from the middle level to the high school, however, are all but nonexistent. This lack of information hampers one of the most crucial moves that students make in their educational careers. (Hertzog \& Morgan, 1998, p.94)

Recently, however, educational reformists have begun to examine the importance of students' transition to the ninth grade. Research shows that the success achieved in the freshman year of high school follows students throughout the course of their education (Blankstein, 2004). Similarly, students who struggle in the freshman year transition tend to struggle throughout high school (Fields, 2005). In fact, " $9^{\text {th }}$ grade has been identified as the most critical point to intervene and prevent students from losing motivation, failing, and dropping out of school" (Gainey and Webb, 1998, 2).

Additionally, in high poverty urban areas, retention in the ninth grade significantly increases the odds that a student will drop out, thereby indicating that without significant intervention, students who transition to the ninth grade (particularly those inadequately prepared) will face a much higher risk of further retentions, academic failures, and risk of eventual high school dropout (Neild \& Balfanz, 2001; Neild, StonerEby \& Furstenberg, 2001; Roderick \& Engles, 1999).

In a recent study, Barber and Olsen (2004) discussed and described possible aspects of new schools that are thought to pose risks for student success, including: whole-class tasks, lower teacher efficacy, lower cognitive skills, and stricter grading standards. More personally, the larger grade and school size is seen to affect the psychological orientation and well-being of students by being less personal, including increased anonymity, less teacher support, greater teacher control, and less opportunity for decisionmaking. (Barber \& Olsen, 2004)

As a result of transition difficulties, current research suggests there is a great academic loss during this brief time (Alspaugh, 1998a, Barber \& Olsen, 2004). Ninth graders experience more dropouts and academic failures than all other grade levels (Alspaugh, 1998a; Alspaugh, 1998b; Smith 1997). Many ninth graders fail courses, for a recent study in Chicago indicated over forty percent of ninth graders fail a major subject in the first semester, while twenty percent fail two or more (Roderick, 1999). Roderick continues:

The finding that a high proportion of students fail major subjects in the early years of high school is symptomatic of an array of problems plaguing [...] secondary schools, including persistently high dropout rates and low student achievement [...] they (ninth grade students) are not ready to meet the academic, developmental, and social challenges they encounter in the new schools setting. [...] Students must cope with dramatic increases in the size of their school, the structure of academic schedules, and the complexity of the school environment. They are faced with changes in the size and composition of their peer group and a change in status from being in the oldest to being in the youngest age group in the school. The move to high school also involves an increase in academic demands as students are introduced to new analytic and conceptual skills. (p.305-306) Alarmingly, " $40 \%$ of students retained in the $9^{\text {th }}$ grade do not graduate" (Fields, 2005). Students are not adequately prepared to encounter such a transition, and the academic consequences are far-reaching. Research is clear that the success or failure of the freshman year often follows the student throughout high school. Current research
strongly indicates the reason is the transition from middle school to high school (Caskey, 2006).

The turmoil associated with the middle school to high school transition negatively affects students' academic success. On average, students' grades and attendance decline after moving into high school (Blyth, Simmons, \& Carlton-Ford, 1983; Crockett, Petersen, Graber, Schulenburg, \& Ebata, 1989; Eccles, Lord, \& Midgley, 1991; Felner, Ginter, \& Primavera, 1982; Felner \& Adan, 1989; Roderick, 1994; Schulenburg, Asp, \& Petersen, 1984; Seidman, LaRue, Aber, Mitchell, \& Feinman, 1994; Simmons, Black, \& Zhou, 1991; Simmons \& Blythe, 1987). Continuing in this vein, Alspaugh conducted an ex-post facto study in which forty-eight school districts were examined, all varying in size and school design (K-8, K-5, etc.). As a result of this study, Alspaugh suggested there is a loss in achievement as a result of the middle to high school transition, more so, than the achievement loss found between elementary and middle school (1998). Furthermore, the study revealed that high school dropout rates were higher for districts with Grade 6-8 middle schools than for districts with K-8 elementary schools (Alspaugh, 1998a). Alspaugh further revealed that the more transitions students experienced, the more their academic careers suffered, for,

The students attending middle schools experienced a greater achievement loss in the transition to high school than did the students making the transition from K-8 elementary school. The experience of making a previous transition did not moderate the achievement loss during the transition to high school. This finding implies that the students were encountering a double-jeopardy situation. (Alspaugh, 1998, p.5)

In the study, all schools experienced a mean achievement loss in the transition to high school. These findings strongly support the notion that the transition from middle school to high school leads to achievement loss.

Further strengthening the idea of school transitioning causing academic loss, Alspaugh continued his studies regarding school-to-school transition. In the second study, he focused specifically on the number of transitions throughout students' academic careers and the high school dropout rate. The findings of the study suggested that there is a significant correlation between a higher number of school-to-school transitions and more high school dropouts (Alspaugh, 1998b).

Recently, Robert Balfanz, a research scientist at the Center for Social Organization of Schools at Johns Hopkins University, presented data substantiating concerns that ninth grade is where students drastically fall off-course (Quint, Thompson, \& Bald, 2008). Within the presentation, Balfanz presented calculations that " 17 of the 22 districts (participating in the conference) lose twenty percent or more of their students after the freshman year" (p.5). At the same conference, James Kemple presented a study in which ninth graders from four school districts were followed throughout their high school careers. Researchers found that "of a typical cohort of 100 such ninth-grade students followed in the spring of what should have been their tenth-grade year, only 56 had actually been promoted on time and were attending school as tenth-graders. Twenty students had already dropped out, and the remaining 24 had been kept back in ninth grade" (p.5). Correlative data is clear; students who are held back in the ninth grade are much less likely to successfully complete high school. Kemple's data corroborates this
finding, for "of the 24 (ninth-grade) students retained in (the ninth) grade, only half were still in school three years later" (p.5-6).

Similar in scope and findings, the University of Chicago has researched the Chicago Public Schools system and has found that "first-year high school grades are the best predictors of whether Chicago Public Schools students will succeed in the rest of their high school careers" (Quint, Thompson, \& Bald, 2008, p. 6). A consortium, developed from a partnership between Chicago Public Schools and the University of Chicago, has developed an "on-track" indicator, used within the district's improvement programming. The purpose of the indicator is to identify "ninth-grade students as on track if they earn at least five full-year course credits and no more than one F in a core course in their first year of high school. Analyses using this indicator reveal that on-track freshmen are more than three and a half times more likely than off-track freshmen to graduate in four years" (p. 6).

Current research continually supports the notion that transition causes academic achievement loss and that ninth grade is the pivotal point for intervention, particularly for students identified as at-risk. Duchesne (1997) examined the trajectories of academic functioning between the elementary transition to the first year in high school, finding that

Problem behaviors are important precursors of academic functioning at the beginning of high school. Adolescents who exhibit externalized (e.g., aggression, delinquency) and/or internalized (e.g., anxiety, depression) problem behaviors are more at risk of experiencing difficulties related to their academic functioning and, ultimately, of dropping out of school. (p.409)

## Affective Effects

As a result of the middle to high transition, research is indicating an alarming trend; in addition to the loss in academic achievement during the ninth grade year, students' attitudes regarding school during this transitory time are increasingly negative, thereby extending the achievement loss throughout high school and beyond (Akos, 2004). Regarding motivation, it has recently been found that "the sharp increase in disengagement usually associated with older adolescents actually occurs between $7^{\text {th }}$ and $9^{\text {th }}$ grade" (Cushman, 2006, 42).

Bandura's insights into ideals of self-efficacy strongly indicate that in order to increase one's incentive to act, the person must believe that control is possible for "perceived self-efficacy, or a belief in one's personal capabilities, regulates human functioning in four major ways: [...] cognitive, motivational, affect, and optimism" (Bandura, 1989, pg. 4). By placing students into a situation in which control is seemingly taken away from them, students lose the perception that they can succeed in the new environment. In terms of affect, or mood, Bandura sums up the importance of securing students' self-efficacy:

People with a low sense of efficacy avoid difficult tasks. They have low aspirations and weak commitments to their goals. They turn inward on their selfdoubts instead of thinking about how to perform successfully. When faced with difficult tasks, they dwell on obstacles, the consequences of failure, and their personal deficiencies. Failure makes them lose faith in themselves because they blame their own inadequacies. They slacken or give up in the face of difficulty,
recover slowly from setbacks, and easily fall victim to stress and depression. (Bandura, 1989, p. 5)

Unfortunately, Bandura's words ring all too true with many high school students who have become disenfranchised with the educational system. Once they experience the slightest bit of frustration or failure in the ninth grade, they lose belief in their ability to succeed as well as their confidence in furthering their education. An all too-outwardly visible sign of this inner change can be seen from observing the actions of the outgoing "middle school Seniors" to the quiet, almost invisible "baby Freshman" (Hertzog and Morgan, 1998).

Hertzog and Morgan conducted a case study in which nine domains concerning self-perception were measured prior to and during the middle to high school transition. Of the nine domains measured, a significant drop was reported in five: physical appearance, job competence, romantic appeal, behavioral conduct, and global self-worth (1998). Significant drops in perception of physical appearance and romantic appeal will greatly alter a student's perceived status among companions, while a significant drop in self-perception regarding job competence and behavior conduct will have an enormous impact of the academic success for the ninth grade year and for years to come.

A recent study by Akos and Galassi examined the views of students, parents, and teachers regarding the middle to high school transition. The participants in the study responded to a questionnaire aimed to measure individual opinion and expectations regarding the upcoming transition. Akos and Galassi cited previous research that expressed the importance of parental involvement in the middle to high school transition, for "research has demonstrated that parents and teachers can be a significant source of
help during the transition, yet a child's view is not always perceived accurately by people in the child's environment"(1). The study revealed students held both positive and negative expectations regarding the transition, while teachers and parents held primarily good expectations of the transition. As a result of the study, Akos and Galassi suggest the transition could best be facilitated with a focus on three components- academic, procedural, and social (1). The researchers emphasized the importance of recognizing the impact of transition on all three components for the student.

The middle school to high school transition could not occur at a worse time in the lives of students as they attempt to identify themselves in terms of race and ethnicity. A longitudinal study by French (2000) delves into the formation of student racial/ethnic identify and self-confidence during the crucial time between middle school and high school. Researchers found that:

School transitions involve critical shifts in roles and settings. The nature and timing of this transition have leads many researchers to believe that this (transition to the ninth grade) is a risky transition with effects on the psychological adjustment of adolescents [...] students may experience changes in the racial composition of the school environment and changes in the way they perceive the environment and their relationships with school staff and peers. Perhaps for middle adolescents already beginning a self-identity search, the transition to high school may serve as a race/ethnic consciousness-raising event. (p.588)

A focused literature review regarding the impact of the middle to high school transition on African-American students, Holcomb-McCoy found "the transition to high
school (brings about) increased stress levels, decreased self-esteem, deteriorated academic performance, and heightened risk for maladjustment (in all students);" however, for the African-American student, there is a marked drop in attendance, engagement, and interest in school (Holcomb-McCoy, 2007).

The risks associated with decreased engagement and decreased interest in school are far-reaching, for academic engagement has been identified as the most reliable predictor of eventual graduation (Connell 1995, Kamins and Dweck 1999, DeBruyn 2003, National Research Council 2003). Students who enter high school exhibiting positive academic behaviors such as consistent attendance and passing courses are much more likely to graduate. Ninth grade retentions have detrimental effects reaching beyond the ninth grade school year, negatively impacting the remaining high school experience for recent research has demonstrated that attendance and on-track rates are much more indicative of graduation probability than student background or standardized test scores (Allensworth and Easton, 2005, Balfanz, 2007).

## Pubertal Connection

During the transition from middle to high school, adolescents are also experiencing a daunting transition personally. Puberty is beginning in both males and females during this time period, causing physical, emotional, mental, and psychological changes (Eccles, 2006). Current research suggests pubertal changes have academic implications, for focus, cognitive sophistication, and decision-making skills are all affected greatly during this process (Keating, 2004).

In addition to cognitive changes, students in this age group are beginning to develop their personal self-concept and self-esteem. Research shows self-esteem
immediately after a school transition is lowest, suggesting the unknown factors of a new school can have measurable negative consequences for adolescents (Harter, 1990). Also as a result of pubertal changes, motivation and self-regulation tend to be lower in the adolescent years. Research has shown adolescents tend to derive motivation from what most concretely affects their lives, such as friendships and family situations, not abstract academic thought (Eccles, 2006).

In order to best understand the difficulties associated with the middle to high school transition, it is important to accurately view the many transitions occurring simultaneously for the adolescent, for while "more than half of all middle school students are able to manage these multiple biological, psychological, and social transitions without major problems, [...] a significant proportion [...] encounter distress when making the transition from childhood to adolescence" (Akos, 2004, p.214). Akos continues:

Twenty-five percent to fifty percent of all children in the United States aged 10-17 are 'at risk for curtailed educational, emotional, economic, and social opportunities due to their engagement in high-risk behaviors and activities that include violence and vandalism, unprotected sex, abuse of alcohol and drugs, skipping and failing school' [..] Students from low socioeconomic status background are at particular risk for engaging in these behaviors. (p.214)

Schools must provide support in transitioning to minimize such behaviors and difficulties. Based upon background knowledge regarding the extensive changes occurring in the adolescent, teachers, parents, and counselors can better understand and prepare students for academic success.

## Ninth Grade as a Developing Concern

To best understand the root cause of the fairly recent difficulties with ninth grade transition, it is necessary to review the literature of recent paradigm shifts in school organization. Since the shift from a junior high paradigm to a middle school concept, educators began to realize a problem was emerging for,
high school educators had not been involved in the transition from junior high school to middle school, even though moving ninth graders to the high school had tremendous implications [...] high school educators had actively opposed the middle school concept, labeling it as too permissive and less academically rigorous than the junior high school [...] ninth grade quickly accounted for the largest number of students who demonstrated poor attendance, were tardy to class, caused disturbances and disruptions, were suspended and expelled; failing to accumulate enough credits to move on to the tenth grade, they were dropping out in large numbers as soon as they became of age [...] relations between middle level and high school educators deteriorated as each blamed each other for the new ninth grade "problem." (George and McEwin, 1999, p.13)

## Need for Transition Programming

The loss in academic achievement and the increase in student apathy posttransition indicate a clear need for transition programming. This identified need encourages the creation of programs that target areas of concern at the different stages of transition in order to prevent failures and to give students positive, productive tools to best handle their new concerns in high school (Hertzog and Morgan, 2001). Transition
programming can include a plethora of interventions designed to ease any transition difficulties and increase students' comfort levels in regards to school. Smith conducted a study revealing the effect of transition programs on high school retention and experiences. The study revealed that there is a correlation between higher passing rates and more positive academic experiences for students who experience a transition plan involving students, parents, counselors, and teachers. The resulting conclusion was all stakeholders have a place in the transition of students from middle to high school. Students who receive more support tend to perform better academically (Smith, 1997).

By encouraging students that all stakeholders are involved and supportive in their academic career, students feel much more comfortable and more likely to request help before struggling academically for successful schools "pay explicit attention to transitions [...] building relationships and structures that extend across these transitions (Pennington, 2006).

While research reveals that most ninth grade students experience a struggle as a result of the middle school to high school transition, it is apparent that the school climate, the educational atmosphere, and the school's attempt at intervention all have positive effects on students' experiences (Quint, Thompson, and Bald, 2008). A consortium, in partnership with Chicago Public Schools system, found,
the particular school a student attends plays a large role in whether he or she stays on track. Differences in the number of students on track at each school remained, even when the researcher controlled for eighth-grade test scores and socioeconomic status. This suggests that school climate and structure play a significant role in students' success in high school.

Unsurprisingly, the consortium's researchers found that freshmen-year course performance is better than expected in schools where the relationships between teachers and students are good and where students see high school as relevant preparation for college and workforce. (Quint, Thompson, and Bald, 2008, p.7)

The Southern Regional Educational Board (2005) recently published a Report titled, Getting serious about high school graduation. Of the four strategies discussed, the two primary strategies instructed educators to "Focus attention on the ninth grade" and "Support middle-grades-to-high-school transition programs" (SREB, 2005, p.20-22). The report explains the pivotal nature of the ninth grade:
(especially for minority and male students) the fourteen and fifteen yearolds who moved through the early and middle grades without developing the necessary academic, study, and social skills for success in high school often feel overwhelmed in ninth-grade courses. The ninth grade is more academically rigorous [...] unprepared students are not able to keep up [...] (ninth grade) requires independent skills [...] Those who did not develop (these skills) are seriously impaired in high school. (p.20)

While the this transitional period is difficult for all students, the information presented in this report clearly outline the specific and potentially devastating effects this transition has on students who already have struggled within the academic environment.

A recent study revealed that after the implementation of a transition initiative, students felt much more engaged and attendance rates improved dramatically (Akos, 2004). The study included a variety of transition interventions; however, the researchers
focused more on the student successes and feelings after any transition programming rather than identifying the successes of specific freshman transition interventions. Based upon the study, researchers suggested a larger time frame for implementation and reflection in order to build the most effective program possible.

Current literature indicates that the current dropout rate in many large cities exceeds fifty percent, resulting in a loss of thousands of students from the educational system each school year (Neild, Stoner-Eby, and Furstenberg, 2009). More alarming still, Neild, et.al. continues that "entrance into adult life without a high school diploma carries severe economic and occupational disadvantages" for median income, unemployment rates, and percentage of persons incarcerated are all significantly different for those with and without a high school diploma (p.543-544). The reality of the importance of a high school education, along with the alarming increase in high school dropout rates nationwide, draw attention to the fact that educators must make every possible step to alleviate academic loss and lack of student motivation.

## Relational/Communicative Interventions

## Exposure to High School Expectations/Orientation Sessions

Repeated exposure to high school expectations throughout the eighth grade aims to create a "seamless transition to high school" (Fields, 2005, 2). Whether through mentors, shadowing older students, tours of the school, or meetings with future teachers, this repeated exposure gives the eighth grade student a sense of familiarity upon entering the ninth grade. Based upon the status quo, research suggests "eighth grade is nothing like high school" (Hardy, 2006, p.21). Schools must take steps to redesign the structure, and most importantly, the communication between the two schools.

Research indicates the most effective step in improving student comfort with a new environment is by repeated exposure to the environment (Akos, 2004). Orientation sessions in which upcoming ninth grade students can meet high school administration, faculty, support staff, and upperclassmen are the prime opportunities for streamlining the transitory process.

In a literature review, Lehr (2003) stresses school completion and the promotion of student enthusiasm and active engagement, rather than the prevention of school dropouts, etc (p.343). By focusing upon the relational aspects of high school, the notion is students will feel more comfortable and more involved, thereby, decreasing the primary reasons for school dropouts.

