

Stuarts Draft High School: Quantitative Study Evaluating the Ninth-Grade Transition Program

Eric W. Bond

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Travis W. Twiford, Chair

M. David Alexander

Carol S. Cash

David G. Melton

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Abstract

The purpose of this study was to determine if a transition program had an effect on the academic and social issues that at-risk ninth graders face as they transition to high school. A case study approach based on archival data was used to explore differences in the treatment and control groups. These groups were measured by grade point average (GPA), absences, tardies to school, course failures, discipline referrals, verified credits, and dropouts.

Freshman retention, poor attendance, high failure rates, Standards of Learning (SOL) failures, and discipline problems are some of the issues facing at-risk ninth graders as they transition to high school. These issues can contribute to higher dropout rates, therefore making it more difficult to compete in today's workforce. As we prepare our students to compete in today's global economy, it is necessary to examine the current practices that high schools are utilizing to improve student outcomes, and to prepare more effectively for the higher expectations of today's workforce and educational institutions.

This quantitative study examined the success of the Academic Careers and Technology (A.C.T.) class at Stuarts Draft High School, a yearlong ninth-grade transition program designed for at-risk students that was first implemented in 2003. The A.C.T. program was designed to provide ninth-grade at-risk students with the skills necessary for making a successful transition from middle school to high school and for continued success in their remaining high school career. The curriculum included extended time on reading comprehension, writing, and organizational and study skills. Additionally, technology integration, conflict resolution, and an adult mentor program were included in the curriculum.

Dedication

To my wife Alyson, thank you for your continued love and support and belief in me. Thank you for all that you do for our family and encouraging me to pursue my goals. Your support has allowed me to realize my potential as a person and my potential as a professional educator, and for that, I am forever grateful.

To my wonderful children Morgan and Drew, thank you for your patience and support of me during this time. Thank you for your dedication and cooperation to me and your mother. Without you and your support, this dissertation would not have been possible.

To my mother and father who have taught me the value of a good education and who have modeled the importance of a good work ethic. Dad, thanks for being my role model and influencing me in my professional goals.

To the faculty and students of Stuarts Draft High School, thank you for the opportunity to work with you over the years and for the very fond memories of the time I spent there.

Last, to the at-risk students across this country who struggle every day. You have influenced me and have inspired me to be a better educator. You have encouraged me to do more for those who may not be as fortunate or focused as others.

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Chapter 1

Introduction

The success of ninth-grade students is a concern across the United States — Augusta County Public Schools, Virginia, included. According to the Southern Regional Education Board's October 2005 newsletter, "The ninth grade has the highest failure rate of any grade, and this dramatically increases the likelihood that students will not finish high school ... In addition to academic struggles, behavior problems in the form of suspensions and expulsions appear to increase significantly early in the ninth grade year" (Smith, 2006, p. 1).

The expectations presented to public schools in the No Child Left Behind (NCLB) Act do not allow for continual and increasing dropouts in our high schools. Performance Goal 5 of NCLB simply states that all students must graduate from high school (Virginia Department of Education, 2008).

According to the Digest of Educational Statistics (2008), the national average freshman graduation rate for public secondary schools was approximately 73.4% in the school year 2005-2006. This statistic from the National Center for Educational Statistics combined with the expectation from NCLB that all students must graduate from high school would mean that 26.6% would fall short of the expectation that all students must graduate from high school.

What is the impact of the dropout rate on society? In today's economy, high school students who do not graduate stand little chance of sustaining themselves or a family (Greene, 2002). Lehr, Johnson, Bremer, Cosio, and Thompson (2004) list several statistics on the financial impact of dropouts to individuals and society. Dropouts experience unemployment, underemployment, and incarceration more frequently than other youth. "High school dropouts are less likely to be employed than high school graduates. Nearly 80% of individuals in prison do not have a high school diploma" (p. 7). Lehr, Johnson, Bremer, Cosio, and Thompson went on to say:

Students who do not complete school cost taxpayers billions of dollars in lost revenues, welfare, unemployment, crime prevention, and prosecution. Students who graduate from high school earn an average of \$9,245 more per year than students who do not complete school. (p. 7)

According to the report, *The Education Pipeline in the United States 1970-2000* (Haney et al., 2004) that the graduation rate and on-time graduation are becoming a national concern.

Both numbers are falling short of the national goal of a 90% graduation rate set forth by NCLB. The report examined 30 years of enrollment statistics from all 50 states and it found that the number of ninth graders who did not progress to the tenth grade had tripled during the time frame of the study. Additionally, the national graduation average for ninth graders who were promoted to the tenth grade was 75% or less in 2000-2001. “Since being flunked to repeat a grade is a strong predictor of students dropping out of school prior to graduation, it is hence not surprising that high school graduation rates have been falling nationally, especially in the last 10 years” (p. 59).

Previous literature suggests that the dropout rate in this country is a concern and a problem. Students who do not receive a diploma may not contribute positively to society; they can also become a financial burden to taxpayers. Certainly there is no silver bullet that can eliminate high school dropouts. However, as previously mentioned literature suggests, there is a correlation between high school dropouts and the difficulties that ninth graders face when transitioning to high school (Turner, 2007; Haney, et al., 2004). The direct correlation between ninth-grade failures and dropout rates suggest a *proactive approach* to ensure success for all ninth graders and to meet the eventual expectations and accountability of NCLB. Intervention with transition programs and at-risk transition programs in the early years of high school should be at the forefront of school boards nationwide and such programs could be the basis for additional educational research.

Overview of the Study

This quantitative study examined the success of the A.C.T. class at Stuarts Draft High School, a yearlong ninth-grade transition program designed for at-risk students that was first implemented in 2003. The purpose of this study was to determine if this transition program had an effect on the academic and social issues that at-risk ninth graders face as they transition to high school as measured by grade point average (GPA), absences, tardies to school, course failures, discipline referrals, verified credits, and dropouts.

The A.C.T. program was designed to provide ninth-grade at-risk students with the skills necessary for making a successful transition from middle school to high school and for continued success in their remaining high school career. The curriculum includes extended time on reading comprehension, writing, and organizational and study skills. Additionally, technology integration, conflict resolution, and an adult mentor program are included in the curriculum.

Each spring, at-risk eighth-grade students are selected to participate in the A.C.T. program. The selection criteria are based on at least one of the following concerns during the student's eighth grade year: at least one SOL test score of 415 or less, two or more failed classes, ten or more unexcused absences, 20 or more unexcused tardies, five or more out-of-school suspension days, five or more discipline referrals to the office, and recommendations from middle school teachers.

Stuarts Draft High School operates on a 4 x 4 block schedule. The transition program courses operate on a modified block schedule. The modified block schedule included two yearlong, 45-minute transition classes and three 90-minute block classes of a more traditional format (i.e., English 9, world geography, Earth science, health and physical education, and an elective course) per semester. One English teacher and one business teacher taught the transition classes. Half of the A.C.T. participants attended class with the English teacher for 45 minutes while the other half of the participants attended the 45-minute class with the business teacher. After the 45-minute session, the two teachers switched students and continued instruction.

Statement of the Problem

Freshman retention, poor attendance, high failure rates, SOL failures, and discipline problems are some of the issues facing at-risk ninth graders as they transition to high school. These issues can contribute to an increase in dropouts, therefore making it more difficult to compete in today's workforce. As we prepare our students to compete in today's global economy, it is necessary to examine the current practices that high schools are utilizing to improve student outcomes and to prepare more effectively for changing and higher expectations from today's workforce and educational institutions.

Purpose and Significance of the Study

The purpose of this study was to determine if a transition program had an effect on the academic and social issues that at-risk ninth graders face as they transition to high school. It also provided information to school personnel on how to analyze and revise components of the A.C.T. program in an effort to meet the needs of the stakeholders involved. A successful at-risk program has the potential to improve academic performance and social behavior while decreasing the number of ninth-grade failures, which could eventually decrease the number of future dropouts.

The ninth grade provides the foundation for a successful high school career and could be the building block for changing the culture of today's high school. The potential benefits should not be limited to Augusta County; the benefits could impact other high schools in the region, the state, and also offer national implications as localities determine if their respective high schools would benefit from the components and methodologies implemented in the A.C.T. program.

Research Questions

The research questions for this study were as follows:

Research Question 1. What are the *differences among the two independent variables: 1) three cohort classes who participated in the A.C.T. at-risk program (treatment groups) and 2) other students who had similar at-risk criteria who were not selected in the A.C.T. program (control groups)* on the seven dependent variables: 1) GPA, 2) absences, 3) the number of times tardy to school, 4) the number of course failures, 5) the number of discipline referrals, 6) the number of verified credits, and 7) the number of high school dropouts?

Research Question 2. What are the *differences among the independent variables gender, males and females, in the three cohort classes* who participated in the A.C.T. at-risk program on the seven dependent variables: 1) GPA, 2) absences, 3) the number of times tardy to school, 4) the number of course failures, 5) the number of discipline referrals, 6) the number of verified credits, and 7) the number of high school dropouts?

Research Question 3. What are the *relationships among each selection criterion variable used to select participants into the A.C.T. program* on the seven dependent variables: 1) GPA, 2) absences, 3) the number of times tardy to school, 4) the number of course failures, 5) the number of discipline referrals, 6) the number of verified credits, and 7) the number of high school dropouts.

Definition of Terms

At-risk student – For the purposes of this study, an at-risk student is a ninth-grade student who has been unsuccessful in a traditional school setting and who would benefit academically from a smaller, nontraditional school environment, is at-risk for leaving school or graduating below potential, is average for the grade level, and has chronic problems of attendance and/or

discipline (Virginia Department of Education, 2006). This definition will be used to identify the selection criteria for students to be selected in the A.C.T. program.

Discipline referral – the notification to the administrative staff that a student has not conformed to school policy

Grade point average (GPA) – A measure of the nation’s high school student’s academic achievement is the grade point average. This scale can vary from school to school, but for the purpose of this study, the four-point scale will be used. The four-point scale assigns four points for an “A,” three points for a “B,” two points for a “C,” one point for a “D,” and zero points for a “F.” The GPA earned by a student is figured by dividing the grade points earned by the number of credits attempted.

4 x 4 block schedule – Students are scheduled for eight 90-minute classes each year. Four ninety-minute classes will be utilized in the first semester of school. Four additional 90-minute classes will be utilized during the second semester of school.

Modified block schedule – the division of one 90-minute class block into two 45-minute class blocks. A student on a modified block schedule will replace two of their 90-minute block classes, which run for 90 days each, with two 45-minute classes where each class will run for 180 school days.

Suspension – disciplinary action taken by the school administration against a student that has violated certain school policies. Outside suspensions do not permit students to attend school for up to ten days (Augusta County Public Schools, 2009).

Virginia Standards of Learning (SOL) End-of-Course Tests – The Virginia SOLs in English, mathematics, history, social science, and science are intended “to set reasonable targets and expectations for what teachers are expected to teach and students expected to learn” (Virginia SOL Technical Manual, 2000, p. 1).

Verified credit – credit awarded for a course in which a student earns a standard unit of credit and achieves a passing score on a corresponding end-of-course SOL test or an additional test approved by the Board of Education as part of the Virginia assessment program (Virginia School Law Deskbook, 2007, p. 817).

Dropouts – The Virginia Department of Education defines a dropout as a student who:

1. was enrolled in school at some time during the previous school year; and
2. was not enrolled at the beginning of the current school year; and

3. did not graduate from high school or complete a state or division approved education program; and
 - a. does not meet any of the following exclusionary conditions:
 - b. transferred to another public school division, private school, or state/division-approved education program or
 - c. left the country; or
 - d. is temporarily absent due to illness, suspension, or enrollment in a school-approved alternate education program; or
 - e. died (Spar, 2009, p. 2)

Summary of Chapters

This study is organized into five separate chapters. Chapter One includes an introduction, overview of the study, statement of the problem, significance and purpose of the study, research questions, definition of terms, and the limitations of the study.

Chapter Two provides a review of the literature pertinent to the issues of transitioning from middle school to high school, and more specifically, to at-risk students who are making that transition. This chapter includes an analysis of high school dropouts and the effects on society, the correlation between dropouts and ninth-grade failures, why ninth graders struggle, an overview of the selection criteria used to place students in at-risk transition programs, the curriculum and components of at-risk transition programs, the effectiveness of at-risk programs, and recommendations for future transition programs.

Chapter Three focuses on the methodology used in this quantitative study. The research design is explained including the procedures that were used in completing this study. Additionally, the site and population selection is explained and the data analysis procedures are discussed.

Chapters Four and Five provides the research findings and ideas for future studies. Chapter Four reports the data collected in the study and Chapter Five interprets the results of the information obtained, including pertinent findings, conclusions, and recommendations for future research.

Chapter 2

Structure of Literature Review

This chapter provides a review of literature related to the issues of at-risk ninth-grade students during the transition to high school and to intervention programs that have the potential for a successful impact on students' academic and social development. First, the literature review begins by examining the historical context of transition programs and the need for at-risk transition programs. Second, the selection criteria for participation in at-risk programs is identified and reviewed. Third, components or curriculum utilized by at-risk programs is identified and reviewed. Finally, the review examines if the strategies utilized in the transition programs were effective.

History: Dropouts and the Effects on Society

Haney et al. (2004) determined that during the 1970s, the attrition rate of students between grades nine and ten was 5% or less. In the mid 1980s, the attrition rate between grades 9 and 10 began to increase. By the mid 1990s, the dropout rate reached nearly 10%, which equates to approximately 400,000 students nationwide each year. Haney also conducted research in Texas and other states in 2000-2001 showing that 70-80% of the students who fail to pass the ninth grade will not graduate from high school (Black, 2004).

According to the Digest of Educational Statistics, the national average freshman graduation rate for public secondary schools was approximately 73.4% in the school year 2005-2006 (National Center for Educational Statistics, 2008).

Lehr et al. (2004) found that only 57% of youth with disabilities graduated with regular diplomas during the 1998-1999 school year. "Other student populations who have disproportionately high rates of dropouts include those from low socio-economic circumstances or single-parent families and those who are identified as Native American or Hispanic/Latino." (p. 1)

Lehr et al. (2004) quoted other data, which point to the severity of the dropout problem across the nation and in various student populations:

- Approximately one in eight children in the United States never graduate from high school.

- Based on calculations per school day (180 days of seven hours each), one high school student drops out every nine seconds.
- Young adults of Hispanic descent are more likely to have dropped out of school than Black or White young adults (64% Hispanic, 84% Black, and 92% White; ages 18-24 who completed school).
- On average, students from low-income families are at increased risk of not completing school. (The dropout rate is 10% for low-income families, 5.2% from middle income, and 1.6% from high income.)
- The dropout rate for students with emotional/behavioral disabilities is approximately twice that of general education students.
- Of youth with disabilities who drop out of school, the highest proportions are students with learning disabilities (32%) and students with emotional/behavioral disabilities (50%). (p. 7)

As Lehr et al. (2004) previously mentioned, academic achievement and low socioeconomic status are predictors for dropping out of school. Waggoner (1991) concurred with these findings — students from lower-socioeconomic families are twice as likely to drop out of school as those from middle-class or upper-class families. Additionally, Kaufman et al., (2004) identified students from low-income families are six times more likely to drop out of school than students from high income families.

Contrary to the strong link between socioeconomic status and dropouts as demonstrated by Waggoner and Kaufman et al., research suggests that students from lower-income families can overcome these challenges with parental support and parental values of education. Ford (1993) conducted a study of African-American teenagers and found that the key to the students' commitment to school and academics was not associated with their socioeconomic status, but rather the value of education placed on the students by their parents. Newman et al., (2000) supported these findings with their study of nine Ohio school divisions of low-income minority and academically promising students. "Even when a school had poor ratings, parents' positive feelings toward that school were found to influence their children's perceptions and to correlate with high grade point averages." (p. 54)

Even though students may come from lower income families, those obstacles should not be an excuse for students dropping out of school. It is incumbent upon schools to reach out to

those parents who may not value education and to create opportunities through transitional programs for those parents to appreciate, take ownership, and value education, thus creating a greater probability of student success.

What is the impact of the dropout rate on society? In today's economy, high school students who do not graduate stand little chance of sustaining themselves or a family (Greene, 2002).

Lehr et al. (2004) list several statistics on the impact of dropouts financially to individuals and society. Youth who drop out are more likely than others to experience unemployment, underemployment, and incarceration. "High School dropouts are less likely to be employed than high school graduates. Nearly 80% of individuals in prison do not have a high school diploma." (p. 7) Lehr, Johnson, Bremer, Cosio, and Thompson went on to say:

Students who do not complete school cost taxpayers billions of dollars in lost revenues, welfare, unemployment, crime prevention, and prosecution. Students who graduate from high school earn an average of \$9,245 more per year than students who do not complete school. (p. 7)

Dropouts Correlated to Ninth-Grade Failures

Students drop out of high school for various reasons. One of the theories that will be examined in this study investigates the correlation between high school dropouts and the failures that students face during their ninth-grade year.

The previous literature suggests that the dropout rate in this country is a concern because students who do not receive a diploma become citizens who are not contributing positively to society and, as some have suggested, can become a financial burden to taxpayers. Certainly there is not a silver bullet that can be the cure for eliminating high school dropouts. However, as some of the previously mentioned literature suggests, there is a correlation between high school dropouts and the difficulties that ninth graders face when transitioning into high school (Turner, 2007; Haney et al., 2004).

