THE FRESHMAN ACADEMY IMPACT: 
A COMPARISON OF NINTH GRADE STRUCTURES THROUGH ANALYSES OF 
STUDENT PERCEPTIONS AND PERFORMANCE DATA 

A Dissertation
by
CHRISTOPHER LEE BENNETT

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APPROVED BY:

______________________________________
Barbara B. Howard, Ed.D.
Chairperson, Dissertation Committee

______________________________________
Les Bolt, Ph.D.
Member, Dissertation Committee

______________________________________
Melanie W. Greene, Ed.D.
Member, Dissertation Committee

______________________________________
Jim Killacky, Ed.D.
Director, Doctoral Program in Educational Leadership

______________________________________
Edelma D. Huntley, Ph.D.
Dean, Research and Graduate Studies
ABSTRACT

THE FRESHMAN ACADEMY IMPACT:
A COMPARISON OF NINTH GRADE STRUCTURES THROUGH ANALYSES OF
STUDENT PERCEPTIONS AND PERFORMANCE DATA.
(May 2012)

Christopher Lee Bennett, B.A., University of North Carolina at Chapel Hill
M.A., Gardner-Webb University
Ed.S., Appalachian State University

Chairperson: Barbara B. Howard, Ed.D.

A student's transition from middle school to high school can prove to be a difficult
time, often leading to an academic decline, an increase in the number of accumulated
discipline referrals, and an increase in absences. In order to help students make the transition,
many school systems are establishing freshman academies on their high school campuses to
serve as a metaphorical bridge between the middle school and high school. Clark County
Schools\(^1\) implements the academy model. This study provides a holistic comparison between
Clark County and Lewis County Schools, which does not use the ninth grade academy
intervention strategy.

Student engagement served as the conceptual framework for this study as it is a
strong predictor of academic outcomes. Performance and perceptual data from current tenth

\(^1\) Clark County Schools and Lewis County Schools are pseudonyms
graders in each district provided me a holistic view of the ninth grade experience. The variables of achievement (growth on English I End of Course test), attendance (number of days absent), and discipline (number of incidents accumulated) were analyzed using three methods. First, historical data were collected for each variable and analyzed to determine if the academy model had an impact pre- and post implementation. Second, student performance data and student perceptions from surveys were compared using t-tests to determine if a significant difference existed between students in Clark County and students in Lewis County. Third, data were correlated to determine if a relationship existed between student performance and student perception.

After analysis, I found that with regard to achievement, no significant difference existed in student perceptions or performance data and no relationship existed when comparing performance to perception within each district. However, the analysis of historical data illustrated that Clark County students are closing the gap in the average growth disparity on the English I End of Course test since the implementation of the academy model.

With regard to attendance, the historical data showed that attendance rates have remained steady for both districts for since the 2006-2007 academic year. The analysis of perceptual data did not yield any significant difference; however, a significant difference did exist in the number of days absent as Lewis County students had a better attendance rate. A relationship existed for both Clark County and Lewis County students with the analysis of correlational data.

The analysis of historical discipline data found that both districts are on the same trajectory as both have decreased the number of incidents by 23% since the inception of the academy model in Clark County. No significant difference was found between students’
perceptions of discipline. However, a significant difference existed when analyzing performance data as Clark County had significantly fewer incidents. Additionally, a relationship existed between student perception and student performance in terms of discipline in Clark County.

Most research studies on freshman academies are from urban areas and focus primarily on student performance data. This research sought to add student perceptual data to the performance data component, thereby providing a holistic view of the freshman academy model. Additionally, the research conducted in this study took place in suburban/rural areas. For Clark County, the freshman academy model is serving as a cost-effective manner of helping freshman make a smooth transition to high school as the outcome of the study mirrors other positive data found in national studies.

In future studies, researchers may want to replicate this study with a larger sample size to increase the generalizability of the study. This could take place using multiple districts statewide. A researcher may want to conduct a similar study using teacher performance data and perceptual data in order to gain faculty members’ perceptions of students’ ninth grade experiences. Research could be conducted in multiple ninth grade academies to determine best practices and shared amongst schools/districts in order to best serve ninth grade students as they transition to high school.
ACKNOWLEDGEMENTS

The graduate school journey has included many challenges and fulfilling moments. A debt of gratitude is owed to many people who have helped make the experience successful.

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I would like to thank the many leaders in Cleveland County Schools who have helped me get to this point. Thanks to Dr. Bruce Boyles for allowing this project to get off the ground and for his encouragement during the process. Thanks to Dr. Aaron Allen for being a great mentor for not only the Ed.D. program, but as I took my first steps into school administration at Burns High School. Thanks to my former teaching teammate Bryan Feldman for being a great mentor and best friend and to my most recent teammate, Sherrie Norris, for her continued encouragement, the laughs we had, and for doing the great things she did to support kids. Thanks to those with whom I had the opportunity to teach with for six years at Kings Mountain Middle School who do great things for students as they prepare for the transition to high school. A special thanks to the ‘upstairs hallway’ at Kings Mountain Middle School; I miss working with you all.
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Lastly, this work is dedicated to those for whom it is written—the students who I have had the opportunity to work, get to know, travel, and laugh with each day, night, and weekend over the last six years. Lewis and Clark counties are symbolically for you—representing not only the traveling we did on buses, but the exploration in the classroom of math and science concepts. Thanks for the good times, thanks for knowing when to relax, and thanks for making me love my job. From Washington to Wilmington to Chapel Hill, from Charlotte to the coffee house to the classroom—you pushed me as much as I hope I pushed you to excel. Never hesitate to call if you need me—you know we'll forever remember the Titans!!
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Chapter I

Introduction

As students transition from middle school to ninth grade in a traditional high school, they face many challenges. According to Neild (2009) eighty percent of students in the United States enter a new environment much larger and more impersonal than their middle school. In a traditional high school, classes are spread across a large campus, and the structured middle school routine is a distant memory. Hertzog and Morgan (1999) note that the lack of successful transition programs cause high school dropout rates to rise, especially for freshmen. The transition from middle school to high school has an adverse impact on student achievement, attendance rates, and the number of discipline referrals accumulated by freshmen (Barone, Aguirre-Deandresi, & Trickett, 1991; Hall, 2007).

The North Carolina Department of Public Instruction (NCDPI, 2010) reported that 32.1% of all dropouts occur during the ninth grade year. With the transition to high school coinciding with North Carolina’s legal dropout age of 16, schools lose many students who are classified as either first time or repeating ninth graders. While the high school should not bear the sole responsibility of students dropping out of school, safeguards help make the transition as seamless as possible in an effort to keep at-risk students in the classroom. According to the Duke University’s Center for Child and Family Policy (2008), high school failure and dropout have been referred to as the “silent epidemic” (p. 5) as “the graduation rate has slipped to a level threatening the very health and well being of society” (p. 5). Bridgeland,
Dilulio, and Morison (2006) completed a study, which included a series of focus groups and surveys collected from former students (ages 16-25) who dropped out of high school. Data were collected from 25 locations in the United States including large cities, suburban areas, and small towns. This study, commissioned by the Bill and Melinda Gates Foundation, notes how those choosing to dropout of school negatively impact themselves and society:

The decision to drop out is a dangerous one for the student. Dropouts are much more likely than their peers who graduate to be unemployed, living in poverty, receiving public assistance, in prison, on death row, unhealthy, divorced, and single parents with children who drop out from high school themselves. Our communities and nation also suffer from the dropout epidemic due to the loss of productive workers and the higher costs associated with increased incarceration, health care and social services. (p. i)

The interpersonal and intrapersonal effects caused by high school dropouts have led many school districts to search for reform models to help ninth graders make a smooth transition to high school, which, in effect, will increase the probability of them earning a high school diploma.

Small school models positively impact attendance rates, student achievement, student discipline, and subsequently, dropout rates (Hertzog & Morgan, 1999; Ancess & Ort, 1999; Lakhman, 1999; Wasley, Fine, Gladden, Holland, King, Mosak, Powell, 2000; Center for Collaborative Education, 2001; McBrady & Williamson, 2009). In an effort to create a bridge to ease the transitional effects between middle school and high school, many districts are creating small schools, specifically known as freshman academies, on high school campuses.
Freshman academies house students' core academic classes in an isolated area of campus away from upperclassmen. In contrast, students who enter a traditional high school find their classes spread across a large campus, oftentimes separated into departmental clusters. Teachers within the freshman academy serve only ninth grade students and have a common planning to discuss students and prepare cross-curricular lessons. Teachers in schools without freshman academies are not afforded the same opportunities to have frequent student-centered conversations due to the lack of common planning and the physical distance between classrooms for teachers who serve freshmen. The large, expansive campus of a traditional high school can lead to an impersonal environment for ninth graders, whereas the isolated nature of the freshman academy creates a smaller, more intimate community for students and teachers.

There is a wealth of information to be found on small learning communities' structure and impact on students based on analysis of student performance data, including achievement, attendance, and discipline data. Additionally, much data exist describing issues students face as they transition from middle school to high school. A majority of this research comes from urban areas in the United States including Chicago, Philadelphia, New York, and Boston. Conversely, there is a gap in the amount of information focusing on comprehensive freshman transition programs (Dedmond, Brown, & LaFauci, 2006). The present study focused on addressing this gap by employing survey research to compare the perceptions held by students who were enrolled in a freshman academy with those of students not enrolled in a freshman academy. Cook-Sather (2002) describes the importance of using student perspectives:
The call to authorize student perspectives is a call to count students among those who have the knowledge and the position to shape what counts as education, to reconfigure power dynamics and discourse practices within existing realms of conversation about education, and to create new forums within which students can embrace the political potential of speaking out on their own behalf. (p. 3)

This study focused on Clark County Schools' freshman academies and Lewis County Schools, which are comprised of traditional high schools. Three sets of data were analyzed to determine the impact the freshman academy model had on students. Historical performance data were analyzed between each division due to each district having a different starting point. Survey research gathered student perceptions toward achievement, attendance, and discipline, and data were analyzed to determine if significant differences existed between students enrolled in a freshman academy and those enrolled in a traditional high school. The study also analyzed performance data relating to achievement, attendance, and discipline to determine if a significant difference existed between academy and non-academy oriented schools. Lastly, this study sought to determine if relationships between student perceptions and performance existed within each division.

Prior research with regard to achievement has focused on student proficiency. This study used student growth as a model, which addresses an additional gap in current research as individual student growth is one tenet of the academy concept. The NCDPI growth model analyzes student learning over time, comparing a student's current performance to at least two years of past performance, when data are available (NCDPI, 2010). The Department of Public Instruction provides growth calculations for each student to school districts. With

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1 Clark County Schools and Lewis County Schools are pseudonyms
most research on small schools and freshman academies being conducted in urban areas, this research focused on suburban/rural areas in the Piedmont/Foothills region of North Carolina.

**Purpose Statement and Research Questions**

I investigated whether a significant difference existed between the perceptions held by students who were enrolled in a freshman academy compared to students who were enrolled in a traditional high school's ninth grade with regard to achievement, attendance, and discipline. Tenth grade students' perceptions were collected in order to gain a holistic view of the transition students experienced during their entire ninth grade year. In addition to this analysis, the study investigated whether or not a significant difference existed between achievement, attendance, and discipline data gathered from the 2010-2011 academic year. Lastly, I analyzed data to determine if relationships existed between performance and perceptions within each division. The following seven research questions guided the study:

1. When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to achievement?

2. When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to attendance?

3. When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to discipline?

4. Does a significant difference exist in the English I EOC growth for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?
5. Does a significant difference exist in the attendance rate for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

6. Does a significant difference exist in the number of discipline referrals for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

7. Is there a relationship between students’ perceptions and school performance data?

Significance of the Proposed Study

In a 1999 interview by Chute, Hertzog asserted that, “Retention is all over the place. What’s happened is ninth grade has become the holding tank for the high schools.” According to a national study consisting of 18,320,194 students in grades eight through twelve completed during the 2004-2005 academic year, ninth grade students make up the highest percentage of students in grades 8-12 (Gray, Sable, & Sietsema, 2006).

Table 1

<table>
<thead>
<tr>
<th>Grade</th>
<th>Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th</td>
<td>3,824,670</td>
</tr>
<tr>
<td>9th</td>
<td>4,281,345</td>
</tr>
<tr>
<td>10th</td>
<td>3,750,491</td>
</tr>
<tr>
<td>11th</td>
<td>3,369,339</td>
</tr>
<tr>
<td>12th</td>
<td>3,094,349</td>
</tr>
<tr>
<td>Total</td>
<td>18,320,194</td>
</tr>
</tbody>
</table>

This phenomenon has been labeled the “ninth grade bulge” by Kennelly and Monrad (2011, p. 2). They coined the subsequent year the “tenth grade dip” (p. 2) due to the large percentage decrease in students enrolled in tenth grade. According to Kennelly and Monrad (2011), the large percentage of students in ninth grade-leading to its referral as a holding tank-is due to the high retention rate stemming from academic underachievement, and the sharp decrease in tenth grade can be attributed to students who have not been promoted or those who chose to drop out of school.

The transition to the ninth grade can have far-reaching effects with regard to student achievement, attendance rates, and the number of discipline referrals accumulated by
freshmen (Barone, Aguirre-Deandreis, & Trickett, 1991; Hall, 2007) which often leads to students dropping out of school prior to graduation. In North Carolina, one-third of all dropout events occur during a student's ninth grade year (NCDPI, 2006). Two studies cited by Black (2004) describe comparable findings describing the ninth grade experience. Lounsbury and Johnston (1985) completed a qualitative study by shadowing ninth graders in 48 states and the District of Columbia. Their findings include:

- A mismatch was reported between school policies and practices and 14-year-olds' developmental needs;
- Observed instruction was teacher-centered, with teachers lecturing and students taking notes and completing assignments;
- Found ability grouping and tracking as common practice;
- Classes were based on a 40 to 50 minute class schedule;
- Most high schools offered little or no guidance to help ninth-graders adjust academically and socially;
- Many students fell by the wayside, feeling that school was "pointless and endless;"
- Even in well-managed high schools that appeared to be running smoothly, the researchers said, "something was missing"—especially in the "flat and narrow" teacher-student interactions.

A 1993 study by Wheelock (cited in Black, 2004) resulted in similar findings:

- Ninth grade is considered a minefield for the most vulnerable students, especially those who become disengaged and discouraged and who fail to develop strong bonds with teachers and their school.
• Tedious lessons, overcrowded classrooms, and indifferent teachers were among the factors that diminished students' already fragile attachment to school.

• When students feel their teachers and schools are uncaring and inhospitable, the attachment is easily broken.

Lounsbury and Johnston (1985) predicted that ninth graders would "continue to drift" and "mirror the worst of outmoded high school practices that do little to foster positive learning for all students" (p. 43). In response to this, many school districts are implementing the freshman academy concept of the small schools model (small learning communities) to ease the transition from middle school and better meet the needs of ninth grade students.

Information gained from this research will benefit the students, faculty, and stakeholders of Clark County Schools, which is the location of the freshman academies. Additionally, its holistic approach through integration of performance and perceptual data adds a new dimension to current research. Suburban and rural areas will be able to rely on this research as a majority of the current research discusses the freshman academy initiatives in urban areas across the country. Quantitative data illustrates the impact the academy structure is having on student success with regard to perception and student performance data.

**Definition of Terms**

Freshman/Ninth Grade Academy—A transitional program provided for students in their first year of high school that places students on an interdisciplinary team of teachers, all of which share the same group of students and have common planning. The academy is self-contained on the traditional campus (school-within-a-school model) and has its
own leadership team consisting of a director and counselor (David, 2008; Anderson & McAndrews, 2002; North Central Regional Educational Laboratory, 2005).