## Comprehensive Communication

Development of a comprehensive communication plan is one of the most important, yet sometimes, the most difficult characteristic of transition improvement. All parties involved need to feel as though they have an open dialogue with the other members of the concept. Parents, students, teachers and administrators in both schools should feel a part of the decision-making process, while also feeling adequately informed of decisions already made. Current research suggests that "different kinds of parental involvement are effective at different times during the student's life" [...] "Parents' discussion of school at home had the most positive association with the achievement of students" (Falbo, 2001, p.511). Parental supervision and participation are also cited as types of communication with positive associations, while parental communication with the school demonstrated the greatest negative association with academic achievement (Falbo, 2001).

Gutman and Midgley (2000) recently conducted a study regarding the role of protective factors (both school-initiated and parent-initiated) during the transition from middle school to high school. The study primarily focused on the impact of this transition on African-American students from a lower socioeconomic situation. The researchers found that these students' academic experiences and test scores were significantly improved when the protective factors from both school and home were joined together via collaborative communication in lieu of support mechanism or the other.

The Southern Regional Education Board (2005) recently published the following as a measure for stakeholders to know that their plans are likely to make a difference when,
high schools assign highly qualified teachers to ninth-grade classrooms, balance the teacher/student ratio in ninth grade with the ratios in other grades to ensure ninth-graders get the attention they need, establish schedules that give students more time in critical subjects, work with parents to create individualized school-completion and career-goal plans, provide students with academic mentors to monitor progress towards graduation, and enroll ninth-grader students at risk of failure in at least one career/technical course to connect the school curriculum with career preparation. (p.23)

At this point, all stakeholders involved with have had the opportunity to effectively communication and give the most effective input to ensure all ninth grade students successfully participate in the educational process.

## Rewards/Incentives Programs

While rewards for good behavior or academic achievements might be commonplace in the elementary school, high schools rarely place an emphasis on rewards and incentives; however, the tides appear to be changing as behavior difficulties and high school dropouts become commonplace. A recent quasi-experimental study revealed an increase in student homework completion after promising small rewards (Radhakrishnan, 2009). The study demonstrated a significantly higher level of completion and an increase in the number of assignments completed after incentives were offered. The study indicated that the cost of the incentive had no effect on the level of motivation; rather, it was the introduction of the incentive itself that lead to the increased completion level. Similarly, a study reviewing educational practices in Canada supports the awarding of academic achievement as a positive factory in the increases of Canadian education (Hurley, 2009).

The research, however, is not conclusive in terms of rewards and incentives. There are groups of educators who feel that extrinsic rewards actually lead to lower achievement and motivation among students. Schwartz examines the move toward extrinsic rewards results in a decrease in intrinsic motivation to learn, "resulting in worse performance than would have resulted without extrinsic incentives" (Schwartz, 2009, p.392). Continuing, Schwartz admits that while there may be a place for "motivational competition" it should be used only "with great care" (Schwartz, 2009, p.394). In an effort to maintain intrinsic motivation while providing extrinsic rewards, many schools are opting to rewards groups of students for good behaviors and/or academic successes.

## Instructional Interventions

## Explicit Skills Instruction/ Freshman 101

Explicit instruction in study and organizational strategies are of utmost importance to ninth grade success. Many freshmen do not have the skills to study, take notes, or complete a project at home (Hertzog, 1998). Additionally, most high school students need extra help in intermediate level skills (those of a middle school level education) and more advanced reasoning skills, for:

The typical high school student does not have the fluency to simultaneously move smoothly through a complex passage with more advanced vocabulary and apply comprehension strategies to mentally interact with the author's work and accurately derive the intended meaning. (Balfanz, 2002, p. 11)

By explicitly teaching these instructional skills, and by being consistent with rules and expectations, the ninth graders will mature in the academic setting much more successfully. Similarly, when students cannot engage in their reading material (regardless of academic course or content material):

They (students) do not engage in a number of comprehension strategies that a mature reader will naturally employ at different stages of progressing through a work of literature or non-fiction. These strategies include relating the reading to one's own prior knowledge and experiences, skimming the captions and subtitles of a non-fiction selection (as would be appropriate in a textbook) to notice major topics and themes being covered, figuring out the meaning of unknown words or phrases by making guesses from the context of the passage or going back to reread
for clarification or correction, predicting next developments in a story, recognizing devices used by authors [...] and generally having a mental conversation on the meaning of the selection to oneself as a reader." (Balfanz, 2002, p. 11)

The primary purpose of the Freshman 101/study skills course is to explicitly teach these, and other research-based strategies for improving and strengthening students' ability to actively participate in the learning process.

The Freshman 101 initiative, in addition to academic increases, is designed to increase student self-efficacy and self-confidence. Recent studies indicate a need for explicit instruction in coping stress-management strategies for, "individuals need to access active coping strategies in response to life events, and that optimism is a factor that encourages active coping" (Boman, 2001, p.401). By designing curriculum that not only addresses the academic components of high school, but also the emotional aspects, ninth grade educators help shape a more well-balanced individual who is capable of moving beyond the ninth grade with self-efficacy and self-confidence.

There is a growing body of literature that indicates motivation plays a key role in the efficacy of study skills instruction for "adolescents will often react negatively if the course materials appear babyish or too closely resemble the course materials and approaches they have used in elementary and middle school" (Balfanz, 2002, p. 18). Teachers of a Freshman 101 must take caution to design high school-appropriate materials while accommodating elementary and middle school-level knowledge of class participation. Learning activities should be structured so that students "experience
success, receive positive reinforcement, and exercise some control over their learning process" (Balfanz, 2002, p. 18).

The Principal's Partnership recently published a research brief outlining the special needs of ninth graders. It identified the need for special programming for students entering high school. The following are listed as components of successful programs: "goals, physical space, a focus on math and language arts, rigorous and meaningful curricula, support, stakeholder buy-in, and school-based assistance teams" (Walker, 2006, p.1). Though presenting no conclusive research-based findings, the brief provided many examples of successful programs nationwide.

In regards to the explicit instruction of study skills, there is currently a shift in ideology of how best to teach study skills. Traditionally, techniques such as underlining, taking notes, outlining, writing summaries, and asking questions have not been confirmed as effective in helping students to achieve (Armbruster and Anderson, 1981). Research now indicates:

Suggested guidelines for teaching study skills were to teach the division and parts of texts and materials such as headings, introductions, summaries, topic sentences, and key relationship signals and to teach the importance of knowing about the criterion task. For a test, the student should know the number and types of questions to be asked, the duration of the test, the extent to which external aides may be used, and the evaluative criteria applied. Students should also know why, when, and how to use particular study strategies. (Carnes, 1991, p.342)

The learner needs to become an active participant in the learning process.

A Freshman 101 course should also include a focus on expanding students' knowledge of their own learning styles, strengths, and weaknesses, to better prepare them to actively participate in the learning process.

## Test Preparation/Remediation Curriculum

School-wide remediation programming is a new idea in the high school environment for,
the notion that large numbers of students, at least in some high schools, might be in need of organized and sustained extra help and support to develop [...] skills assumed by challenging high school level work is not part of the mission, organizational structure, or culture of high schools [...] to the extent that remediation is offered, it typically focuses on either providing sub-sets of students with instruction in elementary basic skills or somewhat large groups with instruction narrowly focused to the requirements of mandated tests. (Balfanz, 2002)

While the current body of literature is clear that mandated test preparation is not wholly successful (in terms of developing the best academic achievement in students), research does indicate that there is some merit to test preparation instruction (Balfanz, 2002).

Test preparatory materials are as numerous and diverse as the number of students who use the materials. With the focus on education narrowing closer on standardized test scores, school districts are increasing their focus on standardized testing and test preparation materials. Test preparation materials exist in a variety of mediums, as semester-long curriculum, computer programs to be used during after-school hours, and even five minute activities that can be built into a regular class period in any subject area.

The reality of education is that as long as schools are being judged based upon test scores, educators must find ways to help increase student test scores. The Princeton Review's vice president summarized the focus on test preparatory materials in that, "more than 200,000 students in 60 countries signed up for the Princeton Review's online demonstrations of such tests as the SAT and state exit exams" (Borja, 2003, p.23). The trend continues as educators look for the more cost-efficient and effective manner of test preparation.

The majority of literature supports the notion that test preparation is effective in increasing student test scores. A recent study indicated that " 75 percent of high school students who had previously failed the Texas Assessment of Academic Skills in the 211,000-student Houston school district improved their TAAS reading scores by 29 percent on average in a pilot test-prep program" (Borja, 2003, 23). A 1995 study by found Kaplan test-prep students, on average, increased their SAT scores by 120 points. Initiative can add a few more points. Students who attended all test prep classes and did all their test-prep assignments improved their SAT scores by about 140 points" (Black, 2005, p. 35).

## Structural Interventions

## School within a School/Ninth Grade Academy Concept

High school freshmen are a unique group of students. On the heels of adulthood, ninth graders struggle with the increased freedoms of high school. Middle school offers very structured classes, with teachers frequently monitoring progress, allowing for mistakes and revisions. Students move together from activity to activity. High school, allows students much more freedom in decision making and academic responsibility.

Teacher expectation rises, while parental involvement falls. The majority of students are not prepared for this freedom and responsibility (Akos, 2004). The "School within a School" Model serves as a bridge between the highly structured environment of the middle school and high school. Morrison (1998) explains that the model "serves as a bridge that spans the rough waters of adolescence, enabling students to cross the threshold into high school and continue on, better prepared academically and socially for the rigors of high school and post-secondary education" (p.2). The small schools initiative offers a variety of options for creating smaller communities, including mini schools, school-within-a-school, and schools-within-a-building models (Raywid, 1996).

A review of the literature on school size suggests that upcoming ninth grade students are placed in a learning environment in which the size of their environment largely affects their academic achievement, attendance, behavior, and safety (Wasley, 2002). Overall, students tend to perform at higher levels in smaller environments where students feel they have an important role in their learning and where they can develop strong relationships with adults (Wasley, 2002).

Since the inception of the middle school concept in the 1960's, educators and researchers have recommended enrollments of no more than 900 as the ideal high school size. The background of the recommendation stemmed from the notion that middle schools were generally smaller and team-oriented; therefore, freshman would not be able to adjust to an environment much larger than the maximum of 900 students (Irmsher, 1997). Lee and Smith (1996) suggested that students attending high schools of 600 to 900 students show the greatest amount of learning activity; however, current research indicates that the majority of students in an urban atmosphere experience an increase in
student enrollment of over five hundred percent from middle school to high school (Roderick, 1999).

In terms of students' affective filters, research indicates the size of the school seems to be very important to a student's sense of belonging (Klonsky, 1999). Klonsky's research further suggested that students need to feel that they are important and fit within the social structure. These studies suggest that the small school environment allows students to be more successful. Within the state of Georgia, as with many states nationwide, many high schools far exceed the suggested 600 to 900 student enrollment. Growing empirical evidence suggests, small high schools generally have higher achievement levels, higher graduation and lower dropout rates, and are safer than large high schools. Further the benefits of small size are greater for students in schools with high minority and/or low-income enrollments, particularly in urban communities [...] though not a silver bullet, (small schools) can be an important lever for bringing about a related set of changes that together product significant results. (Cohen, 2001, 5-6)

In an effort to deal with larger high schools and increasing transitory issues, educators have begun creating a ninth grade environment referred to as a school-within-aschool. Recently, many schools have created ninth grade academies, a move supported by the school-within-a-school model. In a recent ex-post facto study of a ninth grade academy in Baltimore, results revealed a ten percent increase in attendance in only one year. From 1993 (pre-planning year) to 1996 (year two of implementation), Patterson High School attendance increased over 16 percent, an impressive feat considering in the
same time frame, district attendance rates dropped four percent. The study purported that by creating an academy-type atmosphere students experienced an environment in which they felt engaged and noticed, a far cry from the typical feelings experienced as high school freshmen (Morrison, 1998; Fields, 2005).

In terms of the varying options for academies and small school environments, the small schools initiative defines several options including,
house plans, mini schools, school-within-a-school, small schools, and school within a building models. The initiative emphasizes the school-within-a-school model that is a separate, autonomous learning unit. In this model, common space is shared with the host school. A commonly implemented (school-within-a-school) model is the ninth grade house plan, a type of school-within-a-school where ninth grade students are housed in isolation on the campus of a grades 9 through 12 school. The ninth graders in this model are offered support services [...] the (school-within-a-school) model most closely replicated a true small school structure without the cost of separate facilities and staffing, and will, therefore, be more likely to produce [the] positive academic effects. (Fraker, 2006)

In a similar vein to the smaller schools model, some research has been done on the placement of ninth graders in a junior high setting as opposed to a senior high setting. The placement of ninth grade students in a junior high setting indicates students are not exposed to the high school environment as a whole as well as students are housed in a smaller school setting. A study delving into the effects of junior high versus senior high
placement on academic achievement and extracurricular involvement found that within a smaller, junior high setting, students participated more in extracurricular activities, experienced higher grade point averages (GPAs), and demonstrated better attitudes in regards to school attendance (Gifford, 1990). The results of the study could have farreaching implications in regards to the benefits of the smaller schools movement.

## Early Identification of At-Risk Students/ Mentoring

Early identification of students at risk of failure is paramount in today's educational world of high-stakes testing. Current research suggests that by continually working with at-risk students, conducting regular reviews of student transcripts, communicating with students' homes in reference to any deficiencies, and implementing timely supports to avoid falling behind, educators can best help at-risk students succeed (Ascher and Maguire, 2007). Unfortunately, lower achieving and lower ability students tend to get lost in the shuffle of a regular high school.

A recent study in dropout prevention found that successful dropout programs should focus on the identification of "key hurdles to school success and helping students overcome them (for example, getting students to complete Algebra II, which has been identified as a key step for college enrollment" (Fashola and Slavin, 1998, p. 182). The study also includes the following as successful practices in dropout programming: personalization of the high school experience for at-risk student with the expectation that increasing attachment to adults at school or giving students high-status roles within school will reduce dropout rates (mentions that some programs give students hats or badges as markers they can identify with) [...] (and) give students a sense of purpose of
completing school and make long-term consequences more apparent in daily activities. (Fashola and Slavin, 1998, p. 182)

A recent paper published identifying early warning signs of dropouts and appropriate interventions presented guidelines for educators for developing the most effective programming to help at-risk students (Kennelly and Monrad, 2007). The study concludes that "early warning systems should offer a systematic analysis of students’ characteristics, risk factors, outcomes, and impact of intervention" (p. 2). The researchers also offer a listing of key indicators of students at risk of dropping out and seven action steps for developing an appropriate system:

These students receive poor grades in core subjects, possess low attendance rates, fail to be promoted to the next grade, and are disengaged in the classroom [...] (educators should) (1) establish a data system that tracks individual student attendance, grades, promotion status, and engagement indicators, such as behavioral marks, as early as fourth grade; (2) determine the criteria for who is considered off-track for graduation and establish a continuum of appropriate interventions; (3) track ninth grade students who miss 10 or more days of school in the first 30 days; (4) monitor first quarter freshman grades, paying particular attention to failures in core academic subjects; (5) review fall semester freshman grades, paying particular attention to failures in core academic subjects; (6) monitor end-of-year grades, as the end-of-year grades will provide further information about failure rates and reveal grade point averages, a strong indicator of dropping out; and (7) track students who have failed
too many core subjects to be promoted to the tenth grade. (Kennelly and Monad, 2007, p.2)

In an observation of a local high school, it was observed that the motto of their Ninth Grade Academy was "Sixteen by Sixteen," meaning each student would achieve sixteen credits by the age of sixteen (2006). This motto, encouraged by the administration, staff, and students, encourages their ninth graders to consistently work together towards the goal of no ninth grade retentions at the end of the year.

The pendulum of educational importance, however, is shifting focus to the importance of at-risk incoming freshman, often assigning an assistant principal and a counselor specifically to the ninth grade populace. The extra involvement of the staff and administration helps to lead to a sense of team among the ninth graders, furthering their chances of success (Blankstein, 2004, Camblin, 2003). Discussing the importance of sense of team and relationship, Alan M, Blankstein states: Relationships are a crucial element of student achievement and student success. [...] They include relationships among staff, between staff and students, among students, between school personnel and the community- among everyone touched by the work of the school (2004, p.15).

It is important to note that this foundation of relationship begins with orientation sessions prior to the start of the school year and extends far beyond the first month of school, whether through mentoring or monthly counseling visits. The continued focus on relationship strengthens students' sense of involvement and belonging, increasing their chance of long-term success (Akos 2004). By including teachers and upperclassmen as mentors, teachers are provided ways to become involved in the lives of their students (Holland, 2001).

Continuing the importance of maintaining relationships, many administrators aiming to increase student involvement and engagement in ninth graders are focusing on the importance of frequent monitoring, either through one-on-one counseling sessions or through pull-out sessions with a counselor or administrator once a student is identified as needing guidance. In a review of a Midwestern academy, a researcher describes her observations of the principal's typical afternoon, "(he) pulls one student out of class to discuss behavior issues, tends to another sent to the office for a dress-code violation, and comforts a dejected-looking boy by giving him a friendly pat on the shoulder and a 'You doin' ok?' (He) waits for the boy's answer, ready to talk if its 'no' (Holland, 2001, p.299). When questioned on his methodology, the principal replies, "This school is largely about relationships with students [...] only when you build that can you make a change academically" (Holland, 2001, p.300).

By introducing the concept of mentoring, high school administrators can (either formally or informally) assist students with creating and building relationships between students and adults for "there is strong evidence that adolescents who form a relationship with an adult besides a parent do better in school [...] Too much cannot be left up to the student in defining his or her personal goals and learning the connection between school and these goals, especially as students move from middle to high school" (Boston Plan for Excellence, 2001, p.23). Similarly, a mixed-methods study correlating social support and test scores found a statistically significant relationship between positive social supports and increased test scores (Lee, Smith, Perry, and Smiley, 1999). Mentoring can be the link that helps students remain actively involved in school, perform better academically, and possibly serve as a link to the business world beyond high school.

The role of counselors within today's high schools is becoming a more popular topic of study for researchers are finding that advisory programs, counseling, and mentoring may have positive effects on student success in high school and beyond (Makkonen, 2004; McDonough, 2005). Makkonen (2004) noted that while it is difficult to isolate the impact of advisory as an intervention (because it is rarely used in isolation), the overall research on the intervention is positive. Makkonen does state that "students who feel that they are part of a supportive school environment are less likely to have poor attendance and drop out and that healthy relationships between teachers and students appear to facilitate academic achievement (2004, p.15). Similarly, McDonough (2005) asserts that "improving counseling would have a significant impact" on low-income, rural, and urban students as well as students of color" (p. 2). To most positively impact student achievement, educators must find ways to make use of this excellent resource.