The report, *The Education Pipeline in the United States 1970-2000* (Haney et al., 2004) stated that the graduation rate and on-time graduation are becoming a national concern and that it is falling short of the national education goal of a 90% graduation rate set forth by NCLB. The report examined 30 years of enrollment statistics from all 50 states and found that the number of ninth-grade students who did not progress to the tenth grade had tripled during the time frame of

this study. Additionally, the report stated that the national graduation average for ninth graders promoted to the tenth grade was 75% or less in 2000-2001. “Since being flunked to repeat a grade is a strong predictor of students dropping out of school prior to graduation, it is hence not surprising that high school graduation rates have been falling nationally, especially in the last 10 years.” (p. 59)

Weiss and Bearman (2007) in *Fresh Starts: Reinvestigating the Effects of the Transition to High School on Student Outcomes* reexamined the effects of school transitions by directly comparing the ninth-grade outcomes of students who make a transition in moving to ninth grade with those who do not. Using data from Chicago (Roderick & Camburn, 1999), Weiss and Bearman stated that 40% of students fail one or more subjects during the first semester of high school. The problems students face in the ninth grade can extend into future years. “For many students, poor performance in the first year of high school establishes a pattern of failure, leading to lower education trajectories and poor outcomes throughout school and substantially higher risk of dropping out of school.” (p. 396)

Turner (2007) reported in *Preparing Inner-City Adolescents to Transition into High School* that the dropout rates among at-risk students has reached “epidemic proportions in many communities. In the inner cities, where students may be placed at risk both by their minority and their socioeconomic status, high school graduation rates are often less than 50% with many students dropping out of school during their ninth grade year.” (p. 15)

In *Relationships Between Academics and Problem Behavior in the Transition From Middle School to High School*, McIntosh, Flannery, Sugai, Braun, and Cochrane (2008) discussed the dropout rate of high school students across North America. They stated, “In the United States, 10.3% of 16-24 year-olds were dropouts in 2004, with 32.4% between 16 and 19 years of age.” (p. 243) One area that may be responsible for the high percentages of dropouts might be attributed to the “difficulty students often experience during the transition to high school.” (p. 244)

Eccles et al. (1993) studied current research of developmental scientists. They found that students transitioning from middle school to high school could be placed at risk of moving in a downward spiral and towards academic failure—and eventually dropping out of school—due to the difficulty of the developmental periods during this time in their lives. This developmental stage involves many physical and emotional changes, which creates a very high risk of difficulty.

Eccles, et al. provided evidence of the decrease in relationships with teachers during the transition stage and the need to build relationships with adults in the community and school as extremely important to the student's educational and social development.

Feelings of detachment may be one factor that contributes to a high percentage of students failing the ninth grade. Hertzog and Morgan (1998) studied 450 high schools and their feeder middle schools. They found that about 25% of ninth graders across the country fail the ninth grade. Some school divisions have a failure rate of nearly 45% in the ninth grade (Black, 2004).

Why Ninth Graders Struggle

Several theories have emerged that explain the difficulties of transitioning into high school. A study conducted by Lounsbury and Johnston for the National Association of Secondary School Principals (NASSP), looked at ninth graders in 48 states and the District of Columbia. Lounsbury and Johnston found several factors that contributed to struggling ninth graders in the early 1980s that are still prominent in today's high schools. Factors included the lack of guidance to help ninth graders adjust academically and socially that prompts them to fall by the wayside. This lack of guidance left students feeling that school was pointless and endless. Lounsbury and Johnston went on to predict that the ninth grade would continue to drift and mirror the worst of outmoded high school practices, which do little to foster positive learning for all students (Black, 2004).

Wheelock (1993) suggested that the ninth grade is a trouble spot for those students who become disengaged from their academics and who fail to develop a strong bond with their teachers and school. Overcrowded classrooms and indifferent teachers lead at-risk students to perceive their teachers and school as uncaring and inhospitable, thus further causing a detachment (Black, 2004).

Some of the more current research on transition programs indicates that several factors account for the lack of achievement of ninth graders. In *Middle and High School Transitions as Viewed by Students, Parents, and Teachers*, Akos and Galassi (2004) found that parents and students had similar concerns when transitioning into high school, while teachers had a different perspective. The top concerns for students and parents were primarily focused on academic concerns, while teachers perceived the top concern to be social, i.e., difficulty fitting in, making new friends, and peer pressure.

Isakson and Jarvis (1999) in *The Adjustment of Adolescents During the Transition Into High School: A Short-term Longitudinal Study* found that peer relationships were a potential factor when ninth graders transition into high school. They discovered that even when students were supported at home, they experienced achievement loss during their ninth-grade year. Not only did they experience academic difficulties, Isakson and Jarvis found that the ninth-grade class experienced a decrease in attendance rates during the school year.

Smith (1997) declared in *Effects of Eighth-grade Transition Programs on High School Retention and Experiences* that high schools that provided some sort of transition program had reduced their dropout rates; those schools that did not implement a transition program had increased their dropout rates. Additionally, Smith found that high schools whose student population was of a lower socioeconomic status and enrolled students of color typically did not offer any kind of transition program.

In Morgan and Hertzog's (2001) qualitative study on how students perceived the transition to high school, *Designing Comprehensive Transition Plans*, several themes emerged that related to student concerns. Some of the concerns included academic struggles, students finding their way around the building without getting lost, discipline, bus schedules, lunch schedules, lockers, and dealing with the school staff.

Similarly to Morgan and Hertzog (2001), Zeedyk et al. (2003) looked at perceptions of students, teachers, and parents in *Negotiating the Transition From Primary to Secondary School; Perceptions of Pupils, Parents, and Teachers*. Zeedyk et al., (2003) found that students and parents ranked bullying, getting lost, and peer relationships as the main issues for transitioning into high school. The teachers in the Zeedyk study perceived bullying, getting lost, and peer relationships as the primary issues facing incoming ninth graders, and felt that schools should be responsible for eliminating these concerns.

Selection Criteria for At-risk Programs

In 1997, the University of Virginia's Thomas Jefferson Center for Education Design conducted a study to determine how school divisions in Virginia were responding to transition issues. The study, conducted by Duke, Boudreaux, Epps, and Wilcox (1998), was a mixed methods study consisting of interviews and data collection from nine Virginia high schools. Three criteria were established to determine which transition programs should be investigated. Consideration was given to the programs that: 1) addressed academic achievement, 2) were

designed exclusively for ninth graders, and 3) were implemented over an extended period of time. Based on these criteria, nine transition programs were identified. Five programs were identified that were designed for all ninth graders and four programs were designed that dealt specifically with at-risk ninth graders: Project Success, Block 9, Freshman Area Core Team (FACT), and Exploring Technology. The four schools that were identified with at-risk programs will be the focus of this review.

Project Success, located in a Central Virginia school division, is an at-risk program that is run by a six-teacher team for five of six blocked periods each week. The program tried to establish a sense of community by hosting the program in one corridor. Classes covered in Project Success include English, mathematics, world history, earth science, and a psychology elective designed to focus on teen social issues (Duke et al., 1998).

Block 9, located in a Central Virginia high school, consists of a team including two English teachers, one teacher each in mathematics, science, and social studies, and a counselor or coordinator. The core classes are taught in the morning, which leaves the afternoon to participate in a required study hall, health and physical education, elective courses in the regular high school setting that the student could select, and a requirement to complete a career interest assessment and participate in community service projects (Duke et al., 1998).

FACT, located on the eastern shore of Virginia, provides at-risk ninth-grade students with a team of core area teachers in English, algebra, earth science, and social studies. The teachers in FACT are able to combine classes when needed and therefore coordinate their teaching. The FACT teachers share a common planning period and run their own detention for FACT students who fail to complete work or misbehave. FACT provides blocks in the afternoon for students to participate in electives in the regular high school program. FACT also provides career assessment (Duke et al., 1998).

Exploring Technology, located in a central Shenandoah Valley high school, is a regional program for at-risk ninth graders. The students attend morning core area classes at a regional vocational center. Classes consist of mathematics, geography, and technology. In the afternoon, the students attend elective classes at their respective home high school (Duke et al., 1998).

According to Duke et al. (1998), the selection criteria for at-risk students varied. Project Success required that students not be in the lowest quartile or have a record of behavioral problems. The Block 9 program only accepted students who were not enrolled in any honors or

advanced courses. The FACT program took students whose scores on the Iowa Test of Basic Skills ranged from the 25th to the 50th percentile. The Exploring Technology program accepted students based solely on the judgment of school personnel, who determined dropout risks.

Caldwell's (2007) quantitative case study explored a program bounded by date and time, and with formative and summative assessments that can be used by the administration and staff for program evaluations and improvements. This study evaluated the effectiveness of the Bearcat PRIDE transition program at Virginia High School, a program for at-risk students. The program was designed to provide ninth-grade at-risk students with the skills necessary for making a successful transition from middle school to high school.

Three groups of these ninth-grade students were included in the 2003-2005 study. Participants in each of the three treatment groups were selected by a transition team, which consisted of the middle school principal, high school principal, middle school counselor, two middle school English teachers, and the ninth-grade transition team coordinator. During the 2003-2004 school year, 26 students participated in the study and all of them completed the program. During the 2004-2005 school year, 37 students started the study with only 26 students completing it. During the 2005-2006 school year, 49 students started the study with 43 students completing it. The criteria used by the committee to select the participating students were:

1. Each student attempted to complete SOL tests during the designated testing period.
2. Each student scored below 6.0 on the Stanford Reading Test.
3. discipline referrals, which included three or more suspensions and/or one expulsion.
4. 25 or more absences from school
5. individual academic course grades; four or fewer failed courses
6. total GPA using a four-point scale
7. tardy records, no more than 20 unexcused tardies
8. middle school teacher individual referrals
9. Parent participation in school activities: all parents had to agree to schedule a meeting with the school academic staff or to agree to a home visit (Caldwell, 2007).

Dyke (2007) completed a study for the Virginia Polytechnic Institute and State University, which looked at the impact of a transition program in a southeastern Virginia high school with an enrollment of 1,703 students. The school population consisted of 84.3% African American, 12.9% Caucasian, 1.6% Hispanic, .6% Asian, .4% Native American, and .2%

unspecified. The economically disadvantaged population, which was determined by free and reduced lunch, was 55.7%. This quantitative study examined two groups of students. One group was the experimental group who received a treatment, e.g., a transition program. There were 42 students who were identified to participate in the experimental group and were placed in this transition program. The other group received no treatment and served as a control group. There were 37 students who met the selection criteria (i.e., same characteristics as the experimental group but they did not attend a summer camp like the experimental group did) and were placed in the control group. The criteria for selecting students to participate in the transition program were students that were first-time ninth graders, age 15 or higher, general education students, and enrolled in the transition program for the entire first semester.

Caldwell (2007), Dyke (2007), and Duke et al. (1998) showed that the selection processes for enrolling students in at-risk transition programs can be subjective. In these studies, six different school divisions were represented with all six having different selection criteria for their respective transition programs. While the results of these studies were comparable, the selection criteria in the Caldwell study were much more specific in nature and were more consistent with the definition of at-risk as defined previously by the Virginia Department of Education.

A summary of the selection criteria used for Project Success, Block 9, FACT, Exploring Technology, Bearcat Pride and the Dyke study are represented in Table 1.

Curriculum and Components of Ninth-Grade Transition Programs

Various school systems across the country are making efforts to address the problems associated with transitioning into high school. Many school divisions have implemented ninth-grade transition programs of some nature. Duke et al. (1998) referenced the *Washington Post* (January 31, 1997), stating, “It’s hard to find a school district these days that isn’t doing something to ease the transition for ninth-graders, whether creating special orientation sessions for new students or establishing an entire school solely for ninth-graders.” (p. 6) As mentioned earlier, inconsistency in identifying at-risk students is common. It is reasonable to expect some inconsistency in the components and/or curriculum used by ninth-grade transition programs.

Table 1

Selection Criteria used for 9th Grade Transition Programs

Selection Criteria	9th Grade Transition Programs				
	Project Success	Block 9	FACT	Exploring Technology	Bearcat Pride
Upper Quartile on Standardized Scores	X				
No Behavioral problems	X				
No Honors or Advanced Classes		X			
Standardized Test Scores			X		X
Teachers' Recommendations				X	X
Discipline Referrals					X
Absences					X
Course Grades					X
GPA					X
Tardies					X
First Time, Over Aged, 9 th Graders					X
Regular Education Students					X

Before identifying the components of any transition program, understanding the perceptions of the stakeholders involved in the transition to high school is important. Morgan and Hertzog (2001) reported, “By including parents in the design of transition programs, schools gain valuable allies in helping ease students’ anxiety about the move.” (p. 14) Furthermore, Akos and Galassi (2004) suggested that if transition programs are oriented purely around teacher assessments of student worries, efforts might be misdirected. Zeedyk et al., (2003) felt that input from all parties, not just teachers, is important when designing transition programs:

It seems that pupils and their parents experience a high degree of similarity in their perspectives, so if the experience of transition is to be improved, it may be necessary to focus efforts on both groups. There was also some evidence that teachers may underrate the extent to which children's individual abilities and skills can contribute to the transition process. (p. 77)

Lehr et al. (2004) identified several dropout intervention programs, two of which are designed specifically for the transition of eighth graders to high school: the Ninth Grade Dropout Prevention Program (NGP) and the School Transitional Environment Project (STEP). NGP's components utilized an orientation program, peer tutoring, small class size, and strategies to improve relationships between home and school. STEP is intended to help students during the transition period from middle school to high school. Some of the components of STEP include an alternative school environment and a modified role of the homeroom teacher. Much like NGP, STEP enhanced communication between the home and the school.

Akos and Galassi (2004) conducted their quantitative study on perceptions of stakeholders who are directly involved in the transition to high school. The study consisted of questionnaires for both middle and high school students, and their respective parents and teachers. A Likert scale was utilized and analyzed with inferential statistics. The multiple-response options were analyzed using descriptive statistics. A school counseling faculty member and masters' level counseling students coded the open-ended questions. Most of the content analysis involved recording verbatim responses, so interpretation about the possible meaning of these responses was kept to a minimum. Coding was used primarily for classifying recommended transition interventions. These data were then analyzed qualitatively and/or with descriptive statistics.

The middle school participants consisted of 173 sixth-grade students, 83 of their parents, and 12 of their teachers. Forty-eight percent of the participants were male and 49% were female (2.3% did not specify gender). The participants were 57.2% Caucasian, 19.7% African-American, 8.7 % Asian, 8.1%, Hispanic, 4% multiracial, and 2.3% did not specify race.

The high school participants consisted of 320 ninth-grade students, 61 parents, and 17 teachers. There were 47.8% male participants and 50.3% female (1.9% did not specify gender). Caucasians were represented by 76.3% of the students with 10.3% African American, 5.6% Asian, 3.4% Hispanic, 2.2% multiracial, and 1.9% did not specify race.

The middle school drew students from two elementary schools and the high school drew students from two middle schools. Overall the school district can be characterized as high performing with over 90% of the students attending postsecondary education.

Even though Akos and Galassi (2004) studied the perceptions of stakeholders who are directly involved in the transition to high school, the analyses of the data indicated that the three groups of participants (i.e., stakeholders) had similar views of the challenges posed by transitioning into high school. Those challenges prompted the participants to provide useful suggestions related to the design of transition programs. The suggestions have been categorized as three separate, but interrelated components: procedural, academic, and social.

First, the procedural components of transition (e.g., students successfully finding their way around the school) can be both simple and short term. Examples include guided tours of the building in the spring prior to the transition, self-guided tours for students and families in the summer, scavenger hunts during an orientation, and a walk-through of student class schedules prior to the opening day of classes (Akos & Galassi, 2004)

Second, the implementation of interventions to ensure academic success involves conceptualizing school transition as a process that is completed over time rather than being a simple one-time event. Akos and Galassi (2004) suggested implementing the following components to address the academic concerns of transitioning:

1. Teaching study and time management skills pre- and post-transition.
2. Increasing communications with students regarding academic expectations.
3. Increasing communications between teachers at the middle school and high school.
4. Implementing a homework hotline or teacher website for parents and students to access for assistance with homework.
5. Providing academic tutors.
6. Increasing direct communications between the school and parents in order to assist students with homework, the academic demands of the new school, and to prevent and/or remediate academic problems.

The third component identified by Akos and Galassi (2004) addressed the social aspect of school transition. The study suggested:

Building students' sense of community through interventions such as small group activities during orientation, team building, cooperative learning and other modifications

that result in smaller and a more intimate learning environment would appear to have promise as methods for helping students to negotiate both the social and academic aspects of school transitions successfully. These types of reforms are evident in the movement to smaller learning communities, with academies, schools within a school, and house structures for ninth grade. Moreover, initial research by Felner et al. (1993) reported that students had more positive middle and high school transition experiences as reflected by academic, social-emotional, and behavioral measure in schools that had modified their social environment to increase a sense of belonging than in schools that had not. (p. 10)

While the participants provided useful suggestions about the design of transition programs, the study was conducted with students in a high-performing school district where over 90% of the students attend a postsecondary institution. The participants' perceptions of academic performance as a transition issue may have taken on greater importance as compared to procedural and social concerns. Additionally, the validity of the student questionnaires may have been compromised since the student responses in the pre-transition recollections could have been influenced by either their post-transition experiences or by forgetting given that they were surveyed in October, approximately two months after the students had entered their new schools.

It should be noted that while academies, schools within a school, or house structures for all ninth graders may provide positive opportunities for the transition, programs designed specifically for at-risk students may seem counterproductive if singled out and isolated in a single structure with no interaction with the remainder of the student body (Duke et al., 1998). These researchers suggested that, "Programs for all ninth graders eliminate the stigma and embarrassment of being singled out for a special program upon entering high school" (p. 35). They recommended a combined transition program with components designed to meet the needs of all ninth graders, but with special assistance to at-risk ninth graders without tracking or isolation.

Kemple, Herlihy, and Smith (2005) conducted an independent, third-party evaluation of the Talent Development High School model. This model is a comprehensive school reform initiative that was developed to address challenges facing low-performing public high schools in U.S. cities. This study focused on the first five high schools to begin using the model in the School District of Philadelphia. The study followed 20 cohorts of ninth-grade students for four

years of high school. In order to determine the effect of the Talent Development model, the researchers compared a group of students who were exposed to the model with a group of students who were not:

The interrupted time series component of the analytic strategy assessed the extent to which the measures of engagement and performance for students in the Talent Development high schools differ from the engagement and performance for similar students in the same schools prior to Talent Development implementation (p. 34).