Small Learning Community (SLC) – Any separately defined, individualized learning unit within a larger school setting. Students and teachers are scheduled together and frequently have a common area of the school in which to hold most or all of their classes (Sammon, 2000).

School-Within-A-School–A school-within-a-school (SWAS) operates within a larger ‘host’ school, either as the only SWAS in that school or one of several. Schools-within-schools (SWS) represent different degrees of autonomy, but typically have their own personnel and program, and their students and teachers are self-selected. Staff of a SWAS must defer to the principal of their host school on matters of school safety and building operations. Its principal reports directly to a district official. Writers often use the terms ‘school-with-a-school’ and ‘schools-within-schools’ (Cotton, 2001).

Dropout–student was enrolled in school at some time during the reporting year; was not enrolled on day 20 of the current year; has not graduated from high school or completed a state or district approved educational program; and does not meet any of the following reporting exclusions:

a. transferred to another public school district, private school, home school or state/district approved educational program,

b. temporarily absent due to suspension or school approved illness, or
c. death (NCDPI, 2011b).

End of Course Test–used to sample a student’s knowledge of subject-related concepts as specified in the North Carolina Standard Course of Study and to provide a global
estimate of the student's mastery of the material in a particular content area (NCDPI, 2011c). For the purpose of this study, ninth grade English I End of Course Test scores will be analyzed. The purpose behind this is that it is the only EOC all ninth graders take. The Algebra I EOC is taken by advanced students during their 8th grade year.

End of Course Test Growth—measurement of a child's expected academic progress in a subject; measured using a growth formula. The formula predicts where a child should be academically at the end of the course. The growth formula predicts how far a child should grow academically by the end of a particular course (NCDPI, 2011d).

North Carolina Window on Student Education (NCWise)—an integration of all aspects of public school life from the classroom to the central office; web-based and centrally maintained for capturing, accessing and reporting a wide spectrum of student information; replaced the Student Information Management System (SIMS). For the purpose of this research, data from NCWise included English I End-of-Course growth, attendance, and discipline referrals (North Carolina Window on Student Education, 2009).

Discipline Referral—the outcome of a student committing an offense which requires action by administration and is entered into the data management system (NCWise). In the NCWise system, discipline referrals are termed “incidents.”

Attendance—the presence of a student on days when school is in session. A student is counted as present only when he/she is actually at school, present at another activity sponsored by the school as part of the school's program, or personally supervised by a member of the staff (NCDPI, 2011a).
Average Daily Attendance—the total number of days of attendance for all students divided by the total number of school days in a given period gives the average daily attendance (ADA) (NCDPI, 2011a).

High School Transition—a process during which institutional and social factors influence which students’ educational careers are positively or negatively affected by the movement between organizations (Schiller, 1999).

Traditional/Comprehensive High School—the structure found in most high schools in the United States. A traditional high school includes students in grades nine through twelve who can be enrolled in the same courses, primarily electives, but also core academic classes. Students in a traditional high school oftentimes have lunch at common times and are mixed during class changes (Neild, 2009).
Chapter II

Review of the Literature

This chapter includes a review of literature introducing the transition problems students face with regard to achievement, attendance, and discipline as they leave middle school and enter a traditional, comprehensive high school. The chapter continues by describing how the freshman academy falls within the small learning community model. A description of the freshman academy concept explains how freshman academies utilize rigor, relevance, and relationships as ingredients to ensure student success and individual growth. This body of literature on the freshman academy offers insight into the primary problems incoming freshmen face in relation to achievement, attendance, and discipline and offers suggestions of dealing with these issues through the freshman academy approach. The review of literature provides a description of academies that are currently in place in the United States along with a description of barriers school systems face as they attempt to implement small learning communities. The conceptual framework, student engagement, which is used to guide the study, builds upon this literature and concludes the chapter.

Transition Problems Facing Freshmen

The transition to high school requires students to experience new environments, new curricula, new class organizations, and new teachers while simultaneously undergoing developmental changes themselves (Mizelle & Irvin, 2000; McIntosh, Flannery, Sugai, Braun, & Cochrane, 2008; Wilcock, 2007). Mizelle's research found that these factors can
cause the school to become large and impersonal, teacher-centered, and more competitive. She noted that ninth graders feel their high school teachers give more homework and have higher expectations than their middle school teachers from the previous year (Mizelle, 2005). This can lead students to becoming overwhelmed as they make choices affecting their future such as choosing courses, deciding on extracurricular activities in which to participate, and beginning to think about their future after high school (Mizelle, 2005).

The impersonal nature of traditional high schools can negatively affect students when making class selections. In comprehensive high schools with a large number of students and a wide variety of courses, students do not always receive the individual attention needed during the registration process. McIntosh et al. (2008) support this in their findings by noting that the lack of focused attention and individualized strategic planning can have a major impact on a student's academic performance and play a role in his/her future as a high school student. The small size of a freshman academy lends itself to a more focused attention on students' registration selections. The team teachers communicate with one another, the student, and parent to assist in course selections based on the student's needs. This is possible given the fact that all have worked as a team to discuss the students' progress during the year (Chicago Public Schools, 2003).

According to Wilcock (2007), student and parent motivation is another factor that can determine whether or not a student has a successful transition from middle school to high school. Students who are motivated to succeed will make the high school curriculum work for them and will assimilate to the new environment. In the elementary school years, parents feel motivated to be active agents in their child's education (Mizelle, 2005). However, as noted by Cooper (1999), as students progress through middle school and high school, this
motivation decreases. Wilcock (2007) noted that parents can be intimidated by the demanding curricula and often believe it is better to provide no advice rather than poor advice. Additionally, some parents see this transition as the beginning of independence and neither wish to nor attempt to interfere with their child's choices (Wilcock, 2007). At the age when students transition, Neild (2009) found students are often less supervised by their parents and more influenced by peers, leading to changes in students' academic habits and behavior that subsequently result in school disciplinary action. Freshman academies offer a variety of events to increase parental involvement, including open houses, parent/teacher conferences, and awards celebrations. Such events create a welcoming climate and invite parents to become an active participant in their child's education at a critical time of transition (Mizelle, 2005).

According to Darling-Hammond (1995), students in traditional high schools transition from class to class across expansive campuses resulting in little personalization or sense of ownership by students. Many high school teachers focus on their subject matter, often ignoring the importance of relationship building. As a result, students feel anonymous and alienated. Neild (2009) reinforces Darling-Hammond's assertions by positing that some students take longer or do not adapt to the more impersonal high school climate when compared to the team-structured middle school concept. Given the size of traditional high schools, students fear other students will harass and tease them, and they will not know to whom they can turn for help (Mizelle, 2005). This leads to negative self-images and lower self-esteem (Mizelle & Irvin, 2000). Academic and social factors, combined with disciplinary reasons, are the components that lead students to unsuccessful ninth grade transitions.
Transition problems stemming from issues with academics, peers, and parents plague many ninth graders in traditional high schools and impede students from being successful as they attempt to finish their K-12 education. Freshman academies seek to help students make the transition to high school much smoother and eliminate the freshman sink or swim mentality, which many face after leaving middle school (Mehta, 2008). The primary problems freshmen face which can impact their probability of graduating in four years include attendance, achievement, and discipline issues (Austin Independent School District, 1987; Bridgeland, Dilulio, & Morison, 2006).

**Attendance.** A 1987 study of 5,895 students in the Austin (TX) Independent School District (Austin (TX) Independent School District, 1987) found that ninth grade students miss the most school days of all grade levels (1st-12th grade). On average, nine percent of ninth grade students are absent each day. For all other grade levels, an average of 5.3% of students are absent each day, focusing exclusively on high school students, 6.3% of students are absent each day.

The Office of Juvenile Justice and Delinquency Prevention developed categories correlating truancy and risk factors (cited in National Center for Mental Health Promotion and Youth Violence Prevention, 2010). These categories include: school, family, economic, and student factors. The transition from middle school to high school exacerbates these problems in many ways as students enter a new, unfamiliar, larger environment, concurrent with a decrease in parental involvement (Cooper, 1999).

- School factors: The size and climate of the school, along with the attitudes of the teachers and administrators play a key role in a student's decision to attend school.
The school's flexibility in meeting the diverse needs of students is also a determinate in student attendance.

- Family factors: The lack of parental supervision, poverty, substance abuse, and domestic violence are factors that can potentially affect a student's attendance.

- Economic factors: Affecting student attendance from an economic perspective include student employment, parents with multiple jobs, along with the lack of affordable transportation.

- Student factors: The emotional and social competence of the student, in addition to a student's drive and motivation will play a role in a student's attendance.

In large schools, it is difficult for teachers to be aware of all of the mitigating factors facing students, especially freshmen, who are new to a high school campus. High schools must find a way to address these factors in order to avoid attendance problems. This is especially important for freshmen. In *Fires in the Bathroom* (Cushman, 2003), a compilation of stories from focus groups with students of various backgrounds detailing their experiences in high school, one freshman reported:

> When I was first starting ninth grade I felt so alone. I used to cut every day, leave classes early, come in late, just to avoid being there...some people like just being a face in the crowd, but it made me feel like nothing. (p. 162)

Teachers must recognize these actions by students and build the appropriate relationships in order to affect student attendance since attendance is an important predictor for student success (McBrady & Williamson, 2009; Virginia Department of Education, 2005).

Students are often absent from school in order to avoid work such as tests and projects. Work avoidance leads to students falling behind academically while absences
mount; combining these two factors leads to a greater risk of a student dropping out of school. Work avoidance is most prevalent between the ages of 5-6 years old, 10-11 years old, and during adolescence (Davis, 2007). The three time periods when work avoidance is most common correlate with the transitions students make in their schooling career: into elementary (ages 5-6), elementary to middle (ages 10-11), and middle to high (ages 15 - 16). Adolescents cannot afford to fall behind academically because it is also during this time that parental involvement is decreasing, leaving students with a smaller number of adults looking out for their success.

Allensworth and Easton (2007) released a research report detailing the correlation between the number of absences a ninth grade student accumulates and the percent chance the student has to graduate in four years with their cohort in Chicago Public Schools. Students who were absent 0-4 days still have an 87% change of graduating with their cohort. There is an approximately 20 percent decline in chance of graduating with the cohort as absences increase at increments of four. Students who miss 20-24 days only have a 10% change of graduating in four years and for students missing 40 or more days, the study found a zero percent chance of a student graduating with their ninth grade cohort. Reasons for the rapid percentage decline include students missing days and not being motivated to make up work and/or students’ absences not being waived causing them to lose course credit and not have enough credits to progress with or catch up with their class. This report illustrates the necessity for students to be in school each day in order to increase their achievement and their probability of graduating on time with their freshman cohort.

**Achievement.** The size and scope of traditional high schools can leave students looking for answers as they try to manage time wisely, use effective study skills, and find
additional opportunities for help (Mizelle, 2005). Neild (2009) noted that some freshmen are inadequately prepared for high school, leading to an unsuccessful transition. She wrote that in middle school, students might struggle academically and not receive the necessary support. Their struggles result in a lack of necessary skills, which may catch up to them in the ninth grade. Neild (2009) concluded that students with poor math and reading skills can be overwhelmed by the academic demands of high school, which causes a negative impact in achievement rates.

According to Ascher (1987), individual problems compound during a student's ninth grade year causing him/her to dropout of school. Ninth grade students are not only at a transition stage of schooling but also personal development. This age group of students has less scheduling and rule flexibility and is often easily influenced by peers to make decisions detrimental to their future. Ascher (1987) also noted that at this stage in a student's educational career, attendance, discipline, and academic problems could compound to a point that leads a student to drop out of school.

Haney, Madaus, Abrams, Wheelock, Miao, and Gruia (2004) gathered the number of students enrolled in public schools by grade for each academic year, and the number of students graduating each academic year. Using a cohort progression analysis, Haney et al. found that from 1970 to 2000, the number of students dropping out of high school more than tripled from 4% to 13%. This study supports Ascher's 1987 findings detailing the compounding of problems freshmen face as they enter high school leading to a dropout event. The results of this national study also point to the necessity to implement an intervention strategy for ninth grade students due to the continuous increase in dropouts over
three decades. These types of data have led to publications describing the dropout crises as an epidemic (Bridgeland, Dilulio, & Morison, 2006).

A study completed by Stearns and Glennie (2006) analyzed the reasons for student dropouts in North Carolina during the 1998-1999 academic year. The researchers gathered data on 14,525 total students (5,460 were ninth grade students) from the North Carolina Department of Public Instruction. Stearns’ and Glennie’s reported that nearly 60% of dropouts do so after having attendance issues. This supports the study completed by the Allensworth and Easton (2007) for the Consortium on Chicago Public Schools, which found that students with attendance problems are less likely to graduate.

**Discipline.** A 1987 study conducted in the Austin (TX) Independent School District found the number of ninth grade discipline referrals was more than double that of any other grade at the high school level in the district (Austin Independent Schools, 1987). The 1987 study found that 63.7% of the referrals came from the ninth grade, whereas the other grade levels accounted for much less, 10th grade: 19.2%; 11th grade: 10.1%; 12th grade: 7.9%. Hall (2007) reported on this study and noted that ninth grade students commit more suicidal acts, engage in alcohol/drug use, and commit more serious delinquent offenses, all of which have a negative impact on student behavior at school.

The data in the Austin (TX) Independent School District report indicate that ninth graders account for a majority of the high school discipline referrals. This illustrates the consistency of the ninth grade discipline problem across both time and geographical distance. Data from NCDPI's 2008-2009 Consolidated Data Report, notes that ninth grade students in North Carolina account for the largest number of short-term suspensions.
A study conducted by Hertzog and Morgan in 1996 (Hall, 2007) discovered a difference in the approach to discipline by teachers and administrators between middle schools and high schools. High schools tended to have a more strict code of conduct and tended to abide by it closely, whereas middle schools were not as stringent (Hall, 2007). This creates a transition problem as students must adjust behaviors to meet high school expectations, which can be difficult for students at this age.

Entering ninth grade, freshmen face a significant number of problems that can impede their success and academic growth. Freshman academies are a branch of the small learning community model designed to help students make a smooth transition from middle school to high school and have success during their ninth grade year, ultimately removing the sink or swim mentality (McIntosh & White, 2006).

**Freshman Academy Model as a Small Learning Community**

The small schools movement began as an experiment with the goal of increasing student achievement, lowering the dropout rate, and increasing the camaraderie found in school buildings. Research from the Northwest Regional Educational Laboratory notes that small learning communities began as “houses and schools-within-schools in the 1960s; magnet programs, career academies, and mini-schools in the 1970s; charters in the late 1980s and 1990s; and finally small learning communities today” (Barton, Klump, & Oxley, 2006, p. 1). Jehlen and Kopkowski (2006) note that what started with only a few schools in certain areas of the country has turned into a reform movement as change has been sought due to increasing accountability standards from the federal and state governments. The idea of smaller, more focused schools carried into the twenty-first century with large, comprehensive high schools being broken down into more focused, student-oriented schools or learning
communities. The small schools initiative hopes to turn around these schools' low levels of academic success by creating smaller, more focused and personal learning environments (Fleischman & Heppen, 2009; Wise, 2008).

According to High Schools for the New Millennium released by the Gates Foundation (2005), students in small high schools score higher on tests, pass more courses, and go on to college more frequently than those in large ones. Research by Clark and Hunley (2007) notes that several forms of small school models exist, including the following: newly created schools, schools within a school (freshman academies), or transition schools such as Middle or Early College Schools. Small schools can be found on the same campus, while others are split completely. These schools generally serve no more than 400 students; however, most serve 200 or fewer. A school community can be broken down into several small schools. Each small school may share buildings, administrators, and certain activities; however, each school is autonomous in that it makes its own decisions, creates its own beliefs and values leading to a more personalized environment (Anderson & McAndrews, 2002; David, 2008; North Central Regional Educational Laboratory, 2005).