## Small Learning Communities

Personalization of the ninth grade year for all students is a very important educational ideal. Though sounding as though each student receives an individualized education, personalization refers to the effort to give each student every opportunity possible to succeed. Depending upon the school and the district, personalization can include mentors, special remediation or enrichment classes, support groups, creative scheduling, or student/teacher contracts. Small learning communities are a manner for creating a sense of personalization, for teachers "can focus on the unique needs of this vulnerable population" (Hardy, 2006, p.21).

Within a small learning community, students share the same team of teachers. By teaming teachers with the same group of students, teachers are able to develop a better
sense of each student individually by hearing from each of the core area teachers and to develop a more united front in the communications between the school and the students' parents. Additionally, the small learning community helps the students feel more known and cared about an individual, thus increasing their chances of success (Smerdon, 2009).

In an effort to better equip and empower teachers, many high schools are moving away from content-specific departmentalization to interdisciplinary academic teaming. Within the teaming concept, a team of academic teachers share the same students, common planning, and sometimes even the same area of the building (George and McEwin, 1999). A recent research brief supported the teaming concept by including small teams of teachers in the list of recommendations for building school capacity for increased student performance (Camblin, 2003).

In a survey of Florida high schools, schools noted the following as reasons for implementing interdisciplinary teacher-teams: "easing the transition to high school, reducing the amount of failure in the ninth grade, especially for ESOL students, and providing a more personal atmosphere for teachers and students" (George and McEwin, 1999, p. 15).

A recently published report discussed several challenges and lessons learned from the initial implementation of the small-schools initiative. They are summarized as follows:
(1) Schools are finding it challenging to focus their efforts simultaneously on implementing new district initiative directed at preparing students for high stakes tests and on restructuring the schools into small learning communities using inquiry-based, contextual learning strategies, (2)

Schools are struggling with tensions resulting from decisions regarding how fully to cluster students and teachers into small learning communities, (3) A strong curricular leader is essential to developing a strong and effective small learning community. Schools are using a variety of approaches to make certain that they have effective leadership, (4) In going wall-to-wall with small learning communities, schools are balancing the desire of teachers for input into staffing decisions with the need to make sure that students have equal access to a range of pathways, (and) (5) As schools have formed more small learning communities, bilingual programs within those schools have struggled to maintain basic services to bilingual students and make sure there is equitable access to upper-grade pathways; inadequate staffing have compounded the problem. (Allen, 2005, p.2)

By truly understanding and recognizing the possible challenges of implementing small learning communities, educators can better plan and prepare their own staff for overcoming these difficulties. In reviewing the possible challenges versus the probable benefits, it is clear that the implementation of small learning communities is universally positive for involved students.

The findings of the aforementioned report are echoed by a study from Neild, Stoner-Eby, and Furstenburger (2009) which indicated that ninth graders often received the least prepared teachers, freshmen are often uninvolved and/or unknowledgeable concerning promotion/retention requirements until it is too late to compensate for mistakes, and ninth grade classes tend to be overcrowded and under-prepared in terms of
curriculum and materials. The conclusions of the study echo the importance of transition programming and the huge eventual impact should educators continue to ignore this loss in achievement and motivation (Neild, Stoner-Eby, and Furstenburger, 2009).

A study of a comprehensive reform effort in the Baltimore City Public School System revealed positive results from the implementation of small learning communities and academic teaming for, "students and staff in the small learning communities reported more positive social and academic environments than their counterparts in the district's comprehensive high schools. In addition, students in small, newly created high schools demonstrated positive academic outcomes (e.g., higher test scores, engagement) relative to students in the other schools in the district" (Smerdon, 2009, p. 240). In a recent review of academic supports to most positively impact student achievement, personalized learning environments (such as small learning communities) were noted as having a very significant positive academic impact (Chalt, Muller, Goldware, and Houseman, 2007).

In addition to the academic and affective benefits for students, small learning communities are beneficial for teacher in that, communication among teachers and administrations at SLC meeting about successes and failures supports and empowers you in regards to the students... you know more about the kids so you have a better understanding of how to teach them. It makes it a lot less lonely for teachers as well. (Boston Plan for Excellence, 2001, p. 18)

By increasing the lines of communication, students feel more comfortable within their environment, increasing the possibility of success. Additionally, students who are at-risk
are much more likely to reach out for help if the lines of communication are firmly established previously (Camblin, 2003).

## Gender-Specific Classes

As educators strive to design the most effective educational environments for students, every effort is being made to improve the quality of the school environment. Teachers are urged to include relaxing techniques and intellectual music prior to administering standardized tests, while school designers are attempting to choose colors and designs that best minimize distractions to learning.

As any teacher or administrator can attest, one of the greatest distractions in a classroom is... the opposite sex. Students, regardless of age, frequently find interactions with the opposite sex more important than focusing on the lesson at hand. Educators are taking notice of the distraction and many are reconsidering the idea of same-sex classes, now in literature referred to as "gender-specific classes."

Recently, as part of a plan to provide additional opportunities for students to choose a "better" school, the federal government lessened Title IX restrictions on singlesex schools (U.S. Department of Education 2006). This change has renewed interest in establishing single-sex schools within the public school system as a way to address the needs of students who have not been successful in traditional coeducational schools. Allgirls math and science classes have been documented in numerous states.

While current literature is undecided as to the effectiveness of gender-specific classes in high school age students, the body of literature is clearly moving in the direction that gender-specific classes and academies are on the rise and should receive notice.

## Conclusion

Current research is clear; the transition from middle school to high school is a time of great academic loss. Success in the ninth grade is essential to high school success and completion. In order to minimize dropouts, increase graduation rates and standardized test scores, schools must find the most effective transition interventions to assist their student populations during the middle to high school transition.

Research supports the statement that the freshman graduation rate is a national emergency (Haney et al, 2004). Understanding how to serve the freshman classes when they arrive in high schools must become a paramount goal for all high schools.

## Chapter 3: Methodology

The purpose of this chapter is to describe the research design, the methodology, the data collection, and the data analysis procedures in this study. The researcher will also delineate the sampling procedures and instrument validations. The chapter is divided into five sections. Section one provides the introduction, section two describes the design, section three describes the population and sample, section four contains data collection procedures, and section five contains data analysis procedures.

## Introduction

The purpose of this study was to examine the effects of transition intervention on the academic achievement of ninth graders. The academic achievement was measured by End of Course Test (EOCT) scores to determine which interventions most positively affected student success. Principal questionnaires were utilized to identify which transition interventions were used in each populace. Survey items included several research-based interventions. The following factors, which are currently aligned or determined by No Child Left Behind will be investigated: minority children, children with disabilities, children with limited English proficiency, children in poverty, Title 1 status, and AYP accreditation. Hertting and Phenis-Bourke have suggested that there are differences and similarities in the needs and practices of new and veteran principals (2007), so the experience level of the principals was examined.

This study was designed to answer the following research questions:
$\mathrm{RQ}_{1}$ : Is there a significant difference in End of Course Test scores as a result of various levels of transition intervention implementation?

Null Hypotheses as related to Research Question One:
7. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of relational transition interventions.
8. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of relational transition interventions.
9. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of instructional transition interventions.
10. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of instructional transition interventions.
11. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of structural transition interventions.
12. There will be no significant differences in Ninth Grade Algebra I End of Course test scores of students who have experienced varying levels of structural transition interventions.
$\mathrm{RQ}_{2}: \quad$ Is there a significant difference in End of Course Test scores as a result of various demographic indicators?

Null Hypotheses as related to Research Question Two:

1. There will be no significant differences in scores on the Ninth Grade

Literature and Composition End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
2.: There will be no significant differences in scores on the Algebra I End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
$\mathrm{RQ}_{3}$ : Is there a relationship between scores on the Ninth Grade End of Course Tests and specific freshman transition interventions?

Null Hypotheses related to Research Question Three:
3. There will be no relationship between Ninth Grade Literature and Composition End of Course Test scores of students who have experienced varying levels of freshman transition interventions.
4. There will be no relationship between Algebra I End of Course Test scores of students who have experienced varying levels of freshman transition interventions.

## Design

This study solicited principals' input regarding the specific freshman transition interventions implemented during the 2008-2009 school year in their respective schools. The research design for this study was a quantitative analysis. The survey was based on the Likert scale to ensure statistical analysis could be performed. An ex-post facto review of test scores from the 2008-2009 school year was an integral part of the quantitative analysis. Each high school student sub-group was studied for the impact of the specific interventions used within that particular setting.

## Instrumentation

The survey used within the study consisted of two parts. Part A inquired as to the degree of implementation of the specific freshman transition interventions implemented in the participating high schools in order to answer Research Questions One through Six; answer choices used a Likert scale range, indicating: 1- no implementation, 2-partial implementation, and 3- full implementation. Part B focused on demographic information in order to answer Research Questions Seven and Eight; answer choices delineated appropriate percentage ranges, based upon the Likert scale (i.e. 1: 0-25\%, 2: 25-50\%, etc). The content of the survey was validated through research, as every question asked within this survey was linked to specific research. Additionally, the survey was piloted for clarity and readability. While the survey initially was designed for specific intervention analysis only, the researcher later added Part C in order to best divide the interventions into appropriate domains.

## Population

This study took place within public high schools in the state of Georgia. The United States Department of Education (2009) website identifies the 2008-2009 student population of the state of Georgia as $1,649,589$. The state of Georgia currently has 185 school districts, comprised of 2,460 schools. The demographic breakdown of students within the state of Georgia includes fifty-one percent of students identified as economically-disadvantaged, twelve percent served as children with disabilities, and five percent with limited English proficiency. Of the 1.6 million students in the Georgia public school system, forty-six percent are Caucasian, thirty-eight percent are AfricanAmerican, ten percent are Hispanic, three percent are Asian/Pacific Islander, and less than one percent are Native American (United States Department of Education, 2009).

A permission letter along with a copy of the principal cover letter and principal survey were mailed to all public school districts within Georgia asking for the Superintendent's permission to distribute surveys to high school principals within their school district (See Appendix D). The population for this study included all high schools from districts in which Superintendents gave permission. From the 163 Georgia public school districts, permission was obtained from 50 school districts. Those choosing not to allow participation cited two primary reasons. Firstly, many districts within the state of Georgia have strict research codes allowing only employees of the respective district to conduct research within the district. Secondly, several districts explained that administrative changes (either at the district or local level) made it impossible to accurately answer survey questions at this point the year.

Once the superintendent permission forms were received, indicating which high schools had permission to participate ( $\mathrm{n}=79$ ), the researcher contacted every high school
principal from within the allowed districts. To identify the most effective transitions used throughout the state of Georgia and to increase the generalizability of the study, this researcher chose to include all public school districts within the state in lieu of taking a population sample.

Only principals of high schools (as defined by the researcher as grades nine through twelve) were included in the contact list. The principals were contacted electronically with a cover letter and a link to the survey. Seventy nine high school principals were contacted and seventy-two responded to the survey, resulting in a return rate of 77.2 percent. In order that credible generalizations could be made, Dillman (2000) emphasizes that a reasonable return rate of 62.2 percent is essential. The return rate for this study indicates that high school principals are concerned and interested in developing the most effective transition interventions for upcoming ninth graders. Once all of the surveys were received, they were examined for completion. Inadequate surveys were eliminated ( $n=11$ ), resulting in a final sample of 62 high schools out of the 79 whose superintendents gave permission.

## Data Collection

Upon receiving university level Internal Review Board approval, the researcher contacted each superintendent in the state of Georgia with a permission packet which included: a superintendent cover letter, a copy of the principal survey cover letter, a hard copy of the survey, and a self-addressed stamped envelope from the researchers. Each superintendent was asked to sign and date the permission form, then mail the form back to the researcher. Once permission forms were received, the researcher electronically contacted each principal in the districts with a cover letter and the survey link. The
twenty-question survey included two sections, a transition intervention section and a demographic section. The questionnaire was based upon the Likert Scale. The purpose of the questionnaire was for each principal to identify what element(s) of transition programming were used with ninth graders in the 2008-2009 school year. The demographic section accompanied the transition interventions to identify any similar characteristics among principals and/or subgroupings.

The researcher obtained 2008-2009 EOCT score information for each participating school district from the Georgia Department of Education website (2009, www.gadoe.org/testing).

## Data Analysis

The items on the survey were grouped into three domains (excluding demographic information) to probe the research questions outlined in this study. The Likert scale allowed the administrators to best illustrate the degree of implementation of each of the transition interventions. The researcher input the data exactly as submitted by the respondents; when an item was left was blank, the researcher input a zero for calculation purposes. There were 62 respondents in the study.

## Content Validity and Reliability

The survey consisted of two pages using a Likert 3-point scale with easily readable instructions. In order to establish content validity, each survey item was directly linked to expert opinion found with the review of pertinent literature. In order to establish content validity, Salkind (2000) recommends including expert opinion. He explains that content validity as the extent to which a test (or survey) represented the universe of items from which it is drawn. The following tables identify the literature that
supports the included freshman transition interventions and serve to validate the survey statements and lend content validity.

Table 1: Content Validity of Items in Domain 1- Relational/Communicative

| Item Number | Survey Statement | Justification in Literature |
| :---: | :---: | :---: |
| Item 1 | Ninth grade students met with the counselor or an advisor at least monthly to discuss attendance, grades, and school concerns. | National Conference of State Legislatures, 2007; Pennington, 2006; Aacher \& Maguire, 2007 |
| Item 2 | Ninth grade students participated in an orientation session which included an introduction to ninth grade teachers. | Pennington, 2006; Fields, 2005; Akos, 2005 |
| Item 3 | Ninth grade students participated in an orientation session which included an introduction to all high school administrators | Pennington, 2006; Fields, 2005; Akos, 2005; Blankenstein, 2004 |
| Item 4 | Ninth grade students participated in an orientation session in which breakout groups allowed for upcoming ninth graders to discuss concerns with ninth grade faculty | Pennington, 2006; Fields, 2005; Akos, 2005 |
| Item 5 | Ninth grade students were assigned an adult mentor prior to the beginning of the school year | National Conference of State Legislatures, 2007; Pennington, 2006; Southern Regional Education Board, 2005; Aacher \& Maguire, 2007; Holland, 2001 |
| Item 6 | Ninth grade students were assigned an upperclassman student mentor prior to the beginning of the school year. | National Conference of State Legislatures, 2007; Pennington, 2006; Southern Regional Education Board, 2005; Aacher \& Maguire, 2007; Holland, 2001 |
| Item 7 | Ninth grade students were exposed to high school rules and procedures within the first week of school. | Fields, 2005; Akos, 2005; Blankenstein, 2004; Pennington, 2006 |
| Item 19 | Ninth grade students are assigned to a team in which the four core academic teachers share all students on the team. | National Conference of State Legislatures, 2007; Pennington, 2006; Aacher \& Maguire, 2007; Blankenstein, 2004 |

Table 2: Content Validity of Items in Domain 2 - Instructional

| Item Number | Survey Statement | $\underline{\text { Justification in Literature }}$ |
| :--- | :--- | :--- |
| Item 12 | Ninth grade students were required to take a <br> semester (or more) length class specifically <br> focused on study skills. | Hertzog, 1998; Balfanz, 2002; <br> Boman, 2001; Walker, 2006; <br> Armbruster \& Anderson, 1981 |
| Item 13 | Ninth grade students had the option of taking a | Hertzog, 1998; Balfanz, 2002; |

semester (or more) length class specifically focused on study skills.

Item 14 Ninth grade students were exposed to a studyskills curriculum that was built into another class.

Item 17 Ninth grade students participate in mandatory, semester-long test preparation in prior to taking their End of Course Tests

Item 18 Ninth grade students participate in mandatory test preparation as an intensive pre-test session prior to taking their End of Course Tests

Boman, 2001; Walker, 2006;
Armbruster \& Anderson, 1981
Hertzog, 1998; Balfanz, 2002; Boman, 2001; Walker, 2006;
Armbruster \& Anderson, 1981
Balfanz, 2002; Borja, 2003;
Black, 2005

Balfanz, 2002; Borja, 2003;
Black, 2005

Table 3: Content Validity of Items in Domain 3 - Structural

| Item Number | Survey Statement | Justification in Literature |
| :--- | :--- | :--- |
| Item 8 | Ninth grade students were eligible for individual <br> rewards (gift certificates, food, candy, discount <br> cards, etc.) for good behavior at the end of a <br> defined time period (grading period, semester, <br> etc.) | Lehr, 2003; Radhakrishnam, <br> 2009; Hurley, 2009 |
| Item 9 | Ninth grade students were eligible for group <br> rewards (freshman luau, class pizza party, etc.) <br> for good behavior at the end of a defined time <br> period (grading period, semester, etc.) | Lehr, 2003; Radhakrishnam, <br> Item 10 Hurley, 2009 |
|  | Ninth grade students were eligible for individual | Lehr, 2003; Radhakrishnam, |
| Item 11 |  |  |
|  | rewards (gift certificates, food, candy, discount <br> cards) for good grades at the end of a defined <br> time period (grading period, semester, etc.) | $2009 ;$ Hurley, 2009 |

Content validity was further established through a pilot survey. The primary advantage of this approach was to identify any ambiguities or problems prior to administration, increasing the effectiveness and validity of the actual research findings for "pretested survey statements have a much better chance of holding up under subsequent statistical analysis and were less likely to require the kind of extensive rewording which would make them invalid" (Page, 2002).

Survey piloting was conducted among three local school districts to establish internal consistency. Permission was obtained from the district level administrations prior to the pilot testing. Results were studied for typographical errors, item analysis, and to ensure the survey was clear and concise to the affected audience. A team of high school principals ( $\mathrm{n}=10$ ) who have experience with ninth grade interventions were selected to both proofread and answer the survey questions. Written comments gave important insight to the researcher about the ability of the instrument to measure the intended material. The terminology used in the cover letter and survey was both common and understandable to the targeted participants. A careful review of the returned pilot surveys revealed no ambiguities, typos, or suggestions for rewording; therefore, the survey's final version remained the same as that used in pilot testing.

Further establishing the survey as a valid instrument for its particular testing purpose, it must be determined that each item is representative of the targeted domain (Sireci, 1998). Consequently, it was necessary to conduct a domain evaluation using Subject Matter Experts (SME). According to Sireci (1998), the SME's content classifications are used to derive item-objective congruence indices for test items, as well
as overall congruence indices for each content area. The pilot testing respondents ( $\mathrm{n}=10$ ) had past experience as principals and/or educators were chosen to serve as the Subject Matter Experts. This additional section, "Part C: Domain Evaluation" was added later in which participants were asked to validate the questions within this study by grouping each survey item into one of three domains: (a) Relationship/Communication, (b) Instructional, and (c) Structural/Design. (See Appendix C)

The researcher received all ten domain evaluations returned from the SME's. Of these ten evaluations, item-objective congruence for each item ranged from 0.70 to 1.00 . Sireci (1998) purports that an item-objective congruence of 0.70 or greater is necessary to accept congruence with its objective. Based on this established criterion, content validity was established for each survey item included within the survey.

