

ABSTRACT

Kimberly F. Williamson. COLLEGE PREPARATION: PERSPECTIVES OF SECOND-YEAR COMMUNITY COLLEGE AND FOUR-YEAR UNIVERSITY STUDENTS (Under the direction of Dr. Michael Pooock). Department of Educational Leadership, April, 2010.

The purpose of this study was to examine students enrolled at community colleges and universities in North Carolina about their perceptions of their college preparation experiences. The study specifically examined student perceptions as to the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff played in their college preparation experience. Gender, race, high school course of study, level of first English course, and level of first mathematics course served as independent variables.

Results indicate that students enrolled in the College/University Prep course of study while in high school perceived their high school teachers had significant influence on their preparation for college compared to students enrolled in the College Tech Prep, Career Prep, or Occupational Prep course of study. Although not statistically significant, students enrolled in a curriculum level mathematics course as the first level college mathematics course felt their high school teachers had a greater influence on their college preparation when compared to their peers enrolled in developmental/remedial mathematics. The same trend was found when examining the influence of high school counselors. Students enrolled in a curriculum level mathematics course as the first level of mathematics course felt their high school counselors had a greater influence on

their college preparation when compared to their peers enrolled in developmental/remedial mathematics. Finally, students enrolled in curriculum level English as their first level of English course also felt their high school counselors had a greater influence on their college preparation when compared to their peers enrolled in developmental/remedial English. Students believe parents and college admissions and recruiting staff played a minimal role in their college preparation.

Generalizations from this study can be used by administrators in higher education to analyze the situation of college preparation, identify areas of needed change, and adopt new strategies to increase college readiness. The findings can assist educational leaders, legislators, and policymakers in increasing the communication between secondary and postsecondary institutions regarding expectations of high school graduates, in writing educational policies, and in assisting students in the transition from high school to college.

COLLEGE PREPARATION: PERSPECTIVES OF SECOND-YEAR
COMMUNITY COLLEGE AND FOUR-YEAR UNIVERSITY STUDENTS

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COMMUNITY COLLEGE AND FOUR-YEAR UNIVERSITY STUDENTS

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DEDICATION

In loving memory of my father, Seaton Poe Fairless, Jr. Daddy, you taught me the most valuable and significant life lessons.

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complete this degree, I have felt his guiding hand over the past months as I have worked to finish this project.

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Thanks be to God for all of the great things in my life! I will continue to praise you every day for the wonderful blessings you bestow upon me!

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CHAPTER 1: INTRODUCTION

College readiness is a crucial issue for students and for leaders at institutions of higher education (Conley, 2007). Students must meet institutional placement standards which are measured by college required admissions tests. If a student cannot meet required admissions standards in reading, writing, and mathematics, he or she is required to complete one or more remedial courses before attempting college level courses (Reed & Conklin, 2005). When students are underprepared for college, it is time consuming and costly for the student and the institution. *An Action Agenda for Improving America's High Schools* (Achieve, Inc., & National Governors Association [NGA], 2005), reported that taxpayers pay an estimated one to two billion dollars each year to provide remedial education to students at public universities and community colleges. It also reported that deficits in basic skills cost businesses, colleges, and underprepared students as much as sixteen billion dollars annually in lost productivity and remedial costs. However, when admissions standards are clearly articulated to students prior to matriculation, and students arrive on campus with the skills they need, students are far more likely to succeed (Reed & Conklin). Collaboration between secondary and postsecondary education leaders is an important part of articulating clear standards as they transition from high school to college (Achieve, Inc. & NGA; Reed & Conklin).

The Commission on the Future of Higher Education (2006) reported that 40% of college students in the United States are required to enroll in at least one

remedial course upon entering an institution of higher education. Of those students entering directly from high school, Achieve Inc. and the National Governors Association (2005) reported that nearly one-third will place into remedial courses. The situation is more acute at community colleges as the percentage of underprepared high school graduates enrolling at public community colleges surpasses that enrollment at four-year institutions (Wirt, Choy, Rooney, Provasnik, Sen, & Tobin, 2004). Among first-year students entering colleges and universities in fall 2000, 42% who enrolled at community colleges had to complete one or more remedial courses as compared to 20% at public four-year colleges and universities. This figure reduces to 12% at private four-year colleges and universities (Parsad, Lewis, & Greene, 2003). Sixty-three percent of students at community colleges average one year or more in remedial courses, compared to only 38% at public four-year institutions (Wirt et al., 2004). The above statistics indicate there are a significant number of students graduating from high school who must enroll in remedial courses upon entering an institution of higher education. A higher percentage of students who attend community colleges are required to enroll in remedial courses as compared to those who attend four-year colleges and universities. Based on these statistics, one may question what factors influence the college preparation of high school students.

This study examined the perceptions of college sophomores enrolled in selected community colleges and four-year universities in the state of North

Carolina about their college preparation experiences. The study specifically gathered student perceptions as to the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff played in their college preparation experience. Both secondary and postsecondary education leaders have accountability in preparing students for college (Achieve, Inc. & NGA, 2005). The leadership at each level can benefit from the perspectives shared by students. Generalizations from this study suggest effective strategies that warrant further investigation when preparing high school students for college. Educational leaders can gather from the data analysis the college preparation experiences of high school students and can then use the data to inform and plan for systematic changes.

Background

The need to provide more effective and efficient remediation is evident from the concern among educational leaders, policy makers, and the public regarding the lack of preparedness of high school graduates for college (Culcross, 1996; Parsad et al., 2003; Provasnik & Planty, 2008). There are seemingly negative effects of admitting underprepared students to college. Such effects include: increased college budgets, devaluation of degrees, disincentives for high school students to study hard and take courses at the pre-college level, and the lengthening of time required to obtain a degree (Culcross).