According to the United States Department of Education's Implementation Study of Smaller Learning Communities (Bernstein, Millsap, Schimmenti, & Page, 2008), the freshman academy model is the most popular among reforms in the small schools movement. In a 2002-2003 study of 119 schools receiving federal grant money for initiating small schools 38% implemented a freshman academy at the beginning of the 2001-2002 school year, and 55% at the beginning of the 2002-2003 school year, which makes the freshman academy model the most popular. According to research on transition problems freshmen
face, school leaders are adopting this model in order to make the process smooth, thereby, increasing freshman achievement.

Keefe and Jenkins (cited in Union Pacific Foundation's *Personalized Learning at the High School*, 2011) discuss the need for personalized learning, which is provided in small learning communities, including freshman academies. By becoming more responsive to students' individual needs, a personalized learning environment promotes student ‘success and achievement’ (Union Pacific Foundation, 2011, p. 2).

Darling-Hammond (1997) cites four factors contributing to a personalized learning environment:

1. Structures that provide environments for serious learning that attend to the needs of students to have caring, supportive relationships with teachers.
2. Shared exhibitions of student work that make it clear what the school values and how students are doing.
3. Structures that support teacher collaboration, in particular, teacher teams, focused on student learning.
4. Structures for shared decision-making and dialogue about teaching and learning with other teachers, students and parents.

Darling-Hammond's four factors extend Keefe and Jenkins' argument for small schools, because as Darling-Hammond notes, “Unlike large, ‘warehouse’ schools with thousands of students and the system of anonymity they perpetuate, small schools with 300 to 600 pupils are more likely to solve problems because they cannot be hidden and ignored” (Society for the Advancement of Education/USA Today, 2002, p. 1). Darling-Hammond's use of the term
“warehouse schools” (1995, n.p.) is the antithesis of the learning communities that are created in freshman academies.

Daggett and Meeder's (2011) research on small learning communities assisted them in their development of ten components of successful school reform: (a) create a culture that embraces a rigorous and relevant curriculum, (b) use data to provide clear unwavering focus, (c) set high expectations that are monitored for student's continuous improvement, (d) create a framework to organize curriculum that drives instruction, (e) provide students real-world applications, (f) create multiple pathways to rigor and relevance, (g) provide sustained professional development that is focused, (h) obtain and leverage parent and community involvement, (i) maintain safe and orderly schools, (j) offer effective leadership development.

Many freshman academies are modeled from Breaking Ranks (Lachat, 2001) research, which integrates the following components matching Daggett and Meeder (2011), and Darling-Hammond's (1997) definitions of successful school reform:

- Track the performance of specific student groups on multiple measures, including students participating in specific programs and students in learning academies/communities, courses, projects, or internships;
- Profile performance by gender, race/ethnicity, economic level, language proficiency, disability, and other equity factors to identify achievement gaps;
- Analyze student performance at multiple levels, including school, grade level, academy/learning community, subject area, program, course, classroom, and individual student;
• Compare student course grades to results on state assessments and other standardized measures;
• Determine how factors such as absence and mobility affect assessment results;
• Analyze trends in absence, suspension, and dropout rates for specific student groups;
• Profile longitudinal performance trends on multiple measures;
• Track the longitudinal performance of specific student cohorts; and
• Make data-informed decisions about instructional improvement. (Lachat, 2001)

The freshman academy is a school-within-a-school model derived from the small schools movement, which provides specific interventions for students entering ninth grade. The tenets of the small schools model supported by Darling-Hammond, Meeder, and Daggett have been tailored specifically toward meeting the needs of the young adolescent entering high school. While each academy can be as unique as the campus on which it is found, a broad-based profile can be given in order to define the academy and set it apart from the whole-school environment (Cook, Fowler, & Harris, 2008).

Framework of the Freshman Academy

According to the National Conference of State Legislatures (2010), successful high schools provide rigorous coursework, relevant learning opportunities, and meaningful relationships with instructors who are qualified to help students achieve high standards. Daggett and Nussbaum (2007) note that “rigorous and relevant curriculum and instruction, supported by strong relationships and a welcoming learning environment, matter” (p. 5). These traits address the elements of rigor, relevance, and relationships as necessary ingredients of a successful freshman academy promoting student success.
**Rigor.** A rigorous curriculum is a key component of the small schools initiative. Students are more likely to remain engaged and involved if they take ownership of their learning. Rigorous class time consists of students actively exploring, researching, and solving complex problems to develop a deeper understanding of core concepts. An increase in class work and/or homework does not constitute a rigorous curriculum; conversely, a rigorous curriculum gives students the opportunity to develop and apply habits as they experience learning (Brandell, 2007). A rigorous curriculum incorporates higher order thinking skills are incorporated, which prepares students for academic challenges at the college level (Oregon Small Schools Initiative, 2005). There are several strategies that should be employed to set the tone of a rigorous curriculum including, but not limited to, setting high expectations for all students, covering topics in depth as opposed to skimming the surface, and working across the curriculum (Oregon Small Schools Initiative, 2005).

Blackburn (2008) defines rigor as “creating an environment in which each student is expected to learn at high levels, each student is supported so he or she can learn at high levels, and each student demonstrates learning at high levels” (p. 19). Based on her definition, a rigorous curriculum can be employed easier in a small school environment. Her emphasis on rigor is defined by three categories, but she places an emphasis on noting ‘each student’ tying in the relationship ingredient, which is more prevalent in small schools as opposed to traditional ninth grades. The environment Blackburn notes consists of the actual academy structure—a separate area for ninth grade—but also an environment where all students are known, as are their parents and other stakeholders, due to increased communication within the academy. Blackburn also notes ‘learning’ three times in her definition. Structures within the academy such as class proximity (teachers or all subjects close to one another), common
planning, sharing common students, etc. allow for the creation of rigorous projects such as cross-curricular units integrating higher order thinking skills.

**Relevance.** When exposed to a curriculum relevant to their lives, students are more likely to stay actively engaged resulting in greater depth of learning (U.S. Department of State’s Bureau of International Information Programs, 2008). In order to offer a curriculum that is relevant to students’ lives and interests, it is imperative that teachers take time to get to know the students early in the school year (Brandell, 2007). Once connections are made, teachers then tailor lessons and units to the interests of the students. A key part of engaging freshmen is combining current studies with future plans and allowing students to make a personal connection with the subject matter. These units can take place in one subject or across several areas. The teacher must remove him/herself from the role of teacher and take on the task of being facilitator. These projects can be centered around the interests of the students while at the same time focusing on certain strands of the standard course of study (David, 2008). Project-based learning assignments should flourish in small schools where teachers have more opportunity to get to know the students on a personal and intellectual level. Teachers can then set expectations based on such knowledge.

**Relationships.** Building relationships with students in a large comprehensive high school is difficult for students, teachers, and administrators primarily due to the sheer number of students assigned to each teacher. However, in a small school environment, students receive a personalized education where school personnel know most students by name. Relationships are not only important between students and teachers, but include a close-knit association of administrators, counselors, teachers, students, and parents (Lambert & Lowry, 2004).
There are four stages involved in creating lasting relationships in small schools. In the first stage, teachers see the need for personalization and begin to design and implement certain structures to support personalization. Stage two consists of students and teachers beginning to see a difference in their relationships (after being involved in a small school), and the role of teachers and the professional community begins to expand. Also during this second stage, teachers begin to discuss instructional practices regarding the individual learner. In stage three, teachers begin to alter their practices to meet individual needs and use school data (test scores, attendance, and discipline referrals) to inform future planning. The final stage is an extension of stage three as teachers continually seek professional development opportunities and use data gathered in stage three to build structures to support teaching and learning in the small school (Lambert & Lowry, 2004).

There are a variety of practices that enable relationships to be forged in small schools including advisory periods during which teachers work with small groups in problem-solving and team building activities. In addition, freshman classes are clustered allowing a large high school to have more of a personal feel as teachers are visible and accessible throughout the day. Relationships can also be developed in small schools easier than comprehensive high schools as expectations can be expressed more clearly to a smaller group of people (Lambert & Lowry, 2004).

High school students, especially freshmen, should not be anonymous. When a relationship is built between a student and adult at a school, students are more likely to have success (National Conference for State Legislatures, 2010). These relationships are a big part of keeping students in school. Research from the North Carolina Department of Public Instruction (2010) indicated that in North Carolina 32.1% of the students that drop out of
school, do so during their ninth grade year. This supports the need to develop relationships early in a student's academic career.

Due to the smaller ratio of student to teachers, relationships between teachers, students, parents, and administrators can be more effective in small schools. With closer contact maintained among all involved, students are less likely to fall behind in class. Students are more likely to want to remain engaged with school when they specifically see that those around them care (Daggett & Nussbaum, 2007).

**Freshman Academy Profile**

Freshman academies are an extension of the middle school at the high school level (Bernstein, Millsap, Schimmenti, & Page, 2008; McIntosh and White, 2006; Neild, 2009; Wormeli, 2000). By introducing the academy concept on high school campuses, administrators are removing the sink or swim mentality from the transition process (Mehta, 2008). Academies are defined by their structure, the teaming concepts, and the additional opportunities they offer students due to their size.

**Structure.** McIntosh and White (2006) identified 12 research-based strategies for the development of a freshman academy. It was determined through their own research and integrating ideas from staff development activities with faculty members that an academy should include: (a) core teacher classrooms, freshman lockers, principal, and counselor located in the freshman academy; (b) a formation of teams of ninth-grade core teachers (science, math, history, and English) who share the same cohort of students; (c) a common preparation period for each core team to facilitate developing intervention strategies for at-risk students, planning student activities, and developing professional learning communities; (d) a freshman counselor working closely with middle school counselors to ensure proper
placement of students into freshman courses; (e) freshman students and teachers having a common lunch period; (f) special freshman lunchtime activities; (g) freshman homerooms; (h) student council representation from each freshman homeroom; (i) an annual freshman teacher retreat to bond, plan, and energize professional learning opportunities by developing common practices; (j) a freshman principal, counselor, and intervention specialist to work with the freshman class every year instead of moving with that class to the next year; (k) increased and improved transition activities during the eighth-grade year; (l) a three-hour freshman orientation in August. These strategies are to be employed by high school faculty in order to increase achievement, decrease absenteeism, and decrease the number of discipline referrals accumulated by ninth grade students. Many of these characteristics are embedded in the middle school philosophy. Thus, by integrating them into ninth grade academies, administrators can create a metaphorical bridge to close the philosophical gap between the two types of schools.

**Teaming.** A major element of the middle school philosophy that is a part of most freshman academies is the teaming process among faculty members (Bernstein, Millsap, Schimmenti, & Page, 2008). On a team, four core teachers (math, science, English/language arts, and social studies/history) share the same students each day. The classrooms are physically clustered together on a specified part of campus. While their functions are the same, Wormeli (2000) helps to illustrate the difference between middle school and high school teaming as middle school teams create unique team names and mascots showing explicit separation whereas high schools do so more covertly. The team approach allows teachers to discuss successes and weaknesses of students they all share, define procedures for the team, celebrate achievements, and make curricular connections with material being
studied (Wormeli, 2000). Freshman academies are discreetly organized into teaching teams lacking names and other identifiers, which are common to the middle school concept. However, teaming permits teachers to discuss a common group of students and keep a more watchful eye on students' academic progress (Dailey & Cavanna, 2006; Southern Regional Education Board, 2002; Wormeli, 2000).

**Additional Opportunities.** The academy's characteristics—small size, rigorous and relevant instruction, forged relationships, parental connections—help teachers and parents monitor student progress and allow stakeholders to introduce interventions if dropout signs become evident. Chmelynski (2004) notes that academies also offer the opportunity to provide tutors for math and reading, specifically for targeted freshmen. The freshman academy model makes identifying students who need the additional scaffolding easier as teaching teams have frequent conversations about students' academic progress and needs.

In summary, freshman academies are a structured intervention strategy (a small school, school-within-a-school model) designed to create an environment where freshmen can experience a smooth transition to high school. A majority of the focus of the academy concept surrounds its location on campus, its leader, and the teaming process (Neild, 2009). There are three components to the reform model—rigor, relevance, and relationships—which target and address student attendance, achievement, dropout, and discipline issues. The Center for Teaching Quality (2007) noted:

The North Carolina high school reform movement is focused on creating small, personalized, and academically rigorous schools that increase graduation rates, reduce suspension and expulsion rates, increase college going rates, and reduce college remediation rates. To achieve these goals, North Carolina New Schools Project
supported high schools focused on building relationships and creating relevant and
rigorous learning opportunities for students (p. 2).

Successful small schools will use these strategies to reach students as they address the
aforementioned issues, which tend to serve as roadblocks students face when they reach high
school.

**Freshman Academy Response to Transition Problems**

**Attendance.** Cotton (1996) researched 103 documents (studies, evaluations, reviews,
and syntheses) identifying a relationship between school size and aspects of schooling. In 16
of the documents, Cotton found that small schools have a pattern of increasing student
attendance. The Center for Collaborative Education completed a study of small schools in
Boston in 2001 and found that small schools attain a 93% attendance rate whereas traditional
schools have an 86% rate (Center for Collaborative Education, 2001). A study detailing the
Chicago High School Redesign Initiative (2002-2005) found that freshmen were absent
between six and nine fewer days each year when compared to counterparts in traditional high
schools (Khane, Sporte, de la Torre, & Easton, 2006). Wasley et al. (2000) found that
regardless of the type of small school (school within a school, free standing, or multi-school),
attendance rates were better when compared with regular schools. Most freshman academies
fall under the school-within-a-school model and Wasley et al. found that students missed an
average of 8.1 days compared to an average of 13.6 days per semester in a traditional school.

The studies illustrate two measures of attendance—percentages and number of days
missed—which both point to the fact that small schools (freshman academies included), lead
to better attendance rates for students. The Allensworth and Easton study (2007) completed
for the Consortium for Chicago Public Schools related days missed to probability of
graduation. Combining these studies, illustrates the importance of attendance and how small schools positively impact this predictor a dropout event (Allensworth & Easton, 2007; Center for Collaborative Education, 2001; Khane, Sporte, de la Torre, & Easton, 2006; Cotton, 1996; Wasley et al, 2000).

Achievement. In a comprehensive study of small schools documents, Cotton (1996) found that about half of the research finds no difference in student achievement between students enrolled in small schools, as opposed to traditional high schools. However, the other half of the research found student achievement in small schools to be “superior” (p. 5) to that of traditional high schools. Nowhere in her research did she find traditional high schools outperforming small schools. This research leads to the conclusion that achievement in small schools is greater than, or equal to, that of comprehensive high schools (Cotton, 1996).

According to Heppen and Therriault (2008) ninth grade is the “make or break” year (p. 1). Research backing up this assumption notes that most students who drop out of school do so during ninth grade and a disproportionate number of students retained in the ninth grade drop out of school (Heppen and Therriault, 2008). A 2008 study by Furstenberg, Neild, and Stoner-Eby noted predictors that ninth grade failures and dropouts share: (a) older than age-appropriate students, (b) minority students, (c) children in single-family homes, (d) history of in-school behavior problems, (e) infrequent attendance, (f) low grades, (g) low test scores, (h) repeated a grade, (i) parents have relatively little education. The structure and function of freshman academies are to identify students exhibiting dropout traits and provide interventions before a dropout event can occur (Weathers, 2006). A 1998 national study of 450 schools by Hertzog and Morgan found that schools with a fully operational transition program have an average dropout rate of 8%, as opposed to schools not employing any
transition program have a dropout rate of 24%. Freshman academies are able to identify the predictors found in the Furstenberg, Neild, and Stoner-Eby study, address them, and help students become successful and remain in school (Neild, 2009).