Some of the key components of the Talent Development model that address ninth-grade transition issues are listed as follows and they are represented in the simplified conceptual framework in Figure 2:

1. Ninth-Grade Success Academy, a self-contained school-within-a-school organized around interdisciplinary teacher teams that share the same and have common daily planning time
2. doubling the course offerings in English and math
3. 4 x 4 block schedule to encourage time for students to work in cooperative teams
4. Freshman Seminar offered the first semester of the ninth-grade year to offer skills that will help students improve their study habits, note-taking, and time-management skills, as well as social skills inside and out of school
5. Twilight Academy, an after hour's program for students with severe discipline or attendance problems (Kemple et al., 2005).

In Dyke's (2007) study of a transition program for over-age, first-time ninth graders, several components of the transition program were identified. First, the transition program classes were double blocked in an attempt to provide additional instructional time. The course offerings consisted of Algebra I, English 9, biology, and one elective. Second, the transition program students had four teachers who saw them on a daily basis. Third, the team of teachers was provided with a common planning time. Fourth, the teachers were given a smaller teaching load. Finally, the participants of this transition program were provided with bi-monthly guidance from a school counselor.

Contrary to the academic rigors and high academic expectations reported by Dyke (2007) and Kemple et al. (2005), an article sponsored by the Office of Educational Research and Improvement, *The Ninth Grade—A Precarious Time for the Potential Dropout* (Ascher, 1987)

lists several components or strategies that high schools should implement in an effort to assist at-risk students from dropping out of school:

1. deferring required courses to allow room for more electives in the ninth grade
2. improving articulation between high school and primary school
3. decreasing the feeling of alienation in the ninth grade
4. sensitizing teachers to the problems of being a ninth grader
5. creating alternatives to retention before the ninth grade
6. planning special programs to orient middle school students and their parents to high school

Legters and Kerr (2001) investigated the lack of information regarding the character of ninth-grade reforms, the extent to which they are being implemented, and/or the impact on student outcomes. They studied the types and effects of practices aimed at promoting ninth-grade success through a quantitative analysis of data collected from public high schools in Maryland. They examined specific practices and assessed their impact on student attendance, achievement, promotion, and dropout rates.

The study consisted of surveying 174 schools in the spring of 2000, which achieved a 79% response rate. An additional source of data was information collected by the Maryland State Department of Education: student participation, achievement, and background characteristics that were reported on the annual Maryland School Performance Assessment Program (MSPAP). Also included in the MSPAP was data pertaining to school size, average student socioeconomic status, race and ethnicity composition, dropout rates, school-wide attendance rates, and percentage of ninth graders passing the basic skills test (Legters & Kerr, 2001).

Legters and Kerr's (2001) study revealed that Maryland high schools used a diverse set of practices/components with their ninth graders. Twenty-five percent of the high schools used school-within-a-school, academy, or small learning community models as the primary component for ninth-grade transition, 33% used extended blocks of instructional time, 25% used interdisciplinary teams of teachers who share the same students, and 34% grouped students in a homeroom or advisory group that met on a regular basis. Additionally, the researchers found that in Maryland high schools:

Nearly 80% of schools report that teachers use student-centered instructional practices, such as cooperative learning or student-directed projects or activities, an average of once

a week or more. Similarly, nearly all (94%) of Maryland high schools conduct orientation programs or assemblies for ninth grade students upon arrival at high school. (p. 6)

Furthermore, Legters and Kerr identified other key components such as special curriculums, classes for ninth graders that provide assistance with both study and social skills, and summer enrichment programs.

Blankenship's (2009) study evaluating a personalized education program for at-risk ninth grade students focused on teacher mentor programs. Blankenship assessed the needs of at-risk 9th graders by developing and implementing a transitional intervention program pairing at-risk students with volunteered teachers who mentored, advised, tutored, and created a personalized education plan for each student. This qualitative case study selected a group of students who were failing one or more classes by progress report time. Data were collected from mentors' and mentees' recorded open-ended questionnaires that analyzed the effectiveness of building relationships with students and whether mentors could have a positive effect on the social and academic performances of their students. Blankenship's findings indicated that the mentor program had positive affects on the majority of the mentees.

Effectiveness and Recommendations for Transition Programs

After identifying at-risk students who are part of the implementation of transition programs with multiple components, this review investigates the evaluation process to determine if the efforts made in transitioning students into the ninth grade are successful. Not only does this section examine the effectiveness of several of the previously mentioned studies, it examines the recommendations of the researchers for future consideration.

Legters and Kerr (2001) indicated that in the state of Maryland ninth-grade transition practices are being used to promote ninth-grade success and schools that are considered high poverty and high minority are most likely to implement transition practices. Moreover, the data indicate that the high poverty, high minority schools that reported using the school-within-a-school component showed substantial improvements in promotion, dropout, and achievement outcomes between 1993 and 2000. The researchers recommend that these findings warrant further investigation of the potential of the school-within-a-school component to improve student outcomes, especially in disadvantaged high schools.

Dyke (2007) summarized her study with 30 identified areas of concern. Of the 30 areas, only four areas had statistically significant results when the transition program was implemented.

The transition program was effective in reducing the number of students recycled, the number of male students recycled, the number of female students recycled, and the number of female students absent. Dyke found that this transition program had little impact on grade point averages, discipline issues, and overall attendance.

Dyke (2007) made several recommendations based on the results of her study. First, much like Ascher (1987) suggested, decrease the number of required courses and add more elective courses to ensure some academic success for at-risk ninth graders. Second, the program should increase staff training on gender sensitivities, investigate the grading practices and expectations of ninth-grade teachers and students, investigate discipline practices and classroom management, and strengthen attendance policies.

Contrary to the Dyke study, Kemple et al. (2005) discovered several positive results from the implementation of the Talent Development High School model. Some of their key findings were:

1. substantial gains in attendance, academic course credits earned, and promotion rates
2. positive impacts during the first year of high school with emphasis on combining high-quality curricular and instructional enhancements with pervasive structural reforms aimed at building supportive and personalized learning environments
3. improvements in credits earned and promotion rates for ninth graders were sustained as students moved through high school

The Duke et al. (1998) study of nine different transition programs, with five involving all ninth graders and four dealing with at-risk ninth graders, reported several factors as being effective. Student discipline was an area where improvements were made with eight of the nine programs indicating some type of success in reducing student referrals. Improvement in grades was identified in most of the transition programs. One of the transition programs designed for all ninth graders noted a passing rate of 32% prior to the implementation of the program and 93% in the post-transition program. However, only two programs indicated that standardized test scores had improved. Seven of the nine programs reported improvements in the students' ability to adapt socially to the high school environment. It should be noted that Duke, Boudreax, Epps, and Wilcox removed the program names from the results of this study to avoid possible embarrassment or controversy.

Based on the findings by Duke et al. (1998), several recommendations were made to school leadership:

1. Ninth-grade transition programs should establish clear goals and expectations to evaluate program effectiveness clearly.
2. At-risk transition programs should be offered in the context of a general transition program for all ninth graders.
3. Ninth-grade transition programs should be staffed with one reading specialist, one special education teacher, and one guidance counselor.
4. Ninth-grade transition programs should provide their teachers with common planning time, staff development, and special resources.
5. Ninth-grade students should be provided with a required study hall.
6. At-risk eighth graders should be required to attend a special summer program focused on skill development before entering the ninth grade.
7. Systematic research on the effectiveness of different types of ninth-grade transition programs should be undertaken.

In Caldwell's 2007 study, significant differences were found in three of six areas: significant improvement in GPA, reduction in the number of core course failures, and the number of extra-curricular activities. The research found no significant improvement or minimal differences in Stanford 9 Reading scores, attendance, and the number of times tardy to school.

Caldwell suggested the positive outcomes could be:

...attributed to the support and implementation of the transition program, smaller learning community, study skills classes, literacy curriculum, academic and career counseling, after-school and summer programs, teacher mentoring, character education classes, monitoring of student agenda books, motivational strategies, and parent programs and involvement. (p. 148)

Caldwell (2007) attributes the lack of improvement in the Stanford 9 reading scores, attendance and tardies to the ineffectiveness of the parent programs and involvement, family illnesses, and the lack of teacher staff development programs in teaching literacy for at-risk students. The following recommendations were made based on Caldwell's results:

1. modified block scheduling to keep students out of the mainstream and to reduce discipline problems

2. inclusion of single-sex education classes
3. rotation of teacher participation after a three-year term
4. staff development on learning theory
5. consistent disciplinary plan
6. funding for student motivational programs and activities
7. weekly staff meetings on student progress
8. additional transition activities from middle school to high school (e.g., student and teacher exchanges)

Summary of Research

Transitioning from middle school to high school, as evidenced by the preceding review of literature and analysis of research studies, can be difficult for young adults. For those young adults that have historically struggled in the normal school environment, the transition process from middle school to high school is complicated exponentially. While various school systems across the country are making attempts to address transitional problems, relatively little information is available on the effects of transitional programs. Moreover, there is relatively little information available on the effects of transitional programs that deal specifically with at-risk students. The information that is available primarily investigates the perceptions of the participants that are directly involved in the transition process and looks at the transition process pertaining to the ninth grade as a whole, not specifically at-risk ninth graders.

The review of literature and the analysis of the studies indicate that there are not enough data to suggest that one transition program is better than another, but the research does suggest that there are promising programs that are evolving with positive results to ensure the success of at-risk ninth grade students. Components of these programs deserve to be studied further and should be considered by policy makers.

Future Research

Additional research on ninth-grade transition programs is needed in an effort to influence policy makers regarding issues that our young students are facing today. Findings from these important studies are needed to inform local and national decision makers about issues ranging from curriculum conversations to dropout prevention, school configuration, and cross-building planning (Smith, 2006). With the passing of NCLB, attention has been directed toward the

problem of dropouts with a focus on increasing the graduation rates for all students. Lehr et al., stated, “Educators, administrators, and policy makers at district and state levels are in need of interventions that will increase high school graduation for all students especially those at risk of school failure” (p. 1).

Smith (2006) went on to suggest that there is a lack of research on the impact of programs designed to help students transition from middle school to high school. He also stated, “that while the studies that have been conducted by the National Education Longitudinal Study provide valuable information about the impact of transition programs on student academic and social outcomes, however, the database is almost 20 years old” (p. 1). Stein and Hussong (2007) stated, “Although considerable research show dramatic developmental changes in the transition to middle school, far fewer studies examine factors impacting the transition to high school” (p. 60). Additionally, Lehr et al. (2004) indicated that synthesis of research-based dropout prevention programs is difficult due to the incomplete intervention research on dropout and school completion rates. “In light of the negative consequences of dropouts for society and individuals, facilitating school completion for all students must be a priority for educators, administrators and policymakers across the country” (p. 8).

The research at Stuarts Draft High School included a quantitative study that analyzed the statistical data of success over the history of the A.C.T. class, a yearlong ninth-grade transition program first implemented in 2003, as previously explained. Each year, at-risk students were selected in the spring of their eighth grade year to participate. The results of this study can provide valuable information to help school personnel analyze and revise components of the A.C.T. program in an effort to meet the needs of the stakeholders involved. A successful at-risk program has the potential to improve academic performance and social behavior, while decreasing the number of ninth-grade failures, which could eventually decrease the number of future dropouts.

The ninth grade provides the foundation for a successful high school career that could be a key building block for changing the culture of today’s high schools. The potential benefits from the components and methodologies implemented in the A.C.T. program should not be limited to the locality of Augusta County; the benefits could impact the remaining high schools in the region and state, and provide national implications as well.

The A.C.T. transition program studied involved a high school located in Central Virginia. A.C.T. was designed to provide ninth-grade at-risk students with the skills necessary for making a successful transition from the middle school to high school and continued success in the remainder of their high school career. The purpose of the study was to see if the ninth-grade at-risk participants in this transition program had a greater success rate, as measured by GPA, absence rate, tardies to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts, when compared to a control group of ninth-grade students with the same at-risk characteristics who did not participant in the A.C.T. program. Both the control group and the experimental group attended the same high school.

As mentioned in the opening paragraph, it was suggested that the ninth grade year has the highest failure rate, which could lead to an increased dropout rate. The expectations presented to public schools in NCLB do not allow for continued and increasing dropout rates in our high schools. Therefore, being proactive in retaining students should be of national concern and should be at the forefront of school boards across the country.

Chapter 3

Introduction of Methodology

The purpose of this study was to determine if a transition program had an effect on the academic and social issues that at-risk ninth graders face as they transition to high school. The A.C.T. program was designed to provide ninth-grade at-risk students with the skills necessary for making a successful transition from the middle school to high school and for continued success in the remainder of their high school career. The study-determined if these students in this transition program had a greater success rate, as measured by GPA, absences, tardies to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts when compared to a control group of ninth-grade students with the same at-risk characteristics who did not participant in the A.C.T. program. A case study approach was used by the researcher to explore the program, event, activity, and/or the process for one or more individuals in depth. The case(s) were bound by time and activity, and researchers collected detailed information using a variety of data collection procedures over a sustained time period (Creswell, 2007).

This chapter identifies the participants of the study and defines evaluation instruments, data collection, and data analysis procedures. The formative assessment of the program is designed to provide data that will analyze and improve the program.

Description of Program

In this study the A.C.T. participants were the experimental group. They received the treatment of the additional aide and curriculum of the A.C.T. class and the influence of the A.C.T. teachers. The transition program included two, yearlong, 45-minute transition classes and three 90-minute block classes of a more traditional format (i.e., English 9, world geography, Earth science, health and physical education, and an elective course) per semester. The curriculum of the two, yearlong, 45-minute classes concentrated on improving reading comprehension skills, writing skills, study skills, technology integration, conflict resolution, and social skills. Additionally, the teachers served as adult mentors for the students. One English teacher and one business teacher taught the transition classes. A business teacher and English teacher were chosen due to their respective talents and certifications as they relate to the goal of improving reading comprehension, writing, and technology integration. Half of the A.C.T.

participants attended class with the English teacher for 45 minutes while the other half of the A.C.T. participants attended the 45-minute class with the business teacher. After the 45-minute session, the two teachers switched students.

The control groups of students followed a traditional program of study and did not receive the treatment of the additional aide and curriculum of the A.C.T. class and the influence of the A.C.T. teachers. This particular high school utilized a 4 x 4 block schedule where each student in the control groups took four 90-minute classes per semester. The traditional courses taken by the control group were also included in the A.C.T. program of study, minus the transition classes. Both groups utilized the same faculty for the traditional classes.

The research questions for this study were:

Research Question 1. What are the *differences among the two independent variables: 1) three cohort classes who participated in the A.C.T. at-risk program (treatment groups) and 2) other students who had similar at-risk criteria who were not selected in the A.C.T. program (control groups)* on the seven dependent variables: 1) GPA, 2) absences, 3) the number of times tardy to school, 4) the number of course failures, 5) the number of discipline referrals, 6) the number of verified credits, and 7) the number of high school dropouts?

Research Question 2. What are the *differences among the independent variables gender, males and females, in the three cohort classes* who participated in the A.C.T. at-risk program on the seven dependent variables: 1) GPA, 2) absences, 3) the number of times tardy to school, 4) the number of course failures, 5) the number of discipline referrals, 6) the number of verified credits, and 7) the number of high school dropouts?

Research Question 3. What are the *relationships among each selection criterion variable used to select participants into the A.C.T. program* on the seven dependent variables: 1) GPA, 2) absences, 3) the number of times tardy to school, 4) the number of course failures, 5) the number of discipline referrals, 6) the number of verified credits, and 7) the number of high school dropouts.

Design

This study utilized a quantitative method of research. In this design, one group was the experimental group that received a treatment. The treatments of the experimental groups were the two A.C.T. classes that students were enrolled in. The other group received no treatment and

served as a control group (Pedhazur & Schmelkin, 1991). The control group was not enrolled in the A.C.T. classes.

The results of this research provide information to educators to assist them in planning and implementing successful transition programs for ninth-grade students. Implications of this study confirmed or refuted current practices of the ninth-grade transition program at the school studied. The findings of this study may also be used for program improvements.

In order to verify the control groups and the experimental groups, the researcher randomly matched the characteristics of the entire ninth-grade class with the criteria used for the selection process to the A.C.T. program. Those selection criteria were: a score of 415 or less on at least one eighth grade SOL, two or more failed classes, 10 or more unexcused absences to school, 20 or more tardies to school, five or more out-of-school suspension days, five or more discipline referrals, and teacher recommendations. Additionally, to address the impact of poverty, the researcher identified those students who received free or reduced lunch. Once matches were identified, the researcher randomly selected comparable students to create a control group (see Appendix A).

To answer Research Question 1, each dependent variable was measured as the difference between students who participated in the A.C.T. (treatment group) and the students who did not participate in the A.C.T. (control group). Seven different t-tests for independent samples were used to compare the mean differences among the independent variables, A.C.T. and Non-A.C.T., with the seven different dependent variables: GPA, absences, the number of times tardy to school, the number of course failures, the number of discipline referrals, the number of verified credits, and number of high school dropouts.

Seven null hypotheses were evaluated:

1. There is no difference between the A.C.T. treatment group and the control group on GPA.
2. There is no difference between the A.C.T. treatment group and the control group on absences.
3. There is no difference between the A.C.T. treatment group and the control group on the number of times tardy to school.
4. There is no difference between the A.C.T. treatment group and the control group on the number of course failures.

5. There is no difference between the A.C.T. treatment group and the control group on the number of discipline referrals.
6. There is no difference between the A.C.T. treatment group and the control group on the number of verified credits.
7. There is no difference between the A.C.T. treatment group and the control group on the number of high school dropouts.