The quality of a state's educational system and the skills possessed by the workforce are important factors in business and industry (NGA, 2003). In their

report, the Achieve, Inc. and NGA (2005) encouraged government leaders to provide financial incentives for higher education leaders to work with local education officials and high school faculty in an effort to improve college readiness. Other policymakers have suggested that the cost of remedial education should be shifted from postsecondary institutions to the high school and that increased collaboration between high schools and colleges could be a step towards improving student preparation for college (Parsad et al., 2003).

Problem Statement

Many high school graduates are completing the educational requirements to receive a high school diploma, yet do not meet the entrance standards necessary to place out of remedial courses at the postsecondary level (Parsad et al., 2003; Provasnik & Planty, 2008). In North Carolina the percentage of high school students enrolled in at least one upper level mathematics course has increased from 40% to 72% since the early 1990s (Callan, 2006). However, statistics on the high school graduating class of 2002 indicated that 41.6% of students who enrolled in a North Carolina Community College were required to take a developmental mathematics course (North Carolina Community College System, Division of Business & Finance [NCCCS], 2004). If more high school students in North Carolina are taking upper level courses, yet there are still over 40% of students enrolling in a developmental mathematics course in the North Carolina Community College System, there appears to be a lack of consistency

between what high schools require for graduates and what colleges expect of high school graduates.

College preparation is an integral part of a high school education. Teachers, school counselors, parents, and college admissions and recruiting staff play a vital role in preparing students for college. There is a lack of research on first-year college student perceptions of their high school college preparation experiences. The purpose of this study was to compare perceptions about high school preparation experiences of college freshmen enrolled at selected community colleges and at universities in North Carolina to determine whether there was a difference in the perceptions about the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff played in preparing the students for college between community college and university students? Although the purpose was to compare perceptions of college freshmen, data collection did not begin until the students were enrolled for their second year of college. Therefore, the participants were sophomores.

Conceptual Framework

The theoretical basis for this study evolves from the college choice model developed by Hossler and Gallagher (1987). Hossler and Gallagher's college choice model identifies three stages which students transition through as they make decisions about postsecondary education and select an institution. The first stage is the predisposition phase. This is a developmental phase in which students determine whether or not they would like to attend college. Factors such

as student characteristics, significant others, educational activities, and school characteristics influence students in the predisposition phase. During the second stage, the search phase, students gather information about institutions of higher education. Students develop a choice set of colleges in which to apply. Students are influenced by their own values, their own search activities, and the search activities initiated by institutions of higher education. The final stage, choice, is the phase in which students decide which institution they will actually attend. The choice set is the major influence during the choice phase (Hossler & Gallagher). Hossler and Gallagher's college choice model is relevant for this research because of the focus on factors that can contribute to a student's college preparation: high school teachers, high school counselors, parents, and college admissions and recruiting staff (Sokol, 2000). Each of these factors are individual and organizational influences that are described in the college choice model as having an impact on a student's decision to pursue education beyond high school.

Significance of the Study

This study provided findings regarding the college preparation of sophomores enrolled at community colleges and at four-year universities. Systematic knowledge of how high school graduates perceive their high school to college preparation will give education leaders essential information that is needed to recognize areas for improvement (Hartman & Feir, 2000). The researcher aimed to offer insight into the role that high school teachers, high

school counselors, parents, and college admissions and recruiting staff play in college preparation efforts of high school graduates.

The findings can be used by administrators in higher education to analyze the situation of college preparation, identify areas of needed change, and adopt new strategies to increase college readiness. High school teachers, high school counselors, college admissions and recruiting staff, secondary administrators, and postsecondary administrators could use the results of this study to develop college preparation courses or plan collaborative efforts between high schools and colleges. The results can be useful to educational leaders, legislators, and policymakers in increasing the communication between secondary and postsecondary institutions regarding expectations of high school graduates, in writing educational policies, and in assisting students in the transition from high school to college. The findings will be made available to give administrators data that can be used to proactively work with students who are seeking admission into institutions of higher education. Furthermore, if disseminated more broadly, the findings could provide parents with beneficial information to assist them with helping their high school children adequately prepare for and meet the expectations of colleges and universities.

Overview of the Methodology

The survey instrument used in this study was the College Preparation Questionnaire adapted from a survey that was developed by Gerry R. Sokol (2000). The survey instrument contained 60 items that investigated four factors

involved in preparing students for college: high school teachers, high school counselors, parents, and college admissions and recruiting staff. The College Preparation Questionnaire was administered to college freshmen and sophomores at selected community colleges and universities in North Carolina. Community colleges and universities were selected from the 58 institutions that are a part of the North Carolina Community College System and the 16 institutions that are a part of the University of North Carolina System. College sophomores selected to complete the survey instrument were Spring 2008 graduates from a high school in the North Carolina public school system.

Definition of Key Terms

For the purposes of this study, the following definitions are used:

College - A four-year higher education institution. A college can be a private institution or a public institution.

Community College - A two-year public higher education institution.

Academically underprepared students- Students who lack basic skills in at least one of the three subject areas of reading, writing, or mathematics (Tritelli, 2003).

Remedial Education - Courses offered in reading, writing, or mathematics for college students lacking the skills necessary to perform college-level work required by the institution (National Center for Education Statistics [NCES], n.d.).

Developmental Education - Used interchangeably with remedial education.

College Readiness - Demonstrating the minimum set of skills and credentials necessary to attend college (Greene & Winters, 2005).

College Preparedness - Demonstrating the minimum skills necessary to enroll in college level courses. This term is used to refer to students who are not considered to be academically underprepared (Callan, 2006).

College Level Course - Courses that, upon completion, give degree credit towards an associate's degree or higher. Courses that are not considered to be remedial (Callan, 2006).