Many national publications such as the New York Times (2009) and USA Today (Toppo, 2010) run stories labeling large, comprehensive high schools as "dropout factories." In a May 28, 2010 article in USA Today, Greg Toppo wrote, “recent research suggests that about one in eight high schools in the USA—many of them in the nation's biggest cities—are virtual "dropout factories" where fewer than 60% of freshmen graduate within four years.” In a study of 11 small schools in New York City, Ancess and Ort (1999) found a significant difference in dropout rates between traditional schools and small schools. Small schools are breaking down the warehouse structure into learning communities as teachers work to infuse rigor and relevance into the curriculum and build relationships with students in order to decrease the dropout rate.

**Discipline.** Freshman academies report having fewer discipline problems, which can be attributed to the relationships developed between students, teachers, and parents due to the academy's structure. This assertion is supported by Anderson and McAndrews' (2002) research noting that students know they will be held more accountable because their team of teachers meets frequently to discuss behavior and academic actions. Wasley et al. (2000), note “students in small schools feel safer, come to school more often, and feel more attached to their school” (p. 10). This illustrates a relationship component, which is easier to build in an academy environment due to its small size. A study completed in a Georgia high school with a population of 2,200 students, found that ninth grade discipline accounted for 60% of the
total school discipline. After the implementation of a freshman academy, the ninth grade discipline rate dropped to 5% (Chmelynski, 2004).

**Research on Current Academies**

The freshman academy concept is still a work in progress for many districts, which have adopted this model. The following represent examples that offer promising results as measures of their success.

**Philadelphia Inner-City High Schools.** Five Philadelphia inner-city high schools implemented freshman academies on their campuses as a means to curb the dropout rate and help increase achievement of ninth grade students. These schools were labeled Talent Development High Schools (Center for Social Organization of Schools, 2011). The following study gauged the effectiveness of Philadelphia’s small schools in its Talent Development High School Program. Kemple, Herlihy, and Smith (2005) conducted a quasi-experimental study focused on these specific five high schools. Researchers paired the five schools with six similar area high schools that did not implement the program. The study compared the outcomes of ninth graders who entered Talent Development High Schools in the years immediately after the program was implemented with the outcomes of ninth graders from these schools in the years just before program implementation and the outcomes in the six comparison schools. Researchers analyzed the differences before and after implementation in Talent Development High Schools and the comparison schools in order to show the effects of the program.

Results indicate that schools implementing the model for two or more years have seen their ninth grade attendance improve by 15 or more percentage points, while the number of students with 90% or more attendance has doubled. Additionally, the number of students
who reach the eleventh grade in the first two schools to implement this approach has nearly doubled. Across all five schools, course pass rates are up while suspensions are down. A substantial number of students have begun to close achievement gaps in both reading and math and nearly a third of the ninth graders have gained at least two years in math (Center for Social Organization of Schools, 2011).

**Chicago Public Schools.** In the early 1990s, leaders in Chicago Public Schools implemented small learning communities in 150 schools. Wasley et al. (2000) completed a mixed-method study of small schools as the researchers set out to gather a large data set in order to examine the success rate of the small schools reform. This two-year study focused on 150 small schools. The researchers divided the study into three parts. First, they identified all small schools in Chicago. Next, they analyzed a variety of factors linked to student performance including absenteeism and dropout rates. The final part of the study included an ethnographic analysis of eight schools, which provided researches a more detailed understanding and view of what takes place in the setting being researched (Wasley et al., 2000).

When compared to students in traditional schools, those in small learning communities had better attendance rates, lower dropout rates, and lower retention rates. The students' reading achievement scores increased, and average standardized test scores held steady, which leaders considered a positive outcome. With regard to school climate, violent acts decreased, and the smaller environment encouraged learning, increased parent participation, teacher collegiality, and job satisfaction (Wasley et al., 2000). The school system created small school environments to address increasing dropout rates, low
achievement levels, low levels of student engagement, and inequitable standards. The district based their decision to create small school environments on the following four findings:

1. to create small, intimate learning communities where students are well known and can be pushed and encouraged by adults who care for and about them;
2. to reduce the isolation that too often seeds alienation and violence;
3. to reduce the devastating discrepancies in the achievement gap that plague poorer children, and children of color;
4. to encourage teachers to use their intelligence and their experience to help students succeed. (Wasley et al., 2000).

**Barriers to Small Schools**

According to McRobbie (2001), there are several barriers to creating and sustaining small schools/freshman academies. Public perception of the traditional high school, and what they believe it should be, is one of the largest barriers. According to a Public Agenda (2001) study funded by the Bill and Melinda Gates Foundation, the majority of parents like the idea of smaller high schools but see other reforms such as reducing school size, reducing class size, improving discipline, and improving teacher pay more pressing. In the same Public Agenda (2001) study, 801 parents (with high school children) were surveyed and only 20% of parents felt breaking up large schools into smaller high schools was the best approach to improve education. Other options included: stronger discipline, reducing class size, or improving teacher salaries as the best first step (Public Agenda, 2001).

Many school districts see funding as a major concern when considering the creation of small schools. Districts view small schools as an “unaffordable luxury” (McRobbie, 2001, p. 2). A study conducted on small schools in New York City found that the cost per graduate of
a small school is less than that of a comprehensive high school, due to lower dropout and higher graduation rates. The study concluded by noting, ‘quite small additional budgets are well worth the improved outputs’ (McRobbie, 2001, p. 2).

**Conceptual Framework**

The conceptual framework for this study was grounded in student engagement. Willms (2003) initially defines student engagement as ‘students' attitudes toward schooling’ (p. 8), then further describes it as ‘the extent to which students identify with and value schooling outcomes’ (p. 8). According to Connell, Spencer, and Aber (1994), student engagement has become a strong predictor of academic outcomes such as test scores, grades, attendance, and graduation within the school environment. The quality of the school environment influenced students’ belief regarding their ability to perform academically, their control over their own behavior, their feeling of relatedness to teachers and classmates, their belief that education will benefit them personally and economically, and their feeling of belonging/attachment to school (Willms, 2003; Quint, Miller, Pastor, Cytron, 1999).

Student engagement has an effect on the three elements studied in this research: achievement, attendance, and discipline. With regard to the effect of student engagement on achievement, Newmann, Wehlage, and Lamborn (1992) note that intrinsic motivation, extrinsic motivation, and school membership play a key role. Covington (1998) describes intrinsic motivation as ‘the payoff resides in the actions themselves—that is, the act of learning is its own reward.’ Extrinsic motivation is described by Covington (1998) as rewards and consequences. Newmann, Wehlage, and Lamborn (1992) define school membership as ‘whether or not students see themselves as an active and respected member of the school"
community, with the school working in the student's interest” (p. 19). The authors cite seven factors contributing to school membership:

1. Students' personal and social backgrounds;
2. The district and community context, whose norms and policies affect many aspects of life in school;
3. School culture, reflected in beliefs and values of staff and students;
4. School organization;
5. Curriculum;
6. Teachers' background and competence; and
7. Teacher-student interaction. (p. 34)

School membership, intrinsic motivation, and extrinsic motivation combine to determine a student's level of academic engagement. Formally defined as "the student's psychological investment in and effort directed toward learning, understanding, or mastering the knowledge, skills or crafts that academic work is intended to promote" (Newmann, Wehlage, and Lamborn, 1992, p. 12), academic engagement is critical for freshmen and high school staff working with freshmen as the high school tends to be an environment much more teacher/content centered than the middle school. Relationships must be established in order to provide the intrinsic and extrinsic motivators, and students must feel as though they are active members of their school community to remain continually engaged in school.

Attendance is a key component of a student's success in school. When students are engaged, they will want to come to school. Students who attend school are statistically much more likely to graduate with their cohort in four years (Allensworth & Easton, 2007). Figure
one illustrates Franklin, Harris, and Allen-Meares' (2008) multi-level model of school attendance.

![Diagram of multi-level model of school attendance]

**Figure 1.** Multi-level model of school attendance

The model depicts the child in the center and a connection of school, family, and community surrounding the child. Factors the school is responsible for include: climate, attitudes, experiences, environment, and the curriculum. The family factors include: domestic issues, supervision, awareness, and attitude toward education. The community is an often overlooked component of school attendance; factors controlled by the community include: providing opportunities for students, a transportation system, and raising cultural awareness. When these three entities come together, students are more likely to be in school and remain engaged in school, ultimately leading to their success.

Discipline is the third indicator of student engagement in school. Moles (1990) notes misbehavior is exhibited for one of the following two reasons:

1. Students are strongly motivated to be disruptive or
2. Students, either because of ability or inclination, do not readily engage in academic work (p. 122).
Moles' second reason for misbehavior relates back to academic engagement. Students must see the importance in their work. They must have a connection with their teacher, and this connection should extend to the family unit as a means of correcting negative behaviors. As with the academic component of setting expectations, modeling, and showcasing student work, positive behaviors exhibited in class should be treated this way as well, ultimately controlling behaviors and increasing engagement (Moles, 1990).

Teachers' behavior has a direct effect on students' perception and engagement with school. For example, Quint et al. (1999) note that students want to know how they can perform well in school. Students have a desire to know the teachers' expectations for them as students. Additionally, students have a desire for feedback allowing them to establish teacher expectations, while at the same time providing them the feeling that teachers care about them (Skinner, Wellborn, & Connell, 1990).

Figure two was used as a model to illustrate the flow of student engagement for the purpose of this study. The model was used in a 1999 study of small schools, "Project Transition," which gathered student perceptions toward such schools.

![Figure 2. Flow of student engagement](image-url)
The research questions and survey questions for this study were derived from figure two as I attempted to determine if a significant difference exists in students' perceptions toward the three variables dependent upon their participation in a freshman academy. As Willms (2003) notes, the researcher is determining the value students place on schooling outcomes. Additionally, the study allowed me to determine if students' perceptions met their output value with regard to achievement, attendance, and discipline rates for the 2010-2011 academic year.

Summary

_A school counselor explains the so-called ninth-grade slump: “Some kids go into shock when they enter ninth grade,”_ she says, _noting that many 14-year-olds run into serious academic trouble during the first semester. “Kids who give up on school—and on themselves—sink quickly. Most never recover.”_ (Black, 2004, p. 42)

Ninth grade can be a tumultuous time for students as they transition from a middle school to high school environment. Freshmen face transition problems related to their achievement, attendance, and discipline, which can have an adverse effect on their chances of successfully completing high school. In order to help students make the transition successfully, small learning communities are being established on many high school campuses. Freshman academies as a school-within-a school model originated from the structure of the small learning community movement (Clark & Hunley, 2007). This structure revolves around the three concepts of rigor, relevancy, and relationships. Teams of ninth grade students and teachers are clustered together to maintain open lines of communication between students, staff and stakeholders. Additionally, teachers are able to plan together and
offer students additional opportunities to construct knowledge through remediation and tutoring.

The primary issues freshmen face as they enter high school are attendance, achievement, and disciplinary issues, which can subsequently lead to student dropouts. The goal of a freshman academy is to monitor student progress and intervene as necessary. The size and structure of the freshman academy lend themselves to making this a manageable task. Monitoring progress and intervening are much more difficult on a traditional high school campus due to its size and impersonal nature. Students enrolled in a freshman academy have fewer absences, greater achievement on standardized tests, and fewer disciplinary referrals. Subsequently, students in freshman academies are more likely to graduate than students not entering an academy model (Hertzog & Morgan, 1999; Ancess & Ort, 1999; Lakhman, 1999; Wasley, Fine, Gladden, Holland, King, Mosak, Powell, 2000; Center for Collaborative Education, 2001; McBrady & Williamson, 2009).

Freshman academies adopt the tenets of infusing a rigorous and relevant curriculum while creating deep and meaningful relationships to engage students and try to help avoid transition issues that plague many freshmen. High schools that adopt these principles are more successful leading to higher student achievement (National Conference of State Legislatures, 2010).

Current academies show promising results as schools continue to refine their practices to best meet the needs of freshmen making the transition. A large amount of research has been conducted and reported on small schools/freshman academies in urban areas around the United States (Center for Social Organization of Schools, 2011; Kemple, Herlihy, and Smith, 2005; Wasley et al, 2000). The two districts in this study are located in
diverse geographical areas with each county being comprised of both suburban and rural areas.

Transition problems that plague many ninth graders in traditional high schools ultimately lead to the students not being successful as they attempt to finish their K-12 education. These problems range from academics, to attendance, to discipline, leading ultimately to dropping out. Freshman academies seek to help students make this transition as they employ the new three R's of education—rigor, relevance, and relationships. These traits lead to successful academies, but more importantly successful students. Studies completed using small schools in Philadelphia and Chicago point to the successes small schools can have when compared to traditional, comprehensive high schools. School leaders must understand the fundamentals of the academy structure and concept and be able to measure its effectiveness in order to make sure students are in an effective learning environment as they work through their “make or break” year (Heppen and Therriault, 2008, p. 1).

This research seeks to holistically assess the freshman academy initiative when compared to traditional ninth grade structures through the use of student perceptions and student performance data. Additionally, the research will be conducted in suburban/rural areas whereas a majority of the research on freshman academies comes from urban, metropolitan areas. To complete this study, chapter three will discuss the methodology used to complete the research, chapter four includes the data analysis and findings, and chapter five provides an analysis of the data and a discussion of its implications.
Chapter III

Methodology

Definition of Strategy

Creswell (2009) describes quantitative research as a means of testing theories through an examination of the relationship among variables. The organizational structure of the freshman academy served as the independent variable while student perceptions and data involving achievement, attendance, and discipline functioned as the dependent variables. In addition to using survey and perceptual data, I gathered historical data for each school district in order to be able to put findings into context. The historical data allowed me to identify trends across and between school divisions dating back to 2006-2007. Historical data were gathered from testing departments in the school district and from state school report cards.

To collect student perceptions, survey research was used. Creswell describes survey research as “a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population” (2009, p. 145). Pfleeger and Kitchenham (2003) similarly define survey research as “a comprehensive system for collecting information to describe, compare or explain knowledge, attitudes and behavior over large populations” (slide 70). In addition to their definition, Pfleeger and Kitchenham note that survey research is beneficial for investigating the nature of a large population through sampling and testing theories where there is little control over the variables. Building on Pfleeger and Kitchenham’s definition and benefits, sampling in educational research is conducted to permit
the detailed study of part rather than the whole population (Ross, 2005). Ross (2005) notes that

Information derived from the resulting sample is customarily employed to develop useful generalizations about the population. These generalizations may be in the form of estimates of one or more characteristics associated with the population, or they may be concerned with estimates of the strength of relationships between characteristics within the population. (p.1)

Students were surveyed to obtain perceptions of their ninth grade experience with regard to achievement, attendance, and discipline. Generalizations were made to determine if a significant difference in perception existed between students enrolled in a freshman academy and those not enrolled. Survey research was used in lieu of strictly examining longitudinal data due to the plethora of confounding variables that could be present.

With regard to analyzing English I data, test re-norming, counting re-tests toward proficiency, changes in teachers, and differences in schedules could have a major impact on the analysis. Discipline referrals vary by school and district with annual changes in the codes of conduct. Additionally, too much variance exists as offenses may/may not be entered into the data system as incidences due to a change in policy and/or change in administrator(s) from year to year. Attendance rates would be constant between school divisions because students are either present or absent; these rates would be the most fixed of the three variables. By analyzing student perceptions, I was able to obtain a unique view—one based on students' thoughts, and not solely on assessment measurements.