To answer Research Question 2, each criterion variable was measured as the difference between males and females who participated in the A.C.T. (treatment group). Seven different t-tests for independent samples were used to compare the mean differences among the independent variables, A.C.T. males and A.C.T. females, with the seven dependent variables: GPA, absences, the number of times tardy to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts. Seven null hypotheses will be evaluated:

1. There is no difference between the male A.C.T. participants and the female A.C.T. participants on GPA.
2. There is no difference between the male A.C.T. participants and female A.C.T. participants on absences.
3. There is no difference between the male A.C.T. participants and the female A.C.T. participants on the number of times tardy to school.
4. There is no difference between the male A.C.T. participants and the female A.C.T. participants on the number of course failures.
5. There is no difference between the male A.C.T. participants and the female A.C.T. participants on the number of discipline referrals.
6. There is no difference between the male A.C.T. participants and the female A.C.T. participants on the number of verified credits.
7. There is no difference between the male A.C.T. participants and the female A.C.T. participants on the number of high school dropouts.

To answer Research Question 3, each selection criterion variable was measured to determine which of the characteristics used to select participants into the A.C.T. program had significant relationships with the measured outcomes. Pearson's correlations were used to compare the mean differences among the selection criteria variables on the seven dependent

variables: GPA, absences, the number of times tardy to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts. Six null hypotheses will be evaluated:

1. There is no significant relationship between scoring 415 or less on at least one SOL in the 8th grade with GPA, absences, the number of times tardy to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts.
2. There is no significant relationship between two or more failed classes in the 8th grade with GPA, absences, the number of times tardy to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts.
3. There is no significant relationship between ten or more unexcused absences in the 8th grade with GPA, absences, the number of times tardy to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts.
4. There is no significant relationship between 20 or more unexcused tardies in the 8th grade with GPA, absences, the number of times tardy to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts.
5. There is no significant relationship between five or more out-of-school suspension days in the 8th grade with GPA, absences, the number of times tardy to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts.
6. There is no significant relationship between five or more discipline referrals in the 8th grade with GPA, absences, the number of times tardy to school, the number of course failures, the number of discipline referrals, the number of verified credits, and the number of high school dropouts.

Population

The Central Virginia high school in this study had an enrollment of approximately 780 students. The demographics included 91 % White, 6 % Black, 1 % Hispanic, and 2 % other. The

reported economically disadvantaged population, which is determined by free and reduced lunch, was 10%.

Three groups of at-risk 9th grade students were included in this study over their respective high school careers. The study included four years of data for the freshman classes of school years 2002-2003, 2003-2004, and 2004-2005. A transition team consisted of the middle school principal, middle school counselor, middle school teachers, parental approval and high school counselor which select participants in each of the three treatment groups. The selection criteria for enrollment into the A.C.T program were:

1. Virginia Standards of Learning tests; each student attempted to complete the 8th grade SOL tests during the designated testing period, receiving a score of 415 or less.
2. Classes passed; two or more failed classes
3. Five or more suspension days
4. Five or more discipline referrals
5. School absences; 10 or more unexcused absences from school
6. 20 or more unexcused tardies to school
7. Middle school teacher individual recommendations; the middle school staff could recommend a student for the program based on the student's potential successes in a controlled educational environment.

The committee was instructed to examine the student data of the upcoming freshmen class and to recommend students who had the potential to achieve academically and socially in the 9th grade transition program which was specifically designed for at-risk students. The committee was instructed to recommend students who met at least one of the seven selection criteria. Students who were identified as Special Education Students were not considered for participation in the program.

During the 2002-2003 school year, 23 freshmen participated in the program, during the 2003-2004 school year, 24 freshmen participated in the program, and during the 2004-2005 school year, 18 freshmen participated in the program.

Instrumentation

Danielson and McGreal (2000) describe the importance of formative assessment as follows,

Formative judgments play a necessary role in the learning and growing process that defines formative work. Effective frameworks for the design of professional development all involve some noticeable outcome. The most successful systems include mechanisms to ensure that schools use some type of formative assessment as a part of the required analysis and reflection on the outcomes (p. 104).

Summative data have the potential to provide information to local school districts and to other transitional programs for at-risk students with similar demographics and goals. Danielson and McGreal (2000) also weigh in on the importance of summative data in the evaluation process:

Legislators and policy-makers tend to value the summative purposes, those of quality assurance and accountability. They make the point that public schools are, after all, public institutions, supported by taxpayer money, and that the public has the legitimate interest in the quality of teaching that occurs there (p.8).

Archival data of the A.C.T participants and Non-A.C.T. participants were obtained from the student information system, StarBase, by the researcher. The following A.C.T. participants (treatment group) and Non-A.C.T. participants (control group) data were collected: (a) GPA, (b) absences, (c) number of times tardy to school, (d) number of course failures, (e) number of discipline referrals, (f) number of verified credits and (g) number of high school dropouts. The data were analyzed by using Statistical Package for Social Sciences (SPSS) where t-tests and Pearson correlations were utilized.

Range data were created for the ordinal data. The ranges for GPA were set as: “A” = 3.45-4.0; “B” = 2.45-3.44; “C” = 1.45-2.44; “D” = .45-1.44; and “F” \leq .44. The range data for absences were set as: 0 absences; 1-9 absences; 10-19 absences; 20-29 absences; and \geq 30 absences. The range data for tardies to school were set as: 0 tardies; 1-9 tardies; 10-19 tardies; 20-29 tardies; and \geq 30 tardies. The range data for discipline referrals were set as: 0 discipline referrals; 1-9 discipline referrals; 10-19 discipline referrals; 20-29 discipline referrals; and \geq 30 discipline referrals. The range data for course failures were set as: 0 course failures; 1-3 course failures; 4-6 course failures; 7-9 course failures; and \geq 10 course failures. The range data for verified credits were set as: 0 verified credits; 1-3 verified credits; 4-6 verified credits; 7-9 verified credits; and \geq 10 verified credits.

The nominal data A.C.T. participants, free/reduced lunch and dropouts were represented with numerical values. The number 1 represents a “yes” response. The number 2 represents a “no” responses. The nominal data gender was represented with numerical values. The number 1 represents “male” and the number 2 represents “female”.

Procedures

In this quantitative methods case study the researcher was the principal data collector during the collection of archival data. IRB certification was obtained by the researcher (see Appendix B). The Institutional Review Board (IRB) approval at Virginia Tech was secured for the research study before data were extracted from archival sources (see Appendix C). Written permission from the school division’s superintendent and the principal of the high school was requested to conduct the study (see Appendix D and Appendix E). Students’ identities were not disclosed therefore meeting the criteria for exempt category of research listed in regulation 46.101(b) of the IRB Protocol and Submission Document.

Data Analysis

This study examined if the 9th grade at-risk participants in this transition program had a greater success rate, as measured by GPA, absences rate, tardies to school, number of course failures, number of discipline referrals, number of verified credits, and number of high school dropouts, compared to a control group of ninth grade students with the same at-risk characteristics who did not participant in the A.C.T. program.

Descriptive statistics were gathered on dependent variables, GPA, absences, number of times tardy to school, number of course failures, number of discipline referrals, number of verified credits, and number of high school dropouts.

The independent sample t-test is the most frequently used method to determine the differences in means between two groups (Howell, 2002). The independent sample t-test can also be used if sample sizes are relatively small. Independent sample t-tests were conducted on the following dependent variables: GPA, absences, number of times tardy to school, number of course failures, number of discipline referrals, number of verified credits, and number of high school dropouts to compare means and differences of the treatment groups and the control groups. The treatment groups were compared to the control groups to draw conclusion concerning which mean is larger than the other, compare the means and standard deviations

between the two groups and verify if there was a significant difference between the means, significance level at $p < .05$. Pearson's r will be used to compute the effect size, where $r \geq .7$ is considered to be large, $r = .5$ is considered to be moderate and $r \leq .4$ is considered to be a small relationship.

Limitations

This quantitative study was conducted with a limited number of participants. The study was limited to the students of Stuarts Draft High School. The results cannot be generalized to other transition programs for at-risk students. The participants of this study were confined to the first three years of the A.C.T. program.

The students in this study represented a rural high school in central Virginia with a 4 x 4 block system with a semester based credit system. Looking at each cohort for their respective four-year academic careers, the students involved in the study may not have had the same teachers resulting in teacher expectations and grading practices as a limitation.

Although the students in the transition program had similar schedules, they did not take the same number of SOL tests consistently from year to year and is considered limitation. Other limitations include: a loss of 28 participants due to transfers to other schools; the randomly matched control group was not matched exactly with the experimental group; the middle school used in this study did not keep student tardy records, therefore the selection criteria of 20 or more unexcused tardies was not a valid selection criteria; and the middle school administration did not keep records of the teacher recommendations to place students into the A.C.T. program therefore there is no documentation for the 13 (25%) A.C.T. participants who were placed in the transition program based solely on teacher recommendations.

Chapter 4

Purpose of the Study

The purpose of the study was to determine if a transition program had an effect on the academic and social issues that at-risk 9th graders face as they transition to the high school. A case study approach using archival data was used to explore the differences in the treatment and control groups measured by grade point average (GPA), absences, tardies to school, course failures, discipline referrals, verified credits, and dropouts.

This chapter contains the statistical analysis of the data related to the three research questions and hypotheses. These data were obtained from the school division's database and were analyzed by using the Statistical Package for the Social Sciences (SPSS). Independent sample t-tests were used to compare mean group differences between the A.C.T. participants and the Non-A.C.T. participants and to compare the mean group differences between the male A.C.T participants and the female A.C.T. participants. Additionally, Pearson's correlation tests were used to find the relationships among each selection criterion variable used to select participants into the A.C.T. program.

The first section represents demographic information about the students involved in the study. The following sections represent the data collections, results, analysis and summary.

Demographic Data

The participants in this study, both A.C.T. students and Non-A.C.T. students, must have met at least one of the following selection criteria: a score of 415 or less on at least one eighth grade SOL, two or more failed classes, 10 or more unexcused absences to school, 20 or more tardies, five or more out-of-school suspension days, five or more discipline referrals, and teacher recommendations. Additionally, to address the impact of poverty, the researcher identified those students who were receiving free or reduced lunch.

There were originally 130 participants in this study which included three cohorts of ninth grade classes, the ninth grade class of 2003-2004, ninth grade class of 2004-2005 and the ninth grade class of 2005-2006. The data collected represents four years of each cohort's high school career.

There was a loss of 28 participants in this study netting a final population of 102 students. Fourteen of the 28 participants that were eliminated in the study were A.C.T. students who

transferred from the high school in which the study was conducted and who transferred to a school outside the school division. Seven of these transfer students were male A.C.T. students and seven of these transfer students were female A.C.T. students. The remaining 14 participants that were eliminated in this study were the randomly matched Non-A.C.T. students of the control group. The 14 Non-A.C.T students that were eliminated in this study consisted of seven male and seven female students.

Table 2 provides information concerning the demographic characteristics of the three ninth grade cohorts in this study as well as demographic characteristics on the dependent variables GPA, absences, tardies, discipline referrals, course failures, verified credits, and dropouts. The data presented in Table 2 represents cumulative numbers for the four year high school career of each participant in the study. Of the participants, 51(50%) were A.C.T. students and 51 (50%) were Non-A.C.T. students. Fifty-four (52.9%) of the students were male and 48 (47.1%) were female. Twenty-three (22.5%) of the participants participated in the free and

Table 2

Demographic Characteristics of Participants (n =102)

Characteristics	03-04		04-05		05-06		
	(n=38)		(n=18)		(n=46)		
1. A.C.T. participants	Yes	19	50.0%	9	50.0%	23	50.0%
	No	19	50.0%	9	50.0%	23	50.0%
2. Gender	Male	17	44.7%	11	61.1%	26	56.5%
	Female	21	55.3%	7	38.9%	20	43.5%
3. Free/Reduced	Yes	4	10.5%	5	27.8%	14	30.4%
	No	34	89.5%	13	72.2%	32	69.6%
4. GPA Range	A	0	0%	2	11.1%	1	2.2%
	B	12	31.6%	4	22.2%	13	28.3%
	C	23	60.5%	11	61.1%	21	45.7%
	D	3	7.9%	1	5.6%	10	21.7%
	F	0	0%	0	0%	1	2.2%

(table continued)

Table 2 (continued)

Characteristics	03-04		04-05		05-06		
	N	%	n	%	N	%	
5. Absence Range	0	1	2.6%	0	0%	0	0%
	1-9	3	7.9%	1	5.6%	2	4.3%
	10-19	4	10.5%	3	16.7%	2	4.3%
	20-29	7	18.4%	2	11.1%	7	15.2%
	≥ 30	23	60.5%	12	66.7%	35	76.1%
6. Tardy to School Range	0	0	0%	1	5.6%	0	0%
	1-9	10	26.3%	1	5.6%	6	13.0%
	10-19	7	18.4%	5	27.8%	7	15.2%
	20-29	5	13.2%	1	5.6%	9	19.6%
	≥ 30	16	42.1%	10	55.6%	24	52.2%
7. Discipline Referral Range	0	6	15.8%	2	11.1%	3	6.5%
	1-9	24	63.2%	13	72.2%	25	54.3%
	10-19	5	13.2%	1	5.6%	8	17.4%
	20-29	2	5.3%	1	5.6%	8	17.4%
	≥ 30	1	2.6%	1	5.6%	2	4.3%
8. Course Failure Range	0	9	23.7%	5	27.8%	8	17.4%
	1-3	20	52.6%	5	27.8%	19	41.3%
	4-6	5	13.1%	3	16.7%	9	19.6%
	7-9	2	5.3%	3	16.7%	8	17.4%
	≥ 10	2	5.3%	2	11.1%	2	4.3%
9. Verified Credit Range	0	3	7.9%	2	11.1%	6	13.0%
	1-3	2	5.3%	1	5.6%	3	6.5%
	4-6	6	15.8%	1	5.6%	10	21.7%
	7-9	20	52.6%	6	33.3%	18	39.1%
	≥ 10	7	18.4%	8	44.4%	9	19.6%
10. Dropouts	Yes	5	13.2%	3	16.7%	15	32.6%
	No	33	86.8%	15	83.3%	31	67.4%

reduced lunch program and 79 (77.5%) of the participants did not participate in the free and reduced lunch program. Fifty-five (54%) of the participants in the study maintained a GPA of a “C” average. Seventy (69%) of the participants in the study accumulated 30 or more absences from school and 50 (49%) accumulated 30 or more tardies. Sixty-two (61%) of the participants in the study accumulated one to nine discipline referrals. Forty-four (43%) of the participants in the study accumulated one to three course failures. Forty-four (43%) of the participants in the study earned seven to nine verified credits and 79 (77%) of the participants in the study were high school graduates.

Table 3 provides information concerning the demographic characteristics of the three ninth grade cohorts in this study as it pertains to the six selection criteria of the participants. The six selection criteria used in this study were: a score of 415 or less on at least one 8th grade SOL; failed two or more classes during their 8th grade year; 10 or more unexcused absences during their 8th grade year; 20 or more unexcused tardies during their 8th grade year; five or more out of school suspensions (OSS) during their 8th grade year; and five or more discipline referrals during their 8th grade year. Eighty-four (82%) of the participants in the study scored 415 or less on at least one of their 8th grade SOL. Seventy (69%) of the participants in the study did not fail two or more classes during their 8th grade year. Ninety-three (91%) of the participants in the study had fewer than ten unexcused absences during their 8th grade year. One hundred and two (100%) of the participants in the study had fewer than 20 unexcused tardies to school. Ninety-four (92%) of the participants in the study had fewer than 5 discipline referrals in the 8th grade.

Table 3

Selection Criteria of Participants During their 8th Grade Year (n = 102)

Selection Criteria	03-04		04-05		05-06		
	n	%	n	%	n	%	
1. 415 or less	Yes	37	97.4%	6	33.3%	41	89.1%
	No	1	2.6%	12	66.7%	5	10.9%
2. Failed 2+	Yes	7	18.4%	6	33.3%	19	41.3%
	No	31	81.6%	12	66.7%	27	58.7%
3. 10+ unexcused absences	Yes	1	2.6%	0	0%	8	17.4%
	No	37	97.4%	18	100%	38	82.6%
4. 20+ unexcused tardies	Yes	0	0%	0	0%	0	0%
	No	38	100%	18	100%	46	100%
5. 5+ OSS	Yes	1	2.6%	0	0%	0	0%
	No	37	97.4%	18	100%	46	100%
6. 5+ referrals	Yes	3	7.9%	0	0%	5	10.9%
	No	35	92.1%	18	100%	41	89.1%

Table 4 provides the participants central tendency characteristics on GPA, absences, tardies to school and discipline referrals. The data presented in Table 4 represents averages for the four year high school career of each participant in the study.

Table 4

Participant Central Tendency Characteristics During their High School Career (n = 102)

Characteristic	M	SD	Median	Mode	Range	Max.	Min.	Variance
03-04 (n=38)								
GPA	2.27	.58	2.24	.87	2.37	3.24	.87	.33
Absences	51	38	44	28	153	153	0	1412
Tardy to School	30	26	22	1	100	101	1	674
Discipline Referrals	6	7	3	0	31	31	0	49
04-05 (n=18)								
GPA	2.46	.76	2.26	1.15	3.00	4.15	1.15	.58
Absences	59	39	63	11	147	156	9	1544
Tardy to School	38	28	38	13	87	87	0	783
Discipline Referrals	7	9	4	3	35	35	0	79
05-06 (n=46)								
GPA	2.03	.72	1.96	.00	3.72	3.72	.00	.52
Absences	61	37	63	24	185	192	7	1357
Tardy to School	40	32	30	28	142	143	1	1023
Discipline Referrals	11	10	7	4	43	43	0	99

The 2005-2006 cohort had the lowest mean average for GPA (2.03) and the highest mean averages for absences (61), tardies to school (40) and discipline referrals (11) compared to the other two cohorts.

Data Analysis

Research Question 1. What are the differences among the two independent variables: 1) three cohort classes who participated in the A.C.T. at-risk program (treatment groups) and 2) other students who had similar at-risk criteria who were not selected in the A.C.T. program (control groups) on the seven dependent variables: 1) GPA, 2) absences, 3) the number of times tardy to school, 4) the number of course failures, 5) the number of discipline referrals, 6) the number of verified credits, and 7) the number of high school dropouts?