Null Hypotheses

- H₀1. There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.
- H₀2. There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.
- H₀3. There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.

- H₀4. There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.
- H₀5. There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.
- H₀6. There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college.
- H₀7. There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college.
- H₀8. There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college.
- H₀9. There is no statistically significant difference between the English course placement of community college and four-year university students

regarding their perceptions of the role high school counselors played in preparing them for college.

H₀10. There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college.

H₀11. There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

H₀12. There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

H₀13. There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

H₀14. There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

H₀15. There is no statistically significant difference between the mathematics course placement of community college and four-year university students

regarding their perceptions of the role their parents played in preparing them for college.

- H₀16. There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.
- H₀17. There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.
- H₀18. There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.
- H₀19. There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.
- H₀20. There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.

Assumptions

In this study, registrars at each institution chosen to participate provided email addresses of students based on the established criteria for selection of the sample population. It was assumed that the participants gave accurate reflections of their high school experiences. The participants gave accurate reflections of their first year college experiences. The research methods were reliable and valid for the purpose of the study.

Limitations of the Study

The study was limited to sophomore students at select institutions in the state of North Carolina and the results may not be generalizable outside of North Carolina. The high school course of study could be a limitation. Participants could have completed a variety of different courses and had a variety of different teachers in high school. Therefore, the curriculum the students' studied may be different as well as the effectiveness of the teacher in presenting that curriculum. An additional limitation is that colleges select their own placement tests and set their own criteria for placement into remedial or college level courses. Participants may have placed into a remedial course based on one college's criteria, but into a college level course based on another college's criteria.

These limitations notwithstanding, this study's strength lies in its ability to match high school, community college, and four-year university service areas. Thus, this study was able to leverage insight on the overall question regarding the matching of college readiness perceptions and requirements from each of

these vantage points. As such, it significantly adds to the body of scholarly knowledge regarding college readiness. Moreover, as this inquiry is readily replicable in other states, future work can discern national generalizability from findings context specific to the state of North Carolina.

Organization of the Dissertation

This study is divided into five chapters. Chapter 1 provides the introduction and overview of the study. Chapter 2 is a review of the literature. The methodology and procedures used to conduct the study are outlined in chapter 3. Chapter 4 is an analysis of the results of the study. A summary and discussion of the findings, implications and conclusions of the results, and recommendations for future research are included in chapter 5.

Summary

Feedback from college students about the effectiveness of their high school preparation can be used by high schools and colleges to identify areas needing improvement and to prioritize strategies for improvement (Hartman & Feir, 2000). The purpose of this study was to compare perceptions about high school preparation experiences of college freshmen enrolled at the community college and at the university level. However, email addresses were not received until after students had completed their freshmen year. The study obtained sophomore students' perceptions of factors that influenced their college preparedness.

CHAPTER 2: REVIEW OF LITERATURE

Organization of the Review of Literature

The first section of the review of literature will discuss the underprepared student and the role of higher education in offering remediation to these students. Next, I will present factors that influence the preparation level of high school graduates. The factors include: high school teachers, high school counselors, parents, and college admissions and recruiting staff. These factors are taken from the work of Sokol (2000) whose survey instrument was adapted for this study. Section three will discuss the collaboration of secondary and postsecondary institutions. From there, I will share research on student perceptions of college preparation. The College Preparation Questionnaire which was the survey instrument used in this study will be highlighted next. Since the study focused on gathering perceptions of students enrolled in community colleges and universities in North Carolina, the following section will discuss the North Carolina education system. The final section will discuss the conceptual framework based on the research of Hossler and Gallagher (1987).

Underprepared Students and the Role of Higher Education

Who are the Underprepared Students?

McCabe (2003) referred to underprepared students as academically deficient and lacking the necessary skills to begin college level course work. However, Maxwell (1979) referred to underprepared students as those whose skills, knowledge, and academic abilities are significantly below those of the

average student. The underprepared student population is large and diverse (NGA, 2003; Oudenhoven, 2002; Parsad et al., 2003; Provasnik & Planty, 2008). About one of every three first-year students at community colleges in the United States takes at least one remedial course in reading, writing, or mathematics (NGA, 2003). In urban areas the figures rise to three out of every four (NGA, 2003). McCabe reported that one-third of underprepared students are deficient in all basic skills areas; one-third are deficient in two out of three basic skills areas; and one-third are deficient in only one area. Statistics of underprepared students have also been reported using multiple demographics.

By geographic area, the western region of the United States has the highest percentage of underprepared students according to Greene and Forster (2003). Only 25% of college students in the West are college ready. The Northeast and Midwest have a college readiness rate of 32%, the same college readiness rate as the overall rate of the nation. The South has the highest college ready rate at 38% (Greene & Forster).

By race/ethnicity, minorities tend to be less prepared for college than their white peers (NGA, 2003). Only 47% of African American and 53% of Latino high school graduates are academically qualified for college compared to 68% of white high school graduates (NGA, 2003). Only 20% of all Black students and 16% of all Hispanic students leave high school college ready. College readiness rates for White, Asian American, and American Indian students are as follows:

White, 37%; Asian American, 38%; American Indian, 14% (Green & Forster, 2003).

Other demographic information includes gender, race, age, income, and ability. McCabe (2003) reported that there are more female students than male students who are underprepared. The age range for underprepared students is from age 15 to 55, with nearly half being age 24 or older (McCabe). A high percentage of underprepared students are financially disadvantaged (McCabe). McCabe also reported that students with physical disabilities represent 10% of the underprepared population. Many of these students have never left their own neighborhoods and possess limited knowledge of the world. Underprepared students also have limited family or peer encouragement to advance academically (McCabe).