Survey research created a larger data set thereby increasing the power in the analysis and increasing the generalizability of the study (Creswell, 2009). Other methods of gathering
perceptions interviews and/or focus groups limit the quantity of responses possibly distorting the outcome of identifying a significant difference due to a decrease in the power of the sample. Survey research also allowed me to address the variables through a wider array of questions with a set of specific answers using a Likert scale. This allowed me to objectively and mathematically illustrate the differences in perceptions between students who attended ninth grade academies and those who did not.

Krosnick and Presser (2010) assert “the heart of the survey is the questionnaire” (p. 263). Therefore, when employing survey research it is vital that the questionnaire be designed to accurately collect the desired data. In developing a survey, choosing the question type—open-ended or closed—must be one of the first considerations (Krosnick & Presser, 2010). For the purpose of this research, closed or forced choice questions were used with Likert-type scale responses available to students. This was necessary to maintain the quantitative nature of the research. Open-ended questions are more open to interpretation requiring coding as opposed to a statistical analysis. This would have resulted in a less objective measurement of the constructs.

A Likert scale is “based on the assumption that each statement/item on the scale has equal ‘attitudinal value,’ ‘importance,’ or ‘weight’ in terms of reflecting an attitude towards the issue in question” (Kumar, 2005, p. 145). The assumption that all items have equal weight is also a limitation of a Likert scale as statements seldom have equal attitudinal value. A Likert scale helps place different respondents in relation to one another as opposed to strictly measuring an attitude. Likert scaling illustrates the strength of respondents’ views when compared to one another (Kumar, 2005). A forced-choice Likert scale was used, which means participants did not have choices such as undecided, no opinion, uncertain, or don't
know (Friedman & Amoo, 1999). Friedman and Amoo (1999) note that this method is reasonable when researchers believe all subjects have an opinion therefore eliminates the participants from coping out of providing an answer.

Question design is an essential component in order for survey research to be an effective methodological tool. Krosnick and Presser (2010) list eight factors that when abided by, lead to the creation of quality questions:

1. Use simple, familiar words (avoid technical terms, jargon, and slang);
2. Use simple syntax;
3. Avoid words with ambiguous meanings (i.e. aim for wording that all respondents will interpret in the same way);
4. Strive for wording that is specific and concrete (as opposed to general and abstract);
5. Make response options exhaustive and mutually exclusive;
6. Avoid leading or loaded questions that push respondents toward an answer;
7. Ask about one thing at a time (avoid double-barreled questions);
8. Avoid questions with single or double negations (p. 264).

The eight characteristics made the survey more user-friendly and easier for respondents to complete. A survey should not create a stressful situation for participants. Paying attention to the reading level and developmental age of the respondents is also essential in designing a valid instrument.

When employing survey research, the validity of the instrument used to collect data is essential in order to develop trustworthy conclusions. Three areas of validity must be addressed: content validity, predictive or concurrent validity, and construct validity. Content validity refers to how well items measure the content. Predictive or concurrent validity refers
to whether or not items predict results or correlate with other results. Construct validity
describes the extent to which the items measure the intended constructs (Creswell, 2009).

In addition to being valid, an instrument must demonstrate reliability. Trochim (2006)
defines reliability as, ‘mean[ing], repeatability, or consistency’ (online source). A common
way to measure the reliability of a survey instrument is to calculate Cronbach’s alpha.
Cronbach’s alpha is a measure of internal consistency, that is, how closely a set of items are
related as a group (University of California at Los Angeles (UCLA), Stat Consulting Group,
2006). A "high" value of alpha is often used as evidence that the items measure an
underlying (or latent) construct (UCLA, Stat Consulting Group, 2006). The higher the score,
the more reliable the instrument. A score of 1.0 is a perfect reliability score. Alpha measures
of .7 or greater are generally considered an acceptable level of reliability for research
(Santos, 1999).

Two published surveys offered items that measured student perceptions toward
achievement, attendance, and discipline. Each survey had an established reliability with alpha
levels greater than .7. Akey (2006) developed the Student Attitudes and Behavior Scales and
School Context Scale to measure students’ attitudes toward discipline with the Manpower
Demonstration Research Corporation. The second survey used in this study was the
Examining Relationships to Academic Rigor, Homework and Engagement from Students’
Perspectives, which used findings from the Gates Foundation national evaluation of small
schools (Berends, 2008). Berends developed this survey while working for the National
Center for School Choice at Vanderbilt University.

This study sought to determine if a significant difference exists among the responses
of participants representing two comparative groups—those tenth graders who attended a
ninth grade academy and tenth graders who attended a traditional comprehensive ninth grade—in their perceptions of achievement, attendance, and discipline data.

**Research Questions**

1. When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to achievement?

2. When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to attendance?

3. When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to discipline?

4. Does a significant difference exist in the English I EOC growth for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

5. Does a significant difference exist in the attendance rate for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

6. Does a significant difference exist in the number of discipline referrals for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

7. Is there a relationship between students' perceptions and school performance data?

**Role of the Researcher**

Glesne and Peshkin (1992) posit that it is the role of the quantitative researcher to 'observe and measure, and care is taken to keep the researchers from “contaminating” the data through personal involvement with the research subjects’ (p. 6). In this study, the role of the
researcher included requesting school district approval to complete the study, distributing the survey, collecting/analyzing survey results, collecting student performance data from testing coordinators, and analyzing the performance data. With regard to collecting data from outside districts, Bloom (1999) asserts

> Obtaining data for comparison schools (which have nothing to gain from cooperating and much to lose from invidious comparisons) can be much more difficult than obtaining data for program schools (that want to demonstrate success). This can become especially problematic for programs that are being tested in multiple school districts and thus require cooperation from many organizations to obtain comparison school data. (p.6)

To address these issues, I used several means of communication beginning with an email and follow-up by telephone to the appropriate district and site-based administrators. Email communication allowed me to explain the study and phone calls provided the opportunity to provide more personal communication at the school level to encourage administrators and teachers to allow their students to take part.

**Participants**

This study surveyed tenth grade students in Clark County who were enrolled in a freshman academy during their freshman or ninth grade year and tenth grade students in Lewis County who had not been enrolled in a freshman academy during the 2010-2011 academic year. Lewis County was chosen as the comparison group because it is ranked ninth in the state in terms of the four-year cohort graduation rate and first in the state when ranked by school system size.
The study’s purpose was to obtain participants’ perceptions related to achievement, attendance, and discipline as influenced by their ninth grade experiences. Included in this study was any current tenth grade student who was a first-time ninth grade student in the 2010-2011 academic year subsequently promoted to the tenth grade for the 2011-2012 academic year. A first-time ninth grade student was defined as a student not retained from the previous year thus only having experienced the ninth grade for one academic year. This definition reduced a threat to validity from having participants with more than one year of experience from which to draw perceptions. To identify the comparison group of tenth graders who did not experience a ninth grade academy, I consulted with Clark County Schools’ officials and the North Carolina School Report Card (NCDPI, 2011e) database to ensure that the comprehensive traditional high school met comparable demographic characteristics including indicators of socio-economic status, size of school, and other factors.

Multiple sampling strategies were used to complete this study: criterion, stratified, and cluster sampling. Each of these strategies is explained more fully in the following section.

**Criterion Sampling.** The study sought to compare perceptual and student performance data from schools having established academies and those lacking ninth grade academies, the first sampling strategy assisted in differentiating between the two to determine the structure of schools. Criterion sampling involves selecting cases that have a predetermined importance (Patton, 2001); therefore, using this strategy I chose the given experimental schools, Clark County high schools, and a comparison group of high schools lacking freshman academies but meeting certain pre-determined demographic characteristics.
**Stratified Random Sampling.** Once individual high schools were identified, I used stratification to further narrow the sample. Stratified random sampling “involves dividing the population into homogeneous subgroups and then taking a simple random sample in each subgroup” (Trochim, online source, 2006). I used 2010-2011 ninth month membership data to determine the percentage of freshmen enrolled at each of the high schools.

**Cluster Sampling.** After stratifying the schools, I clustered each school by Biology courses. Cluster sampling allowed me to sample a naturally occurring group nested within a higher-order unit (Thomas, 2006; Mertens, 2010). Within each high school, all current tenth grade students are enrolled in a regular or Honors Biology course. Given the Biology clusters/classes in each tenth grade, I surveyed the corresponding percentage of regular and Honors Biology classes.

I obtained permission to survey students in Clark County from the superintendent and in Lewis County from the district’s Institutional Review Board. After district permission was granted, I contacted administrators at each high school and was given a list of teachers whose classes would take the survey. I contacted the teachers to make arrangements for the online survey to be administered. All procedures of this study adhered to Appalachian State University’s Institutional Review Board (IRB) protocol to ensure proper precautions were in place to protect students.

**Data Collection**

I found two surveys used in an investigation of student perceptions toward achievement, attendance, and discipline (Akey, 2006; Berends, 2008). The authors of both surveys granted permission to utilize their surveys with each question relating back to the conceptual framework guiding this study [student engagement]. The surveys are the work of
Dr. Berends, Director of the National Center on School Choice through Vanderbilt University and Dr. Akey, a researcher with Manpower Demonstration Research Corporation (MDRC). MDRC is a social policy research organization. The items in the two surveys remained unchanged and were combined into one online survey which allowed me to report the original alpha.

On the survey, a Likert scale measured student responses ranging from strongly agree, agree, disagree, and strongly disagree. Survey Monkey, an online survey tool, allowed students to complete the surveys while at school. Wright (2005) asserts that online survey services make online survey research much easier and faster when compared to paper/pencil surveys noting advantages such as access to individuals in distant locations, the ability to reach difficult to contact participants, and the convenience of having automated data collection, which reduces researcher time and effort. Paper and pencil surveys require the researcher to combine and organize the data, which can be a time consuming process, whereas web-based surveys export data to programs such as Excel and/or statistical software packages for analysis (Wright, 2005).

Students completed the survey at school, using their school's computers ensuring equal access for all students. A hyperlink directing students to the survey was posted on the school webpage and an email sent to teachers administering the survey. Teachers directed the students to the hyperlink on the webpage. The students clicked on the link to begin the password protected survey. The survey was password protected in order to avoid those outside the sample access to the survey. Once students completed the survey, the data were immediately submitted and available for analysis.
Student performance data were collected from the testing coordinator in each school district. Anonymity of students was maintained throughout the study in regards to all student performance data. All freshmen in North Carolina complete the English I End of Course test. Therefore, I used this as a measurement of student achievement. District officials provided attendance and discipline referral data based on a 180-day school year. Officials in both districts gathered these data from the NCWise data system. Baseline historical data for English I growth were collected from district testing coordinators. Attendance and discipline historical data were gathered from the state's school report card website (NCDPI, 2011e). Historical data were collected because both divisions were not equal at the beginning of the study and analysis of these data allowed me to draw further conclusions of the impact of the academy structure.

Data Analysis

Baseline data were analyzed using descriptive statistics in order to describe the data's basic features (Trochim, 2006) and ground the study in an historical context. These data allowed me to analyze pre- and post-implementation data to determine if the academy's effects are present even in the absence of significant differences found using inferential statistics. Baseline data are displayed in tables and graphs to visually illustrate the relationship between the variables. The graphs illustrate the trend of the historical data which serves as another measurement of the effectiveness of the academy. In areas where Clark County trails Lewis County, shrinking disparities are signs of progress easily depicted on line graphs.

Once the survey window closed, I analyzed each section of the survey—attendance, achievement, and discipline—and a t-test was conducted to determine if a significant difference
existed between students enrolled and not enrolled in a freshman academy. A $t$-test allowed me to determine if a significant difference exists between the means of the two groups being studied—those enrolled and those not enrolled in a freshman academy—using parametric data from random samples with a normal distribution (Trochim, 2006; Cohen, Manion, & Morrison, 2007). In order to determine the magnitude of the effect, of the treatment Cohen's $d$ was calculated. Cohen's $d$ measures the difference between two means. When evaluating effect size using Cohen's $d$, I was concerned with the magnitude of $d$ (Gravetter & Wallnau, 2009 p. 264). Table 2 (Gravetter & Wallnau, 2009, p. 264) guided me in determining the magnitude of the effect:

Table 2

<table>
<thead>
<tr>
<th>Magnitude of $d$</th>
<th>Evaluation of Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>$d = .2$</td>
<td>Small effect</td>
</tr>
<tr>
<td>$d = .5$</td>
<td>Medium effect</td>
</tr>
<tr>
<td>$d = .8$</td>
<td>Large effect</td>
</tr>
</tbody>
</table>

Lastly, a researcher must determine a risk level, also known as an alpha level, to rule out a chance finding. For this study, .05 was used as the alpha level, as is noted to be the rule of thumb by Trochim (2006). The .05 alpha level means that, "five times out of a hundred you would find a statistically significant difference between the means even if there was none" (Trochim, 2006).

I gathered student performance data from the testing departments of the school systems involved in the study. Microsoft Excel was used to conduct a $t$-test to determine if a significant difference existed between mean data from students enrolled in a freshman academy and data from students enrolled as traditional ninth graders at comparison high schools. I used the same alpha level, .05, to determine whether or not a significant difference
existed between the two samples. Cohen's $d$ allowed me to determine the magnitude of the effect using the table two.

Correlational research allowed me to ‘describe or analyze relationships between variables, conditions, or events, any of which may be reported attitudes, beliefs, or behaviors’ (Boudah, 2011, p. 156). In this analysis, I sought to determine if students' attitudes and beliefs as gathered in surveys correlated with their actions. Within each district, I analyzed data for a relationship between English I growth and perceptions toward achievement, number of days absent and perceptions toward attendance, and number of incidents accumulated and perceptions toward discipline. Correlations were calculated using Microsoft Excel and an alpha level .05 to determine if a significant difference existed.

Validity and Trustworthiness

The survey used to gather data has an established alpha value that is greater than .7 making it reliable and considered acceptable for research (Santos, 1999). The conceptual framework used to ground the research questions and the survey questions is based in research. I sought to determine if a significant difference exists in student perceptions as well as determining if a significant difference exists in student performance data.

The limitations to the findings include the fact that only one cohort of students was being studied. Future research should expand the study to multiple cohorts and compare perceptions over a given period of time. It may be difficult to generalize the findings as I used two counties similar in demographics. Additionally, the academies under study are similar in structure and years of implementation. The issue does not affect this study as the goal was to produce a document designed specifically for Clark County Schools as a method to formally and holistically assess the freshman academy initiative.
Chapter IV

Findings

The transition from middle school to high school can be difficult for many students as they depart the structured middle school philosophy in the spring and are greeted in the fall by a larger, more impersonal environment found in traditional high schools. In order to ease the transition for students, districts are creating freshman academies on high school campuses to lessen the sink or swim mentality many students face when they enter high school. Freshman academies are a structured intervention strategy designed to create an environment where freshmen can experience a smooth transition to high school.

Three sets of data were analyzed in this study. Historical data were collected from each district in order for a baseline to be established so objective comparisons could be made as to the impact freshman academies have had on achievement, attendance, and discipline. Other data sets included perceptual and performance data from students in one selected district, Clark County Schools, who spent their ninth grade year in a freshman academy. The second set of perceptual and performance data were gathered from students in a comparison district, Lewis County Schools, who enrolled into a traditional high school configuration. The study gathered data from surveys based on students' perceptions surrounding achievement, attendance, and discipline. Student performance data for students' ninth grade year were gathered from each system's central office and included growth on the English I EOC, number of days students were absent their ninth grade year, and number of incidents
accrued by each student.

This chapter revisits the research questions and provides a description of the two school districts and county units being studied. Additionally, I describe the findings gathered from analysis of historical data, survey data, and performance data. This chapter provides descriptions and charts depicting prominent data gathered from the analysis.