Part A of the survey contained a list of twenty specific freshmen interventions as outlined in the review of literature regarding current best practices. For each item, respondents were asked to use a 1 to 3 Likert scale to rate the degree of implementation, ranging from (1) no implementation to (3) full implementation of intervention during the 2008-2009 school year.

Part B of the survey identified the following demographic factors: level of principal experience, school setting (urban, suburban, rural), methods for identifying atrisk students, ninth grade percentage of minority children, ninth grade percentage of children with IEP's, ninth grade percentage of children with limited English proficiency, ninth grade percentage of children in poverty, the school's current Title 1 Status, the school's current AYP status, and the ninth grade retention rate for the 2008-2009 school
year. The information sought in Part B of the survey intended to address any demographic discrepancies noted during post hoc analysis.

## Analysis of Results

The researcher utilized an online survey program to design and collect survey responses. The researcher was then able to export all data into a Microsoft Excel spreadsheet. Each survey was assigned a numeric name to maintain organization and confidentiality. The following table delineates how the data were converted into numeric input for analysis purposes. No all items, a zero was input if the question was left blank.

Table 4: Data Input Values

| Survey Item(s) | Chosen Response | Data Input Value |
| :---: | :---: | :---: |
| Items 1-20: Interventions | No implementation Partial implementation Full implementation | $\begin{aligned} & \hline 1 \\ & 2 \\ & 3 \end{aligned}$ |
| Item 21: Years of principal experience | 1-5 years 6-10 years 11-20 years 20+years | $\begin{array}{\|l\|} \hline 1 \\ 2 \\ 3 \\ 4 \\ \hline \end{array}$ |
| Items 23-25 <br> CRCT scores, Report card grades, Behavioral referrals | $\begin{aligned} & \text { Yes } \\ & \text { No } \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & 2 \end{aligned}$ |
| Items 26-29: Minority, IEP, LEP, Poverty | $\begin{aligned} & \hline 0-25 \% \\ & 26-49 \% \\ & 50-75 \% \\ & 76-100 \% \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 1 \\ 2 \\ 3 \\ 4 \\ \hline \end{array}$ |
| Item 30: Title 1 Status | Receive Title 1 funding Do not receive Title 1 funding | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| Item 31: AYP Status 08-09 | Met <br> Needs Improvement (NI) <br> NI- Year Two <br> NI- Year Three + | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |
| Item 32: Retention Rate 08-09 | $\begin{aligned} & 0-5 \% \\ & 5-10 \% \\ & 10-15 \% \\ & 15-20 \% \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |

## $20 \%+$

5

Data was then exported into Grad Pack 18 SPSS, a statistical software program.
Transition and demographic data were analyzed using Analysis of Variance (ANOVA) and correlative statistics to identify any existing relationships between intervention implementation and End of Course test scores. ANOVA was also conducted to identify any existing relationships between demographic data and End of Course test scores. Both ANOVA distributions sought to either support or discredit the following null hypotheses:

1. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of relational transition interventions.
2. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of relational transition interventions.
3. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of instructional transition interventions.
4. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of instructional transition interventions.
5. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of structural transition interventions.
6. There will be no significant differences in Ninth Grade Algebra I End of Course test scores of students who have experienced varying levels of structural transition interventions.
7. There will be no significant differences in scores on the Ninth Grade Literature and Composition End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
8. There will be no significant differences in scores on the Algebra I End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.

Correlative analyses were conducted to either accept or discredit the following null hypotheses:

1. There will be no relationship between Ninth Grade Literature and Composition End of Course Test scores of students who have experienced varying levels of freshman transition interventions.
2. There will be no relationship between Algebra I End of Course Test scores of students who have experienced varying levels of freshman transition interventions.

Demographic information was also analyzed descriptively specifically focusing on frequencies as to ensure the generalizability of study results.

## Ethical Considerations

The ethical considerations for this study were limited. The researcher maintained the confidentiality requirements of each school system, as well as, the requirements and procedures of Liberty University and the International Review Board. The school systems, individual schools, and administrators remained anonymous as participants in the study. The researcher conducted all research with the utmost ethical care.

## Summary of Methodology

The intent of Chapter 3 was to outline and explain the methods and procedures that were used in this study. The researcher conducted a quantitative study to determine whether or not a relationship exists between interventions and EOCT scores. The survey was created by the researcher and construct validity was established through a pilot study. Content validity was established by linked each survey item directly to expert opinion found within the review of the literature. After obtaining permission from district superintendents, high school principals in all participating districts were electronically contacted with the survey. Data were analyzed according to the study's research questions. The findings from this study have the potential to serve as indicators of successful transition programming, as well as, identify areas in which further research is needed. Chapter 4 summarizes the data concerning specific freshman transition
interventions. The demographics for participating schools are reported using descriptive data. An analysis of variance explores relationships between the specific interventions implemented and EOCT scores, as well as any existing relationships between demographics and EOCT scores, and is summarized in table form. Chapter 5 offers a discussion of major findings and recommendations for further study.

## Chapter Four: Findings

The purpose of this study was to determine if a relationship exists between specific freshman transition interventions and ninth grade academic success. The study aimed to measure academic success by focusing upon ninth grade End of Course Test (EOCT) scores in the areas of English and Mathematics. The research questions guiding this study include:

This study was designed to answer the following research questions:
$\mathrm{RQ}_{1}$ : Is there a significant difference in End of Course Test scores as a result of various levels of transition intervention implementation?

Null Hypotheses as related to Research Question One:
13. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of relational transition interventions.
14. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of relational transition interventions.
15. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of instructional transition interventions.
16. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of instructional transition interventions.
17. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of structural transition interventions.
18. There will be no significant differences in Ninth Grade Algebra I End of Course test scores of students who have experienced varying levels of structural transition interventions.
$\mathrm{RQ}_{2}: \quad$ Is there a significant difference in End of Course Test scores as a result of various demographic indicators?

Null Hypotheses as related to Research Question Two:

1. There will be no significant differences in scores on the Ninth Grade Literature and Composition End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
2.: There will be no significant differences in scores on the Algebra I End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
$\mathrm{RQ}_{3}$ : Is there a relationship between scores on the Ninth Grade End of Course Tests and specific freshman transition interventions?

Null Hypotheses related to Research Question Three:
5. There will be no relationship between Ninth Grade Literature and Composition End of Course Test scores of students who have experienced varying levels of freshman transition interventions.
6. There will be no relationship between Algebra I End of Course Test scores of students who have experienced varying levels of freshman transition interventions.

## Demographic and Descriptive Data

The sample included within this study is representative of high school principals and practices throughout the state of Georgia. All school districts in the state of Georgia were invited to participate; after receiving district permission, every participating high school principal in the state was contacted with the survey. Overall, 54 districts gave permission to participate, 16 districts did not give permission to participate, and 93 districts were non-responsive, even after multiple attempts (via postal mail and electronic communication) to obtain a response. Of the 54 districts offering permission to participate, 79 high schools were represented. Of the 79 high schools, 62 completed surveys were received, resulting in an $78.4 \%$ response rate (from allowed districts).

The demographic section of the survey aimed to best illustrate the participating population. The tables that follow show both the frequency and the percentage of responses in each demographic category including years of experience, type of school, percent of minority children, percent of children with IEPs, percent of children with

Limited English proficiency, percent of children living in poverty, current Title 1 status, AYP status, and ninth grade retention rates. (Note: on all demographic responses, one survey was incomplete, resulting in some totals that do not add up to 100 percent).

Table 5: Years of Experience

|  | $1-5$ Years | $6-10$ Years | $11-20$ Years | $20+$ Years |
| :--- | :--- | :--- | :--- | :--- |
| Frequency | 29 | 15 | 12 | 4 |
| $\%$ | 46.8 | 24.2 | 19.4 | 6.5 |

As displayed in the above table, the majority (46.8\%) of principals within the study had 1-5 years of experience with the next largest group (24.2\%) having 6-10 years of experience.

Table 6: Type of School

|  | Rural | Suburban | Urban |
| :--- | :--- | :--- | :--- |
| Frequency | 43 | 16 | 2 |
| $\%$ | 69.4 | 25.8 | 3.2 |

As displayed in the above table, the vast majority of schools involved in the study were rural (69.4\%) with the second largest group, suburban displaying 25.8\% involvement.

Table 7: Percent of Minority Children

|  | $0-25 \%$ | $26-49 \%$ | $50-75 \%$ | $76-100 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| Frequency | 25 | 21 | 10 | 5 |
| $\%$ | 40.3 | 33.9 | 16.1 | 8.1 |

As displayed in the above table, the largest group of respondents come from schools with $0-25 \%$ of minority children represented ( $40.3 \%$ ) with the second largest group ( $33.9 \%$ ) claiming a population of $26-49 \%$ minority children.

Table 8 Percent of Students with IEPs

|  | $0-25 \%$ | $26-49 \%$ | $50-75 \%$ | $76-100 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| Frequency | 57 | 4 | 0 | 0 |
| $\%$ | 91.9 | 6.6 | 0 | 0 |

As displayed in the above table, the vast majority (91.9\%) of respondents have a student population with IEPs of 0-25\%. The only other frequency displayed among respondents was an IEP population of $26-49 \%(6.6 \%)$.

Table 9: Percent of Students with Limited English Proficiency

|  | $0-25 \%$ | $26-49 \%$ | $50-75 \%$ | $76-100 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| Frequency | 59 | 1 | 0 | 0 |
| $\%$ | 95.2 | 1.6 | 0 | 0 |

As displayed in the above table, all school (95.2\%) with the exception of one (1.6\%), derive from an LEP population of 0-25\%.

Table 10: Percent of Students Living in Poverty

|  | $0-25 \%$ | $26-49 \%$ | $50-75 \%$ | $76-100 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| Frequency | 8 | 25 | 22 | 6 |
| $\%$ | 12.9 | 40.3 | 35.5 | 9.7 |

As displayed in the above table, the majority of respondents (40.3\%) house a student population living in poverty between $26-49 \%$; however, the second largest group
(35.5\%) was very close in frequency and demonstrated a higher population living in poverty, 50-75\%.

Table 11: Title 1 Status

|  | Receive Title 1 Funding | Do not receive Title 1 funds |
| :--- | :--- | :--- |
| Frequency | 23 | 37 |
| $\%$ | 37.1 | 59.7 |

As displayed in the above table, the majority of respondents (59.7\%) do not receive Title 1 funding. The other $37.1 \%$ do receive some Title 1 funding.

Table 12: AYP Status

|  | Met | NI Year One | NI Year Two | NI Year Three+ |
| :--- | :--- | :--- | :--- | :--- |
| Frequency | 39 | 8 | 8 | 4 |
| $\%$ | 62.9 | 12.9 | 12.9 | 6.5 |

Table 13: Ninth Grade Retention Rate

|  | $0-5 \%$ | $5-10 \%$ | $15-20 \%$ | $20 \%+$ |
| :--- | :--- | :--- | :--- | :--- |
| Frequency | 16 | 34 | 6 | 4 |
| $\%$ | 25.8 | 54.8 | 9.7 | 6.5 |

## Specific Freshman Transition Interventions

Each principal was asked to identify which of the following twenty specific freshman transition interventions were implemented in his respective school during the 2008-2009 school year:
I. Ninth grade students met with the counselor or an advisor at least monthly to discuss attendance, grades, and school concerns.
II. Ninth grade students participated in an orientation session which included an introduction to ninth grade teachers.
III. Ninth grade students participated in an orientation session which included an introduction to all high school administrators
IV. Ninth grade students participated in an orientation session in which breakout groups allowed for upcoming ninth graders to discuss concerns with ninth grade faculty
V. Ninth grade students were assigned an adult mentor prior to the beginning of the school year
VI. Ninth grade students were assigned an upperclassman student mentor prior to the beginning of the school year.
VII. Ninth grade students were exposed to high school rules and procedures within the first week of school.
VIII. Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.)
IX. Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.)
X. Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards) for good grades at the end of a defined time period (grading period, semester, etc.)
XI. Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good grades at the end of a defined time period (grading period, semester, etc.)
XII. Ninth grade students were required to take a semester (or more) length class specifically focused on study skills.
XIII. Ninth grade students had the option of taking a semester (or more) length class specifically focused on study skills.
XIV. Ninth grade students were exposed to a study-skills curriculum that was built into another class.
XV. Ninth grade students are isolated from the general high school population during instructional hours.
XVI. Ninth grade students are isolated from the general high school population for core academic courses only.
XVII. Ninth grade students participate in mandatory, semester-long test preparation in prior to taking their End of Course Tests
XVIII. Ninth grade students participate in mandatory test preparation as an intensive pre-test session prior to taking their End of Course Tests
XIX. Ninth grade students are assigned to a team in which the four core academic teachers share all students on the team.
XX. Ninth grade students are exposed to gender- specific classes in at least one of the four core academic areas.

The following table illustrates the frequencies of interventions used in the 20082009 school year among participating schools:

Table 14: Frequency of Interventions among Participating Schools

| Intervention | No Implementation | Partial Implementation | Full Implementation |
| :---: | :---: | :---: | :---: |
| Optional Study Skills Class | 40 (64.5\%) | 15 (24.2\%) | 5 (8.1\%) |
| Study skills in other classes | 23 (37.1\%) | 31 (50\%) | 6 (9.7\%) |
| Instructional Isolation | 24 (38.7\%) | 23 (37.1\%) | 13 (21\%) |
| Teacher Team | 34 (54.8\%) | 12 (19.4\%) | 15 (24.2\%) |
| Gender-specific classes | 57 (91.9\%) | 3 (4.8\%) | 1 (1.6\%) |
| Academic Isolation | 33 (58.1\%) | 11 (17.7\%) | 14 (22.6\%) |
| Semester Test Prep | 31 (50\%) | 13 (21\%) | 16 (25.8\%) |
| Counselor Meetings | 6 (9.7\%) | 31 (50\%) | 24 (38.7\%) |
| Orientation w/ Teachers | 1 (1.6\%) | 9 (14.5\%) | 51 (82.3\%) |
| Upperclassman Mentor | 43 (69.4\%) | 15 (42.4\%) | 3 (4.8\%) |
| Exposure to Expectations | 0 (0.00\%) | 1 (1.6\%) | 60 (96.8\%) |
| Behav. Ind. Reward | 21 (33.9\%) | 18 (29\%) | 22 (35.5\%) |
| Orientation w/ Admin | 1 (1.6\%) | 10 (16.1\%) | 49 (79\%) |
| Orientation w/ Breakout | 25 (40.3\%) | 18 (29\%) | 17 (27.4\%) |
| Adult Mentor | 28 (45.2\%) | 11 (17.7\%) | 20 (32.3\%) |
| Ind. Rewards Grades | 18 (29\%) | 15 (24.2\%) | 27 (43.5\%) |
| Group Reward Grade | 29 (46.8\%) | 14 (22.6\%) | 17 (27.4\%) |
| Group Reward Behavior | 30 (48.4\%) | 13 (21\%) | 17 (27.4\%) |
| Required Study Skills Class | 36 (58.1\%) | 11 (17.7\%) | 11 (17.7\%) |
| Pre-Test Test Prep | 24 (38.7\%) | 23 (37.1\%) | 13 (21\%) |

The data indicates the intervention with the highest level of implementation among participating schools in Exposure to High School Expectations (96.8\%), with the second largest group being Orientation with Teachers (82.3\%), and the third largest group being Orientation with Administration (79.0\%). The three least implemented interventions are Gender-specific classes (1.6\%), Upperclassman Mentor (4.8\%), and a Required Study skills class (17.7\%). The three interventions that most evenly spanned the spectrum of no, partial, and full implementation were Instructional Isolation (38.7\%, $37.1 \%, 21 \%$ ), Rewards for Individual Behavior (33.9\%, 29\%, 35.5\%), and Pre-test Test Preparation (38.7\%, 37.1\%, 21\%).

In reflection upon the frequencies, it is evident that while some interventions are being implemented consistently throughout the participating schools, there are many interventions that are in varying stages of implementation and the administrations of the schools would greatly benefit from information as to the efficacy of said interventions.

## Null Hypotheses

The researcher conducted data analyses to either confirm or discredit the following null hypotheses:

1. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of relational transition interventions.
2. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of relational transition interventions.
3. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of instructional transition interventions.
4. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of instructional transition interventions.
5. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of structural transition interventions.
6. There will be no significant differences in Ninth Grade Algebra I End of Course test scores of students who have experienced varying levels of structural transition interventions.
7. There will be no significant differences in scores on the Ninth Grade Literature and Composition End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
8. There will be no significant differences in scores on the Algebra I End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty
within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
9. There will be no relationship between Ninth Grade Literature and Composition End of Course Test scores of students who have experienced varying levels of freshman transition interventions.
10. There will be no relationship between Algebra I End of Course Test scores of students who have experienced varying levels of freshman transition interventions.

## Levene Test of Homogeneity of Variance

Prior to running the analysis of variance statistical tests, the researcher chose to conduct a Levene Homogeneity of Variance test in each of the test groupings listed below. The purpose of the Levene Homogeneity of Variance test is to ensure that the assumption of equal variance is valid. In order to assume that all groups are of equal variance, the significance level had to be above 0.05. After performing the Levene Test for Homogeneity of Variance, all groups were above the 0.05 , thus the ANOVA could be performed assuming homogeneity.