Table 5 shows the demographic comparisons and the comparisons of the dependent variables between the A.C.T. participants and the Non-A.C.T. participants. Table 4 represents data over the four year high school career of each participant. The gender of the A.C.T. participants and the Non-A.C.T. participants were divided equally. The A.C.T. participants consisted of 12 (23.5%) students on free and reduced lunch and 11 (21.6%) of the Non-A.C.T. participants were free and reduced lunch. The highest percentage for GPA range for the A.C.T. participants was the “C” range with 32 (62.7%) of the A.C.T. participants earning a GPA between 1.6667 and 2.3333. The highest GPA range for the Non-A.C.T. participants was the “C” range with 23 (45.1%) of the Non-A.C.T. participants earning a GPA between 1.6667 and 2.3333. The highest percentage for absence range (number of days absent from school) for both the A.C.T. and Non-A.C.T. participants was the 30 or more days of school at rate of 68.6%.

Table 5

Comparison Between A.C.T. Participants and Non-A.C.T. Participants Over their Four Year High School Careers (n = 102)

Characteristics	<u>A.C.T. Participants</u> (n = 51)		<u>Non-A.C.T.</u> <u>Participants</u> (n = 51)		
	N	%	N	%	
1. Gender	Male	27	52.9%	27	52.9%
	Female	24	47.1%	24	47.1%
2. Free/Reduced	Yes	12	23.5%	11	21.6%
	No	39	76.5%	40	78.4%
3. GPA Range	A	0	0%	3	5.9%
	B	12	23.5%	17	33.3%
	C	32	62.7%	23	45.1%
	D	7	13.7%	7	13.7%
	F	0	0%	1	2.0%

(table continued)

Table 5 (continued)

Characteristics	<u>A.C.T. Participants</u> (n = 51)			<u>Non-A.C.T.</u> Participants (n = 51)		
	N	%	N	%		
4. Absence Range						
0	0	0%	1	2.0%		
1-9	3	5.9%	3	5.9%		
10-19	4	7.8%	5	9.8%		
20-29	9	17.6%	7	13.7%		
≥ 30	35	68.6%	35	68.6%		
5. Tardy to School Range						
0	1	2.0%	0	0%		
1-9	5	9.8%	12	23.5%		
10-19	9	17.6%	10	19.6%		
20-29	8	15.7%	7	13.7%		
≥ 30	28	54.9%	22	43.1%		
6. Discipline Referral Range						
0	4	7.8%	7	13.7%		
1-9	31	60.8%	31	60.8%		
10-19	7	13.7%	7	13.7%		
20-29	5	9.8%	6	11.8%		
≥ 30	4	7.8%	0	0%		
7. Course Failure Range						
0	8	15.7%	14	27.5%		
1-3	23	45.1%	21	41.2%		
4-6	8	15.7%	9	17.6%		
7-9	8	15.7%	5	9.8%		
≥ 10	4	7.8%	2	3.9%		
8. Verified Credit Range						
0	6	11.8%	5	9.8%		
1-3	2	3.9%	4	7.8%		
4-6	9	17.6%	8	15.7%		
7-9	26	51.0%	18	35.3%		
≥ 10	8	15.7%	16	31.4%		
9. Dropouts						
Yes	8	15.7%	15	29.4%		
No	43	84.3%	36	70.6%		

The A.C.T. participants' highest range for tardies was 30 or greater with 28(54.9%) students and the Non-A.C.T. participants' highest range for tardies was 30 or greater with 22 (43.1%) students. The highest discipline referral range for both the A.C.T. and Non-A.C.T. participants was the 1-9 discipline referral range at 60.8%, 31 students for each group. The highest course failure range, over the time frame of four years of their high school career, for both the A.C.T. and Non-A.C.T. participants was the 1-3 course failure range with 23 (45.1%) students and 21 (41.2%) students respectively. The highest verified credit range for both the A.C.T. and Non-A.C.T. participants was the 7-9 range with 26 (51%) students and 18 (35.3%) students respectively. The A.C.T. participants had 8 (15.7%) students dropout and the Non-A.C.T. participants had a 15 (29.4%) dropout.

Table 6 shows the central tendency comparisons of the A.C.T. participants and the Non-A.C.T. participants. The data represents a four year average over the course of the participants' high school career. The A.C.T. participants had a lower mean average on GPA (2.11) compared to the Non-A.C.T. participants on GPA (2.27). The A.C.T. participants had a higher mean average on absences, tardies to school, course failures and discipline referrals compared to the Non-A.C.T. participants.

Table 6

Central Tendency Comparison Between A.C.T. Participants and Non-A.C.T. Participants Over their Four Year High School Careers (n =102)

Characteristic	M	SD	Median	Mode	Range	Max.	Min.	Variance
A.C.T. participants (n=51)								
GPA	2.11	.58	2.08	.89	2.35	3.24	.89	.33
Absences	60	37	63	24	150	156	6	1401
Tardy to School	38	26	32	13	101	101	0	674
Course Failure	4	4	3	2	13	13	0	13
Verified Credit	7	3	8	8	11	11	0	11
Discipline Referral	9	10	6	3	43	43	0	106
Non-A.C.T. participants (n=51)								
GPA	2.27	.79	2.22	1.67	4.15	4.15	.00	.62
Absences	55	38	54	9	192	192	0	1418
Tardy to School	33	32	26	1	142	143	1	1042
Course Failure	3	3	2	8	13	13	0	10
Verified Credit	7	3	0	8	11	11	0	12
Discipline Referrals	7	7	4	0	24	24	0	53

Table 7 shows the results of the seven different t-tests for independent samples comparing group differences between the A.C.T. participants and the Non-A.C.T. participants. The t-tests showed that there were no significant differences between the A.C.T. participants and the Non-A.C.T. participants on GPA, absences, tardies, course failures, discipline referrals, verified credits and dropouts at $p < .05$.

Table 7

Group Differences Between A.C.T. Participants and Non-A.C.T. participants

Measure	<u>A.C.T. Participants</u>	<u>Non-A.C.T. Participants</u>	<i>Df</i>	<i>t</i>
1. GPA	2.11	0.58	2.27	0.79
2. Absences	60	37	55	38
3. Tardy to School	38	26	33	32
4. Course Failure	4	4	3	3
5. Discipline	9	10	7	7
Referral				
6. Verified Credits	7	3	7	3
7. Dropouts	2	0.37	2	0.46

**p* < .05

Research Question 2. What are the differences among the independent variables gender in the three cohort classes who participated in the A.C.T. program on the seven dependent variables: 1) GPA, 2) absences, 3) the number of times tardy to school, 4) the number of course failures, 5) the number of discipline referrals, 6) the number of verified credits, and 7) the number of high school dropouts? A t-test for independent samples was conducted to answer the research question.

Table 8 shows the demographic comparisons and the comparisons of the dependent variables between the male and female A.C.T. participants over their four year high school careers. The male A.C.T. participants consisted of 8 (29.6%) students on free and reduced lunch and 4 (16.7%) of the female A.C.T. participants were free and reduced lunch. The largest number of male A.C.T. students whose averages fell into the “C” range for GPA was 17 (63%) students and the largest number of female A.C.T. students whose averages fell into the “C” range for GPA was 15 (62.5%) students. The highest percentage for absence range for both the male and

female A.C.T. participants was the 30 or more days of school with 16 (59.3%) students and 19 (79.2%) students respectively. The male A.C.T. participants' highest range for tardies was 30 or greater with 14 (51.9%) students and the female A.C.T participants' highest range for tardies was 30 or greater with 14 (58.3%) students. The highest discipline referral range for both the male and female A.C.T. participants was the 1-9 discipline referral range with 13 (48.1%) students and 18 (75%) students respectively. The highest course failure range for both the male and female A.C.T. participants was the 1-3 course failure range with 8 (29.6%) students and 15 (62.5%) students respectively. The highest verified credit range for both the male and female A.C.T. participants was the 7-9 range with 13 (48.1%) students and 13 (54.2%) students respectively. The male A.C.T. participants had 6 (22.2%) students dropout and the female A.C.T. participants had 2 (8.3%) students dropout.

Table 8

Comparison Between Male Participants and Female Participants in A.C.T. Over their Four Year High School Career (n=51)

Characteristics	Male (n=27)		Female (n=24)	
	n	%	n	%
1. Free/Reduced				
Yes	8	29.6%	4	16.7%
No	19	70.4%	20	83.3%
2. GPA Range				
B	5	18.5%	7	29.2%
C	17	63.0%	15	62.5%
D	5	18.5%	2	8.3%
3. Absence Range				
0	0	0%	0	0%
1-9	3	11.1%	0	0%
10-19	3	11.1%	1	4.2%
20-29	5	18.5%	4	16.7%
≥ 30	16	59.3%	19	79.2%

(table continued)

Table 8 (continued)

4. Tardy to School Range	0	1	3.7%	0	0%
	1-9	4	14.8%	1	4.2%
	10-19	5	18.5%	4	16.7%
	20-29	3	11.1%	5	20.8%
	≥ 30	14	51.9%	14	58.3%
5. Discipline Referral Range	0	2	7.4%	2	8.3%
	1-9	13	48.1%	18	75.0%
	10-19	4	14.8%	3	12.5%
	20-29	4	14.8%	1	4.2%
	≥ 30	4	14.8%	0	0%
6. Course Failure Range	0	4	14.8%	4	16.7%
	1-3	8	29.6%	15	62.5%
	4-6	5	18.5%	3	12.5%
	7-9	7	25.9%	1	4.2%
	≥ 10	3	11.1%	1	4.2%
7. Verified Credit Range	0	5	18.1%	1	4.2%
	1-3	1	3.7%	1	4.2%
	4-6	2	7.4%	7	29.2%
	7-9	13	48.1%	13	54.2%
	≥ 10	6	22.2%	2	8.3%
8. Dropouts	Yes	6	22.2%	2	8.3%
	No	21	77.8%	22	91.7%

Table 9 shows the central tendency characteristics of the male A.C.T. participants and the female A.C.T. participants over their four year high school careers. The male A.C.T. participants had a lower mean average on GPA (1.99) compared to the female A.C.T. participants on GPA (2.25). The female A.C.T. participants had a higher mean average on absences and tardies to school compared to the male A.C.T. participants.

Table 9

Participant Central Tendency Characteristics Over their Four Year High School Careers (n=51)

Characteristic	<i>M</i>	<i>SD</i>	<i>Median</i>	<i>Mode</i>	<i>Range</i>	Max.	Min.	Variance
Male (n=27)								
GPA	1.99	.55	1.98	.95	2.07	3.02	.95	.30
Absences	53	38	45	24	150	156	6	1428
Tardy to School	34	25	30	3	87	87	0	609
Course Failure	5	4	0	0	13	13	0	17
Verified Credit	7	4	8	8	11	11	0	15
Discipline Referrals	13	12	8	6	43	43	0	153
Female (n=24)								
GPA	2.25	.59	2.34	.89	2.35	3.24	.89	.35
Absences	68	36	68	68	137	153	16	1312
Tardy to School	43	27	33	13	94	101	7	735
Course Failure	3	3	2	2	11	11	0	7
Verified Credit	7	3	7	6	11	11	0	6
Discipline Referrals	5	5	4	3	20	20	0	23

While the mean averages between the male A.C.T. participants and the female A.C.T. participants were relatively the same on course failures and verified credits, the male A.C.T. participants had a higher mean average on discipline referrals (13) compared to the female A.C.T. participants (5).

Table 10 shows the results of the seven different t-tests for independent samples comparing group differences between the male A.C.T. participants and the female A.C.T. participants.

Table 10

Group Differences Between Male A.C.T Participants and Female A.C.T. participants

Measure	Male		Female		Df	t
	M	SD	M	SD		
1. GPA	1.99	0.55	2.25	0.59	49	1.59
2. Absences	53	38	68	36	49	1.42
3. Tardy to School	34	25	43	27	49	1.20
4. Course Failure	5	4	3	3	49	2.55*
5. Discipline	13	12	5	5	49	2.89*
Referral						
6. Verified Credits	7	4	7	3	49	0.25
7. Dropouts	2	0.42	2	0.28	49	1.36

* $p < .05$

The test revealed that there was a statistically significant difference between male A.C.T. participants and female A.C.T. participants on course failures, $t(49) = (2.55)$, $p < .05$ (computed $P = .01$). The mean of male A.C.T. participants ($M = 5$, $SD = 4$) was higher than the mean of female A.C.T. participants ($M = 3$, $SD = 3$). The effect size, d , was computed to be .722, which is a large effect size.

The test revealed that there was a statistically significant difference between male A.C.T. participants and female A.C.T. participants on discipline referrals, $t(49) = (2.89)$, $p < .05$ (computed $P = .01$). The mean of male A.C.T. participants ($M = 13$, $SD = 12$) was higher than the mean of female A.C.T. participants ($M = 5$, $SD = 5$). The effect size, d , was computed to be .829, which is a large effect size.

Research Question 3. What are the relationships among each selection criterion variable used to select participants into the A.C.T. program on the seven dependent variables: 1) GPA, 2) absences 3) the number of times tardy to school, 4) the number of course failures, 5) the number

of discipline referrals, 6) the number of verified credits, and 7) the number of high school dropouts.

To answer the research question 3, Pearson Correlation analysis was employed. This form of analysis was used because the researcher wanted to see if the selection criteria had significant relationships with the seven dependent variables and more specifically, to see if the selection criteria used had a relationship with the number of dropouts from the A.C.T. participants and the Non-A.C.T. participants. A correlation describes the strength between two variables and whether or not one variable may predict the value of the other variable. Pearson's r can have a value anywhere between -1 and 1. As the r value gets closer to -1 or 1, the stronger the association between the two variables and the more accurately you can predict one variable from the values of the other variable.

Pearson Correlation analyses were conducted to examine the relationships between the dependent variables and measured outcomes. Intercorrelations for each predictor of all of the participants are found in Table 11. A significance level of $p < .05$ was used for this test.

Table 11

Intercorrelations Among the Selection Criteria and Measured Outcomes (n= 102)

Measure**	GPA	Absences	Tardy to School	Course Failure	Discipline Referral	Verified Credits	Dropouts
415 or Less	.379*	-.067	.029	-.194	-.168	.345*	.250*
Failed 2+	.454*	-.243*	-.101	-.556*	-.487*	.447*	.394*
10+ unexcused absences	.268*	-.131	-.239*	-.066	-.136	.294*	.411*
5+ OSS	-.001	.153	.118	.043	.046	.210*	.184
5+ discipline referrals	.336*	-.006	.140	-.118	-.262*	.397*	.366*
M	2.19	57	36	3	8	7	2
SD	.69	37	29	3	9	3	.42

* $p < .05$

** Note. 20+ unexcused tardies not valid due to n=1.

A Pearson correlation was carried out on scoring 415 or less on at least one 8th grade SOL and high school GPA. The test revealed that there was a small significant correlation between scoring 415 or less on at least one 8th grade SOL and high school GPA $r(102) = .379$, $p < .05$ (computed $p = .000$). Therefore, scoring 415 or less on at least one 8th grade SOL is positively associated with high school GPA and we can say that scoring 415 or less on at least one 8th grade SOL accounts for 14% of the variability in high school GPA.

A Pearson correlation was carried out on scoring 415 or less on at least one 8th grade SOL and verified credits. The test revealed that there was a small significant correlation between scoring 415 or less on at least one 8th grade SOL and verified credits $r(102) = .345$, $p < .05$ (computed $p = .000$). Therefore, scoring 415 or less on at least one 8th grade SOL is positively associated with verified credits and we can say that scoring 415 or less on at least one 8th grade SOL accounts for 12% of the variability in verified credits.

A Pearson correlation was carried out on scoring 415 or less on at least one 8th grade SOL and high school dropouts. The test revealed that there was a small significant correlation between scoring 415 or less on at least one 8th grade SOL and high school dropouts $r(102) = .250$, $p < .05$ (computed $p = .011$). Therefore, scoring 415 or less on at least one 8th grade SOL is positively associated with high school dropouts and we can say that scoring 415 or less on at least one 8th grade SOL accounts for 6% of the variability in high school dropouts.

A Pearson correlation was carried out on failed two or more classes in the 8th grade and high school GPA. The test revealed that there was a moderate significant correlation between failed two or more classes in the 8th grade and high school GPA $r(102) = .454$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is positively associated with high school GPA and we can say that failing two or more classes in the 8th grade accounts for 21% of the variability in high school GPA.

A Pearson correlation was carried out on failed two or more classes in the 8th grade and high school absences. The test revealed that there was a small significant correlation between failed two or more classes in the 8th grade and high school absences $r(102) = -.243$, $p < .05$ (computed $p = .014$). Therefore, failing two or more classes in the 8th grade is negatively associated with high school absences and we can say that failing two or more classes in the 8th grade accounts for 6% of the variability in high school absences.

A Pearson correlation was carried out on failed two or more classes in the 8th grade and high school course failures. The test revealed that there was a moderate significant correlation between failed two or more classes in the 8th grade and high school course failures $r (102) = -.556$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is negatively associated with high school course failures and we can say that failing two or more classes in the 8th grade accounts for 31% of the variability in high school course failures.

A Pearson correlation was carried out on failed two or more classes in the 8th grade and high school discipline referrals. The test revealed that there was a moderate significant correlation between failed two or more classes in the 8th grade and high school discipline referrals $r (102) = -.487$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is negatively associated with high school discipline referrals and we can say that failing two or more classes in the 8th grade accounts for 24% of the variability in high school discipline referrals.

A Pearson correlation was carried out on failed two or more classes in the 8th grade and verified credits. The test revealed that there was a moderate significant correlation between failed two or more classes in the 8th grade and verified credits $r (102) = .447$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is positively associated with verified credits and we can say that failing two or more classes in the 8th grade accounts for 20% of the variability in verified credits.