**Research Questions**

1. When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to achievement?

2. When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to attendance?

3. When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to discipline?

4. Does a significant difference exist in the English I EOC growth for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

5. Does a significant difference exist in the attendance rate for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

6. Does a significant difference exist in the number of discipline referrals for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

7. Is there a relationship between students' perceptions and school performance data?

**Participants**

The school districts used in this study are located in the Piedmont/Foothills of North
Carolina. Each school district is diverse in its geography as both comprise urban, suburban, and rural areas. All schools in the study contain ninth through twelfth grades with the comparison schools not having freshman academies. The high schools in each district have a feeder zone consisting of elementary and middle schools, or elementary, intermediate, and middle schools.

Clark County is located in the foothills of North Carolina. According to the data presented on city-data.com in 2009, Clark County has a population of 98,078. Of the residents, 75.6% are White, 20.7% African American, 2.8% Hispanic/Latino, 1.5% Multiracial, and 0.8% Asian (United States Census Bureau, 2011). With regard to educational attainment in Clark County, 28% of residents did not complete high school, 35% hold a high school degree or an equivalent degree, 6% attended college less than one year, 11% attended college for more than one year, 7% hold an associate's degree, 9% hold a bachelor's degree, 3% earned a master's degree, 1% obtained a professional school degree, and less than 1% have a doctorate degree (City-Data, 2009). In Clark County Schools, 59.8% of students are enrolled in free and reduced lunch. According to information from the United States Census Bureau in 2011, the median household income in Clark County is $38,304 compared to the state average of $43,754.

Lewis County is also located in the foothills of North Carolina. According to the data presented on city-data.com in 2009, Lewis County has a population of 154,358. Within the county, 81.7% of the residents are White, 8.4% African American, 8.4% Hispanic/Latino, 1.9% Multiracial, and 3.5% Asian (United States Census Bureau, 2011). Twenty-six percent of the residents of Lewis County did not complete high school, 30% have a high school degree or equivalent degree, 7% attended college for less than one year, 13% have more than
one year's experience in college, 7% earned an associate's degree, 12% earned a bachelor's degree, 4% hold a master's degree, 1% earned a professional school degree, and less than 1% earned a doctorate degree (City-Data, 2009). In Lewis County, 48.4% of students are enrolled in free and reduced lunch. According to information from the United States Census Bureau in 2011, the median household income is $42,100 per year, just under the state average of $43,754.

Table three provides a comparison of school district data between Clark County Schools, Lewis County Schools, and the North Carolina state averages for each category (NCDPI, 2011e).

Table 3

Comparison of Clark County Schools to Lewis County Schools

<table>
<thead>
<tr>
<th></th>
<th>Clark County</th>
<th>Lewis County</th>
<th>State Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average high school size</td>
<td>936</td>
<td>880</td>
<td>794</td>
</tr>
<tr>
<td>Per pupil expenditure (local, state, federal)</td>
<td>$8,700</td>
<td>$7,826</td>
<td>$8,398</td>
</tr>
<tr>
<td>Average English I course size</td>
<td>17</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>English I percent proficient</td>
<td>81.00%</td>
<td>82.80%</td>
<td>80.60%</td>
</tr>
<tr>
<td>School attendance</td>
<td>96%</td>
<td>96%</td>
<td>95%</td>
</tr>
<tr>
<td>Percent of high schools making AYP</td>
<td>60%</td>
<td>17%</td>
<td>36%</td>
</tr>
<tr>
<td>Short-term suspensions (&lt; 10 days)</td>
<td>39.83</td>
<td>13.7</td>
<td>No data</td>
</tr>
<tr>
<td>Long-term suspensions (&gt; 10 days)</td>
<td>0.34</td>
<td>0</td>
<td>No data</td>
</tr>
<tr>
<td>Number of acts of violent crime (per 100 students)</td>
<td>1.99</td>
<td>1.57</td>
<td>1.52</td>
</tr>
<tr>
<td>Average number of high school teachers</td>
<td>68</td>
<td>56</td>
<td>52</td>
</tr>
<tr>
<td>Percent enrolled in free and reduced lunch</td>
<td>59.8%</td>
<td>48.4%</td>
<td>53.9%</td>
</tr>
<tr>
<td>High school teachers with advanced degrees</td>
<td>34%</td>
<td>29%</td>
<td>26%</td>
</tr>
<tr>
<td>Average number of high school staff with NBPTS cert</td>
<td>17</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Percent of classes taught by Highly Qualified teachers</td>
<td>97%</td>
<td>96%</td>
<td>97%</td>
</tr>
</tbody>
</table>
Results

Through the collection of historical data and current perceptual and performance data, I sought to determine if freshman academies serve as an effective intervention strategy to lessen the impact of a student’s transition from middle school to high school. Data were analyzed by three means to determine the effectiveness of Clark County Schools’ freshman academies. Descriptive historical data provided a baseline to analyze trends before and after the implementation of the academy concept in comparison to Lewis County’s high schools. Performance and perceptual data were analyzed between each district to determine if a significant difference existed between scores for each of the seven research questions. Lastly, performance and perceptual data were analyzed to determine if correlations exist between students’ perceptions and their output within each district.

Analysis of Historical Data. Analysis of historical data helps researchers better understand events that have already occurred (Johnson & Christensen, 2012). In order to determine whether the academy structure has impacted achievement, attendance, and discipline, I collected descriptive data for each variable presented in table four.

English I Growth Data. Descriptive statistics were used to place ninth grade English I growth into context.

Table 4

<table>
<thead>
<tr>
<th>English I historical growth data</th>
<th>06-07</th>
<th>07-08</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark County</td>
<td>0.0156</td>
<td>-0.1009</td>
<td>0.0221</td>
<td>0.0522</td>
<td>0.0076</td>
</tr>
<tr>
<td>Lewis County</td>
<td>0.052</td>
<td>-0.019</td>
<td>0.107</td>
<td>0.111</td>
<td>0.031</td>
</tr>
</tbody>
</table>
The academy model was implemented in Clark County Schools at the conclusion of the 2007-2008 school year. While the trends of each school district are identical, the average student growth on the English I End of Course test has grown closer since the establishment of freshman academies. During the 2007-2008 testing cycle, Lewis County students' growth was .0819 higher than Clark County students' growth, however, three years following implementation, this figure has diminished to .0234. Within each tested year when both districts experienced positive growth, Clark County students experienced more growth, and in years when both districts did not show growth, Clark County ninth graders did not experience as dramatic a decline as did Lewis County students.

**Attendance Data.** As noted in table five, attendance rates have remained steady for each school district when analyzing historical data. Due to this, a fair comparison can be
made in determining if academies have made a significant difference in student attendance rates.

Table 5

**Historical attendance data**

<table>
<thead>
<tr>
<th></th>
<th>06-07</th>
<th>07-08</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark</td>
<td>95%</td>
<td>96%</td>
<td>96%</td>
<td>96%</td>
<td>96%</td>
</tr>
<tr>
<td>Lewis</td>
<td>96%</td>
<td>96%</td>
<td>96%</td>
<td>96%</td>
<td>96%</td>
</tr>
</tbody>
</table>

**Discipline Data.** The number of short term (less than ten days) and long term (ten days or more) suspensions per one hundred high school students were collected from each district's state report card and reported in table six and figure four.

Table 6

**Number of short term and long term suspension days per one hundred high school students**

<table>
<thead>
<tr>
<th>Suspensions</th>
<th>06-07</th>
<th>07-08</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark</td>
<td>35</td>
<td>43</td>
<td>50</td>
<td>44</td>
<td>39.83</td>
</tr>
<tr>
<td>Lewis</td>
<td>17</td>
<td>19</td>
<td>18</td>
<td>14</td>
<td>13.7</td>
</tr>
</tbody>
</table>

![Discipline Graph](image)

*Figure 4. Graphical representation of the number of short term and long term suspension days per one hundred high school students*
Both Clark County Schools and Lewis County Schools followed the same trend with regard to short and long terms suspensions per 100 students. The historical discipline data helps illustrate that Clark County Schools is on the same trajectory as Lewis County Schools with regard to discipline; each division has reduced short and long-term suspensions by nearly 23% since the 2008-2009 school year. Other analyses allowed me to further delve into different types of collected data to see whether a difference exists with current students.

**Analysis of Performance and Perceptual Data.** An online survey instrument was used to collect data from students in Clark County’s freshman academies and ninth graders in Lewis County’s traditional high schools. Two complete surveys were combined to one and administered to students. Table seven provides Cronbach’s alpha for each survey before and after administration, which remained fairly constant for two constructs and decreased slightly with regard to the discipline construct. The lower retained alpha level for the discipline construct could be attributed to these questions being at the end of the survey and respondents being less attentive at this point (Trochim, 2006).

Table 7

<table>
<thead>
<tr>
<th></th>
<th>Original Alpha</th>
<th>Retained Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement</td>
<td>.83</td>
<td>.85</td>
</tr>
<tr>
<td>Attendance</td>
<td>.73</td>
<td>.76</td>
</tr>
<tr>
<td>Discipline</td>
<td>.72</td>
<td>.63</td>
</tr>
</tbody>
</table>

A total of 182 ninth graders in Clark County responded to the survey and 79 students in Lewis County completed the survey. Student performance data were collected on these students from district testing officials. The following information is a breakdown of each research question and its associated findings.
**Research Question 1.** When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to achievement?

An independent samples $t$-test was used to determine if a significant difference existed regarding perceptions toward achievement between students enrolled and not enrolled in a freshman academy at the .05 level of significance. Results of the $t$-test are displayed in table eight.

Table 8

<table>
<thead>
<tr>
<th>$T$-test results for achievement perceptual data between Clark County and Lewis County</th>
<th>Clark County</th>
<th>Lewis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.77</td>
<td>2.83</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.31</td>
<td>0.18</td>
</tr>
<tr>
<td>Observations</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>t Stat</td>
<td>-0.62</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=$t$) one-tail</td>
<td>0.27</td>
<td></td>
</tr>
</tbody>
</table>

The results of the $t$-test indicate that a significant difference does not exist in student perceptions toward achievement as the $p$-value was greater than the .05 level of significance.

**Research Question 2.** When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to attendance?

An independent samples $t$-test was used to determine if a significant difference existed regarding perceptions toward attendance between students enrolled and not enrolled in a freshman academy at the .05 level of significance. Results of the $t$-test are displayed in table nine.
Table 9

*T-test results for attendance perceptual data between Clark County and Lewis County*

<table>
<thead>
<tr>
<th></th>
<th>Clark County</th>
<th>Lewis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.67</td>
<td>2.73</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.60</td>
<td>0.50</td>
</tr>
<tr>
<td>Observations</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>19</td>
<td>11</td>
</tr>
<tr>
<td>t Stat</td>
<td>-0.25</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.40</td>
<td></td>
</tr>
</tbody>
</table>

The results of the *t*-test indicate that a significant difference does not exist in student perceptions toward attendance as the *p*-value was greater than the .05 level of significance.

**Research Question 3.** When tenth graders reflect on their ninth grade transition, does a significant difference exist in the perceptions of students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade with regard to discipline?

An independent samples *t*-test was used to determine if a significant difference existed regarding perceptions toward discipline between students enrolled and not enrolled in a freshman academy at the .05 level of significance. Results of the *t*-test are displayed in table ten.

Table 10

*T-test results for discipline perceptual data between Clark County and Lewis County*

<table>
<thead>
<tr>
<th></th>
<th>Clark County</th>
<th>Lewis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.98</td>
<td>2.96</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>Observations</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>t Stat</td>
<td>0.19</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.43</td>
<td></td>
</tr>
</tbody>
</table>

The results of the *t*-test indicate that a significant difference does not exist in student perceptions toward discipline as the *p*-value was greater than the .05 level of significance.
Research Question 4. Does a significant difference exist in the English I EOC growth for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

An independent samples $t$-test was used to determine if a significant difference existed in growth on English I End of Course test scores between students enrolled and not enrolled in a freshman academy at the .05 level of significance. Results of the $t$-test are displayed in table eleven.

Table 11

| T-test results for English I End of Course test data between Clark County and Lewis County |
|---------------------------------|-----------------|-----------------|
|                                  | Clark County    | Lewis County    |
| Mean                            | 0.05            | 0.11            |
| Standard deviation              | 0.47            | 0.47            |
| Observations                    | 166             | 76              |
| Degrees of freedom              | 147             |                 |
| t Stat                          | -0.85           |                 |
| P(T<=t) one-tail                | 0.20            |                 |

The results of the $t$-test indicate that a significant difference does not exist in growth on the English I End of Course test as the $p$-value was greater than the .05 level of significance.

Research Question 5. Does a significant difference exist in the attendance rate for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

An independent samples $t$-test was used to determine if a significant difference existed regarding attendance rates (number of days absent) between students enrolled and not enrolled in a freshman academy at the .05 level of significance. Results of the $t$-test are displayed in table twelve.
Table 12

*T-test results for attendance data between Clark County and Lewis County*

<table>
<thead>
<tr>
<th></th>
<th>Clark County</th>
<th>Lewis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.42</td>
<td>4.39</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>6.55</td>
<td>4.27</td>
</tr>
<tr>
<td>Observations</td>
<td>183</td>
<td>80</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>222</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>2.99</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.001</td>
<td></td>
</tr>
</tbody>
</table>

The results of the *t*-test indicate that a significant difference does exist in attendance data, however, the test illustrates Lewis County ninth grade students have a statistically higher attendance rate than Clark County Schools ninth grade students. Cohen's *d* was calculated to determine the effect size and was found to be -.25 illustrating only a small effect.

**Research Question 6.** Does a significant difference exist in the number of discipline referrals for students enrolled in a freshman academy and those enrolled in a traditional high school ninth grade?

An independent samples *t*-test was used to determine if a significant difference existed regarding the number of discipline referrals accumulated between students enrolled and not enrolled in a freshman academy at the .05 level of significance. Results of the *t*-test are displayed in table thirteen.

Table 13

*T-test results for discipline data between Clark County and Lewis County*

<table>
<thead>
<tr>
<th></th>
<th>Clark County</th>
<th>Lewis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.52</td>
<td>3.28</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>3.02</td>
<td>6.70</td>
</tr>
<tr>
<td>Observations</td>
<td>183</td>
<td>80</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-2.24</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.01</td>
<td></td>
</tr>
</tbody>
</table>
The results of the $t$-test indicate that a significant difference does exist in the number of incidents accrued by ninth grade students toward achievement as the $p$-value was lower than the .05 level of significance. Cohen's $d$ was found to be $d = -0.39$ indicating a small effect.

**Analysis of Correlational Data.** Table fourteen depicts the correlations between the three variables being analyzed in Clark County and Lewis County. Correlational data were used to address research question seven: Is there a relationship between students' perceptions and school performance data?

Table 14

<table>
<thead>
<tr>
<th>Correlational data of variables within districts</th>
<th>Clark County</th>
<th>Lewis County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct: Discipline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-0.205</td>
<td>-0.080</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.005</td>
<td>0.484</td>
</tr>
<tr>
<td>N</td>
<td>183</td>
<td>79</td>
</tr>
<tr>
<td>Construct: Attendance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>-0.209</td>
<td>-0.276</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.005</td>
<td>0.015</td>
</tr>
<tr>
<td>N</td>
<td>179</td>
<td>78</td>
</tr>
<tr>
<td>Construct: Achievement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.092</td>
<td>0.008</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.237</td>
<td>0.942</td>
</tr>
<tr>
<td>N</td>
<td>166</td>
<td>76</td>
</tr>
</tbody>
</table>

The main focus of table 14 is the significance; however, attention must be paid to the positive or negative value of the correlation. A relationship still exists, even if negative, due to scaling of the survey from one (strongly disagree) to four (strongly agree) in combination with the attendance rates and discipline referrals where lower numbers are preferred. This combination would lead to a negative, yet still, significant, relationship.
Several correlations can be noted from the analysis. In Clark County, a relationship exists between the students discipline data and their perceptions toward discipline. It can be concluded that students’ behavior follows their beliefs toward behavior, as gathered from the survey. In analyzing the Lewis County data, a relationship is not evident with regard to discipline.