Debate Over Which Institutions Should Teach Remedial Courses

Remediation at the postsecondary level is a contentious issue and the focus of ongoing debate in policy related literature (Parsad et al., 2003). Proponents of remedial education agree that it is necessary to provide opportunities for entering freshmen who lack adequate academic skills. However, there is disagreement among educators, policymakers, and the public over whether remediation should be provided at all postsecondary institutions, or whether it should be restricted to community colleges (Parsad et al.). Still others argue that high schools need to do a better job at preparing students for college

so that remediation in higher education is not necessary (Day & McCabe, 1997; Ignash, 1997; Oudenhoven, 2002; Parsad et al.).

Achieve, Inc. and the National Governors Association (2005) reported that advocates for offering remedial education at all levels of higher education argue that shifting full responsibility for remediation to community colleges may create a cast system between two and four-year colleges and may also limit opportunities for students. Opponents of remediation in higher education argue that incentives to do well in high school are removed and that the education of prepared students is sacrificed at the expense of making courses less demanding (Achieve, Inc. & NGA, 2005; Day & McCabe, 1997; Ignash, 1997; Oudenhoven, 2002; Parsad et al., 2003). Many leaders at four-year colleges maintain that remedial courses are not college level and therefore, should not be their responsibility. Leaders in four-year colleges are concerned that if they offer remedial courses the institution will lose prestige and that resources could be better spent on degree programs (Oudenhoven). Parsad et al. also stressed concern over the financial and human resource costs of remedial education and the negative impact these costs may have on the quality of regular course offerings.

According to Day and McCabe (1997), there is strong opposition to the role that colleges play in developing basic skills. Opponents suggest that higher education should not be expected to provide what secondary education has failed to provide and that too much money is being spent on remediation. Some

taxpayers and state boards of education insist that colleges should not teach what high schools have already been awarded tax dollars to provide (Oudenhoven, 2002). The public and legislators are immensely concerned that they are paying twice for the same education, once in high school and then in college (Achieve, Inc. & NGA, 2005; Day & McCabe; Ignash, 1997; Oudenhoven; Parsad et al., 2003).

The Role of the Community College

Postsecondary education must be provided in order for underprepared students to compete in today's economy and to succeed in tomorrow's workforce (Day & McCabe, 1997). Between 1974-1975 and 2006-2007, the number of community colleges in the United States increased by 17%. Over 6.2 million students were enrolled in community colleges across the nation in the fall of 2006 (Provasnik & Planty, 2008). The community college's mission for educational access and opportunity for all allows the community college to be the best hope for the delivery of remedial education. According to Day and McCabe, higher education is expected to respond to social and economic pressures for improved performance and accountability. Community colleges are in the position to lead that response by offering remedial education that is part of the solution because they are located within commuting distance of 90% of America's population and deliver remedial courses at a significantly lower cost than most other higher education institutions (Culcross, 1996; Provasnik & Planty). Community college administrators profess that they offer a disproportionate amount of remedial

education compared to other higher education institutions. However, because community colleges are more accessible to students in terms of costs, location, teaching focus, and admissions policies, they are uniquely poised to provide more remediation (Ignash, 1997).

Community colleges represent a unique opportunity for all people to reap the benefits of higher education. The community college is a nexus connecting high school students to higher education and to careers. The nation is filled with students who expect community colleges to keep their promise of providing a postsecondary education that may lead to better jobs (Warford, 2004).

Factors that Influence High School Graduates Preparation for College

Oakes (2002), a professor at the University of California, provided six conditions that make a difference in the preparation of high school graduates and their eligibility to attend four-year colleges and universities. The first is a college-going culture. Educators, parents, and students must share the belief that all students should have the opportunity to attend college. Second, high schools must provide a rigorous academic curriculum. Students need to engage in significant subject matter that is required to be ready for courses in college. Third, high quality teaching must make the rigorous academic curriculum accessible and sensible. Fourth, students must be provided extra support. They need intensive academic and college-going opportunities that allow them to learn how to navigate through the pathway to college access. Fifth, high schools need to provide a multicultural college-going identity, in which all students are

entrusted with the confidence and skills to go to college without sacrificing their own identity and their connection with their home community. Finally, family connections and social networks must be available for all students. Parents need to know how to ask questions and get the information they need to meet the needs of their students. All of these conditions are relevant to the factors provided below that influence the preparation of high school graduates to attend college. The factors are high school teachers, high school counselors, parents, and college admissions and recruiting staff.

High School Teachers

Kagan (1993) explored the beliefs and practices of two teachers and two professors. The research was conducted in four phases. During phase one, Kagan conducted an ethnographic study of each teacher's classes, produced narrative text, and interviewed them about their pedagogical beliefs and careers. In phase two, Kagan interviewed the methods professors. The interviews were audiotaped and transcribed. In phase three, narratives were exchanged. Each teacher received a copy of the narrative describing Kagan's interview with the corresponding professor. Each professor was given a copy of the narrative describing Kagan's interview with the corresponding teacher. During the final phase, each participant was interviewed a second time. Each participant was asked to comment on the narrative they had read.

Findings for Kagan's study indicated that professors saw the primary role of teaching as promoting problem solving and higher level thinking. The

professors also viewed mandated curriculum and standardized achievement tests as mostly irrelevant to problem solving and higher-level thinking because they tend to be targeted to lower level academic skills. Kagan (1993) also reports that the professors in the study described a good teacher as one who motivates lifelong learning outside of the classroom for the intrinsic joy of exercising the mind.

The teachers in Kagan's (1993) study saw their role as preparing students to succeed, which included helping students acquire the necessary academic skills and information, motivating students to score well on standardized tests, and to develop students into rounded individuals with self-esteem, social skills, and healthy values. Kagan suggested that pedagogical styles of high school teachers can affect the college preparation of high school graduates. The inductive method of teaching is more effective than the information-giving, lecture method of instruction (Kagan).