## Analysis of Variance (ANOVA)

A one-way Analysis of Variance test was chosen to examine the difference between groups with more than two independent variables. Analysis of variance looks for possible differences between the means of more than two groups. In order to best identify the types of interventions that are most significantly related to higher academic achievement, the researcher chose to analyze the relationship between the following items:
$>$ Relational/Communicative Interventions (as a group) and Spring Algebra I EOCT scores
> Relational/Communicative Interventions (as a group) and Spring Ninth Grade Literature and Composition EOCT scores
$>$ Instructional Interventions (as a group) and Spring Algebra I EOCT scores
$>$ Instructional Interventions (as a group) and Spring Ninth Grade Literature and Composition EOCT scores
> Structural Interventions (as a group) and Spring Algebra I EOCT scores
$>$ Structural Interventions (as a group) and Spring Ninth Grade Literature and Composition EOCT scores
$>$ Demographic (individually as listed below) and Spring Algebra I EOCT scores
$>$ Demographic (individually as listed below) and Spring Ninth Grade Literature and Composition EOCT scores

- Principal Experience
- School Location
- Minority
- Poverty

The researcher chose to run each of the aforementioned ANOVA analyses. The following tables demonstrate the findings from the ANOVA analyses:

Table 15: ANOVA Output of Relational/Communicative Interventions and EOCT scores

|  |  | ANOVA |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | Sum of Squares | df | Mean Square | F | Sig. |
|  | Within Groups | 9003.232 | 9 | 1000.359 | .292 | .974 |
|  | Total | 174690.104 | 51 | 3425.296 |  |  |


| Spring_Math | Between Groups | 23011.548 | 9 | 2556.839 | .393 | .933 |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | Within Groups | 331703.124 | 51 | 6503.983 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

Table 16: ANOVA output of Instructional Interventions and Spring EOCT scores
ANOVA

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 13794.571 | 9 | 1532.730 | .460 | .894 |
|  | Within Groups | 169898.765 | 51 | 3331.348 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 22923.334 | 9 | 2547.037 | .392 | .934 |
|  | Within Groups | 331791.338 | 51 | 6505.713 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

Table 17: ANOVA output of Structural Interventions and Spring EOCT scores

| ANOVA |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| Spring_English | Between Groups | 20961.524 | 17 | 1233.031 | .326 | .993 |
|  | Within Groups | 162731.812 | 43 | 3784.461 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 36574.007 | 17 | 2151.412 | .291 | .996 |
|  | Within Groups | 318140.665 | 43 | 7398.620 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

Table 18: ANOVA output of Principal Experience and Spring EOCT scores

|  |  | ANOVA |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Setween Groups | 4010.219 | 4 | 1002.555 | .312 | .868 |
|  | Within Groups | 179683.117 | 56 | 3208.627 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 6566.771 | 4 | 1641.693 | .264 | .900 |
|  | Within Groups | 348147.901 | 56 | 6216.927 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

Table 19: ANOVA output of School Location and Spring EOCT scores

ANOVA

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 2312.035 | 2 | 1156.018 | .370 | .693 |
|  | Within Groups | 181381.301 | 58 | 3127.264 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 3882.761 | 2 | 1941.381 | .321 | .727 |
|  | Within Groups | 350831.911 | 58 | 6048.826 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

Table 20: ANOVA output of Percent of Minority Children and Spring EOCT scores

|  |  | ANOVA |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 7239.349 | 3 | 2413.116 | .780 | .510 |
|  | Within Groups | 176453.988 | 57 | 3095.684 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 11148.228 | 3 | 3716.076 | .617 | .607 |
|  | Within Groups | 343566.444 | 57 | 6027.481 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

Table 21: ANOVA output of Percent of Children in Poverty and Spring EOCT scores

ANOVA

|  |  | Sum of <br> Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring English | Between Groups | 2429.651 | 3 | 809.884 | .255 | .858 |
|  | Within Groups | 181263.686 | 57 | 3180.065 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring Math | Between Groups | 10290.089 | 3 | 3430.030 | .568 | .639 |
|  | Within Groups | 344424.583 | 57 | 6042.537 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

Based upon the ANOVA analysis, there is no statistical significance to any existing relationship within any of the domains and EOCT scores. There is also no
statistical significance to any existing relationship within any demographic indicator and EOCT scores. Based upon the ANOVA findings, it is necessary for the researcher to accept all null hypotheses.

## Correlative Study

In addition to the domain-focused ANOVA analysis, the researcher chose to also run correlative analyses between each specific freshman transition intervention and the Spring EOCT scores. The purpose behind this dual-faceted analyses was two-fold: first of all, the researcher felt that should results concur, the findings would be that much stronger; secondly, the researcher felt it was important to examine interventions both as similar groups (domains) and as individual interventions.

The following tables represent the output from the correlative analyses:
Table 22: Correlative output of Counselor Meetings and Spring English EOCT scores

|  |  | Counselor <br> Meetings | Spring_English |
| :--- | :--- | ---: | ---: |
| Counselor Meetings | Pearson Correlation | 1 | .239 |
|  | Sig. (2-tailed) | .064 |  |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .239 | 1 |
|  | Sig. (2-tailed) | .064 |  |
|  | N | 61 | 61 |

Table 23: Correlative output of Counselor Meetings and Spring Math EOCT scores

|  |  | Counselor <br> Meetings | Spring_Math |
| :--- | :--- | ---: | ---: |
| Counselor Meetings | Pearson Correlation | 1 | .244 |
|  | Sig. (2-tailed) |  | .058 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | .244 | 1 |
|  | Sig. (2-tailed) | .058 |  |


|  |  | Counselor <br> Meetings | Spring_English |
| :--- | :--- | ---: | ---: |
| Counselor Meetings | Pearson Correlation | 1 | .239 |
|  | Sig. (2-tailed) |  | .064 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .239 | 1 |
|  | Sig. (2-tailed) | .064 |  |
|  | N | 61 |  |

Table 24: Correlative output of Orientation with Teachers and Spring English EOCT scores

|  |  | Spring_English | Orientation w/ Teachers |
| :--- | :--- | ---: | ---: |
| Spring_English | Pearson Correlation | 1 | -.090 |
|  | Sig. (2-tailed) |  | .490 |
|  | N | 61 | 61 |
| Orientation w/ Teachers | Pearson Correlation | -.090 | 1 |
|  | Sig. (2-tailed) | .490 |  |
|  | N | 61 | 61 |

Table 25: Correlative output of Orientation with Teacher and Spring Math EOCT scores

|  |  | Orientation w/ <br> Teachers | Spring_Math |
| :--- | :--- | ---: | ---: |

Table 26: Correlative output of Orientation with Administration and Spring English EOCT scores

|  | Orientation w/ <br> Admin | Spring_English |
| :--- | ---: | ---: |
| Orientation w/ Admin _ Pearson Correlation |  | 1 |


|  | Sig. (2-tailed) |  |
| :--- | ---: | ---: |
|  | N | .481 |
| Spring_English | Pearson Correlation | 61 |

Table 27: Correlative output of Orientation with Administration and Spring Math EOCT scores

|  |  | Orientation w/ <br> Admin | Spring_Math |
| :--- | :--- | ---: | ---: |
| Orientation w/ Admin | Pearson Correlation | 1 | -.056 |
|  | Sig. (2-tailed) |  | .669 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.056 | 1 |
|  | Sig. (2-tailed) | .669 |  |
|  | N | 61 | 61 |

Table 28: Correlative output of Orientation with Breakout Groups and Spring English EOCT scores

|  |  | Orientation w/ <br> Breakout <br> Groups |  |
| :--- | :--- | ---: | ---: |
| Srientation w/ Breakout | Pearson Correlation | 1 | -.153 |
| Groups | Sig. (2-tailed) |  | .238 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.153 | 1 |
|  | Sig. (2-tailed) | .238 |  |
|  | N | 61 | 61 |

Table 29: Correlative output of Orientation with Breakout Groups and Spring Math EOCT scores


| Orientation w/ Breakout | Pearson Correlation | 1 | -.175 |
| :--- | :--- | ---: | ---: |
| Groups | Sig. (2-tailed) |  | .177 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.175 | 1 |
|  | Sig. (2-tailed) | .177 |  |
|  | N | 61 | 61 |

Table 30: Correlative output of Adult Mentor and Spring English EOCT scores

|  |  | Adult Mentor | Spring_English |
| :--- | :--- | ---: | ---: |
| Adult Mentor | Pearson Correlation | 1 | -.174 |
|  | Sig. (2-tailed) |  | .180 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.174 | 1 |
|  | Sig. (2-tailed) | .180 |  |
|  | N | 61 | 61 |

Table 31: Correlative output of Adult Mentor and Spring Math EOCT scores

|  |  | Adult Mentor | Spring_Math |
| :--- | :--- | ---: | ---: |
| Adult Mentor | Pearson Correlation | 1 | -.173 |
|  | Sig. (2-tailed) |  | .182 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.173 | 1 |
|  | Sig. (2-tailed) | .182 |  |
|  | N | 61 | 61 |

Table 32: Correlative output of Upperclassman Mentor and Spring English EOCT scores

|  |  | Upperclassman <br> Mentor | Spring_English |
| :--- | :--- | ---: | ---: |$|$| Upperclassman Mentor | Pearson Correlation | 1 |
| ---: | ---: | ---: |


|  |  | Upperclassman <br> Mentor |  |
| :--- | :--- | ---: | ---: |
| Spring_English |  |  |  |$|$| Spperclassman Mentor | Pearson Correlation |
| ---: | :--- |
|  | Sig. (2-tailed) |
|  | N |

Table 33: Correlative output of Upperclassman Mentor and Spring Math EOCT scores

|  |  | Upperclassman Mentor | Spring_Math |
| :---: | :---: | :---: | :---: |
| Upperclassman Mentor | Pearson Correlation | 1 | . 109 |
|  | Sig. (2-tailed) |  | . 402 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | . 109 | 1 |
|  | Sig. (2-tailed) | . 402 |  |
|  | N | 61 | 61 |

Table 34: Correlative output of Exposure to Expectations and Spring English EOCT scores

|  |  | Exposure to <br> Expectations |  |
| :--- | :--- | ---: | ---: |
| Exposure to Expectations | Pearson Correlation | 1 | -.018 |
|  | Sig. (2-tailed) |  | .893 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.018 | 1 |
|  | Sig. (2-tailed) | .893 |  |
|  | N | 61 | 61 |

Table 35: Correlative output of Exposure to Expectations and Spring Math EOCT scores

|  | Exposure to <br> Expectations | Spring_Math |
| :--- | :---: | :--- |


| Exposure to Expectations | Pearson Correlation | 1 | -.017 |
| :--- | :--- | ---: | ---: |
|  | Sig. (2-tailed) | .899 |  |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.017 | 1 |
|  | Sig. (2-tailed) | .899 |  |
|  |  |  | 61 |

Table 36: Correlative output of Individual Behavior Rewards and Spring English EOCT scores

|  |  | Behavior <br> Individual <br> rewards | Spring_English |
| :--- | :--- | ---: | ---: |$|$|  |  |
| ---: | :--- |
| Behavior Individual rewards | Pearson Correlation |
|  | Sig. (2-tailed) |

Table 37: Correlative output of Individual Behavior Rewards and Spring Math EOCT scores

|  |  | Behavior <br> Individual <br> rewards |  |
| :--- | :--- | ---: | ---: |
| Behavior Individual rewards | Spring_Math |  |  |
|  | Sig. (2-tailed) | 1 | .141 |
|  | N |  | .278 |
|  | Pearson Correlation Correlation | 61 | 61 |
| Spring_Math | .141 | 1 |  |
|  | Sig. (2-tailed) | .278 |  |
|  | N | 61 | 61 |

Table 38: Correlative output of Individual Grade Rewards and Spring English EOCT scores

|  |  | Grade individual <br> rewards | Spring_English |
| :--- | :--- | ---: | ---: |
| Grade individual rewards | Pearson Correlation | 1 | .162 |
|  | Sig. (2-tailed) |  | .212 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .162 | 1 |
|  | Sig. (2-tailed) | .212 |  |
|  | N | 61 | 61 |

Table 39: Correlative output of Counselor Meetings and Spring Math EOCT scores

|  |  | Grade individual <br> rewards | Spring_Math |
| :--- | :--- | ---: | ---: |
| Grade individual rewards | Pearson Correlation | 1 | .146 |
|  | Sig. (2-tailed) |  | .262 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | .146 | 1 |
|  | Sig. (2-tailed) | .262 |  |
|  | N | 61 | 61 |

Table 40: Correlative output of Group Grade Rewards and Spring English EOCT scores

|  |  | Grade group <br> rewards | Spring_English |
| :--- | :--- | ---: | ---: |
| Grade group rewards | Pearson Correlation | 1 | .122 |
|  | Sig. (2-tailed) |  | .347 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .122 | 1 |
|  | Sig. (2-tailed) | .347 |  |
|  | N | 61 | 61 |

Table 41: Correlative output of Group Grade Rewards and Spring Math EOCT scores

|  |  | Grade group <br> rewards | Spring_Math |
| :--- | :--- | ---: | ---: |
| Grade group rewards | Pearson Correlation | 1 | .101 |
|  | Sig. (2-tailed) |  | .438 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | .101 | 1 |
|  | Sig. (2-tailed) | .438 |  |
|  | N | 61 | 61 |

Table 42: Correlative output of Required Study Skills Class and Spring English EOCT scores

|  |  | Required Study <br> Skills Class |  |
| :--- | :--- | ---: | ---: |
| Required Study Skills Class | Pearson Correlation | 1 | .051 |
|  | Sig. (2-tailed) |  | .698 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .051 | 1 |
|  | Sig. (2-tailed) | .698 |  |
|  | N | 61 | 61 |

Table 43: Correlative output of Required Study Skills Class and Spring Math EOCT scores

|  |  | Required Study <br> Skills Class |  |
| :--- | :--- | ---: | ---: |
| Required Study Skills Class | Spring_Math |  |  |$|$|  |  |
| ---: | :--- |
|  | Sig. (2-tailed) |

Table 44: Correlative output of Optional Study Skills Class and Spring English EOCT scores

|  |  | Optional Study <br> Skills Class |  |
| :--- | :--- | ---: | ---: |
| Spring_English |  |  |  |$|$| Spal Study Skills Class | Pearson Correlation |
| ---: | :--- |
|  | Sig. (2-tailed) |

Table 45: Correlative output of Optional Study Skills Class and Spring Math EOCT scores

|  |  | Optional Study <br> Skills Class |  |
| :--- | :--- | ---: | ---: |
| Optional Study Skills Class | Pearson Correlation | 1 | .104 |
|  | Sig. (2-tailed) |  | .426 |
|  | N |  | 61 |
| Spring_Math | Pearson Correlation | .104 | 61 |
|  | Sig. (2-tailed) | .426 | 1 |
|  | N | 61 |  |

Table 46: Correlative output of Study Skills in other Classes and Spring English EOCT scores

|  |  | Study-skills in <br> other class | Spring_English |
| :--- | :--- | ---: | ---: |
| Study-skills in other class | Pearson Correlation | 1 | .121 |
|  | Sig. (2-tailed) |  | .351 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .121 | 1 |
|  | Sig. (2-tailed) | .351 |  |

Table 47: Correlative output of Study Skills in other Classes and Spring Math EOCT scores

|  |  | Study-skills in <br> other class |  |
| :--- | :--- | ---: | ---: |
| Study-skills in other class | Pearson Correlation_Math | 1 | .131 |
|  | Sig. (2-tailed) |  | .314 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | .131 | 1 |
|  | Sig. (2-tailed) | .314 |  |
|  | N | 61 | 61 |

Table 48: Correlative output of Instructional Isolation and Spring English EOCT scores

|  |  | Instructional <br> Isolation | Spring_English |
| :--- | :--- | ---: | ---: |
| Instructional Isolation | Pearson Correlation | 1 | .056 |
|  | Sig. (2-tailed) |  | .673 |
|  | N | 60 | 60 |
| Spring_English | Pearson Correlation | .056 | 1 |
|  | Sig. (2-tailed) | .673 |  |
|  | N | 60 | 61 |

Table 49: Correlative output of Instructional Isolation and Spring Math EOCT scores

|  |  | Instructional <br> Isolation | Spring_Math |
| :--- | :--- | ---: | ---: |
| Instructional Isolation | Pearson Correlation | 1 | .081 |
|  | Sig. (2-tailed) |  | .539 |
|  | N | 60 | 60 |
| Spring_Math | Pearson Correlation | .081 | 1 |
|  | Sig. (2-tailed) | .539 |  |
|  | N | 60 | 61 |

Table 50: Correlative output of Academic Course Isolation and Spring English EOCT scores

|  |  | Academic <br> Course Isolation |  |
| :--- | :--- | ---: | ---: |
| Spring_English |  |  |  |
| Academic Course Isolation | Pearson Correlation | 1 | .092 |
|  | Sig. (2-tailed) |  | .491 |
|  | N | 58 | 58 |
| Spring_English | Pearson Correlation | .092 | 1 |
|  | Sig. (2-tailed) | .491 |  |
|  | N | 58 | 61 |

Table 51: Correlative output of Academic Course Isolation and Spring Math EOCT scores

|  |  |  |  |
| :--- | :--- | ---: | ---: |
|  |  | Academic <br> Course Isolation | Spring_Math |
| Academic Course Isolation | Pearson Correlation | 1 | .088 |
|  | Sig. (2-tailed) |  | .511 |
|  | N | 58 | 58 |
| Spring_Math | Pearson Correlation | .088 | 1 |
|  | Sig. (2-tailed) | .511 |  |
|  | N | 58 | 61 |

Table 52: Correlative output of Semester Test Prep and Spring English EOCT scores

|  |  | Semester Test <br> Prep |  |
| :--- | :--- | ---: | ---: |
| Semester Test Prep | Pearson Correlation | 1 | -.186 |
|  | Sig. (2-tailed) |  | .152 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.186 | 1 |
|  | Sig. (2-tailed) | .152 |  |
|  | N | 61 | 61 |

Table 53: Correlative output of Semester Test Prep and Spring Math EOCT scores

|  |  | Semester Test <br> Prep |  |
| :--- | :--- | ---: | ---: |
| Semester Test Prep | Pearson Correlation | 1 | -.185 |
|  | Sig. (2-tailed) |  | .154 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.185 | 1 |
|  | Sig. (2-tailed) | .154 |  |
|  | N | 61 | 61 |

Table 54: Correlative output of Pre-Test Test Prep and Spring English EOCT scores

|  |  | Pre-test Test <br> Prep |  |
| :--- | :--- | ---: | ---: |
| Pre-test Test Prep | Pearson Correlation |  | 1 |

Table 55: Correlative output of Pre-Test Test Prep and Spring Math EOCT scores

|  |  | Pre-test Test <br> Prep | Spring_Math |
| :--- | :--- | ---: | ---: |
| Pre-test Test Prep | Pearson Correlation | 1 | -.190 |
|  | Sig. (2-tailed) |  | .143 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.190 | 1 |
|  | Sig. (2-tailed) | .143 |  |
|  | N | 61 | 61 |

Table 56: Correlative output of Teacher Teams and Spring English EOCT scores

|  |  | Teacher Team | Spring_English |
| :--- | :--- | ---: | ---: |
| Teacher Team | Pearson Correlation | 1 | .100 |
|  | Sig. (2-tailed) |  | .444 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .100 | 1 |



Table 57: Correlative output of Teacher Teams and Spring Math EOCT scores

|  |  | Teacher Team | Spring_Math |
| :--- | :--- | ---: | ---: |
| Teacher Team | Pearson Correlation | 1 | .140 |
|  | Sig. (2-tailed) |  | .281 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | .140 | 1 |
|  | Sig. (2-tailed) | .281 |  |
|  | N | 61 | 61 |

Table 58: Correlative output of Gender-specific classes and Spring English EOCT scores

|  |  | Gender- specific <br> classes | Spring_English |
| :--- | :--- | ---: | ---: |
| Gender- specific classes | Pearson Correlation | 1 | .016 |
|  | Sig. (2-tailed) |  | .902 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .016 | 1 |
|  | Sig. (2-tailed) | .902 |  |
|  | N | 61 | 61 |

Table 59: Correlative output of Gender-specific classes and Spring Math EOCT scores

|  |  | Gender- specific <br> classes |  |
| :--- | :--- | ---: | ---: |
| Gender-specific classes | Pearson Correlation | 1 | .022 |
|  | Sig. (2-tailed) |  | .866 |
|  | N |  | 61 |
| Spring_Math | Pearson Correlation | .022 | 61 |
|  | Sig. (2-tailed) | .866 | 1 |
|  | N | 61 |  |
|  |  |  | 61 |

After correlating each of the twenty specific freshman transition interventions with both Spring English and Spring Math EOCT scores, the researcher found that no significant relationship existed between any of the specific interventions and the End of Course Test scores, thus reflecting similar results as the Analysis of Variance. In both cases, the researcher had to accept all null hypotheses.