A Pearson correlation was carried out on failed two or more classes in the 8th grade and high school dropouts. The test revealed that there was a small significant correlation between failed two or more classes in the 8th grade and high school dropouts $r (102) = .394$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is positively associated with high school dropouts and we can say that failing two or more classes in the 8th grade accounts for 16% of the variability in high school dropouts.

A Pearson correlation was carried out on 10 or more unexcused absences in the 8th grade and high school GPA. The test revealed that there was a small significant correlation between 10 or more unexcused absences in the 8th grade and high school GPA $r (102) = .268$, $p < .05$ (computed $p = .007$). Therefore, 10 or more unexcused absences in the 8th grade is positively associated with high school GPA and we can say that 10 or more unexcused absences in the 8th grade accounts for 7% of the variability in high school GPA.

A Pearson correlation was carried out on 10 or more unexcused absences in the 8th grade and tardies to school. The test revealed that there was a small significant correlation between 10 or more unexcused absences in the 8th grade and tardies to school $r(102) = -.239$, $p < .05$ (computed $p = .015$). Therefore, 10 or more unexcused absences in the 8th grade is negatively associated with tardies to school and we can say that 10 or more unexcused absences in the 8th grade accounts for 6% of the variability in tardies to school.

A Pearson correlation was carried out on 10 or more unexcused absences in the 8th grade and verified credits. The test revealed that there was a small significant correlation between 10 or more unexcused absences in the 8th grade and verified credits $r(102) = .294$, $p < .05$ (computed $p = .003$). Therefore, 10 or more unexcused absences in the 8th grade is positively associated with verified credits and we can say that 10 or more unexcused absences in the 8th grade accounts for 9% of the variability in verified credits.

A Pearson correlation was carried out on five or more out of school suspensions in the 8th grade and verified credits. The test revealed that there was a small significant correlation between five or more out of school suspensions in the 8th grade and verified credits $r(102) = .210$, $p < .05$ (computed $p = .034$). Therefore, five or more out of school suspensions in the 8th grade is positively associated with verified credits and we can say that five or more out of school suspensions in the 8th grade accounts for 4% of the variability in verified credits.

A Pearson correlation was carried out on five or more discipline referrals in the 8th grade and high school GPA. The test revealed that there was a small significant correlation between five or more discipline referrals in the 8th grade and high school GPA $r(102) = .336$, $p < .05$ (computed $p = .001$). Therefore, five or more discipline referrals in the 8th grade is positively associated with high school GPA and we can say that five or more discipline referrals in the 8th grade accounts for 11% of the variability in high school GPA.

A Pearson correlation was carried out on five or more discipline referrals in the 8th grade and high school discipline referrals. The test revealed that there was a small significant correlation between five or more discipline referrals in the 8th grade and high school discipline referrals $r(102) = -.262$, $p < .05$ (computed $p = .008$). Therefore, five or more discipline referrals in the 8th grade is negatively associated with high school discipline referrals and we can say that five or more discipline referrals in the 8th grade accounts for 7% of the variability in high school discipline referrals.

A Pearson correlation was carried out on five or more discipline referrals in the 8th grade and verified credits. The test revealed that there was a small significant correlation between five or more discipline referrals in the 8th grade and verified credits $r(102) = .397$, $p < .05$ (computed $p = .000$). Therefore, five or more discipline referrals in the 8th grade is positively associated with verified credits and we can say that five or more discipline referrals in the 8th grade accounts for 16% of the variability in verified credits.

A Pearson correlation was carried out on five or more discipline referrals in the 8th grade and high school dropouts. The test revealed that there was a small significant correlation between five or more discipline referrals in the 8th grade and high school dropouts $r(102) = .366$, $p < .05$ (computed $p = .000$). Therefore, five or more discipline referrals in the 8th grade is positively associated with high school dropouts and we can say that five or more discipline referrals in the 8th grade accounts for 13% of the variability in high school dropouts.

Pearson Correlation analyses were conducted to examine the relationships between the dependent variables and measured outcomes. Intercorrelations for each predictor of the A.C.T. participants are found in Table 12. A significance level of $p < .05$ was used for this test.

Table 12

Intercorrelations Among the Selection Criteria and Measured Outcomes of the A.C.T. Students

Measure**	GPA	Absences	Tardy to	Course	Discipline	Verified	Dropouts
			School	Failure	Referral	Credits	
415 or Less	.210	.005	.016	-.183	-.200	.318*	.213
Failed 2+	.482*	-.056	-.026	-.665*	-.548*	.601*	.496*
10+ unexcused absences	.074	.021	-.181	-.031	-.093	.152	.191
5+ discipline referrals	.245	.010	.136	-.073	-.352*	.304*	.121
M	2.11	60	38	4	9	7	2
SD	.575	37	26	4	10	3	4

* $p < .05$

** Note. 20+ unexcused tardies and 5+ OSS not valid due to n=1.

A Pearson correlation was carried out on scoring 415 or less on at least one 8th grade SOL and verified credits. The test revealed that there was a small significant correlation between scoring 415 or less on at least one 8th grade SOL and verified credits $r(51) = .318$, $p < .05$ (computed $p = .023$). Therefore, scoring 415 or less on at least one 8th grade SOL is positively associated with verified credits and we can say that scoring 415 or less on at least one 8th grade SOL accounts for 10% of the variability in verified credits.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and high school GPA. The test revealed that there was a moderate significant correlation between failing two or more classes in the 8th grade and high school GPA $r(51) = .482$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is positively associated with high school GPA and we can say that failing two or more classes in the 8th grade accounts for 23% of the variability in high school GPA.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and high school course failures. The test revealed that there was a moderate significant correlation between failing two or more classes in the 8th grade and high school course failures $r(51) = -.665$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is negatively associated with high school course failures and we can say that failing two or more classes in the 8th grade accounts for 44% of the variability in high school course failures.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and high school discipline referrals. The test revealed that there was a moderate significant correlation between failing two or more classes in the 8th grade and high school discipline referrals $r(51) = -.548$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is negatively associated with high school discipline referrals and we can say that failing two or more classes in the 8th grade accounts for 30% of the variability in high school discipline referrals.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and verified credits. The test revealed that there was a moderate significant correlation between failing two or more classes in the 8th grade and verified credits $r(51) = .601$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is positively associated with verified credits and we can say that failing two or more classes in the 8th grade accounts for 36% of the variability in verified credits.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and high school dropouts. The test revealed that there was a moderate significant correlation between failing two or more classes in the 8th grade and high school dropouts $r(51) = .496$, $p < .05$ (computed $p = .000$). Therefore, failing two or more classes in the 8th grade is positively associated with high school dropouts and we can say that failing two or more classes in the 8th grade accounts for 25% of the variability in high school dropouts.

A Pearson correlation was carried out on five or more discipline referrals in the 8th grade and high school discipline referrals. The test revealed that there was a small significant correlation between five or more discipline referrals in the 8th grade and high school discipline referrals $r(51) = -.352$, $p < .05$ (computed $p = .011$). Therefore, five or more discipline referrals in the 8th grade is negatively associated with high school discipline referrals and we can say that five or more discipline referrals in the 8th grade accounts for 12% of the variability in high school discipline referrals.

A Pearson correlation was carried out on five or more discipline referrals in the 8th grade and verified credits. The test revealed that there was a small significant correlation between five or more discipline referrals in the 8th grade and verified credits $r(51) = .304$, $p < .05$ (computed $p = .030$). Therefore, five or more discipline referrals in the 8th grade is positively associated with verified credits and we can say that five or more discipline referrals in the 8th grade accounts for 9% of the variability in verified credits.

Pearson Correlation analyses were conducted to examine the relationships between the dependent variables and measured outcomes. Intercorrelations for each predictor of the Non-A.C.T. participants are found in Table 13. A significance level of $p < .05$ was used for this test.

A Pearson correlation was carried out on scoring 415 or less on at least one 8th grade SOL and high school GPA. The test revealed that there was a moderate significant correlation between scoring 415 or less on at least one 8th grade SOL and high school GPA $r(51) = .544$, $p < .05$ (computed $p = .000$). Therefore, scoring 415 or less on at least one 8th grade SOL is positively associated with high school GPA and we can say that scoring 415 or less on at least one 8th grade SOL accounts for 30% of the variability in high school GPA.

Table 13

Intercorrelations Among the Selection Criteria and Measured Outcomes of the Non - A.C.T. Students

Measure**	GPA	Absences	Tardy to	Course	Discipline	Verified	Dropouts
			School	Failure	Referral	Credits	
415 or Less	.544*	-.153	.033	-.277	-.144	.381*	.278*
Failed 2+	.441*	-.431*	-.159	-.428*	-.409*	.298*	.339*
10+ unexcused absences	.388*	-.247	-.298*	-.139	-.251	.402*	-.493*
5+ OSS	.013	.207	.143	.047	.057	.294*	.219
5+ discipline referrals	.408*	-.028	.135	-.184	-.215	.476*	.511*
M	2.27	55	33	3	7	7	2
SD	.789	38	32	3	7	3	.46

* $p < .05$

** Note. 20+ unexcused tardies not valid due to n=1.

A Pearson correlation was carried out on scoring 415 or less on at least one 8th grade SOL and verified credits. The test revealed that there was a small significant correlation between scoring 415 or less on at least one 8th grade SOL and verified credits $r(51) = .381$, $p < .05$ (computed $p = .006$). Therefore, scoring 415 or less on at least one 8th grade SOL is positively associated with verified credits and we can say that scoring 415 or less on at least one 8th grade SOL accounts for 15% of the variability in verified credits.

A Pearson correlation was carried out on scoring 415 or less on at least one 8th grade SOL and high school dropouts. The test revealed that there was a small significant correlation between scoring 415 or less on at least one 8th grade SOL and high school dropouts $r(51) = .278$, $p < .05$ (computed $p = .048$). Therefore, scoring 415 or less on at least one 8th grade SOL is positively associated with high school dropouts and we can say that scoring 415 or less on at least one 8th grade SOL accounts for 8% of the variability in high school dropouts.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and high school GPA. The test revealed that there was a moderate significant correlation between

failing two or more classes in the 8th grade and high school GPA $r(51) = .441$, $p < .05$ (computed $p = .001$). Therefore, failing two or more classes in the 8th grade is positively associated with high school GPA and we can say that failing two or more classes in the 8th grade accounts for 19% of the variability in high school GPA.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and high school absences. The test revealed that there was a moderate significant correlation between failing two or more classes in the 8th grade and high school absences $r(51) = -.431$, $p < .05$ (computed $p = .002$). Therefore, failing two or more classes in the 8th grade is negatively associated with high school absences and we can say that failing two or more classes in the 8th grade accounts for 19% of the variability in high school absences.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and high school course failures. The test revealed that there was a moderate significant correlation between failing two or more classes in the 8th grade and high school course failures $r(51) = -.428$, $p < .05$ (computed $p = .002$). Therefore, failing two or more classes in the 8th grade is negatively associated with high school course failures and we can say that failing two or more classes in the 8th grade accounts for 18% of the variability in high school course failures.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and high school discipline referrals. The test revealed that there was a moderate significant correlation between failing two or more classes in the 8th grade and high school discipline referrals $r(51) = -.409$, $p < .05$ (computed $p = .003$). Therefore, failing two or more classes in the 8th grade is negatively associated with high school discipline referrals and we can say that failing two or more classes in the 8th grade accounts for 17% of the variability in high school discipline referrals.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and verified credits. The test revealed that there was a small significant correlation between failing two or more classes in the 8th grade and verified credits $r(51) = .298$, $p < .05$ (computed $p = .034$). Therefore, failing two or more classes in the 8th grade is positively associated with verified credits and we can say that failing two or more classes in the 8th grade accounts for 9% of the variability in verified credits.

A Pearson correlation was carried out on failing two or more classes in the 8th grade and high school dropouts. The test revealed that there was a small significant correlation between

failing two or more classes in the 8th grade and high school dropouts $r(51) = .339$, $p < .05$ (computed $p = .015$). Therefore, failing two or more classes in the 8th grade is positively associated with high school dropouts and we can say that failing two or more classes in the 8th grade accounts for 11% of the variability in high school dropouts.

A Pearson correlation was carried out on 10 or more unexcused absences in the 8th grade and high school GPA. The test revealed that there was a small significant correlation between 10 or more unexcused absences in the 8th grade and high school GPA $r(51) = .388$, $p < .05$ (computed $p = .005$). Therefore, 10 or more unexcused absences in the 8th grade is positively associated with high school GPA and we can say that 10 or more unexcused absences in the 8th grade accounts for 15% of the variability in high school GPA.

A Pearson correlation was carried out on 10 or more unexcused absences in the 8th grade and tardies to school. The test revealed that there was a small significant correlation between 10 or more unexcused absences in the 8th grade and tardies to school $r(51) = -.298$, $p < .05$ (computed $p = .034$). Therefore, 10 or more unexcused absences in the 8th grade is negatively associated with tardies to school and we can say that 10 or more unexcused absences in the 8th grade accounts for 9% of the variability in tardies to school.

A Pearson correlation was carried out on 10 or more unexcused absences in the 8th grade and verified credits. The test revealed that there was a moderate significant correlation between 10 or more unexcused absences in the 8th grade and verified credits $r(51) = .402$, $p < .05$ (computed $p = .003$). Therefore, 10 or more unexcused absences in the 8th grade is positively associated with verified credits and we can say that 10 or more unexcused absences in the 8th grade accounts for 16% of the variability in verified credits.

A Pearson correlation was carried out on 10 or more unexcused absences in the 8th grade and high school dropouts. The test revealed that there was a moderate significant correlation between 10 or more unexcused absences in the 8th grade and high school dropouts $r(51) = .493$, $p < .05$ (computed $p = .000$). Therefore, 10 or more unexcused absences in the 8th grade is positively associated with high school dropouts and we can say that 10 or more unexcused absences in the 8th grade accounts for 24% of the variability in high school dropouts.

A Pearson correlation was carried out on five or more out of school suspensions in the 8th grade and verified credits. The test revealed that there was a small significant correlation between five or more out of school suspensions in the 8th grade and verified credits $r(51) = .294$,

$p < .05$ (computed $p = .036$). Therefore, five or more out of school suspensions in the 8th grade is positively associated with verified credits and we can say that five or more out of school suspensions in the 8th grade accounts for 9% of the variability in verified credits.

A Pearson correlation was carried out on five or more discipline referrals in the 8th grade and high school GPA. The test revealed that there was a moderate significant correlation between five or more discipline referrals in the 8th grade and high school GPA $r(51) = .408$, $p < .05$ (computed $p = .003$). Therefore, five or more discipline referrals in the 8th grade is positively associated with high school GPA and we can say that five or more discipline referrals in the 8th grade accounts for 17% of the variability in high school GPA.

A Pearson correlation was carried out on five or more discipline referrals in the 8th grade and verified credits. The test revealed that there was a moderate significant correlation between five or more discipline referrals in the 8th grade and verified credits $r(51) = .476$, $p < .05$ (computed $p = .000$). Therefore, five or more discipline referrals in the 8th grade is positively associated with verified credits and we can say that five or more discipline referrals in the 8th grade accounts for 23% of the variability in verified credits.

A Pearson correlation was carried out on five or more discipline referrals in the 8th grade and high school dropouts. The test revealed that there was a moderate significant correlation between five or more discipline referrals in the 8th grade and high school dropouts $r(51) = .511$, $p < .05$ (computed $p = .000$). Therefore, five or more discipline referrals in the 8th grade is positively associated with high school dropouts and we can say that five or more discipline referrals in the 8th grade accounts for 26% of the variability in high school dropouts.

Chapter 5

Summary

This chapter summarizes the research, presents the findings, discusses the conclusions based on the data in Chapter 4, and presents general recommendations for ninth grade transitions programs specifically designed for at-risk students.

The purpose of the study was to determine if this transition program had an effect on the academic and social issues that at-risk ninth graders face as they transition to high school as measured by grade point average (GPA), absences, tardies to school, course failures, discipline referrals, verified credits, and dropouts.

The A.C.T. program was designed to provide ninth-grade at-risk students with the skills necessary for making a successful transition from middle school to high school and for continued success for their remaining high school careers. The participants in this study, both A.C.T. and Non-A.C.T students, met at least one of the following selection criteria: scored 415 or less on at least one eighth grade SOL; two or more failed classes in the eighth grade, 10 or more unexcused absences to school during their eighth grade year, 20 or more tardies during their eighth grade year, five or more out-of-school suspension days during their eighth grade year, five or more discipline referrals during their eighth grade year, and teacher recommendations. The A.C.T. participants were enrolled in the year long transition program during their freshman year. The data collected represents the four years of high school for each A.C.T. participant and each Non-A.C.T. participant.

Summary of Major Findings

Finding #1. There were no significant differences between the A.C.T. participants and the Non-A.C.T. participants comparing the mean differences between GPA, absences, tardies to school, course failures, discipline referrals, verified credits and dropouts. These findings are consistent with other studies in regards to GPA (Dyke 2007); absences and tardies (Caldwell 2007); and discipline referrals (Dyke 2007). They are inconsistent with other studies in regards to course failures (Caldwell 2007). There is no additional research to support or refute the findings in regards to verified credits and dropouts.

Finding #2. There was a significant difference between the male and female students who both participated in the A.C.T. program as it relates to the number of course failures they

earned over the course of their respective high school careers. The male A.C.T. students averaged five course failures during their four year high school career compared to the female A.C.T. students who averaged three course failures during their four year high school career. This finding contradicts other studies (Caldwell, 2007) which found that there was not a significant difference between the male and female students who participated in 9th grade at-risk transition programs as it relates to course failures.

Finding #3. There was a significant difference between the male and female students who both participated in the in the A.C.T. program as it relates to the number of discipline referrals they earned over the course of their respective high school careers. The male A.C.T. students averaged 13 discipline referrals compared to the female A.C.T. students who averaged 5 discipline referrals. This finding is consistent with Caldwell (2007) and contradicts the findings of Dyke (2007). Neither Caldwell nor Dyke specifically identified discipline referrals in their respective studies; however, they both addressed in-school-suspensions and detentions, both of which could be characterized as a type discipline referral.