There are techniques that teachers can use to affect students' motivation to learn in a positive way (Gross, 1988). Gross offered several suggestions for teachers. Teachers must relate the material presented in the classroom to the life concerns of the students. Gross also suggested that everything taught should have a parallel with the students' experiences. Teachers have a role to play in raising students' level of concern about learning. Teachers need to give immediate and specific feedback to students. The immediate and specific

feedback enables students to realize their success as a result of the effort they put into learning (Gross).

High School Counselors

School counselors are aware of the need for high school graduates to seek some kind of postsecondary education that will equip them to be successful in society (Hoyt, 2001). Hoyt professed that school counselors play an important role of empowering students and their parents to make reasoned decisions regarding college attendance. This section will discuss research regarding the role that school counselors play in preparing students for college.

In Hugo's (2004) qualitative study of school counselor roles, he identified the programs and services that were provided by two high-income and two low-income high schools in the Los Angeles Unified School District with a high rate of college attendance among the high school graduates. The research questions were designed to determine the nature of academic counseling students received, the circumstances of counselor and student interaction, and the programs counselors offered to assist students in successfully navigating the complex college choice process. The study also explored practices that supported the counselor-to-student relationship and the barriers that impeded the relationship. School administrators and college counselors were interviewed. Documents were analyzed and focus groups were conducted with the counseling staff at each site. The findings indicated that the schools offered strong college preparatory curriculum for students in all grade levels, provided test preparation

programs, and encouraged faculty and family involvement, as well as partnerships with colleges. The study also found that the counselors and administrators perceived the importance of a school-wide philosophy of preparing all students for college.

School counselors also help to prepare students for college by playing an important role in the cultural support that can have a positive impact on student preparation for college. Muhammad (2008) specifically addressed cultural support as a factor that predisposes African American student's attitudes and knowledge towards college. Muhammad used Hossler and Gallagher's model of college choice to present a background for a study. In this study, students approached college choice in three phases- predisposition, search, and choice. Students progressed from interest in college to researching colleges and finding an institution that fits their academic ability and goals. Muhammad explored the college choice process from a critical race theory perspective, proposing that for African American students, cultural support for college predisposition is reflected more in the aspirations of parents, peers, and school counselors. Using a database from the fourth follow-up to the 1988 National Educational Longitudinal Survey, Muhammad analyzed the data to confirm that cultural support is a factor in the college choice process of African American students. The network of cultural support extended from the students' home and surrounding community to the school community. Muhammad found that African American students'

understanding of their school counselors' expectations for their future education positively influenced college predisposition.

School counselors fill a wide range of roles when helping minority students prepare for college. Farmer-Hinton and Adams (2006) explored the roles and responsibilities of counselors whose task is to prepare first-generation, college-bound Black students for college. In the spring of 2002, all five school counselors at Glenn Hills College Preparatory Charter High School (GHCP) were recruited and interviewed about their roles in the school. Interviews were conducted and included discussion of the school's mission, student-counselor relations, school history and organization, student academics, student social support, and college preparatory activities. The interviews were audio taped and transcribed.

The transcription revealed two themes relevant to the role school counselors fill in order to help Black students prepare for college. The first theme revealed how GHCP school counselors conveyed norms and expectations about college access. The second theme conveyed the range of social support and resources GHCP school counselors provided for student orientation toward becoming college-bound. GHCP school counselors provided assistance on high school courses, personal problems, and postsecondary plans. The data reported that school counselors were responsible for creating new norms of college access for a student population with limited experience and knowledge about the option of postsecondary education. Their role was to convince the students, who were predominantly first-generation college-bound students, that they could

attend college. GHCP school counselors provided an array of resources and support (Farmer-Hinton & Adams, 2006).

Parents

Parent involvement in education helps to foster college preparation for their high school students (Gross, 1988). One form of involvement is parent participation in parent-teacher organizations (Gross). Parent participation in parent-teacher meetings and taking their students to visit college campuses and ask questions about the colleges they visit are other forms of involvement (Lowery & Associates, 1982).

Cagampang (1992) studied the role that parents have in college readiness. The study collected data from 10 focus groups on the predisposition stage, on college choice among first-generation college aspirants, and on parents' information rather than their education as a predictor of college readiness. Participants were selected using a nationally representative sample of eighth graders and their parents from a National Education Longitudinal Study of 1998. In the analysis, school initiated parent information activities contributed significantly to students' readiness for college. The analysis also revealed that parents' information, whether obtained from their own activities or from school initiated programs, contributed significantly to students' academic performance. Large disparities in access to information were associated with race and parents' level of education.

Attempts have been made to address this disparity in access to information among parents. Hollie-Major (2003) sought to assist parents in discovering their common needs and to organize and act on those needs through enhanced and shared information in a workshop format. Hollie-Major gathered data through parent surveys, orientation workshops, and focus groups. The study was implemented in three action research cycles. In the first cycle, parent needs and concerns were identified. The primary findings were the need for financial aid, information sessions, preparation/time, responsive school representatives, and community involvement. During the second cycle, parent workshops were designed based upon the identified needs and concerns. Five workshops were presented for parents as follows: Developmental Stages/Communication, Getting Ready for College/High School Preparation, Getting into College/The Admission Process, Paying for College/Financial Aid, and Getting through College/Goal Setting. In the final cycle, parent focus groups were conducted to explore the experiences of parents of first-generation, college-bound students and their involvement in the college preparation process.