Relationships existed for both Clark County Schools and Lewis County Schools when analyzing attendance as a variable. In both districts, students’ perceptions toward attendance matched their performance/output as measured using student level attendance data. While a relationship existed in both districts, a slightly stronger relationship existed in Lewis County Schools meaning students in Lewis County have a stronger tie to their school with regard to attendance. With regard to achievement, no relationship existed between student survey responses and growth on the English I End of Course test.

**Summary**

After analyzing the historical data, I found that Clark County students have worked to close the gap in English I growth since the implementation of the freshman academy model and both systems remain on the same trajectory with regard to discipline. No significant differences were found with regard to student perceptions among the three variable, however, a significant difference did exist in the analysis of discipline and attendance results. Clark County students have significantly fewer discipline referrals and Lewis County students have significantly fewer absences. Analyzing correlational data revealed relationships between perception and performance with regard to attendance for both districts and Clark County students exhibited a relationship within the discipline construct.
Multiple analyses were conducted to evaluate the impact of freshman academies on the success of ninth grade students. Baseline data were collected and analyzed in order to put the study into an historical context to determine if academies have had an impact when analyzing data descriptively in addition to the inferential analyses conducted. Perceptual and performance data were analyzed using t-tests to determine if significant differences exist between student performance and student perceptions based on attendance in a traditional ninth grade or in a freshman academy. Lastly, data were analyzed to determine if relationships exist between students' performance in the ninth grade and their perceptions of their ninth grade experience. The following chapter delves into the findings and their effect on students.
Chapter V

Analysis

This study explored how freshman academies affect student perceptions of their high school experience in addition to analyzing the effect freshman academies have on student performance data in terms of achievement, attendance, and discipline. The ninth grade year is a difficult time for many students as they enter an environment far removed from the middle school philosophy. The struggle students face has led to a disproportionate number of retentions leading the ninth grade being referred to as the ‘bulge’ year (Kennelly & Monrad, 2011, p. 2). The freshman academy is one intervention strategy districts are employing in an effort to help students transition into the high school and ultimately graduate with their cohort. Clark County Schools launched the freshman academy initiative during the 2008-2009 school year on its high school campuses.

Chapter five provides a linkage between the study’s findings and relevant literature, gaps in previous research are filled, limitations to the study are discussed, the conceptual framework is revisited, implications are explained, and future research suggestions are provided for those interested in pursuing similar research.

Analysis

From the three analyses used to measure the effectiveness of Clark County Schools’ freshman academy initiative, the following conclusions can be drawn regarding the three variables under study.
**Achievement.** Through analysis of historical growth data for students, dating back to 2006-2007 when growth data could be calculated with the new English I test, each district has maintained the same trend. However, since the implementation of freshman academies on high school campuses, Clark County ninth graders have decreased the gap in achievement each year. The final year before implementation, the gap in growth was .0819 and following the most recent test (2010-2011) the gap was .0234. Clark County students have closed the gap by .0585, or 71.4%.

No correlations existed within each school division when testing for a relationship between student perceptions and student growth. Additionally, a significant difference did not exist when conducting t-test analyses between districts when comparing student growth and student perceptions toward achievement.

A primary focus of the state's accountability model is on student growth. Growth is a variable that places all students and teachers on an even playing field as each teacher will control each child's growth. A teacher/school cannot control ‘how’ that child comes to them (high achiever, low achiever), but through teaching and learning, a teacher may have a direct affect on how much growth a child will/will not achieve during an academic year. Additionally, with growth comes proficiency. If students continue to grow, they will become (or will become more) proficient.

While Lewis County Schools, a top district in the state, continues to outperform Clark County Schools in terms of student growth on the English I End of Course test, the gap has continued to narrow each year following the implementation of the freshman academies. An increase in rigor, relevance, and relationships due to components of the academy such as common planning, tutoring opportunities, increased communication between teachers,
parents, and students, the utilization of a freshman academy director and/or guidance counselor specifically for freshman have all played a part in helping Clark County students move closer to Lewis County Schools in terms of student growth.

**Discipline.** Historically, Clark County Schools and Lewis County Schools have been on the same trajectory with regard to short and long term high school suspensions. While Clark County has a greater number of suspensions, each system has decreased by approximately 23% since the implementation of freshman academies.

In comparing data within each division, a relationship was found between behavior (number of incidents accrued) and attitudes toward behavior (from survey data) for students in Clark County Schools, whereas there was a lack of relationship in the Lewis County Schools data set. A relationship between attitudes and outcomes with regard to behavior means that students’ thought process relates to their performance. Students who think positively about behavior are less likely to misbehave resulting in an incident. Additionally, a significant difference existed between performance data between Clark County Schools and Lewis County Schools in terms of discipline.

The freshman academy model contains proactive elements that help keep discipline to a minimum when compared to schools that do not utilize a ninth grade academy. Teaming allows teachers the opportunity to discuss specific students and their behavior and solve and potential problems before they begin (Bernstein, Millsap, Schimmenti, & Page, 2008). Additionally, teachers are better able to build and sustain working relationships with students in the freshman academy which leads to decreased behavior issues. The physical structure of the freshman academies, isolated areas of campus, also limits behavior issues as ninth graders do not have the opportunity to interact with upperclassmen who could prove to be a
negative influence. Having a designated principal, academy director, and counselor also helps solve problems before they begin and allows for teachers and administrators to sometimes use alternative forms of punishment as opposed to traditional referrals (McIntosh & White, 2006).

**Attendance.** Analyzing data back to the 2006-2007 school year, Clark County Schools and Lewis County Schools have consistently had a 96% attendance rate. Within each division, there is a correlation between students’ attitudes toward attendance and their actual attendance data meaning students who have positive beliefs about school are more likely to be in attendance. Measuring the strength or the correlation, Lewis County Schools has a slightly stronger relationship between beliefs and performance. Related to this is the fact that when testing for significance between the divisions, there is a significant difference between performance (days absent) for Lewis County. Lewis County ninth grade students averaged 4.4 days absent compared to Clark County students who averaged 6.4 days absent.

The relationship between students’ perceptions toward attendance and actual attendance for students in a freshman academy can be attributed to the relationships developed with teachers and increased collaboration between school and parents (Bernstein, Millsap, Schimmenti, & Page, 2008; Lambert & Lowry, 2004;).

**Perceptual and Performance Data.** Through analysis of perceptual data gathered from ninth graders surveyed regarding their thoughts on achievement, attendance, and discipline only one significant difference was found between students enrolled in a ninth grade academy and students who were not enrolled in a ninth grade academy. Although limited significant differences were found, the fact that students were able to have a voice in their schooling may be valuable to school districts. Cook-Sather (2002) notes:
When students have the opportunity to articulate their perspectives on school, they not only offer insights into that schooling that are valuable for educators. They also have an opportunity to hone their own thinking to think metacognitively and critically about their educational experiences. And as a result of this newly gained perspective and investment, students not only feel more engaged but are also inclined to take more responsibility for their education because it is no longer something being done to them but rather something they do. (p. 10)

Empowering students to discuss their engagement may provide a catalyst to allow students to see that leaders are trying to make changes to ensure success. Correlational data did exhibit relationships within the Clark County Schools division in terms of attendance and discipline meaning that students’ beliefs, thoughts, and attitudes are consistent with their actions. This behavior reflects the metacognitive thinking in Cook-Sather’s quote.

The freshman academy concept is both a structure in that it is a stand-alone portion of the building and also an ideology meaning that certain tenets and best practices combine to create the concept. In high performing schools, components of the academy concept can be carried out across the ninth grade, even in the absence of the academy. A variety of variables can create a pseudo-academy structure such as teacher experience, collaboration within and across subject areas, rigor and relevance infused into curriculums, and relationships built between staff and students. Many of the research strategies that go into the creation of the freshman academy concept can still be integrated into the ninth grade experience, even without the physical structure or academy label. Districts are moving from implementing some ideas of the freshman academy concept to full-fledged academies as intervention
strategies when they see their ninth grade becoming a “holding tank” for their students (Chute, 1999).

Heppen and Therriault (2008) noted that ninth grade is the “make or break” year (p. 1), therefore, successful school systems, such as Lewis County Schools, have not adopted the freshman academy model because they have yet to see the need. Lewis County is ranked as a top ten district in the state with regard to graduation rates. Clark County Schools’ official vision statement notes that it desires to be a top ten district leading district administrators to advise me to choose Lewis County as the comparison group.

In the preceding analyses using historic, correlational, and significance testing, Clark County Schools compared favorably with the comparison group. Analyses illustrated that Clark County is even or making progress toward the tested variables meaning that freshman academies are having a positive effect on ninth graders as they enter high school. The ultimate outcome variable will be to compare high school graduation rates once students in the first ninth grade academy reach graduation.

The freshman academy model is a cost effective intervention strategy to help ninth graders make a smooth transition from middle school to high school. A freshman academy does not require capital or instructional funding; it is a re-organization of the school to create the isolated environment and a selection of appropriate staff members. It is also a paradigm shift for parents of older children who entered the high school prior to the implementation of the academy model. With the freshman academy, there is an increase in communication and more focus is given to each child. The study sought to analyze the effectiveness of the freshman academy model in Clark County in comparison with the traditional high schools in Lewis County. Significant differences in performance and perceptual data were noted for the
two districts which are located in more suburban/rural areas in contrast to the urban areas where a majority of freshman academy research has been completed. The use of perceptual data adds a new dimension to the current research which is primarily focused on performance data. By incorporating perceptual data, I was able to analyze the academy model from the students' point of view. I also compared perceptions to performance within divisions. The strategies used relate back to Cook-Sather's (2002, p. 3) quote, “the call to authorize student perspectives is a call to count students among those who have the knowledge and the position to shape what counts as education.” Students should be given the opportunity to shape their education, and by integrating their perceptions, I expanded the current body of research primarily focusing on performance data.

**Limitations**

Depending on the structure of a school system, students make several critical transitions that could have adverse effects on academic success. This study only focused on the middle school to high school transition. Additionally, this research study does not compare pre- and post-academy student longitudinal quantitative measures such as test scores, attendance rates, and discipline referrals. When measuring those types of specific data sets, it is difficult to determine if the academy made the impact, or if a confounding variable may have made the impact. For example, if one were to compare English I End of Course test scores, there are many variables that could affect scores such as teacher quality, test re-norming, the inclusion of re-testing in proficiency, or the general level of the cohort for the particular year. With regard to discipline, this could vary by teacher, by cohort, or there could be a change in the faculty member in charge of discipline. I felt the best approach to this project was through perceptions held by students making the transition.
When using students and schools as research participants, many variables can have an impact. Every effort was made to control for any variables that could affect the outcome of this study to maintain the study's validity and reliability. Given this premise, the following limitations exist with this study:

1. The comparison group consisted of other schools in another school district. Since all Clark County Schools ninth graders enter a freshman academy, a comparison group for the same academic year did not exist within the county.

2. Perceptual data were collected from three of the four schools in the comparison group and two of the five schools in the experimental group. Emails were sent and phone calls were made to district officials, principals, assistant principals, and teachers, however, access was not granted at non-surveyed schools. No reason for lack of participation was provided by school personnel.

3. Student perceptions were gathered from tenth grade students who were asked to and trusted to provide honest answers regarding their high school experience.

4. One high school's freshman academy was implemented one year prior to the establishment of the academy concept on the campuses of the other high schools. Teachers in this academy were afforded one extra year of working together prior to this research being conducted.

5. One high school principal in Clark County would not grant permission for me to use biology classes as this is a tested area and the principal did not want the class to be disrupted. To accommodate for this, the principal suggested that civics classes be surveyed and I was assured that the same students taking biology (both honors and regular) would be taking honors and regular civics.
**Delimitations**

Delimitations are characteristics that limit the scope and define boundaries of a study thereby limiting the generalizability of the study (Simon, 2011). Delimitations found in this study include:

1. Student perceptions were gathered in November of their tenth grade year. While this allowed students to holistically reflect on their transition experience, students were five months removed from the conclusion of their freshman year.
2. Only a single cohort's perceptions and student performance data were analyzed. A longitudinal study presented too many confounding variables with student performance data, including, but not limited to test re-norming and teacher turnover.
3. A single measure of each category of student performance data were collected and analyzed. The only forms of objective, universal data which could be collected, was collected. Any other type of data, such as grade point averages, includes a large amount of subjectivity which would vary teacher by teacher/school.
4. The study was limited to two school districts, one employing the freshman academy model and one consisting of the traditional high school. The purpose of this was to provide data for Clark County Schools without including data from other school districts who have implemented the freshman academy concept.

**Revisiting the Conceptual Framework**

As noted in Chapter two, this research is grounded in student engagement which is a strong predictor of academic outcomes such as test scores, grades, attendance, and graduation within the school environment (Connell, Spencer, and Aber, 1994). The quality of the school environment influenced students' belief regarding their ability to perform academically, their
control over their own behavior, their feelings of relatedness to teachers and classmates, their belief that education will benefit them personally and economically, and their feeling of belonging/attachment to school (Quint, Miller, Pastor, & Cytron, 1999; Willms, 2003). Each of these beliefs relates back to the constructs being analyzed: achievement, attendance, and discipline.

Figure five was used to illustrate the flow of student engagement for the purpose of this study.

**Figure 5. Flow of student engagement**

Student engagement was the most effective framework that could have been employed within this study as it fits best with the utilization of historical, correlational, and significance testing. Engagement, and elements of engagement, can be studied and compared in multiple fashions for the past, present, and future making it an ideal framework painting a holistic picture. My goal was to quantitatively tell the story of students’ freshman experiences. Student engagement serves this purpose in the best manner as it is defined as ‘the extent to which students identify with and value schooling outcomes’ (Willms, 2003, p. 8). The connection of the framework to the survey questions found within each construct
strengthened the findings as all aspects of the study related back to the importance of student engagement.

With application to the study, the fact that it was found that Clark County and Lewis County students place similar value on schooling outcomes illustrates that Clark County Schools is on the desired trajectory to become a top district in the state.

**Implications**

Analyses of historical data indicate that the freshman academy initiative is working to smooth the transition for Clark County ninth grade students. The gap between English I growth between Clark County Schools and Lewis County Schools is diminishing, attendance data remains high, and discipline incidents continue to decrease and decrease at a rate consistent with Lewis County. Correlational data show relationships within the Clark County division in terms of attendance and discipline meaning that students' beliefs, thoughts, and attitudes are consistent with their actions. The fact that significant differences could only be identified with one of the six areas under study can be viewed as both a blessing and a curse. Any school district wants to see itself as the best when compared to others, however, finding areas where growth is possible can only strengthen a district's mission and vision and ultimately increase its output. District leaders can look at the pre and post-implementation means of the collected and analyzed data—understanding that the starting points were not equal—and see that as a district, Clark County Schools does not fall far behind Lewis County Schools, which is one of the leading districts in the state. School districts whose ninth graders struggle to make the transition to high school leading to low graduation rates can use data from this study to help determine if ninth grade academies may be beneficial to their student population.
The goal of the ninth grade academy concept is to ease the transition from middle school to high school which ultimately increases the school's graduation rate. Research shows that graduation rates hinge on the areas of achievement, discipline, and attendance (Ancess & Ort, 1999; Center for Collaborative Education, 2001; Hertzog & Morgan, 1999; Lakhman, 1999; McBrady & Williamson, 2009; Wasley, Fine, Gladden, Holland, King, Mosak, & Powell, 2000). In order to continue to strengthen freshman academies and subsequently increase graduation rates, students need to be made aware of the mission, vision, and goals of the academy which would impact their perception of their ninth grade experience and why the academy structure exists.