Finding #4. There were several significant differences in the relationships between the selection criteria used to place students in the A.C.T. program and the measured outcomes. Tables 11, 12 and 13 represent the Pearson's correlations between the selection criteria and the measured outcomes for the three identified groups which were: combined participants (n=102); A.C.T. participants (n=51) and the Non-A.C.T. participants (n=51). The overall goal of the A.C.T. program was to keep students in school and reduce the number of dropouts. Therefore, for the purpose of finding #4, the measured outcome of dropouts was the focus of this major finding. Cross-referencing the correlations between the three groups, the only selection criteria identified in all three correlations, as it related to dropouts, was failing two or more classes during the 8th grade year. Furthermore, the A.C.T. participants, who benefited from specialized help as part of the transition program, had a moderate, positive relationship between the selection criteria failing two or more classes during the 8th grade year and dropouts.

Additionally, the selection criteria failing two or more classes during their 8th grade year had significant relationships with the measured outcomes verified credits, discipline referrals, course failures and GPA. These significant relationships were moderate in the three correlations; combined participants (n=102); A.C.T. participants (n=51) and the Non-A.C.T. participants

(n=51). This would suggest that one of the stronger selection criteria used to place students in the A.C.T. program was selecting students who have failed two or more classes during their 8th grade year.

There is no additional research to support or refute this finding.

Finding #5. There were several significant differences in the relationships between the selection criteria used to place students in the A.C.T. program and the measured outcomes. Tables 11, 12 and 13 represent the Pearson's correlations between the selection criteria and the measured outcomes for the three identified groups which were: combined participants (n=102); A.C.T. participants (n=51) and the Non-A.C.T. participants (n=51). The measured outcome of verified credits was the focus of this major finding. Cross-referencing the correlations between the three groups, the selection criteria identified in all three correlations as significant were scoring 415 or less on at least one 8th grade SOL test and accumulating five or more discipline referrals during the 8th grade year. This finding would suggest that two of the stronger selection criteria used to place students in the A.C.T. program, as it relates to the measured outcome verified credits, was selecting students who have scored 415 or less on at least one 8th grade SOL test and accumulating five or more discipline referrals during their eighth grade year.

There is no additional research to support or refute this finding.

Finding #6. The number of significant student correlations for the selection criteria was fewer in the treatment group than in the non-treatment group. This would suggest that the treatment might have effectively met the students' needs.

There is no additional research to support or refute this finding.

Conclusions

The purpose of the study was to determine if the transition program had an effect on the academic and social issues that at-risk ninth graders face as they transition to high school as measured by GPA, absences, tardies to school, course failures, discipline referrals, verified credits, and dropouts compared to students in a more traditional program of studies during the course of their respective high school careers. Although the analyzed data found significant differences, the number of differences and relationships were fewer than expected by the researcher.

None of the seven research hypotheses for research question one were significant, therefore the null hypotheses were accepted. There was no statistically significant difference in the mean of A.C.T. participants and Non-A.C.T. participants' GPA, absences, tardies to school, number of course failures, number of discipline referrals, number of verified credits, and the number of dropouts. However, it should be noted that the A.C.T. participants reported a lower dropout percentage, 15.7%, compared to the Non-A.C.T. participants, 29.4%.

Five of the seven research hypotheses for research question two were not significant, therefore the null hypotheses were accepted. There was no statistically significant difference in the mean of male A.C.T. participants and female A.C.T. participants' GPA, absences, tardies to school, verified credits, and dropouts. There was a statistically significant difference in the mean of the male A.C.T. participants and female A.C.T participants' course failures and discipline referrals, therefore the null hypotheses were rejected.

Research question three required three separate Pearson's correlations; one for all the participants in the study, one for the A.C.T. participants and one for the Non-A.C.T. participants. The Intercorrelations among all of the participants in the study had 18 significant relationships between the selection criteria used and the measured outcomes, therefore the null hypotheses were rejected. Among all of the participants in the study, the following Pearson's correlations proved to be significant: the selection criteria of scoring 415 or less on at least one SOL during the 8th grade had significant relationships with the measured outcomes GPA, verified credits and dropouts at $p < .05$; the selection criteria of failing two or more classes during the 8th grade had significant relationships with the measured outcomes GPA, absences, course failures, discipline referrals, verified credits, and dropouts at $p < .05$; the selection criteria of 10 or more unexcused absences during the 8th grade year had significant relationships with the measured outcomes GPA, tardies, verified credits and dropouts at $p < .05$; the selection criteria of five or more out of school suspensions during the 8th grade year had significant relationships with the measured outcome verified credits at $p < .05$; and the selection criteria five or more discipline referrals during the 8th grade year had significant relationships with the measured outcomes GPA, discipline referrals, verified credits and dropouts at $p < .05$.

The Intercorrelations among the A.C.T. participants had eight significant relationships between the selection criteria used and the measured outcomes, therefore the null hypotheses were rejected. Among the A.C.T. participants, the following Pearson's correlations proved to be

significant: the selection criteria of scoring 415 or less on at least one SOL during the 8th grade had a significant relationship with the measured outcome verified credits at p<.05; the selection criteria of failing two or more classes during the 8th grade year had significant relationships with the measured outcomes GPA, course failures, discipline referrals, verified credits and dropouts at p<.05; and the selection criteria of five or more discipline referrals during the 8th grade had significant relationships with the measured outcomes discipline referrals and verified credits at p<.05.

The Intercorrelations among the Non-A.C.T. participants had 17 significant relationships between the selection criteria used and the measured outcomes, therefore the null hypotheses were rejected. Among the Non-A.C.T. participants, the following Pearson's correlations proved to be significant: the selection criteria of scoring 415 or less on at least one SOL during the 8th grade had significant relationships with the measured outcomes GPA, verified credits and dropouts at p<.05; the selection criteria of failing two or more classes during the 8th grade year had significant relationships with the measured outcomes GPA, absences, course failures, discipline referrals, verified credits and dropouts at p<.05; the selection criteria of 10 or more unexcused absences in the 8th grade had significant relationships with the measured outcomes GPA, tardies, verified credits, and dropouts at p<.05; the selection criteria of five or more out of school suspensions in the 8th grade had a significant relationship with the measured outcome verified credits at p<.05; and the selection criteria of five or more discipline referrals during the 8th grade had significant relationships with the measured outcomes GPA, verified credits and dropouts at p<.05.

Implications for Practitioners

This single case study could not provide the basis needed to implement transition programs across the country. The A.C.T. program could provide suggestions for other programs with similar goals. Based on the findings of this study, there is a need to establish transition programs specifically designed for at-risk students as they enter into the ninth grade. School leaders need to establish researched based selection criteria to identify students who would best benefit from an at-risk transition program. This study was able to identify several selection criteria that proved to be significant in this selection process. The selection criteria failing two or more classes during the 8th grade year proved to be one of the most prevalent selection criteria in this study. Other selection criteria that proved to be substantial were; receiving five or more

discipline referrals in the 8th grade; scoring 415 or less on at least one 8th grade SOL test and accumulating 10 or more unexcused absences in the 8th grade.

Although this study did not show significant differences between the A.C.T. participants and the Non-A.C.T. participants on the measurable outcomes, school leaders should be aware the dropout percentage of the A.C.T. participants was lower than the Non-A.C.T. participants.

School leaders should also be aware of the gender differences among the A.C.T. participants. The female A.C.T. participants statistically preformed better on course failures and discipline referrals than the male A.C.T. participants. School leaders can build on this information and design programs and curriculum that would better meet the needs of all students. In doing so, school leaders can look at some of the curriculum components of the A.C.T. program which could be beneficial such as the year-long modified block schedule, adult/student mentor program, extended time on reading comprehension and writing skills, organizational and study skills and conflict resolution.

Finally, school leaders should be cognizant of all students in the eighth grade when selecting students to participate in at-risk transition programs. Appendix A identified several eighth grade students who met multiple selection criteria and did not participate in the A.C.T. program. School leaders should consider making transition programs for at-risk students mandatory instead of voluntary.

Recommendations for Further Research

Additional studies on transition programs designed specifically for at-risk students would be beneficial to the education communities. Continued longitudinal studies that include a precise randomly matched control and experimental groups would be less limiting. A longitudinal study that spans over a student's high school career and includes significant data such as dropouts and verified credits could prove to be essential when measuring desired outcomes and goals of transition programs. A study with an emphasis on curriculum that meets the needs of all at-risk students transitioning into high school is essential. A qualitative study analyzing the perceptions of the parents, teachers, administrators and counselors would provide an informative study that can increase the knowledge of successful and-or failed 9th grade transition programs that are specifically designed for at-risk students. Additional studies could be conducted to strengthen the definition of at-risk students and continue to build upon the selection criteria used in selecting students to participant in at-risk transition programs. This study showed that selecting students to

participate in at-risk 9th grade transition programs that failed two our mores classes during their 8th grade year has a moderate relationship with dropouts. Building on this finding, future research could be focused on examining what is done in the middle school to help eliminate this potential dropout indicator.

References

- Akos, P., & Galassi, J. (2004, April). Middle and high school transitions as viewed by students, parents, and teachers. *Professional School Counseling*, 7(4), 212-221. Retrieved June 2, 2008 from Education Research Complete database.
- Ascher, C. (1987). *The ninth grade – A precarious time for the potential dropout* (Report No. 34). New York, NY: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED284922)
- Augusta County Public Schools. (2009). In *handbook for parents and secondary school students*. Fishersville, VA: Augusta County Public Schools.
- Black, S. (2004, February). The pivotal year. *American School Board Journal*, 191(02).
- Blankenship, T. (2009, May). *An evaluation of a personalized education program for at-risk ninth grade students*. Unpublished doctoral dissertation, Capella University, Minnesota.
- Caldwell, T. W. (2007, May). *Evaluation of a ninth grade transition program for at-risk students*. Unpublished doctoral dissertation, East Tennessee State University, Tennessee.
- Creswell, J. W. (2007). *Qualitative inquiry & research design*. Thousand Oaks, CA: Sage Publications, Inc.
- Danielson, C., & McGreal, T. L. (2000). *Teacher evaluation to enhance professional practice*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Digest of Education Statistics. (2008). National Center for Education Statistics. Retrieved from http://nces.ed.gov/programs/digest/d08/tables/dt08_106.asp
- Duke, D., Boudreaux, J., Epps, B., & Wilcox, T. (1998, May). *Ninth grade transition programs in Virginia*. A Policy Perspectives paper from the Thomas Jefferson Center for Educational Design. University of Virginia. Retrieved from www.tjced.org.
- Dyke, F. (2007, April). *What is the impact of a transition program and traditional program of study on over age first time ninth grade students*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Eccles, J., Midgley, C., Buchanan, C., Wigfield, A., Reuman, D., & MacIver, D. (1993). Development during adolescence: The impact of stage/environment fit on young adolescents' experiences in schools and families. *American Psychologist*, 48, 90-101.
- Ford, D. Y. (1993). Black student's achievement orientation as a function of perceived family orientating and demographic variables. *Journal of Negro Education*, 62, 47-66.

- Greene, J. P. (2002). High school graduation rates in the United States. Manhattan Institute for Policy Research. Retrieved from http://www.manhattan-institute.org/html/cr_baeo.htm
- Haney, W., Madaus, G., Abrams, L., Wheelock, A., Miao, J., & Guria, I. (2004, January). The education pipeline in the United States 1970-2000. *The National Board on Educational Testing and Public Policy*. Lynch School of Education, Boston College. Retrieved from <http://www.bc.edu/research/nbetpp/statements/nbr3.pdf>
- Hertzog, C. J., & Morgan, P. L. (1998). Breaking barriers between middle school and high school: Developing a transition team for success. *NASSP Bulletin*, 82 (597), 94-98.
- Howell, D. C. (2002). *Statistical Methods for Psychology* (5th ed.). California: Thomson Learning.
- Isakson, K., & Jarvis, P. (1999). The adjustment of adolescents during the transition into high school: A short-term longitudinal study. *Journal of Youth and Adolescence*, 28(1), 1-26.
- Kaufman, P., Alt, M. N., & Chapman, C. (2004). *Dropout rates in the United States: 2001* (NCES 2005-046). U. S. Department of Education. National Center for Education Statistics. Washington, D.C.: U.S. Government Printing Office. Retrieved from <http://nces.ed.gov/pubs2005/2005046.pdf>
- Kemple, J. J., Herlihy, C. M., & Smith, T. J. (2005). Making progress toward graduation evidence from the talent development high school model. *MDRC Building Knowledge to Improve Social Policy*. (No. ED-99-CO-0155). Washington, D.C.: U.S. Department of Education.
- Legters, N. & Kerr, K. (2001, January). Easing the transition to high school: an investigation of reform practices to promote ninth grade success. Prepared for *Dropouts in America: How severe is the problem? What do we know about intervention and prevention?* Harvard University's Graduate School of Education and Achieve, Inc., Cambridge, MA.
- Lehr, C., Johnson, D., Bremer, C., Cosio, A., & Thompson, M. (2004, May). Essential tools increasing rates of school completion: Moving from policy and research to practice. ICI Publications Office, Minneapolis, MN.
- McIntosh, K., Flannery, K., Sugai, G., Braun, D., & Cochrane, K. (2008, Fall 2008). Relationships between academics and problem behavior in the transition from middle school to high school. *Journal of Positive Behavior Interventions*, 10(4), 243-255. Retrieved from Academic Search Complete database.

- Morgan, L. P., & Hertzog, C. J. (2001). Designing comprehensive transition plans. *Principal Leadership*, 1(7), 10-18.
- Newman, B., Meyers, M. C., & Newman, P. R. (2000). The transition to high school for academically promising, urban, low-income African American youth. *Adolescence*, 35 (137), 45-66.
- Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated approach*. New Jersey: Lawrence Erlbaum Associates.
- Roderick, M., & Camburn, E. (1999). Risk and recovery from course failure in early years of high school. *American Education Research Journal*, 36, 303-343.
- Smith, J. B. (1997). Effects of eighth-grade transition programs on high school retention and experiences. *Journal of Education Research*, 90(3), 144-152.
- Smith, J. S. (2006). *Research summary: Transition from middle school to high school*. Retrieved from
<http://www.nmsa.org/Research/ResearchSummaries/TransitionfromMStoHS/tabcid/1087/Default.aspx>
- Spar, M. A. (2009). *Counting Virginia's high school dropouts: Understanding the new methods & the bigger numbers*. Retrieved from 8 VAC 20-131 www.doe.virginia.gov
- Stein, G., & Hussong, A. (2007, Fall2007). Social and academic expectations about high school for at-risk rural youth. *American Secondary Education*, 36(1), 59-79. Retrieved from Academic Search Complete Database.
- Turner, S. (2007, February). Preparing inner-city adolescents to transition into high school. *Professional School Counseling*, 10(3), 245-252. (ERIC Document Reproduction Service No. EJ767388) Retrieved from ERIC database.
- Virginia Department of Education (VDOE). (2008). *No child left behind title 1, part d: prevention and intervention programs for children and youth who are neglected, delinquent, or at risk*. Retrieved from
www.doe.virginia.gov/VDOE/Instructin/OCP/title1d.html
- Virginia School Law Deskbook. (2007). *Volume I annotated statutes and regulations*. Charlottesville, VA: Matthew Bender & Company, Inc.
- Waggoner, D. (1991). *Undereducated n America: The demography of high school dropouts*. Westport, CT: Auburn House.

Weiss, C., & Bearman, P. (2007, May). Fresh starts: Reinvestigating the effects of the transition to high school on student outcomes. *American Journal of Education*, 113(3), 395-421. Retrieved from Academic Search Complete database.

Zeedyk, M. S., Gallacher, J., Henderson, M., Hope, G., Husband, B., & Lindsay, K. (2003). Negotiating the transition from primary to secondary school: Perceptions of pupils, parents and teachers. *School Psychology International*, 23(1), 67-69. Retrieved from Education Research Complete database.