## Summary of Results

The primary tool used within this research study was a two-part researcherdeveloped survey instrument. The first section of the survey listed twenty specific interventions (that were later grouped into three domains), while the second section included several demographic questions. The researcher first conducted a Levene Test of of Homogeneity of Variance to ensure that all groups could be considered equal for the purposes of an ANOVA. Upon establishing the homogeneity of groupings, the researcher conducted several inferential statistical tests, including ANOVA and Correlative study among all survey items.

The ANOVA testing found no significant relationship among any of the intervention domains and/or demographics in relation to Spring End of Course Test scores. Similar, the correlative study revealed concurring results, with no significant relationship existing between specific freshman transition interventions and Spring End of Course Test scores. The researcher accepted all null hypotheses.

## Chapter Five: Summary and Conclusion

The purpose of this chapter is to present a summary of both the study and its conclusions. These conclusions include whether or not relationships were found between specific freshman transition interventions and ninth grade EOCT scores. Through this research, the data advance the body of knowledge concerning the best courses of actions in regards to ninth grade transition programming. These findings are of particular importance in today's educational system, both as a means to improving test scores and decreasing drop out rates, as well as decreasing excessive spending in areas that do not significantly improve student achievement. This chapter reviews the rationale and purpose of this study, the research findings, and discussion of the results of the study. This chapter concludes with both recommendations for action and for further study.

A review of the literature revealed that the middle to high school transition is negatively affecting students, resulting in increased ninth grade retentions, decreased student motivation, decreased test scores, and eventual increased dropout rates (Akos, 2004, Alspaugh, 1998a, Caskey, 2006). The transition from middle school to high school causes great student stress and academic loss (Alspaugh, 1998a, Caskey, 2006). Ninth graders experience more retentions, dropouts, and academic failures than all other grade levels (Alspaugh, 1998a; Alspaugh 1998b; Smith, 1997). The majority of students are not prepared for the freedom and responsibility that comes from transitioning into high school (Akos, 2004). In fact, British researchers estimate "ten percent of students suffered serious problems after the transition to secondary school" (Akos, 2004, 213). In the day of accountability and standardized testing, this great academic failure and increase in dropouts cannot continue. Currently, educational leaders are attempting
implementation of many possible solutions, trying to identify what will best help ninth graders acclimate to the high school environment and succeed. It is reasonable to believe that by implementing various research-based interventions, ninth grade academic achievement will benefit.

## Purpose

The goal of this research was to identify whether or not a difference existed in End of Course Test scores as a result of various levels of freshman transition intervention implementation. This research also sought to examine whether or not a relationship existed between the implementation of freshman transition interventions and ninth grade End of Course test scores. This information could help high school administrators best identify which interventions and/or practices are most effective in helping students transition effectively.

Understanding the areas of need for freshman in the transition from the middle school to the high school can best help administrators, teachers, and counselors in identifying the areas of need for students prior to an academic, behavioral, or emotional struggle commences.

## Participants

From inviting all Georgia school districts to participate, the researcher received permission from fifty-four school district superintendents to have their high school principals participate in the study. All high school principals were contacted from these fifty-four districts ( $\mathrm{n}=79$ ), and sixty-two of these high school principals responded with a completed survey. The researcher aimed to garner full participation from high school principals throughout the state of Georgia; however, many superintendents stated district
policies allowing only researchers inside the district to conduct studies. Similarly, several of the larger school districts in Georgia require a long application/approval process before any district contacts can be made, thereby complicating the researcher's contact attempts.

## Methods

This was a quantitative design study utilizing a researcher-developed survey. The survey (see Appendix F) was developed based upon twenty research-supported freshman transition interventions.

The survey questions fell into one of three overarching domains:
$>$ Relational/Communicative
> Instructional
$>$ Structure/Programming
In addition to transition implementation questions, principals were asked for demographic data. Letters were sent to every superintendent within the state of Georgia, requesting district permission for high school participation. All participating high school principals were then contacted electronically with a cover letter and a link to the online survey. The primary reasons stated by superintendents not allowing district permission to participate included rules barring any outside researchers and time constraints on principals during spring semester.

Mailings included the initial superintendent contact (consisting of a cover letter, a copy of the principal cover letter and a copy of the survey), electronic high school principal contact, and a follow-up email to each superintendent and principal who had not completed the survey in the requested time offering an extension if necessary. In total,
permission was secured for 72 high schools to participate; 62 completed surveys ( $78.4 \%$ ) were received. This return rate far exceeds Dillman's (2000) essential return rate of $62.2 \%$ indicating the results may be used for credible generalizations. It also indicates that principals are interested in discovering and implementing the most effective transition interventions for their incoming ninth graders.

For statistical analysis, the raw data was collected and input into a Microsoft Excel spreadsheet format for disaggregation of each transition statement. The Excel data was exported into SPSS Grad Pack version 18 for statistical analysis. Analysis of Variance (ANOVA) was utilized to analyze any variance in the means of the responses of principals based upon domains of implementation and End of Course Test scores. Post hoc analysis was run to identify if any groups' means were statistically significant. The researcher also ran correlative studies between each intervention transition and End of Course test scores.

## Research Questions

This research study surveyed high school principals in the state of Georgia. The study was based on the belief that the implementation of freshman transition interventions may likely serve relationally to the academic achievement of respective schools. Principals were asked to identify which specific freshman transition interventions were implemented in the 2008-2009 school year. Each freshman intervention was supported by the literature review. Based upon the review of literature and expert opinion, each intervention was then grouped into three overarching domains (relational, structural and instructional) to identify which area is most effective for
improving ninth grade academic achievement. The study asked the following research questions:

This study was designed to answer the following research questions:
$\mathrm{RQ}_{1}$ : Is there a significant difference in End of Course Test scores as a result of various levels of transition intervention implementation?

Null Hypotheses as related to Research Question One:
19. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of relational transition interventions.
20. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of relational transition interventions.
21. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of instructional transition interventions.
22. There will be no significant differences in Algebra I End of Course test scores of students who have experienced varying levels of instructional transition interventions.
23. There will be no significant differences in Ninth Grade Literature and Composition End of Course test scores of students who have experienced varying levels of structural transition interventions.
24. There will be no significant differences in Ninth Grade Algebra I End of Course test scores of students who have experienced varying levels of structural transition interventions.
$\mathrm{RQ}_{2}: \quad$ Is there a significant difference in End of Course Test scores as a result of various demographic indicators?

Null Hypotheses as related to Research Question Two:

1. There will be no significant differences in scores on the Ninth Grade Literature and Composition End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
2.: There will be no significant differences in scores on the Algebra I End of Course test related to differences in experience level of the principal, the percentage of minority children, the percentage of children with disabilities, the percentage of children with limited English proficiency, the percentage of children in poverty within the ninth grade population, the school's current Title 1 status, and the school's current AYP accreditation.
$\mathrm{RQ}_{3}$ : Is there a relationship between scores on the Ninth Grade End of Course Tests and specific freshman transition interventions?

Null Hypotheses related to Research Question Three:
7. There will be no relationship between Ninth Grade Literature and Composition End of Course Test scores of students who have experienced varying levels of freshman transition interventions.
8. There will be no relationship between Algebra I End of Course Test scores of students who have experienced varying levels of freshman transition interventions.

## Findings

The researcher found no significant relationship between any of the freshman transition interventions and Spring End of Course Test scores. The researcher found no differences when interventions were viewed in domains or as individual interventions. It is important to note that the Test of Homogeneity of Variance did reveal homogeneity among all groups involved within testing.

## Discussion

The implementation of freshman transition interventions, either individually or as part of a comprehensive ninth grade improvement plan, is purposed to aid students academically, behaviorally, and/or emotionally as they transition to the high school. While schools have a large body of literature to support the need for implementing interventions, a comprehensive review of the literature revealed very little information in terms of the effectiveness of such measures. It was interesting to note that the majority of interventions found within literature appeared to be much more practioner-based, rather than research-based. While practioner experience is certainly a valid foundation upon which to develop a program, it is surprising that such resources and time have been invested in interventions that have experienced little research reflection.

It is apparent that schools are choosing which interventions to implement, either based on which interventions are most cost-effective, the most probable to implement, or based upon experiences of similar schools in the area. As administrators reflect upon their respective schools, particularly in light of Georgia's current budget crisis, one cannot help but question the efficacy of such measures. The results of this study highlighted a very important concept in the educational system's method of improvement. Many interventions, programs, and practices are implemented without a strong method of checks and balances. Without a strong protocol for research-plan-implement-reflect, schools find themselves subject to "the flavor of the month," constantly changing programming without any clear focus on what is best for student achievement.

While it is possible that the majority of this study's findings seem to discredit the use of freshman transition interventions, it is important to recognize that many variables affect student achievement other than transition interventions. Frequently, teachers with the least experience and lowest level of degree find themselves at the mercy of larger, lower level classes, while teachers with the most experience and knowledge teach the coveted honors and Advanced Placement classes. Throughout research, it is evident that the ninth grade students are need of the most personal attention, as well as the most knowledge teachers, both in terms of subject matter and educational pedagogy.

Additionally, the researcher must recognize that the limited involvement of large, urban school systems within Georgia could have a possible effect on the study's outcome. Frequency distributions of demographic indicators illustrate a sampling of the great majority of Georgia's school systems; however, as an educator it is important to
recognize the needs of students from lower performing schools and/or lower performing students can be quite different than those in the remainder of the state. It would be very interesting to have the opportunity to conduct this same research in areas where the majority of schools are not meeting state standards. While it was the researcher's desire and intent to include all public high schools within the state of Georgia, a great deal of difficulty was confronted in trying to involve the larger, urban districts. While some had extensive application for research processes (which the researcher completed), the majority were very unwilling to even discuss participation in outside research.

Regardless of intent, it is paramount to recognize that this omission of the category could have affected the outcomes.

## Implications for Practice

While this study first reveals the great need for further study in the efficacy of freshman transition interventions, it also introduces the idea that perhaps too much time, money, and effort is being expended in the area, when no significant academic gains are being reached. This researcher supports further study into the ninth grade failure phenomenon. The current body of literature is saturated with information supporting that ninth grade is a time of great academic struggle for students; it is lacking in researchsupported and study-tested interventions, supports, or actions that are best suited to help new high school students to succeed.

This study, while publishing that results were not statistically significant, reveals an issue of great significance within the educational realm. The body of literature is saturated with information concerning the great academic, behavioral, and motivational issues of students within the middle school to high school transition, reflecting academic
losses and issues for years to come (Alpaugh, 1998, Akos, 2004, Caskey, 2006); however, with all of the practioner-based suggestions for improvement, there is minimal at best reflective studies on the outcomes of such interventions. Educators and researchers alike must push forward to becoming more reflective upon the practices and interventions implemented, rather than continuing to initiate change without assessing the efficacy of prior measures.

## Recommendations for further research

The findings of this study suggest the following recommendations be considered for further study:

1. Does the implementation of specific freshman transition interventions increase student academic achievement (examine change over time)?
2. Does a relationship exist between freshman transition interventions and End of Course test scores among urban schools within the state of Georgia?
3. Is there a discrepancy among teacher practices and/or experience within the ninth grade in comparison to the rest of the high school?
4. What variables contribute to a high school student's experience within the middle school to high school transition?
5. What effect and/or relationship did the creation of the middle school concept have on high school achievement?
6. Would a focus on lower performing schools yield different results than the current study?
7. What findings results from a qualitative phenomenological study of students of varying academic levels throughout transition from middle to high school?

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## Appendices

## Appendix A: Ninth Grade Interventions

## Ninth Grade Interventions

$>$ Ninth grade students met with the counselor or an advisor at least monthly to discuss attendance, grades, and school concerns.

Ninth grade students participated in an orientation session which included an introduction to ninth grade teachers.
$>$ Ninth grade students participated in an orientation session which included an introduction to all high school administrators

Ninth grade students participated in an orientation session in which breakout groups allowed for upcoming ninth graders to discuss concerns with ninth grade faculty

Ninth grade students were assigned an adult mentor prior to the beginning of the school year
> Ninth grade students were assigned an upperclassman student mentor prior to the beginning of the school year.
$>$ Ninth grade students were exposed to high school rules and procedures within the first week of school.

Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.)
$>$ Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.)
$>$ Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards) for good grades at the end of a defined time period (grading period, semester, etc.)

Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good grades at the end of a defined time period (grading period, semester, etc.)
$>$ Ninth grade students were required to take a semester (or more) length class specifically focused on study skills.
$>$ Ninth grade students had the option of taking a semester (or more) length class specifically focused on study skills.
$>$ Ninth grade students were exposed to a study-skills curriculum that was built into another class.
$>$ Ninth grade students are isolated from the general high school population during instructional hours.

Ninth grade students are isolated from the general high school population for core academic courses only.
> Ninth grade students participate in mandatory, semester-long test preparation in prior to taking their End of Course Tests
$>$ Ninth grade students participate in mandatory test preparation as an intensive pretest session prior to taking their End of Course Tests
$>$ Ninth grade students are assigned to a team in which the four core academic teachers share all students on the team.
$>$ Ninth grade students are exposed to gender- specific classes in at least one of the four core academic areas.

Appendix B: Cover Letter for Pilot Test

# Cover Letter for Pilot Survey 

314 Mill Run Drive
Bremen, Georgia 30110
January 7, 2010
Dear Administrator,
As a doctoral student at Liberty University, I am conducting a research study entitled, "Do Specific Freshman Transition Interventions Impact Academic Achievement of Ninth Graders." In order to establish validity for the survey which will be used in the study, it is necessary that the questionnaire be subjected to pilot testing.

Your help is needed in providing information concerning this survey. Please take a few moments to review this questionnaire and provide any critical feedback. Please read the survey for clarity and understanding, and make any changes directly to the survey which you feel will improve this survey. Please return the edited survey in the self-addressed stamped envelope by Thursday, January 14 or as soon as possible.

I sincerely appreciate your participation in this survey review. Please do not hesitate to contact me at (770) 314-1747 or esbrown3@liberty.edu should you have any questions.

Sincerely,

Emily Spake Brown<br>Doctoral Candidate<br>Liberty University

## Appendix C: Domain Evaluation

## Domain Evaluation

The following statements are used within the principal survey to inquire as to which specific transition interventions are used with their respective ninth grade students. In order to validate the questions in this study, please sort each statement into one of the domains listed below. Please choose only one domain and write the corresponding letter in the box to the left of each question.
$>$ Ninth grade students were required to take a semester (or more) length class specifically focused on study skills.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students were exposed to high school rules and procedures within the first week of school.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students were exposed to a study-skills curriculum that was built into another class.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
> Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.)
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards) for good grades at the end of a defined time period (grading period, semester, etc.)
a) Relationship/Communication
b) Instructional:
c) Structure/Design

$>$ Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.)
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good grades at the end of a defined time period (grading period, semester, etc.)
a) Relationship/Communication
b) Instructional:
c) Structure/Design:

$>$ Ninth grade students were assigned an upperclassman student mentor prior to the beginning of the school year.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students were assigned an adult mentor prior to the beginning of the school year
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
> Ninth grade students participated in an orientation session which included an introduction to ninth grade teachers.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students participated in an orientation session which included an introduction to all high school administrators
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students participated in an orientation session in which breakout groups allowed for upcoming ninth graders to discuss concerns with ninth grade faculty
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students participate in mandatory, semester-long test preparation in prior to taking their End of Course Tests
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students participate in mandatory test preparation as an intensive pre-test session prior to taking their End of Course Tests
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students met with the counselor or an advisor at least monthly to discuss attendance, grades, and school concerns.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students had the option of taking a semester (or more) length class specifically focused on study skills.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students are isolated from the general high school population during instructional hours.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students are isolated from the general high school population for core academic courses only.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students are exposed to gender- specific classes in at least one of the four core academic areas.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:
$>$ Ninth grade students are assigned to a team in which the four core academic teachers share all students on the team.
a) Relationship/Communication
b) Instructional:
c) Structure/Design:

Appendix D: Letter of Permission to Georgia Superintendents

## Letter of Permission to Georgia Superintendents

314 Mill Run Drive
Bremen, Georgia 30110
January 16, 2010
Dear Superintendent:
I am requesting your support of a doctoral dissertation study I am conducting with Liberty University. The study will be correlating specific ninth grade transition interventions to End of Course Test scores and retention rates. As this survey is intended to include information representative of Georgia High Schools, it is necessary that information pertaining to all high schools be included in the final analyses of information. For this reason, I would like to ask that your school system be one of the school systems in Georgia to participate in this study.

Principals will be asked to complete a questionnaire regarding the types of ninth grade transition interventions used during the 2008-2009 school year. The questionnaire also consists of a section where principals are asked to provide limited personal and demographic information. Upon receiving permission for principals in your district to participate, principals will be contacted electronically with a cover letter and a link directing them to the brief survey. A sample copy of the survey and the principal cover letter are enclosed for your review.

Confidentiality will be maintained at all times throughout this process. All participants will remain anonymous throughout the duration of the study. Questions specific to background and experience are for assessment purposes only. The questionnaire survey will take less than ten minutes to complete. The results of this study will be made available to you upon request.

Please complete the following information at the bottom of this letter and return this letter in the self-addressed stamped envelope by Monday, February 1st. I sincerely appreciate your support of this request. If you have any questions, please contact me directly at (770) 314-1747 or esbrown3@ liberty.edu.