In 2004, Allen addressed the disparity by exploring the experience of high school juniors and their parents as they engaged in the college search process. The qualitative study employed a focus group method. There were two types of focus groups: one group of prospective college students and one group of parents of those prospective college students. Focus groups were conducted in November 2003. There were three focus groups consisting of six prospective

college students in each group and three focus groups with the parents of the prospective college students. The focus groups were conducted at three locations in a western state. Students and parents discussed future plans for college, college preparation while in high school, college entrance exams, pressure to do well in school, and needs in regards to the college search and selection process. Allen coded that data from transcripts of the focus groups. Three primary themes emerged: preparation for college, selection process, and expectations of college. The study found that experiences differed significantly between rural and larger communities.

College Admissions and Recruiting Staff

College admissions and recruiting staff serve as advocates for students making the transition from high school to college (Komives, Woodard, & Associates, 2003; Lowery & Associates, 1982). They assist students in making wise choices based on accurate information and sound advice. College admissions counselors and high school guidance counselors perform complementary functions so collaboration between them is critical (Lowery & Associates). College admissions and recruiting staff help to educate high school students about opportunities available on their college campuses. Remaining informed and current is a task that requires constant attention of admissions and recruiting staff. They also need to be knowledgeable about the career development process in order to assist students in making decisions that can lead to positive academic and career decisions (Komives et al., 2003)

Lowery and Associates suggested that college admissions staff should visit high schools and need to keep abreast of changes at the high school level. When visiting the high schools, college admissions staff have a role of informing high school counselors of new programs at the college and other changes. Hoover (2008) shared that many admissions representatives leave their campuses for several weeks during the academic year. During this time, they travel to high schools near and far to meet with prospective applicants and some who have already applied to their institutions. Admissions representatives have two distinct jobs while traveling to high schools, college counseling and sales. While acting as a college counselor, the representatives talk with students and help them think about their goals and whether their college is the best fit for their educational endeavors. As a salesmen, admissions representatives gather as much knowledge as possible about their college. They learn information about college majors, financial aid, scholarships, and campus life. The admissions representatives try to sell their college campus to prospective applicants who are seeking information and trying to make choices. Hoover also shared that it is important to build positive relationships with prospective students.

Visits to high schools are not the only way that admissions and recruiting staff disseminate information about their college campuses to prospective students. Many students and parents are seeking information from the Web (Dysart, 2008; Hoover, 2008). Admissions offices spend 23% of their budgets on in-person recruiting and twice as much on Web-based tools (Hoover). An

example of an online tool is CollegeWeekLive at www.collegeweeklive.com. This Web-based recruiting tactic brings students and college recruiters together for informative seminars, one-on-one chats, and virtual tours of campuses. The technology allows colleges and universities to brand its booth in a 3-D virtual exhibition hall with school logos, recruiting slogans, videos, podcasts, brochures, and applications (Dysart).

The Collaboration of Secondary and Postsecondary Institutions
High School Curriculum and College Admissions Requirements

Historically, leaders of higher education institutions set their own admissions requirements with no involvement by state agencies. Minimum college admissions requirements have varied widely both within states and across the nation (American Association of State Colleges and Universities [AASCU], n.d.). The AASCU reports there is little consensus between K-12 education and higher education in the courses that students should take in high school. There is also a great deal of variation among high school graduation requirements across the United States. For example, some states do not even require Algebra I, while others require Algebra I, Geometry, Algebra II, and Trigonometry (AASCU). The AASCU believes it is significant that for the most part, state high school graduation requirements were developed when college-going was not the norm for most students. High school graduation requirements were set independent of college admissions requirements. States have been increasing graduation requirements over the past decades, but with a concern

that requirements that are too stringent could lead to increased high school dropout rates. The nation's schools are moving in the right direction, but policymakers and education leaders have not yet reached consensus in terms of the numbers and topics of courses that high schools need to provide so that graduates will be prepared for college (AASCU).

Critics both inside and outside of the education profession ponder why six percent of the remediation population consists of students who attend college immediately after high school and are still not prepared for their 13th year (Oudenhoven, 2002). According to Oudenhoven, the most significant factor may be that these students did not participate in a college preparatory curriculum in high school, a factor highly correlated with college readiness. American high schools typically track students into rigorous college preparation courses or into vocational courses with less rigorous curriculum, while others are placed into a general track (Achieve, Inc. & NGA, 2005). *An Action Agenda for Improving America's High Schools* supported the recommendation that all students need to learn the rigorous content that is traditionally reserved for college bound students. They also suggested that governors, state education officials, and college administrators can assist with preparing students for college by helping to provide opportunities for students to take college level classes and earn college credit for them while they are still in high school. The report went on to say that governors, legislators, and state boards of education should require all students to complete a common set of high school courses that will provide students with

the skills and knowledge they need for college and work. At a minimum, course requirements for high school graduation should include four years of English and four years of mathematics that teaches competencies in Algebra I, Geometry, Algebra II, Data Analysis, and Statistics. If schools set high expectations for their students, it can make a difference in the academic achievements of the students. In addition to raising the standards of courses required for all students, the report suggested that high school graduation requirements and tests should be connected to the expectations of colleges and employers. Colleges and employers need to honor and reward student achievement through their admissions, placement, and hiring policies (Achieve, Inc. & NGA).

Consequently, students who have high expectations for the future often find themselves to be the product of inadequate coursework in high school. In a speech entitled, *Ahead of the Curve*, U.S. Department of Education Secretary Margaret Spellings addressed the National Governors Association's National Education Summit on High Schools (NESHS) in 2005 with grave concern. She cited that only five states in the nation required high school students to complete four years of mathematics and only six states required high school students to complete four years of English. Forty percent of high schools did not offer advanced placement courses (NGA, n.d.). The percentage of high school students who took a course load that prepared them for college was as low as 34% and the college-ready rate was below 50% in every state in the nation (NESHS, 2005). Adelman (2005) reported that 44% of postsecondary students

who enrolled at community colleges in the 1990s did not reach Algebra II in high school. Eleven percent of postsecondary students who entered four-year institutions did not reach Algebra II in high school. Fifty-five percent of this population of students took two or more remedial courses in college (Adelman). Adelman suggested that cooperative and outreach programs can move more high school students to the level of Algebra II and beyond in mathematics. There is also consensus that students should take mathematics during their senior year in high school, preferably a course beyond Algebra II. This would signal a major change in the academic momentum of high school graduates entering postsecondary institutions and substantially reduce remediation rates (Adelman; Achieve, Inc., 2004).