Student performance is a much more concrete variable than perceptual data. For student performance to continue to increase in the Clark County Schools, the tenets and best/research based practices of the freshman academy must continue to be strengthened and data must continually be analyzed in order to achieve the desired output in test scores, attendance rates, and number of discipline referrals accumulated.

School district leaders can use the outcomes of this research to continue to strengthen the freshman academy model in Clark County Schools. In addition to data presented in this research, school and district historical data can be examined alongside the district's expectations of freshman academies and leaders can continue to implement/strengthen research based best practices. District leaders can also use the student engagement framework and elements found within the framework to strengthen the elements of achievement, attendance, and discipline. On a larger scale, findings from this study incorporating both performance data and perceptual data will provide a more holistic
assessment of the academy structure and help inform district leaders and boards of education of outcomes and effects of the initiative.

Lewis County was chosen as the comparison group because it is similar in demographics, but more importantly, it is a top district with regard to graduation rate. It is important for Clark County Schools to continue to compare itself to counties such as Lewis County in order to meet its goal of becoming one of the ten best performing districts in the state as noted in the county's vision statement.

**Suggestions for Future Research**

The continued focus on students' transition to high school and the utilization of freshman academies as an intervention strategy illustrates the necessity for future research involving the concept. The following recommendations will aid school leaders in investigating the effectiveness of the freshman academy model:

1. This study should be replicated with a larger sample size consisting of multiple districts statewide. The districts being studied had similar demographical make-ups; therefore, a study using a larger sample could compare perceptual and performance data, and could also be analyzed based on the type of community in which the school or district is located. Researchers could determine if the academy model is more effective in a rural, urban, or suburban environment.

2. A similar study could be conducted to analyze teacher perceptions and performance data. Questions surrounding student achievement, discipline, and attendance could be asked of teachers in and not involved in freshman academies. Data could be gathered on teacher growth from End of Course testing.
3. A study could be completed to measure the difference in student performance and/or student perceptions of pre and post implementation of the freshman academy concept. In order to do this, a researcher would have to have careful control or explanation of confounding variables.

4. A qualitative study could be completed to determine what students, teachers, and/or parents feel are the benefits of the freshman academy model as are related to achievement, discipline, and attendance. Interviews and/or focus groups and could center on one school or multiple schools to accomplish this task.

5. A qualitative study could be completed comparing elements of the ninth grade experience as are related to attendance, achievement, and discipline to determine best practices and integrated into the ninth grade academy concept, if not already present.

6. Longitudinal research could be completed in qualitative, quantitative, or mixed methods formats to compare students’ journey through high school and into post-secondary plans to determine if the freshman academy model has long-term effects with regard to achievement, discipline, attendance, and post-secondary plans.

7. A mixed method study could follow these cohorts of students through their high school careers to gauge and measure perceptual and student performance data to determine if there are changes over the course of time. This type of research would allow district officials a more detailed look at the long-term effects of the freshman academy model.

8. A mixed methods study could be conducted to analyze each freshman academy within Clark County Schools to determine what structures are in place to ensure student and teacher success. Qualitative data could be collected from students,
teachers, and parents as each would provide a unique view of the freshman academy concept. Quantitative data could include test data, attendance, and discipline figures to determine if a significant difference exists between high schools. A list of best practices could be obtained from the research data and shared among high schools in the district.

**Conclusion**

Ninth grade can be a tumultuous time for many students as they enter a traditional high school. Clark County Schools is one of many school districts across the country using the freshman academy initiative as a means to smooth students' transition from middle school to high school. This study sought to examine the effectiveness of Clark County Schools' freshman academy initiative using the variables of achievement, attendance, and discipline. After consultation with district officials, Lewis County was chosen as the comparison group due to their graduation rate being in the top ten in the state and their lack of freshman academies.

Historical data, along with student performance data and student perceptual data were examined by multiple means in order to assess the effectiveness. With two exceptions, there is no statistical difference in perception or performance between students in either division. In Clark County Schools, students have a significantly lower number of incident referrals and Lewis County Schools' attendance rate is significantly higher than Clark County's. In analyzing historical data, Clark County Schools has made significant progress in closing the English I growth gap since the inception of the academies. Discipline and attendance data are currently on the same trajectory as Lewis County.
The freshman academy model in Clark County Schools serves as a cost-effective intervention strategy beneficial to students and teachers. As leaders press forward in analyzing data, refining strategies, and implementing best practices, Clark County Schools will continue to make the high school transition a successful experience for students.
REFERENCES


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Small+schools+are+rated+better.+(Education)-a095449604


APPENDICES
Appendix A
Letter of Agreement for the Use of Student Data
[emailed to district leaders in each county]

December 6, 2011

To the Appalachian Institutional Review Board (IRB):

I am familiar with Chris Bennett's research project entitled An Analysis of the Impact of Freshman Academies on Achievement, Attendance, and Discipline Using Student Perceptions and Student Performance Data. I understand that the following student data will be used for this research project:

- Survey data gathering student perceptions: surveys will be administered by Biology teachers to current tenth grade students using SurveyMonkey. Student perceptions toward achievement, attendance, and discipline will be gathered to analyze students’ perceptions of their ninth grade/transition experience.
- Student performance data: Testing Coordinator and NCWise Coordinator will provide English I End of Course test growth, attendance data, and number of incident referrals for the students who were chosen through Biology classes to respond to the survey. This will be completed by merging data using Microsoft Excel.
- Student group: this research will involve first time tenth grade students who will be chosen through Biology classes (both regular and honors). These students also attended the same school the previous year as first time ninth grade students.

I understand that passive consent for the use of student data for the research project will be used, under the Family Educational Rights and Privacy Act. I will have access to the final results of the study.

As the research team conducts this research project the student data will be protected by:

- SurveyMonkey will be used to collect the data. The SurveyMonkey account is protected by a password (as are the surveys students will complete). Upon completion, the surveys, the results, the links to the surveys, and the SurveyMonkey account will be deleted allowing no further access by respondents or the research team.
- Electronic spreadsheets housing student data will be deleted upon completion of the study. Identifiable student data (NCWise numbers and high school names–at no point will students be identified by name) will be deleted by district officials (Testing Coordinator and NCWise Coordinator) after inserting student performance data prior to returning to the researcher. District officials will re-sort non-identifiable data into an order which will not be disclosed to the researcher.
- Data will be stored on school computer which is password protected. After perceptual data is collected, password protected spreadsheet will be sent to Testing and NCWise Coordinators so student performance data can be merged into spreadsheet for analysis. After merging, all NCWise numbers and high school names will be removed making all data anonymous. Data will be re-sorted before being returned to the researcher.
• In the dissertation, individual high schools will not be named as all data will be analyzed on the district level. Additionally, pseudonyms will be assigned to both school districts.
• The data collected will remain confidential by removing identifiers prior to providing to the PI, to the extent confidentiality may be protected under State or Federal law.

Therefore, as a representative of ___________ County Schools, I agree that Chris Bennett's research project may be conducted with the student data described above. I understand that this research will be carried out following sound ethical principles and that it has been approved by the IRB at Appalachian State University.

Sincerely,
Appendix B
Email to principals to gain access to classes for surveying purposes (Clark County)

Principals,
I am close to the data collection phase of my dissertation on freshman academies and have talked with Dr. Boyles and have his permission to survey students without having to gain parental consent. The survey will be administered online to tenth graders in order to collect perceptions of their ninth grade experience.

For my sampling process, I will survey the percentage of bio classes [classes currently being taken by students, please do not include second semester classes unless yearlong course(s)] that relates to the percent of ninth graders in your school when compared to the district (percentages found below). For example, if school A has 20% of the county's 9th graders, I would like to survey 20% of the regular bio classes and 20% of the honors/pre-AP bio classes (please do not include classes designated specifically for repeaters). So if school A has 6 regular bio classes this semester, I would like to survey 2 (actually 1.2, but rounding all numbers up) of these...and if school A has 3 honors sections, I would like to survey 1. If you could please reply with the name of the teacher (can be same teacher) and the period I would need to survey. For example, for school A:
Smith, 4th period
Clark, 5th period
Jones, 1st period

<table>
<thead>
<tr>
<th>School (% of district’s 9th grade)</th>
<th>No. Honors Biology classes offered</th>
<th>No. Regular Biology classes offered</th>
<th>No. Honors classes to survey</th>
<th>No. Regular classes to survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>[School A] (23.6%)</td>
<td></td>
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<td></td>
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<tr>
<td>[School B] (27.8)</td>
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<tr>
<td>[School C] (28.4)</td>
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<tr>
<td>[School D] (20.4)</td>
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I'll be in touch with these teachers to discuss logistics. The survey should take no more than 15-20 minutes and can be completed on desktops or on laptops.

Thanks for your help, please let me know if you have any questions.

Chris L. Bennett, Ed.S.
Doctoral Candidate
Appalachian State University
clbennett@clevelandcountyschools.org
Appendix C

Email to principals to gain access to classes for surveying purposes (Lewis County)

Principals,

My name is Chris Bennett; I recently finished coursework in Appalachian State University's Doctoral Program in Educational Leadership. I am nearing the data collection phase of my dissertation on freshman academies and have talked with your district's IRB and have their permission to survey students. The survey will be administered online to tenth graders in order to collect perceptions of their ninth grade experience.

For sampling, I am looking to survey the percentage of bio classes [classes currently being taken by students, please do not include second semester classes unless yearlong course(s)] that relates to the percent of ninth graders in your school when compared to the district (percentages found below). For example, if school A has 20% of the district's 9th graders, I would like to survey 20% of the regular bio classes and 20% of the honors/pre-AP bio classes (please do not include classes designated specifically for repeaters). So if school A has 6 regular bio classes this semester, I would like to survey 2 (actually 1.2, but rounding all numbers up) of these...and if school A has 3 honors sections, I would like to survey 1. If you could please reply with the name of the teacher (can be same teacher) and the period I would need to survey. For example, for school A:

Smith, 4th period
Clark, 5th period
Jones, 1st and 4th periods

<table>
<thead>
<tr>
<th>School (% of district’s 9th grade)</th>
<th>No. Honors Biology classes offered</th>
<th>No. Regular Biology classes offered</th>
<th>No. Honors classes to survey</th>
<th>No. Regular classes to survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>[School A] (17.7%)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>[School B] (19.7%)</td>
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<td>[School C] (19.4%)</td>
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<tr>
<td>[School D] (16.3%)</td>
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<td>[School E] (26.9%)</td>
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</table>

I'll be in touch with these teachers to discuss logistics (parental consent forms, etc). The survey should take no more than 15-20 minutes and can be completed on desktops or on laptops.

Thanks for your help, please let me know if you have any questions.

Chris L. Bennett, Ed.S.
Doctoral Candidate
Appalachian State University
clbennett@clevelandcountyschools.org
Appendix D
Sample email sent to teachers surveying students

Teachers,
A couple weeks ago, I emailed your principals with regard to surveying students at your high school to collect data for my dissertation. Most of your principals cc'ed you in their reply. For those of you who did not, my dissertation analyzes perceptions and performance data of current tenth grade students in ____________ County and will be compared to perceptual and performance data from students in a comparison district lacking freshman academies. I am looking to see if a significant difference exists in perceptions and performance data between districts with/without freshman academies. If you would please read through the attached instructions and survey students in the classes listed on page two of the attachment. The survey is brief and should take no more than 15-20 minutes. I greatly appreciate your help.

Please let me know if you have any questions.

Thanks,
Chris L. Bennett, Ed.S.
Doctoral Candidate
Appalachian State University
clbennett@clevelandcountyschools.org
Thank you for taking the time to complete the following survey. There are 31 total questions; please read each question carefully and answer honestly as your answers will be anonymous. Your responses should reflect your high school experience up to present day and will help the researcher analyze your transition from the middle school to the high school. You will be asked to enter your NCWise Number (Lunch Number) and current school for reporting purposes; at no point will it be tagged to your name. Thanks again for your participation.

NCWise Number (Lunch Number): 

High school attended as a ninth and tenth grader:

**ATTENDANCE**

1. I feel happy to be at this school.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

2. I feel like I am a part of this school.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

3. I don't fit in with most of the other students in this school.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

4. I participate in a lot of extracurricular activities in this school.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

5. People at this school are like family to me.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

6. I feel like an outsider at this school.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

7. People notice if I am not at school.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

8. Many students in this school don't respect one another.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

9. There are groups of students in this school who don't get along.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

10. Students feel comfortable saying what they think.
    - Strongly Agree  Agree  Disagree  Strongly Disagree

11. Students respect what other students say, even when they disagree.
    - Strongly Agree  Agree  Disagree  Strongly Disagree
**ACHIEVEMENT**

12. My teachers believe that all students in this school can do well.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

13. My teachers have given up on some of their students.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

14. My teachers expect very little from students.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

15. My teachers work hard to make sure all students are learning.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

16. Teachers expected me to be able to teach others about topics learned.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

17. My teachers have often shown examples of work they consider good or poor.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

18. My teachers have often made clear to students what they should know.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

19. My teachers have often assigned projects that let students show they’ve learned.
   - Strongly Agree  Agree  Disagree  Strongly Disagree

20. My teachers have often let students decide on topics they will work on.
    - Strongly Agree  Agree  Disagree  Strongly Disagree

21. My teachers have often let students decide how to work on their assignments.
    - Strongly Agree  Agree  Disagree  Strongly Disagree

22. My teachers have often returned assignments with helpful feedback.
    - Strongly Agree  Agree  Disagree  Strongly Disagree

23. My teachers have often given feedback and allowed me to improve my work.
    - Strongly Agree  Agree  Disagree  Strongly Disagree

**DISCIPLINE**

24. Your teacher makes clear to you how you should behave when working with other students in pairs or small groups.
    - Strongly Agree  Agree  Disagree  Strongly Disagree

25. Your teacher makes clear to you what student conduct is unacceptable.
    - Strongly Agree  Agree  Disagree  Strongly Disagree
26. Your teacher makes clear to you what will happen to students who misbehave.
   Strongly Agree  Agree  Disagree  Strongly Disagree

27. A lot of students never get recognized for the good work they do.
   Strongly Agree  Agree  Disagree  Strongly Disagree

28. Students in my school are expected to treat all of the adults in this school with respect all of the time.
   Strongly Agree  Agree  Disagree  Strongly Disagree

29. The rules in this school are very clear.
   Strongly Agree  Agree  Disagree  Strongly Disagree

30. Students in my school are expected to treat all peers in this school with respect all of the time.
   Strongly Agree  Agree  Disagree  Strongly Disagree

31. Students here get positive recognition when they do well in school.
   Strongly Agree  Agree  Disagree  Strongly Disagree
Christopher Lee Bennett was born in Shelby, North Carolina. He attended grade school in Kings Mountain, North Carolina and graduated from Kings Mountain High School in May 2001. The following autumn, he entered the University of North Carolina at Chapel Hill to study Middle Grades Education and in May 2005 was awarded the Bachelor of Arts degree. In summer 2005, he began work in the School Administration program at Gardner-Webb University and graduated with a Master of Arts degree in May 2007. In May 2008, he entered the Educational Specialist program at Appalachian State University and graduated with an Ed.S. in August 2009. In August 2009, he began pursuit of his Ed.D. in Educational Leadership at Appalachian State University which he received in May 2012. During his career, Mr. Bennett taught eighth grade math and science, served as a high school mens and womens tennis coach and a middle school boys and girls soccer coach, and at the time of this writing, is currently serving as a high school assistant principal.

Mr. Bennett is a North Carolina Teaching Fellow, a member of many educational leadership organizations, and attends First Baptist Church–Kings Mountain. His parents are Mr. and Mrs. Michael L. Bennett.