Appendix A
Matching Control Group and Experimental Group

2002 - 2003 SDMS STUDENTS INFORMATION
2003 - 2004 SDHS ACT STUDENTS

PermNum	Grade	03-04 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
46460	8		X	X	X		X	X	
54561	8		X	X	X		X	X	
31424	8		X	X	X		X	X	
51365	8		X	X	X		X	X	
33658	8		X	X	X		X	X	
33643	8		X	X	X		X	X	
33644	8		X	X	X		X	X	R
45312	8		X	X	X		X	X	
41598	8		X	X	X		X	X	
54590	8		X	X	X		X	X	
41607	8		X	X	X			X	
34553	8		X	X	X				F
34387	8		X	X			X	X	
46486	8		X	X			X	X	
46481	8	NA	X	X				X	
31043	8		X	X				X	F
63685	8	A	X	X				X	
65845	8		X	X					F
63686	8		X	X					
33935	8	A	X	X					R
49619	8		X	X					
40154	8		X	X					
52569	8		X	X					R
54560	8		X	X					
43735	8	NA	X	X					R
66554	8		X	X					
43245	8	A	X	X					
51245	8		X	X					
64431	8	NA	X	X					
34155	8		X	X					
49468	8		X		X		X	X	R
64269	8		X		X		X	X	R
40160	8		X		X		X	X	
32338	8	NA	X		X		X	X	
32233	8		X					X	
49459	8		X					X	
66258	8		X					X	
60298	8		X					X	R
34376	8	NA	X						
34406	8		X						
34386	8	NA	X						
34392	8		X						
45784	8		X						F
34456	8		X						
34400	8	NA	X						

2002 - 2003 SDMS STUDENTS INFORMATION
2003 - 2004 SDHS ACT STUDENTS

PermNum	Grade	03-04 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
34151	8		X						
34426	8		X						F
49463	8		X						R
65918	8		X						
34416	8	NA	X						
52014	8	A	X						
63703	8		X						F
65517	8		X						
53886	8		X						
43235	8		X						
34169	8	NA	X						R
54595	8		X						
34149	8	NA	X						
60319	8		X						
41601	8		X						
34412	8		X						R
49482	8	NA	X						
46373	8		X						
34168	8	NA	X						
51736	8		X						F
54838	8	NA	X						
34162	8		X						
60316	8		X						R
45297	8		X						R
34374	8	NA	X						
53739	8	A	X						
33659	8		X						
34482	8		X						
47264	8	A	X						
34180	8		X						
34157	8	A	X						
34371	8	A	X						
41421	8		X						
65636	8	A	X						
32203	8		X						F
34413	8	NA	X						
54596	8	A	X						
54599	8	A	X						
34417	8		X						
49502	8	NA	X						
41718	8	A	X						
33650	8		X						
39894	8		X						F
34440	8		X						
34153	8		X						F

2002 - 2003 SDMS STUDENTS INFORMATION
2003 - 2004 SDHS ACT STUDENTS

PermNum	Grade	03-04 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
33638	8	NA	X						
39874	8	A	X						
39875	8		X						
34424	8	NA	X						
65491	8		X						
34124	8		X						
46408	8	A	X						
52124	8		X						
34418	8		X						
56480	8		X						F
40009	8		X						
33656	8	A	X						
45788	8		X						
34425	8		X						
66692	8		X						
34126	8		X						
47879	8		X						R
54577	8		X						
34419	8	A	X						
66526	8		X						
51263	8	A	X						
34399	8		X						
32180	8		X						F
34541	8		X						
34441	8		X						
43212	8		X						F
34408	8	NA	X						
43211	8	A	X						R
65768	8		X						
34372	8		X						
34445	8		X						
53687	8		X						
53851	8		X						F
34384	8		X						
34427	8			X	X		X	X	
46488	8			X	X				
54030		A		X					
54237	8				X				F
34109	8							X	
46285	8							X	
33642	8								R
33637	8								
34395	8								
34434	8								
46468	8								

2002 - 2003 SDMS STUDENTS INFORMATION
2003 - 2004 SDHS ACT STUDENTS

PermNum	Grade	03-04 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
33645	8								
43832	8								
34415	8								
34452	8								
41707	8								
34176	8								
43223	8								
51548	8								
33655	8								
53857	8								
34381	8								
51247	8								F
37858	8								
34388	8								
34397	8								
34422	8								
52129	8								R
34444	8								
34449	8								
49507	8								
33604	8								
34161	8								
34442	8								
34129	8								
34391	8								
39876	8								
43252	8								
47134	8								
52096	8								
65560	8								
41596	8								
34389	8								
49623	8								
34594	8								
66648	8								
54026	8								F
64082	8								
66474	8								
34174	8								
66529	8								
65467	8								
34433	8								
49621	8								
34402	8								R
34403	8								

2002 - 2003 SDMS STUDENTS INFORMATION
2003 - 2004 SDHS ACT STUDENTS

PermNum	Grade	03-04 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
34420	8								
41615	8								
34178	8								
63708	8								F
34551	8								
34110	8								
52901	8								
33989	8								
40158	8								F
64517	8								
34105	8								
63692	8								F
33610	8								
34377	8								
33279	8								
34393	8								
34177	8								
34163	8								
34411	8								
41637	8								F
43228	8								
34147	8								
34428	8								
34394	8								
65142	8								
47835	8								
65812	8								
34396	8								
32219	8								
61452	8								F
61453	8								F
41600	8								F
42150	8								
43210	8								
53864	8								F
33646	8								
34435	8								
44196	8								

2003 - 2004 SDMS STUDENTS INFORMATION
2004 - 2005 SDHS ACT STUDENTS

PermNum	Grade	04-05 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
64700	8		X	X	X		X	X	F
42462	8		X	X	X			X	
52142	8		X	X	X			X	F
42772	8		X	X	X		X		
42500	8		X	X				X	F
46517	8		X	X				X	
63968	8		X	X				X	
64694	8		X	X				X	R
41950	8	A	X	X					
42126	8	NA	X	X					
42497	8	A	X	X					R
42504	8	NA	X	X					
42725	8		X	X					
43990	8		X	X					R
51447	8	A	X	X					
56853	8	NA	X	X					R
63698	8		X	X					F
64677	8		X	X					F
42791	8		X		X			X	F
41703	8		X		X				
52019	8		X		X				
39925	8		X						
41803	8		X						
41906	8		X						F
42458	8		X						
42477	8		X						F
42479	8		X						
42499	8		X						
42506	8		X						
42507	8		X						
42697	8		X						
42703	8		X						
42704	8		X						
42726	8		X						
42732	8		X						
42745	8		X						
42758	8		X						
42771	8		X						
42787	8		X						R
43304	8		X						
44165	8		X						R
46381	8		X						
46499	8		X						
47126	8		X						
47746	8		X						F

2003 - 2004 SDMS STUDENTS INFORMATION

2004 - 2005 SDHS ACT STUDENTS

PermNum	Grade	04-05 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
51232	8		X						F
51250	8		X						
54932	8		X						
58616	8		X						F
60037	8		X						F
60064	8		X						R
60147	8		X						F
63694	8		X						
68202	8		X						
42924	8			X	X		X	X	F
67792	8			X	X		X	X	
42464	8			X				X	R
42821	8			X					
66563	8			X					
63702	8				X		X	X	F
42776	8				X			X	F
64717	8				X			X	R
53105	8				X				F
53896	8				X				F
42748	8						X		
34170	8								
34431	8								
39933	8								
39954	8								
41608	8								F
41830	8								R
42117	8	NA							
42122	8								
42125	8								
42127	8								
42314	8								
42320	8								
42451	8								
42454	8								
42459	8								
42460	8								
42461	8								
42463	8	NA							
42466	8								
42467	8								
42468	8								
42470	8								
42474	8								
42475	8								
42476	8								

2003 - 2004 SDMS STUDENTS INFORMATION
2004 - 2005 SDHS ACT STUDENTS

PermNum	Grade	04-05 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
42481	8								
42484	8								
42485	8								
42489	8								
42493	8								
42494	8								
42495	8	NA							
42496	8	A							R
42498	8								
42503	8								
42505	8								
42510	8								
42512	8								
42515	8								
42516	8								
42524	8								
42527	8								
42528	8	NA							
42530	8								
42692	8								
42693	8								
42695	8	A							
42696	8								
42699	8	A							
42700	8								
42701	8								
42705									
42707	8								
42708	8								
42709	8								
42710	8								
42711	8	NA							R
42712	8								
42713	8								
42715	8								
42717	8								
42718	8								
42719	8								
42722	8								
42724	8								
42728	8								
42729	8								
42731	8								
42733	8								
42737	8								

2003 - 2004 SDMS STUDENTS INFORMATION

2004 - 2005 SDHS ACT STUDENTS

PermNum	Grade	04-05 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
42739	8								F
42742	8								
42746	8								
42750	8								F
42753	8								
42754	8	A							
42757	8								
42759	8								
42777	8								
42790	8								
42896	8								
42925	8								
42926	8								
42959	8								
43214	8								F
43221	8								
43274	8								
43863	8								
44167	8								F
45295	8								F
46280	8								
46286	8								
46371	8								F
47133	8								
47136	8								
47142	8								F
47280	8								
47834	8								
47836	8								
49511	8								
49611	8								
50432	8								
51258	8								R
51264	8								
51547	8								
51559	8								
51719	8								
52570	8								
52575	8								
52576	8								
52580	8								
52893	8								
53729	8								
53747	8								
54039	8								F

2003 - 2004 SDMS STUDENTS INFORMATION

2004 - 2005 SDHS ACT STUDENTS

PermNum	Grade	04-05 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free & Reduced
54040	8								
54350	8								
54352	8	NA							R
54719	8								
55137	8								R
56857	8								
58374	8								
58376	8								
58636	8	A							R
60146	8								
63699	8								
63700	8								
63705	8								
63937	8								
63938	8								
64001	8								
64620	8								F
64733	8								
65519	8								
65545	8								
65963	8								
66279	8								
66282	8								
66387	8								
66417	8								
66835	8								
67250	8								
67546	8								R
67770	8								
67860	8								
67863	8	A							
67915	8								F
68017	8								
68071	8								
68282	8								

2004 - 2005 SDMS STUDENTS INFORMATION
2005-2006 SDHS ACT STUDENTS

PermNum	Grade	05-06 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free or Reduced
43174	8		X	X	X		X	X	
69563	8		X	X	X		X	X	F
42924	8		X	X	X		X		
51381	8		X	X	X			X	R
60458	8	NA	X	X	X			X	F
64021	8	NA	X	X	X			X	
38206	8	A	X	X	X				F
44824	8	A	X	X	X				
44850	8		X	X	X				
45078	8	NA	X	X	X				
58056	8		X	X	X				
58375	8		X	X	X				
64688	8	NA	X	X	X				
65844	8		X	X	X				F
44869	8	A	X	X				X	F
45109	8		X	X				X	
45110	8		X	X				X	
51280	8		X	X				X	F
34743	8		X	X					
43199	8	A	X	X					
43821	8	A	X	X					
44460	8	A	X	X					
44567	8		X	X					
44800	8	NA	X	X					F
44801	8	NA	X	X					
45077	8	A	X	X					F
45107	8	NA	X	X					F
45108	8		X	X					
45293	8	NA	X	X					F
45756	8	NA	X	X					
46506	8	A	X	X					F
52020	8	A	X	X					
52555	8	A	X	X					
56852	8		X	X					R
65742	8		X	X					
45129	8		X		X		X	X	F
44822	8		X		X				R
44836	8	NA	X		X				
44845	8		X		X				
44851	8		X		X				
46399	8		X		X				F
51261	8		X		X				R
51735	8	NA	X		X				
52128	8		X		X				R
58656	8		X		X				F

2004 - 2005 SDMS STUDENTS INFORMATION
2005-2006 SDHS ACT STUDENTS

PermNum	Grade	05-06 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free or Reduced
64746	8		X		X				F
66530	8		X		X				
68529	8		X		X				F
64632	8		X				X		R
69109	8		X				X		
44866	8	A	X					X	
53883	8		X					X	
66300	8	NA	X					X	
69904	8		X					X	
37621	8		X						F
37622	8		X						F
38204	8		X						R
42688	8		X						R
42736	8	NA	X						
43170	8		X						
43208	8		X						F
43815	8		X						
43818	8	A	X						
43822	8		X						
44180	8		X						
44561	8		X						
44579	8		X						
44589	8		X						
44804	8		X						F
44806	8		X						
44813	8		X						
44827	8	NA	X						
44828	8		X						
44829	8		X						
44833	8		X						
44854	8		X						
44860	8		X						
44865	8		X						
44871	8		X						F
44996	8	A	X						
45085	8		X						
45086	8		X						
45094	8		X						F
45095	8		X						
45098	8		X						
45103	8		X						
45125	8		X						
45290	8	A	X						
46396	8		X						F
46398	8		X						R

2004 - 2005 SDMS STUDENTS INFORMATION
2005-2006 SDHS ACT STUDENTS

PermNum	Grade	05-06 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free or Reduced
46510	8	A	X						R
46515	8	NA	X						
46522	8		X						
47037	8		X						
47127	8	A	X						
47263	8		X						R
49454	8		X						F
49627	8	NA	X						F
49628	8	A	X						
49642	8		X						R
49649	8		X						R
50427	8		X						F
51716	8	NA	X						
52252	8		X						
54804	8	A	X						F
54823	8	NA	X						R
64147	8		X						R
64265	8		X						F
64724	8		X						
65339	8		X						
65340	8		X						F
65497	8		X						
65543	8	NA	X						
65549	8		X						
65594	8		X						
65901	8		X						
66469	8		X						
66688	8		X						R
67244	8		X						
67338	8	NA	X						R
67437	8		X						
67542	8		X						
67547	8		X						
67660	8		X						R
67890	8	NA	X						
68034	8		X						
68616	8		X						
69384	8	A	X						
69607	8	A	X						
69881	8		X						
69916	8		X						
43180	8			X				X	
34793	8				X		X	X	
64594	8				X		X		
43192	8				X				

2004 - 2005 SDMS STUDENTS INFORMATION
2005-2006 SDHS ACT STUDENTS

PermNum	Grade	05-06 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free or Reduced
45114	8				X				
45758	8				X				R
68115	8				X				
58609	8							X	
38211	8								
43171	8								
43173	8								
43175	8								
43176	8								
43178	8								
43182	8								
43184	8								
43186	8								
43187	8								
43189	8								
43193	8								
43194	8								
43198	8								
43200	8								
43812	8								
43817	8								
43819	8								
43820	8								
43991	8								
44162	8								
44163	8								
44810	8								
44814	8								
44815	8								
44819	8								
44825	8	A							
44831	8								
44837	8								
44840	8								
44855	8								
44857	8								
44973	8								F
44999	8								
45080	8								
45084	8								
45087	8								
45091	8								
45096	8								
45100	8								
45105	8								

2004 - 2005 SDMS STUDENTS INFORMATION
2005-2006 SDHS ACT STUDENTS

PermNum	Grade	05-06 Act Students	415 or Less on at least one SOL	Failed 2 or more classes	10 or More Unexcused Absences	20 or More Unexcused Tardies	5 or More Discipline Days	5 or More Discipline Referrals	Free or Reduced
45128	8								F
45237	8								
45255	8	NA							
45277	8								
45291	8								F
45299	8								
45755	8								
46169	8								R
46376	8								
46377	8								
46388	8	A							
46410	8								
47771	8								
50444	8								
51555	8								
52138	8								R
52571	8								
52906	8								
53680	8								
53683	8								
53885	8								
54044	8	A							R
54113	8								
54805	8								F
60030	8								
60136	8								
64097	8								
64133	8								
64726	8								
64815	8								
65846	8	NA							
66348	8								
66390	8								R
66471	8								
67328	8								F
67794	8								
67977	8								
68056	8								
68913	8								
69271	8								
69334	8								
69701	8								
69970	8								

Appendix B
Human Subjects Completion Certificate



Appendix C

IRB Expedited Approval



Office of Research Compliance
Institutional Review Board
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, Virginia 24061
540/231-4991 Fax 540/231-0959
e-mail moursel@vt.edu
www.irb.vt.edu

DATE: December 21, 2009

MEMORANDUM

TO: Travis W. Twiford
Eric Bond

Approval date: 12/21/2009
Continuing Review Due Date: 12/6/2010
Expiration Date: 12/20/2010

FROM: David M. Moore 

SUBJECT: **IRB Expedited Approval:** "Stuarts Draft High School: Quantitative Study Evaluating the Ninth Grade Transition Program", IRB # 09-1065

This memo is regarding the above-mentioned protocol. The proposed research is eligible for expedited review according to the specifications authorized by 45 CFR 46.110 and 21 CFR 56.110. As Chair of the Virginia Tech Institutional Review Board, I have granted approval to the study for a period of 12 months, effective December 21, 2009.

As an investigator of human subjects, your responsibilities include the following:

1. Report promptly proposed changes in previously approved human subject research activities to the IRB, including changes to your study forms, procedures and investigators, regardless of how minor. The proposed changes must not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.
2. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.
3. Report promptly to the IRB of the study's closing (i.e., data collecting and data analysis complete at Virginia Tech). If the study is to continue past the expiration date (listed above), investigators must submit a request for continuing review prior to the continuing review due date (listed above). It is the researcher's responsibility to obtain re-approval from the IRB before the study's expiration date.
4. If re-approval is not obtained (unless the study has been reported to the IRB as closed) prior to the expiration date, all activities involving human subjects and data analysis must cease immediately, except where necessary to eliminate apparent immediate hazards to the subjects.

Important:

If you are conducting federally funded non-exempt research, please send the applicable OSP/grant proposal to the IRB office, once available. OSP funds may not be released until the IRB has compared and found consistent the proposal and related IRB application.

cc: File

Appendix D

Letter of Permissions to Superintendant

Eric W. Bond
6 John Lewis Road
Fishersville, VA 22939
September 30, 2009

Augusta County Public Schools
6 John Lewis Road
Fishersville, VA 22939

Dear Dr. McQuain,

As you are aware, I am pursuing a doctoral degree from Virginia Polytechnic Institute and State University in Blacksburg, Virginia. My research will include the effectiveness of the ninth grade transition program at Stuarts Draft High School. I will be using these findings to aid school leaders in the management and implementation of ninth grade transition programs specifically designed for students who may be considered at-risk of completing high school.

This letter is requesting your permission to use archival data from Stuarts Draft High School. The data will be retrieved from SASI and Starbase student data management systems. The names and identities of the students will be kept confidential.

I thank you in advance for your consideration of this request. If you have any questions, you may reach me at 245-5107 or by email at ewbond@augusta.k12.va.us.

Sincerely,

Eric W. Bond
Assistant Superintendent for Personnel

Appendix E

Letter of Permissions to Principal

Eric W. Bond
6 John Lewis Road
Fishersville, VA 22939
September 30, 2009

Stuarts Draft High School
1028 Augusta Farms Road
Stuarts Draft, VA 24477

Dear Mrs. Abernathy,

As you are aware, I am pursuing a doctoral degree from Virginia Polytechnic Institute and State University in Blacksburg, Virginia. My research will include the effectiveness of the ninth grade transition program at Stuarts Draft High School. I will be using these findings to aid school leaders in the management and implementation of ninth grade transition programs specifically designed for students who may be considered at-risk of completing high school.

This letter is requesting your permission to use archival data from Stuarts Draft High School. The data will be retrieved from SASI and Starbase student data management systems. The names and identities of the students will be kept confidential. I thank you in advance for your consideration of this request. If you have any questions, you may reach me at 245-5107 or by email at ewbond@augusta.k12.va.us.

Sincerely,

Eric W. Bond
Assistant Superintendent for Personnel