Greene and Forster (2003) defined being college-ready as the ability to pass three hurdles. First, students must graduate from high school. Second, students must have taken certain courses in high school that colleges require for the attainment of necessary skills. Third, students must demonstrate basic literacy skills. The gap between what high schools require and what four-year colleges require before they can consider reviewing a student's application is causing many students to graduate from high school unqualified to apply for college. More than half of the students who do graduate from high school do not meet the minimal requirements to apply to a four-year college (Greene & Forster). Four-year institutions are not the only colleges with expectations. Large numbers of students are also underprepared to attend community colleges

despite the open door admissions policy. A study conducted in Maryland in 1998 found that even among students who completed college preparation courses in high school, 40% of those students who enrolled in a community college needed remediation (Oudenhoven, 2002). Clearly, there is inconsistency between what high schools consider adequate preparation in English and mathematics and in what colleges require. *An Action Agenda for Improving America's High Schools* calls for upgrading the requirements to earn a high school diploma and changing the structure of high schools. It also supports holding high schools and postsecondary institutions accountable for results (Achieve, Inc. & NGA, 2005).

In an effort to address the lack of alignment between high school graduation requirements and college admissions requirements, Achieve, Inc. (2004) launched a review of high school course requirements in all 50 states and the District of Columbia. In the spring of 2004, data on course requirements for earning a diploma was collected from every state education agency. The goal was to compare those requirements with what students need to be successful in college or the workplace. The analysis revealed that no state required every student to take a college or work prep curriculum in order to earn a diploma. A student could take all of the required courses to graduate, yet leave high school underprepared for college and work. In English, 36 states and the District of Columbia required all students to take at least four English courses. Six states required three years of English. Only six states- Alabama, Arkansas, Kentucky, North Carolina, Texas, and West Virginia- specified four years of grade level

English. In mathematics, only thirteen states required two years of mathematics. Twenty-four states and the District of Columbia required three years. Five states: Alabama, Arkansas, Mississippi, South Carolina, and West Virginia required all students to take four courses of mathematics. Nearly half, twenty-two states, did not specify which mathematics courses students need to take. Achieve Inc. reported that no state required all of its graduates to take courses that reflect the real world demands of college and work. They suggested that in order to be prepared, every high school student should be required to take four years of rigorous mathematics, including Algebra I, Geometry, and Algebra II, and four years of grade level English. Problems of inadequate preparation and weak postsecondary performance cannot be addressed unless the expectations problem is addressed as well (Achieve, Inc.).

In addition to course requirements, it is important to consider the alignment between what is measured by high school exams and the standards required in entry-level college courses. Standards for Success in 2003 was a study conducted to determine the degree of alignment that existed between high school exams and standards for success in entry-level university courses. The study conducted an item-by-item analysis of state high school exams in English and mathematics. Exams were represented from 20 different states. A total of 66 exams were analyzed. Thirty-five of the exams analyzed were in English and language arts and 31 were in mathematics (Conley, 2003; Hebel, 2003). A group of raters assigned each exam a rating of A, B, or C. The trained raters were

university faculty who teach entry level courses and high school teachers who work with college bound students. An A rating was given to exams that were well aligned with college standards. A rating of B was assigned to exams that were inconsistently aligned. A rating of C indicated that an exam was not well aligned.

The major finding of the study was that state high school exams have an inconsistent relationship to the knowledge and skills necessary for college success. Only three of the 35 exams in English and language arts received an A rating. None of the 31 exams in mathematics received an A rating (Hebel, 2003). State assessment directors pointed out that the tests were not designed with the intention to measure college-readiness. One purpose of this study was to bring attention to this little known fact. Although states have raised academic standards, they have not fully considered how these standards contribute to improved student success in college (Conley, 2003). The study recommended that state tests should be revised to include items relative to college bound students. It also recommended that states should work closely with representatives from postsecondary education whenever state curriculum content and assessment standards are revised. The collaboration will help promote greater alignment between secondary requirements and postsecondary expectations (Conley, 2003; Hebel). The need for collaboration between high schools and colleges had also been addressed by the National Governors Association. State K-12 and postsecondary education leaders must jointly

develop tests that are more suitable to provide information about how well students are prepared for college and work (Achieve, Inc. & NGA, 2005).

College students can give additional insight regarding courses they took in high school and how well they feel prepared for college. Hartman and Feir (2000) surveyed college seniors majoring in business and engineering. The students were asked to rate how well their high school prepared them for college. The study was an exploratory study to identify elements of high school programs the students perceived as contributing the most to their college experience and those that could be improved. A two-page survey was mailed out to 1,139 students in the spring of 1995 who came to Penn State in the fall of 1991, were initially enrolled in the College of Business or Engineering, and remained at the university four years later. The survey consisted of six parts that were designed to cover the major relevant components of the students' high school career in preparing them for a college major. The parts included student background information, academic program, teaching/learning practices, support structures and extracurricular activities, overall assessment, and special high school characteristics. Mathematics was the academic component of the high school preparation that received the highest rating. The support structure of career guidance received low ratings. This indicated a dissatisfaction with high school guidance and academic personnel to provide high school students with appropriate or adequate assistance for making career decisions. A common theme of the results was a weakness in the relationship that high schools have

with higher education institutions and with business and industry. Hartman and Feir proposed in their study that using a quality framework, which views education as an overall system where high schools and colleges can work together, improves the quality of students and increases their ability to succeed in college. The transition to college can be viewed as a customer-supplier relationship. The customer (the college or university) works with the supplier (the high school) to specify what the requirements (skill levels) are for the inputs (students) that are provided and to inform suppliers how well they are currently meeting these requirements (feedback loop).