Sincerely,

Emily Spake Brown
Doctoral Candidate
Liberty University
I give permission for the principals within my school system to participate in this study.
School System:
Superintendent's Signature:
Date:

## Appendix E: Cover Letter for Principal Survey

# Cover Letter for Principal Survey 

314 Mill Run Drive
Bremen, Georgia 30110
January 16, 2010

## Dear Principal:

Enclosed you will find a survey link which will be used to determine the ninth grade transition interventions used within your school during the 2008-2009 school year. Your assistance is needed in providing information concerning the effect of ninth grade transition interventions on student academic achievement. I believe this research will provide information for future studies in educational leadership.

Participation in this survey is voluntary. In consideration of your busy schedules, completion of this study should take no more than 5-10 minutes. As this survey is intended to include information from Georgia high schools, your participation is essential and greatly appreciated. Permission has been obtained from your superintendent for district principals to participate. The survey can be accessed from the following link: www.surveymonkey.com/s/emilysbrown.

Results are anonymous and will not be connected to school names. Questions specific to background and experience are for assessment purposes only. Completion and submission of this survey will constitute consent to participate. There are no known risks to participation. Aggregated results may be provided to your school system.

Please complete the survey via the enclosed link no later than February 15, 2010. If you have any questions, contact me directly at (770) 314-1747 or esbrown3@ liberty.edu. Thank you for your participation in this survey. Your participation is greatly appreciated.

Sincerely,
Emily Spake Brown
Doctoral Candidate
Liberty University

Appendix F: Survey to Principals

## Survey to Principals

Principals will be directed to access the survey at: www.surveymonkey.com/s/emilysbrown

In the 2008-2009 school year, answer the following questions in regards to your ninth grade students based upon the following scale:

1- no implementation
2- partial implementation
3- full implementation
I. Ninth grade students met with the counselor or an advisor at least monthly to discuss attendance, grades, and school concerns.
II. Ninth grade students participated in an orientation session which included an introduction to ninth grade teachers.
III. Ninth grade students participated in an orientation session which included an introduction to all high school administrators
IV. Ninth grade students participated in an orientation session in which breakout groups allowed for upcoming ninth graders to discuss concerns with ninth grade faculty
V. Ninth grade students were assigned an adult mentor prior to the beginning of the school year
VI. Ninth grade students were assigned an upperclassman student mentor prior to the beginning of the school year.
VII. Ninth grade students were exposed to high school rules and procedures within the first week of school.
VIII. Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.)
IX. Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.)
X. Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards) for good grades at the end of a defined time period (grading period, semester, etc.)
XI. Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good grades at the end of a defined time period (grading period, semester, etc.)
XII. Ninth grade students were required to take a semester (or more) length class specifically focused on study skills.
XIII. Ninth grade students had the option of taking a semester (or more) length class specifically focused on study skills.
XIV. Ninth grade students were exposed to a study-skills curriculum that was built into another class.
XV. Ninth grade students are isolated from the general high school population during instructional hours.
XVI. Ninth grade students are isolated from the general high school population for core academic courses only.
XVII. Ninth grade students participate in mandatory, semester-long test preparation in prior to taking their End of Course Tests
XVIII. Ninth grade students participate in mandatory test preparation as an intensive pre-test session prior to taking their End of Course Tests
XIX. Ninth grade students are assigned to a team in which the four core academic teachers share all students on the team.
XX. Ninth grade students are exposed to gender- specific classes in at least one of the four core academic areas.

Demographic Data:
Please answer the following questions in reference to the 2008-2009 school year.

1. Level of experience as a principal:
$1-5$ years $\quad 6-10$ years $\quad 11-20$ years $\quad 20$ +years
2. Type of schools:

Urban Suburban Rural
3. In what manner(s) are upcoming ninth grade students identified as at-risk?

Using eighth grade CRCT scores
Using eighth grade report card grades
Using eighth grade behavior referrals
4. The following is representative of the percent of minority children from your school's ninth grade population:
$0-25 \% \quad 26-49 \% \quad 50-74 \% \quad 75-100 \%$
5. The following is representative of the percent of children with IEP's from your school's ninth grade population:
$0-25 \% \quad 26-49 \% \quad 50-74 \% \quad 75-100 \%$
6. The following is representative of the percent of children with limited English proficiency from your school's ninth grade population:
$0-25 \% \quad 26-49 \% \quad 50-74 \% \quad 75-100 \%$
7. The following is representative of the percent of children in poverty from your school's ninth grade population:
$0-25 \% \quad 26-49 \% \quad 50-74 \% \quad 75-100 \%$
8. The following is representative of your current Title 1 Status:

Receive Title 1 funding Receive no Title 1 funding
9. What was your AYP status for the 2008-2009 school year?

Met Needs Improvement (NI) NI-Year Two NI- Year Three
10. For the 2008-2009 school year, what percentage of the ninth grade class was successfully promoted to the tenth grade?
0-5\%
5-10\%
10-15\%
15-20\%
$20 \%+$

Appendix G: Frequencies of Interventions Implemented within Participating Schools

Frequencies of Interventions Implemented within Participating Schools

| Counselor Meetings |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  | Cumulative <br> Percent |
| Valid | 1 | 6 | 9.7 | 9.8 | 9.8 |
|  | 2 | 31 | 50.0 | 50.8 | 60.7 |
|  | 3 | 24 | 38.7 | 39.3 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
|  | Total | 61 | 98.4 | 100.0 |  |
| Missing | System | 1 | 1.6 |  |  |
| Total |  | 62 | 100.0 |  |  |

Orientation w/ Teachers

|  |  |  |  | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 | 1 | 1.6 | 1.6 | 1.6 |
|  | 2 | 9 | 14.5 | 14.8 | 16.4 |
|  | 3 | 51 | 82.3 | 83.6 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
| Total | 61 | 98.4 | 100.0 |  |  |
| Missing | System | 1 | 1.6 |  |  |
| Total |  | 62 | 100.0 |  |  |

Orientation w/ Administration

|  |  |  |  |  | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 0 | Frequency | Percent | Valid Percent | 1.6 |
|  | 1 | 1 | 1.6 | 1.6 | 3.3 |
|  | 2 | 1 | 1.6 | 1.6 | 19.7 |
|  | 3 | 10 | 16.1 | 16.4 | 100.0 |
|  | Total | 49 | 79.0 | 80.3 |  |
| Missing | System | 61 | 98.4 | 100.0 |  |
| Total |  | 1 | 1.6 |  |  |


| Orientation w/ Breakout Groups |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | :---: |
|  |  |  |  | Cumulative <br> Percent |  |  |
|  | 0 | 1 | 1.6 | 1.6 | 1.6 |  |
|  | 1 | 25 | 40.3 | 41.0 | 42.6 |  |
|  | 2 | 18 | 29.0 | 29.5 | 72.1 |  |
|  | 3 | 17 | 27.4 | 27.9 | 100.0 |  |
|  | Frequency | Percent | Valid Percent |  |  |  |
| Missing | System | 61 | 98.4 | 100.0 |  |  |
| Total |  | 1 | 1.6 |  |  |  |


| Adult Mentor |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| Valid | 0 | 2 | 3.2 | 3.3 | 3.3 |
|  | 1 | 28 | 45.2 | 45.9 | 49.2 |
|  | 2 | 11 | 17.7 | 18.0 | 67.2 |
|  | 3 | 20 | 32.3 | 32.8 | 100.0 |
|  | Total | 61 | 98.4 | 100.0 |  |
| Missing | System | 1 | 1.6 |  |  |
| Total |  | 62 | 100.0 |  |  |

Upperclassman Mentor

|  |  |  |  | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 | 43 | 69.4 | 70.5 | 70.5 |
|  | 2 | 15 | 24.2 | 24.6 | 95.1 |
|  | 3 | 3 | 4.8 | 4.9 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
| Total | 61 | 98.4 | 100.0 |  |  |
| Missing | System | 1 | 1.6 |  |  |
| Total |  | 62 | 100.0 |  |  |

Exposure to Expectations

|  |  |  |  | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 2 | 1 | 1.6 | 1.6 | 1.6 |
|  | 3 | 60 | 96.8 | 98.4 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
|  | 61 | 98.4 | 100.0 |  |  |
| Missing | System | 1 | 1.6 |  |  |
| Total |  | 62 | 100.0 |  |  |

Behavior Individual Rewards

|  |  |  |  |  | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 | 21 | 33.9 | 34.4 | 34.4 |
|  | 2 | 18 | 29.0 | 29.5 | 63.9 |
|  | 3 | 22 | 35.5 | 36.1 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
|  | Total | 61 | 98.4 | 100.0 |  |
| Missing | System | 1 | 1.6 |  |  |
| Total |  | 100.0 |  |  |  |

Behavior Groups Rewards

|  |  |  |  | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 0 | 1 | 1.6 | 1.6 | 1.6 |
|  | 1 | 30 | 48.4 | 49.2 | 50.8 |
|  | 2 | 13 | 21.0 | 21.3 | 72.1 |
|  | 3 | 17 | 27.4 | 27.9 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
|  |  | 61 | 98.4 | 100.0 |  |
| Missing | System | 1 | 1.6 |  |  |
| Total | 62 | 100.0 |  |  |  |


| Grade Individual Rewards |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  |  |  |  |  |
| Frequency | Percent | Valid Percent | Cumulative <br> Percent |  |  |
| Valid | 0 | 1 | 1.6 | 1.6 |  |

Grade Group Rewards

| Grade |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  | Cumulative <br> Percent |
| Valid | 0 | 1 | 1.6 | 1.6 | 1.6 |
|  | 1 | 29 | 46.8 | 47.5 | 49.2 |
|  | 2 | 14 | 22.6 | 23.0 | 72.1 |
|  | 3 | 17 | 27.4 | 27.9 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
|  | Total | 61 | 98.4 | 100.0 |  |
| Missing | System | 1 | 1.6 |  |  |
| Total | 62 | 100.0 |  |  |  |

Required Study Skills Class

|  |  |  |  |  | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 0 | 3 | 4.8 | 4.9 | 4.9 |
|  | 1 | 36 | 58.1 | 59.0 | 63.9 |
|  | 2 | 11 | 17.7 | 18.0 | 82.0 |
|  | 3 | 11 | 17.7 | 18.0 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
| Missing | System | 61 | 98.4 | 100.0 |  |
| Total | 1 | 1.6 |  |  |  |


| Optional Study Skills Class |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  |  |  |  |  |
| Frequency | Percent | Valid Percent | Cumulative <br> Percent |  |  |
| Valid | 0 | 1 | 1.6 | 1.6 |  |

Study Skills in Other Class

|  |  |  |  | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 0 | 1 | 1.6 | 1.6 | 1.6 |
|  | 1 | 23 | 37.1 | 37.7 | 39.3 |
|  | 2 | 31 | 50.0 | 50.8 | 90.2 |
|  | 3 | 6 | 9.7 | 9.8 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
|  | Total | 61 | 98.4 | 100.0 |  |
| Missing | System | 1 | 1.6 |  |  |
| Total | 62 | 100.0 |  |  |  |

Instructional Isolation

|  |  |  |  |  | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 | 36 | 58.1 | 60.0 | 60.0 |
|  | 2 | 17 | 27.4 | 28.3 | 88.3 |
|  | 3 | 7 | 11.3 | 11.7 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
| Total | 60 | 96.8 | 100.0 |  |  |
| Missing | System | 2 | 3.2 |  |  |
| Total |  | 62 | 100.0 |  |  |


| Academic Course Isolation |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  | Cumulative <br> Percent |
| Falid | 1 | 33 | 53.2 | 56.9 | 56.9 |
|  | 2 | 11 | 17.7 | 19.0 | 75.9 |
|  | 3 | 14 | 22.6 | 24.1 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
|  | Total | 48 | 93.5 | 100.0 |  |
| Missing | System | 62 | 6.5 |  |  |
| Total |  | 100.0 |  |  |  |

Semester Test Prep

|  |  |  |  | Cumulative <br> Percent |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 0 | 1 | 1.6 | 1.6 | 1.6 |
|  | 1 | 31 | 50.0 | 50.8 | 52.5 |
|  | 2 | 13 | 21.0 | 21.3 | 73.8 |
|  | 3 | 16 | 25.8 | 26.2 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
|  | Total | 61 | 98.4 | 100.0 |  |
| Missing | System | 1 | 1.6 |  |  |
| Total |  | 62 | 100.0 |  |  |


| Pre-test Test Prep |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 0 | 1 | 1.6 | 1.6 | 1.6 |
|  | 1 | 24 | 38.7 | 39.3 | 41.0 |
|  | 2 | 23 | 37.1 | 37.7 | 78.7 |
|  | 3 | 13 | 21.0 | 21.3 | 100.0 |
|  | Total | 61 | 98.4 | 100.0 |  |
| Missing | System | 1 | 1.6 |  |  |
| Total |  | 62 | 100.0 |  |  |


| Teacher Teaming |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  | Cumulative <br> Percent |
| Valid | 1 | 34 | 54.8 | 55.7 | 55.7 |
|  | 2 | 12 | 19.4 | 19.7 | 75.4 |
|  | 3 | 15 | 24.2 | 24.6 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
| Total | 61 | 98.4 | 100.0 |  |  |
| Missing | System | 1 | 1.6 |  |  |
| Total |  | 62 | 100.0 |  |  |

Gender-Specific Classes

|  |  |  |  |  | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 1 | 57 | 91.9 | 93.4 | 93.4 |
|  | 2 | 3 | 4.8 | 4.9 | 98.4 |
|  | 3 | 1 | 1.6 | 1.6 | 100.0 |
|  | Frequency | Percent | Valid Percent |  |  |
| Missing | System | 61 | 98.4 | 100.0 |  |
| Total | 1 | 1.6 |  |  |  |

## Appendix H: Survey Item Justification

## Survey Item Justification

Table 1: Content Validity of Items in Domain 1- Relational/Communicative

| Item Number | Survey Statement | Justification in Literature |
| :---: | :---: | :---: |
| Item 1 | Ninth grade students met with the counselor or an advisor at least monthly to discuss attendance, grades, and school concerns. | National Conference of State Legislatures, 2007; Pennington, 2006; Aacher \& Maguire, 2007 |
| Item 2 | Ninth grade students participated in an orientation session which included an introduction to ninth grade teachers. | Pennington, 2006; Fields, 2005; Akos, 2005 |
| Item 3 | Ninth grade students participated in an orientation session which included an introduction to all high school administrators | Pennington, 2006; Fields, 2005; Akos, 2005; Blankenstein, 2004 |
| Item 4 | Ninth grade students participated in an orientation session in which breakout groups allowed for upcoming ninth graders to discuss concerns with ninth grade faculty | Pennington, 2006; Fields, 2005; Akos, 2005 |
| Item 5 | Ninth grade students were assigned an adult mentor prior to the beginning of the school year | National Conference of State Legislatures, 2007; Pennington, 2006; Southern Regional Education Board, 2005; Aacher \& Maguire, 2007; Holland, 2001 |
| Item 6 | Ninth grade students were assigned an upperclassman student mentor prior to the beginning of the school year. | National Conference of State Legislatures, 2007; Pennington, 2006; Southern Regional Education Board, 2005; Aacher \& Maguire, 2007; Holland, 2001 |
| Item 7 | Ninth grade students were exposed to high school rules and procedures within the first week of school. | Fields, 2005; Akos, 2005; Blankenstein, 2004; Pennington, 2006 |
| Item 19 | Ninth grade students are assigned to a team in which the four core academic teachers share all students on the team. | National Conference of State Legislatures, 2007; Pennington, 2006; Aacher \& Maguire, 2007; Blankenstein, 2004 |

Table 2: Content Validity of Items in Domain 2 - Instructional

| Item Number | Survey Statement | Justification in Literature |
| :--- | :--- | :--- |
| Item 12 | Ninth grade students were required to take a <br> semester (or more) length class specifically <br> focused on study skills. | Hertzog, 1998; Balfanz, 2002; <br> Boman, 2001; Walker, 2006; |
| Item 13 Armbruster \& Anderson, 1981 |  |  |


| Item 14 | Ninth grade students were exposed to a study- <br> skills curriculum that was built into another <br> class. | Hertzog, 1998; Balfanz, 2002; <br> Boman, 2001; Walker, 2006; <br> Armbruster \& Anderson, 1981 |
| :--- | :--- | :--- |
| Item 17 | Ninth grade students participate in mandatory, <br> semester-long test preparation in prior to taking <br> their End of Course Tests | Balfanz, 2002; Borja, 2003; <br> Black, 2005 |
| Item 18 | Ninth grade students participate in mandatory <br> test preparation as an intensive pre-test session <br> prior to taking their End of Course Tests | Balfanz, 2002; Borja, 2003; <br> Black, 2005 |

Table 3: Content Validity of Items in Domain 3 - Structural

| Item Number | Survey Statement | Justification in Literature |
| :---: | :---: | :---: |
| Item 8 | Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.) | Lehr, 2003; Radhakrishnam, 2009; Hurley, 2009 |
| Item 9 | Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good behavior at the end of a defined time period (grading period, semester, etc.) | Lehr, 2003; Radhakrishnam, 2009; Hurley, 2009 |
| Item 10 | Ninth grade students were eligible for individual rewards (gift certificates, food, candy, discount cards) for good grades at the end of a defined time period (grading period, semester, etc.) | Lehr, 2003; Radhakrishnam, 2009; Hurley, 2009 |
| Item 11 | Ninth grade students were eligible for group rewards (freshman luau, class pizza party, etc.) for good grades at the end of a defined time period (grading period, semester, etc.) | Lehr, 2003; Radhakrishnam, 2009; Hurley, 2009 |
| Item 15 | Ninth grade students are isolated from the general high school population during instructional hours. | Morrison, 1998; Wasley, 2002; Irmsher, 1997; Lee \& Smith, 1996; Klonsky, 1999; Cohen, 2001; Fields, 2005; Gifford, 1990; Allen, 2005 |
| Item 16 | Ninth grade students are isolated from the general high school population for core academic courses only. | Morrison, 1998; Wasley, 2002; Irmsher, 1997; Lee \& Smith, 1996; Klonsky, 1999; Cohen, 2001; Fields, 2005; Gifford, 1990; Allen, 2005 |
| Item 20 | Ninth grade students are exposed to genderspecific classes in at least one of the four core academic areas. | US Dept of Education, 2006 |

# Appendix I: Differences in End of Course Test Scores and Relational/Communicative Interventions 

## Differences in End of Course Test Scores and Relational/Communicative

## Interventions

| Test of Homogeneity of Variances |
| :--- |
| \left. Levene Statistic df1 df2 Sig. <br> Spring_English 1.472  7 51 <br> Spring_Math 1.602  7 51$\right] .198$ |

ANOVA

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 9003.232 | 9 | 1000.359 | .292 | .974 |
|  | Within Groups | 174690.104 | 51 | 3425.296 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 23011.548 | 9 | 2556.839 | .393 | .933 |
|  | Within Groups | 331703.124 | 51 | 6503.983 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

## Appendix J: Differences in End of Course Test and Instructional

 InterventionsDifferences in End of Course Test and Instructional Interventions
Test of Homogeneity of Variances

|  | Levene Statistic | df1 | df2 | Sig. |
| :--- | ---: | ---: | ---: | ---: |
| Spring_English | 1.984 | 8 | 51 | .067 |
| Spring_Math | 2.126 | 8 | 51 | .050 |


|  | ANOVA |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| Spring_English | Between Groups | 13794.571 | 9 | 1532.730 | .460 | .894 |
|  | Within Groups | 169898.765 | 51 | 3331.348 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 22923.334 | 9 | 2547.037 | .392 | .934 |
|  | Within Groups | 331791.338 | 51 | 6505.713 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

Appendix K: Differences in End of Course Test scores and Structural Interventions

## Differences in End of Course Test scores and Structural Interventions

| Test of Homogeneity of Variances |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | Levene Statistic | df1 | df2 | Sig. |  |
| Spring_English | 1.724 | 11 | 43 | .100 |  |
| Spring_Math | 1.847 | 11 | 43 | .075 |  |


|  |  | ANOVA |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 20961.524 | 17 | 1233.031 | .326 | .993 |
|  | Within Groups | 162731.812 | 43 | 3784.461 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 36574.007 | 17 | 2151.412 | .291 | .996 |
|  | Within Groups | 318140.665 | 43 | 7398.620 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

## Appendix L: Differences in End of Course Test and Demographic Identifiers

## School Location:

Test of Homogeneity of Variances

|  | Levene Statistic | df1 | df2 | Sig. |
| :--- | ---: | ---: | ---: | ---: |
| Spring_English | .293 |  | 2 |  |
| Spring_Math | .401 |  | 58 | .747 |
|  | 2 | 58 | .672 |  |

ANOVA

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 2312.035 | 2 | 1156.018 | .370 | .693 |
|  | Within Groups | 181381.301 | 58 | 3127.264 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 3882.761 | 2 | 1941.381 | .321 | .727 |
|  | Within Groups | 350831.911 | 58 | 6048.826 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

## Principal Experience:

Test of Homogeneity of Variances

|  | Levene Statistic | df1 | df2 | Sig. |
| :--- | ---: | ---: | ---: | ---: |
| Spring_English | .847 | 3 | 56 | .474 |
| Spring_Math | .960 | 3 | 56 | .418 |
|  |  |  |  |  |

ANOVA

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 4010.219 | 4 | 1002.555 | .312 | .868 |
|  | Within Groups | 179683.117 | 56 | 3208.627 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 6566.771 | 4 | 1641.693 | .264 | .900 |
|  | Within Groups | 348147.901 | 56 | 6216.927 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

## Minority:

Test of Homogeneity of Variances

|  | Levene Statistic | df1 | df2 | Sig. |
| :--- | ---: | ---: | ---: | ---: |
| Spring_English | 1.929 | 3 | 57 | .135 |
| Spring_Math | 1.785 | 3 | 57 | .160 |


| ANOVA |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | Sum of Squares | df | Mean Square | F | Sig. |
|  | Within Groups | 7239.349 | 3 | 2413.116 | .780 | .510 |
|  | Total | 176453.988 | 57 | 3095.684 |  |  |
| Spring_Math | Between Groups | 183693.336 | 60 |  |  |  |
|  | Within Groups | 343566.444 | 57 | 6027.481 |  | .617 |
|  | Total | 354714.672 | 60 |  |  |  |
|  |  |  | 3716.076 |  |  |  |

## Poverty:

ANOVA

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 2429.651 | 3 | 809.884 | .255 | .858 |
|  | Within Groups | 181263.686 | 57 | 3180.065 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 10290.089 | 3 | 3430.030 | .568 | .639 |
|  | Within Groups | 344424.583 | 57 | 6042.537 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

## Retention:

ANOVA

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 2429.651 | 3 | 809.884 | .255 | .858 |
|  | Within Groups | 181263.686 | 57 | 3180.065 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 10290.089 | 3 | 3430.030 | .568 | .639 |
|  | Within Groups | 344424.583 | 57 | 6042.537 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

ANOVA

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Spring_English | Between Groups | 10213.647 | 4 | 2553.412 | .824 | .515 |
|  | Within Groups | 173479.690 | 56 | 3097.852 |  |  |
|  | Total | 183693.336 | 60 |  |  |  |
| Spring_Math | Between Groups | 15860.398 | 4 | 3965.099 | .655 | .626 |
|  | Within Groups | 338854.274 | 56 | 6050.969 |  |  |
|  | Total | 354714.672 | 60 |  |  |  |

## Appendix M: Correlative Output of Specific Freshman Transition Interventions

## Correlative Output of Specific Freshman Transition Interventions

|  |  | Counselor <br> Meetings | Spring_English |
| :--- | :--- | ---: | ---: |
| Counselor Meetings | Pearson Correlation | 1 | .239 |
|  | Sig. (2-tailed) | .064 |  |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .239 | 1 |
|  | Sig. (2-tailed) | .064 |  |
|  | N | 61 | 61 |


|  |  | Counselor <br> Meetings |  |
| :--- | :--- | ---: | ---: |
| Counselor Meetings | Pearson Correlation | 1 | .244 |
|  | Sig. (2-tailed) |  | .058 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | .244 | 1 |
|  | Sig. (2-tailed) | .058 |  |
|  | N | 61 | 61 |


|  |  |  | Orientation w/ <br> Teachers |
| :--- | :--- | ---: | ---: |
| Spring_English | Spring_English | 1 | -.090 |
|  | Sig. (2-tailed) |  | .490 |
|  | N | 61 | 61 |
| Orientation w/ Teachers | Pearson Correlation | -.090 | 1 |
|  | Sig. (2-tailed) | .490 |  |
|  | N | 61 | 61 |


|  |  | Orientation w/ <br> Teachers | Spring_Math |
| :--- | :--- | ---: | ---: |
| Orientation w/ Teachers | Pearson Correlation | 1 | -.066 |
|  | Sig. (2-tailed) |  | .612 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.066 | 1 |
|  | Sig. (2-tailed) | .612 |  |


|  |  | Counselor <br> Meetings | Spring_English |
| :--- | :--- | ---: | ---: |
| Counselor Meetings | Pearson Correlation | 1 | .239 |
|  | Sig. (2-tailed) |  | .064 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .239 | 1 |
|  | Sig. (2-tailed) | .064 |  |
|  | N |  | 61 |


|  |  | Orientation w/ <br> Admin | Spring_English |
| :--- | :--- | ---: | ---: |
| Orientation w/ Admin | Pearson Correlation | 1 | -.092 |
|  | Sig. (2-tailed) |  | .481 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.092 | 1 |
|  | Sig. (2-tailed) | .481 |  |
|  | N | 61 | 61 |


|  |  | Orientation w/ <br> Admin | Spring_Math |
| :--- | :--- | ---: | ---: |
| Orientation w/ Admin | Pearson Correlation | 1 | -.056 |
|  | Sig. (2-tailed) |  | .669 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.056 | 1 |
|  | Sig. (2-tailed) | .669 |  |
|  | N | 61 | 61 |


|  |  | Orientation w/ <br> Breakout <br> Groups |  |
| :--- | :--- | ---: | ---: |
| Orientation w/ Breakout <br> Groups | Pearson Correlation | 1 | -.153 |
|  | Sig. (2-tailed) |  | .238 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.153 | 1 |
|  | Sig. (2-tailed) | .238 |  |


|  |  | Orientation w/ <br> Breakout <br> Groups |  |
| :--- | :--- | ---: | ---: |
| Srientation w/ Breakout | Pearson Correlation | 1 | -.153 |
| Groups | Sig. (2-tailed) |  | .238 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.153 | 1 |
|  | Sig. (2-tailed) | .238 |  |
|  | N | 61 | 61 |


|  |  | Orientation w/ Breakout Groups | Spring_Math |
| :---: | :---: | :---: | :---: |
| Orientation w/ Breakout Groups | Pearson Correlation | 1 | -. 175 |
| Groups | Sig. (2-tailed) |  | . 177 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -. 175 | 1 |
|  | Sig. (2-tailed) | . 177 |  |
|  | N | 61 | 61 |


|  |  | Adult Mentor | Spring_English |
| :--- | :--- | ---: | ---: |
| Adult Mentor | Pearson Correlation | 1 | -.174 |
|  | Sig. (2-tailed) |  | .180 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.174 | 1 |
|  | Sig. (2-tailed) | .180 |  |
|  | N | 61 | 61 |


|  |  | Adult Mentor | Spring_Math |
| :--- | :--- | ---: | ---: |
| Adult Mentor | Pearson Correlation | 1 | -.173 |
|  | Sig. (2-tailed) |  | .182 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.173 | 1 |
|  | Sig. (2-tailed) | .182 |  |
|  | N | 61 | 61 |


|  |  | Upperclassman Mentor | Spring_English |
| :---: | :---: | :---: | :---: |
| Upperclassman Mentor | Pearson Correlation | 1 | . 092 |
|  | Sig. (2-tailed) |  | . 480 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | . 092 | 1 |
|  | Sig. (2-tailed) | . 480 |  |
|  | N | 61 | 61 |


|  |  | Upperclassman <br> Mentor |  |
| :--- | :--- | ---: | ---: |
| Upperclassman Mentor | Pearson Correlation | 1 | .109 |
|  | Sig. (2-tailed) |  | .402 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | .109 | 1 |
|  | Sig. (2-tailed) | .402 |  |
|  | N | 61 | 61 |


|  |  | Exposure to <br> Expectations |  |
| :--- | :--- | ---: | ---: |
| Exposure to Expectations | Pearson Correlation | 1 | -.018 |
|  | Sig. (2-tailed) |  | .893 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.018 | 1 |
|  | Sig. (2-tailed) | .893 |  |
|  | N | 61 | 61 |


|  |  | Exposure to <br> Expectations | Spring_Math |
| :--- | :--- | :--- | ---: |
| Exposure to Expectations | Pearson Correlation | 1 | -.017 |
|  | Sig. (2-tailed) |  | .899 |
|  | N | 61 | 61 |
|  | Pearson Correlation | -.017 | 1 |
|  | Sprig. (2-tailed) | .899 |  |
|  | N | 61 | 61 |


|  |  | Behavior <br> Individual <br> rewards |  |
| :--- | :--- | ---: | ---: |
| Behavior Individual rewards | Spring_English |  |  |
|  | Sig. (2-tailed) | 1 | .151 |
|  | N |  | .244 |
| Spring_English | Pearson Correlation | 61 | 61 |
|  | Sig. (2-tailed) | .151 | 1 |
|  | N | .244 |  |


|  |  | Behavior <br> Individual <br> rewards |  |
| :--- | :--- | ---: | ---: |
| Behavior Individual rewards | Spring_Math |  |  |
|  | Searson Correlation | 1 | .141 |
|  | Sig. (2-tailed) |  | .278 |
| Spring_Math | Pearson Correlation | 61 | 61 |
|  | Sig. (2-tailed) | .141 | 1 |
|  | N | 678 |  |
|  |  | 61 | 61 |


|  |  | Grade individual <br> rewards | Spring_English |
| :--- | :--- | ---: | ---: |
| Grade individual rewards | Pearson Correlation | 1 | .162 |
|  | Sig. (2-tailed) |  | .212 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .162 | 1 |
|  | Sig. (2-tailed) | .212 |  |
|  | N | 61 | 61 |


|  |  | Grade individual <br> rewards |  |
| :--- | :--- | ---: | ---: |
| Grade individual rewards | Pearson Correlation | 1 | .146 |
|  | Sig. (2-tailed) |  | .262 |
|  | N |  | 61 |



|  |  | Grade group <br> rewards | Spring_English |
| :--- | :--- | ---: | ---: |
| Grade group rewards | Pearson Correlation | 1 | .122 |
|  | Sig. (2-tailed) | 647 |  |
|  | N | 61 | .347 |
|  | Pearson Correlation | .122 | 61 |
| Spring_English | Sig. (2-tailed) | .347 | 1 |
|  | N | 61 |  |
|  |  |  | 61 |


|  |  | Grade group <br> rewards |  |
| :--- | :--- | ---: | ---: |
| Grade group rewards | Pearson Correlation_Math |  |  |
|  | Sig. (2-tailed) | 1 | .101 |
|  | N |  | .438 |
|  | Pearson Correlation | 61 | 61 |
| Spring_Math | .101 | 1 |  |
|  | Sig. (2-tailed) | .438 |  |
|  | N | 61 | 61 |


|  |  | Required Study <br> Skills Class | Spring_English |
| :--- | :--- | ---: | ---: |
| Required Study Skills Class | Pearson Correlation | 1 | .051 |
|  | Sig. (2-tailed) |  | .698 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .051 | 1 |
|  | Sig. (2-tailed) | .698 |  |
|  | N | 61 | 61 |


|  |  | Required Study <br> Skills Class |  |
| :--- | :--- | ---: | ---: |
| Required Study Skills Class | Pearson Correlation |  | 1 |


| Spring_Math | Pearson Correlation | .065 | 1 |
| :--- | :--- | ---: | ---: |
| Sig. (2-tailed) | .618 |  |  |
|  | N | 61 | 61 |


|  |  | Optional Study <br> Skills Class |  |
| :--- | :--- | ---: | ---: |
| Optional Study Skills Class | Pearson Correlation | 1 | .080 |
|  | Sig. (2-tailed) |  | .540 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .080 | 1 |
|  | Sig. (2-tailed) | .540 |  |
|  | N | 61 | 61 |


|  |  | Optional Study <br> Skills Class |  |
| :--- | :--- | ---: | ---: |
| Optional Study Skills Class | Pearson Correlation | 1 | .104 |
|  | Sig. (2-tailed) |  | .426 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | .104 | 1 |
|  | Sig. (2-tailed) | .426 |  |
|  | N | 61 | 61 |


|  |  | Study-skills in <br> other class | Spring_English |
| :--- | :--- | ---: | ---: |
| Study-skills in other class | Pearson Correlation | 1 | .121 |
|  | Sig. (2-tailed) |  | .351 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .121 | 1 |
|  | Sig. (2-tailed) | .351 |  |
|  | N | 61 | 61 |


|  |  | Study-skills in <br> other class | Spring_Math |
| :--- | :--- | :--- | ---: |
| Study-skills in other class | Pearson Correlation |  | 1 |


|  |  | 61 | 61 |
| :--- | :--- | ---: | ---: |
| Spring_Math | Pearson Correlation | .131 | 1 |
|  | Sig. (2-tailed) | .314 |  |
|  | N | 61 | 61 |


|  |  | Instructional <br> Isolation | Spring_English |
| :--- | :--- | ---: | ---: |
| Instructional Isolation | Pearson Correlation | 1 | .056 |
|  | Sig. (2-tailed) |  | .673 |
|  | N | 60 | 60 |
| Spring_English | Pearson Correlation | .056 | 1 |
|  | Sig. (2-tailed) | .673 |  |
|  | N | 60 | 61 |


|  |  | Instructional <br> Isolation | Spring_Math |
| :--- | :--- | ---: | ---: |
| Instructional Isolation | Pearson Correlation | 1 | .081 |
|  | Sig. (2-tailed) |  | .539 |
|  | N | 60 | 60 |
| Spring_Math | Pearson Correlation | .081 | 1 |
|  | Sig. (2-tailed) | .539 |  |
|  | N | 60 | 61 |



| Spring_Math | Pearson Correlation | .088 | 1 |
| :--- | :--- | ---: | ---: |
| Sig. (2-tailed) | .511 |  |  |
|  | N | 58 | 61 |


|  |  | Semester Test <br> Prep | Spring_English |
| :--- | :--- | ---: | ---: |
| Semester Test Prep | Pearson Correlation | 1 | -.186 |
|  | Sig. (2-tailed) | .152 |  |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -.186 | 1 |
|  | Sig. (2-tailed) | .152 |  |
|  | N | 61 | 61 |


|  |  | Semester Test <br> Prep | Spring_Math |
| :--- | :--- | ---: | ---: |
| Semester Test Prep | Pearson Correlation | 1 | -.185 |
|  | Sig. (2-tailed) |  | .154 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | -.185 | 1 |
|  | Sig. (2-tailed) | .154 |  |
|  | N | 61 | 61 |


|  |  | Pre-test Test Prep | Spring_English |
| :---: | :---: | :---: | :---: |
| Pre-test Test Prep | Pearson Correlation | 1 | -. 170 |
|  | Sig. (2-tailed) |  | . 190 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | -. 170 | 1 |
|  | Sig. (2-tailed) | . 190 |  |
|  | N | 61 | 61 |
|  |  | Pre-test Test |  |
|  |  | Prep | Spring_Math |
| Pre-test Test Prep | Pearson Correlation | 1 | -. 190 |
|  | Sig. (2-tailed) |  | . 143 |
|  | N | 61 | 61 |


| Spring_Math | Pearson Correlation | -.190 | 1 |
| :--- | :--- | ---: | ---: |
|  | Sig. (2-tailed) | .143 |  |
|  | N | 61 | 61 |


|  |  | Teacher Team | Spring_English |
| :--- | :--- | ---: | ---: |
| Teacher Team | Pearson Correlation | 1 | .100 |
|  | Sig. (2-tailed) |  | .444 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .100 | 1 |
|  | Sig. (2-tailed) | .444 |  |
|  | N | 61 | 61 |


|  |  | Teacher Team | Spring_Math |
| :--- | :--- | ---: | ---: |
| Teacher Team | Pearson Correlation | 1 | .140 |
|  | Sig. (2-tailed) |  | .281 |
|  | N | 61 | 61 |
| Spring_Math | Pearson Correlation | .140 | 1 |
|  | Sig. (2-tailed) | .281 |  |
|  | N | 61 | 61 |


|  |  | Gender- specific <br> classes | Spring_English |
| :--- | :--- | ---: | ---: |
| Gender- specific classes | Pearson Correlation | 1 | .016 |
|  | Sig. (2-tailed) |  | .902 |
|  | N | 61 | 61 |
| Spring_English | Pearson Correlation | .016 | 1 |
|  | Sig. (2-tailed) | .902 |  |
|  | N | 61 | 61 |

## Appendix N: IRB Approval

IRB Approval

IRB Approval 778.120109: Do Specific Freshman Transition Interventions Impact Academic Achievement of Ninth Graders\}

## Dear Emily,

We are pleased to inform you that your above study has been approved by the Liberty IRB. This approval is extended to you for one year. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. Attached you'll find the forms for those cases.

Thank you for your cooperation with the IRB and we wish you well with your research project. We will be glad to send you a written memo from the Liberty IRB, as needed, upon request.

Sincerely,
Fernando Garzon, Psy.D.
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