In a survey conducted by Peter D. Hart Research Associates/Public Opinion Strategies (2005), students, faculty members, and employers were surveyed. Interviews were conducted with 1,487 public high school graduates from classes of 2002, 2003, and 2004 during December 2004. Four hundred employers and 300 college faculty who teach first year students at two and four-year colleges were also interviewed from December 2004-January 2005. The study examined student, employer, and faculty opinions about the preparation of high school students for college and the workplace. The quality of preparation students received in high school was closely associated with high expectations and solid academic standards. Only 24% of the high school graduates surveyed felt that they had faced high academic expectations and that they were significantly challenged in high school. The number and difficulty level of core courses taken in high school was strongly associated with how prepared high

school graduates feel today. College students who took Algebra II or other high level mathematics courses in high school were twice as likely to feel prepared for the mathematics they were expected to take in college. Sixty percent of students who took Algebra II or other high level mathematics felt prepared compared to the 26% of students who did not take Algebra II or other high level mathematics courses. Fifty-six percent of the students surveyed said they left high school feeling unprepared for the work and study habits expected in college.

High School Programs and the Effect on College Readiness

This section will share a few research studies involving programs implemented in high schools to foster college readiness. The role of Technical Preparation (Tech Prep) programs on student preparation for college has been the focus of research over the past several years. In 1998, Eddington examined the relationship between Tech Prep programs and students' preparation to attend post-secondary schools with the appropriate basic skills. Tech Prep programs are a high school career path option that students can choose that integrates vocational and academic courses (Eddington). The Tech Prep programs that were included in the study integrated vocational courses, applied academics in the area of English and mathematics, and had articulation agreements between the high school and the community college to encourage post-secondary education. The study was designed to identify factors that had the greatest ability to predict college readiness skills in the areas of English and mathematics. The sample included 183 graduating high school seniors. Some of the participants

were enrolled in Tech Prep high schools and some were not enrolled in Tech Prep high schools. A t-test and ANOVAs were used to analyze integrated vocational and academic courses, applied academics in the area of English and mathematics, and articulation agreements between the high school and the community college. Multiple regression analysis identified a correlation between female students, mother having some higher education, higher level of mathematics completed, recency of last mathematics class, and membership in one of the non-Tech Prep schools with higher mathematics achievement. A higher level of mathematics completed in high school was found to be a predictor of higher mathematics achievement.

Academic resources partnered with Tech Prep programs can enhance college readiness. Yoo (2001) examined the relationship between Tech Prep participation and high school academic resources and college readiness in two Tech Prep consortia. One consortia was in Illinois and the other in Texas. The research method was a mixed method design, including ex post facto casual comparative design. Quantitative methods were used to examine the context of remedial education policies in two community colleges and then to create college readiness variables. Quantitative methods were used to address the theoretical framework of this study. The sample included high school graduates who took placement tests in two community colleges. The participants were divided into Tech Prep and non-Tech Prep participants. College readiness in mathematics and English was determined by general education requirements and the remedial

education policies. A difference was found in college readiness between transfer programs and career and technical programs. There was no difference found in college readiness in mathematics between Tech Prep and non-Tech Prep participants in both consortia. There was no difference in college readiness in English between Tech Prep and non-Tech Prep participants in both consortia. The study defined academic resources as composites of student exposure to different course work and performance in those courses. In both consortia, mathematics and science academic resources were related to college readiness in mathematics. Yoo concluded with a recommendation to increase academic resources of Tech Prep participants to better prepare them for a college.

In 2005, Ball compared the academic achievement of Tech Prep students to non-Tech Prep students attending Idaho State University College of Technology. The results of the study indicated that college students who had been participants in high school Career and Technical Education programs with established Tech Prep agreements were better prepared to succeed in college. These students earned a higher first-year mean grade point average and recorded higher COMPASS mathematics scores. A significantly higher percentage of Tech Prep students qualified to begin college in non-remedial English and mathematics courses.

Finally, the impact of an A+ Program on student preparation, performance, and persistence at a rural community college in southwest Missouri was studied by Marble (2006). This study was a quantitative, group comparison study using

an ex post facto examination of the effects of the Missouri A+ Program. The A+ Program required participating schools to improve the quality of curriculum by eliminating the general education course track in exchange for a rigorous program of academic and vocational-technical coursework. The goal was to academically prepare students for success in postsecondary education and in the workplace. The program also offered scholarship incentives that paid tuition and fees of any Missouri public community college or vocational-technical school that A+ program completers chose to attend. Preparation was measured by the results of the college's entrance and placement testing program. Performance was measured by the first semester grade point averages. Persistence was indicated by freshmen fall-to-spring re-enrollment rates. The population of the study consisted of 1,395 students for 122 Missouri high schools who were first-time, full-time, direct entry students to the community college. Three separate groups of comparisons were made. First A+ students and non-A+ students were compared. Second, A+ schools and non-A+ schools were compared. Last, A+ students from A+ schools were compared with non-A+ students from non-A+ schools. Logistic Regression Analysis and ANOVA were used to analyze the 27 null hypotheses that were derived from the research questions. The findings indicate that A+ students outpaced non-A+ students on preparation, performance, and persistence.

The above studies indicate that high school programs such as Tech Prep and A+ schools have a positive impact on the college preparation of high school students.

Collaboration Between Secondary and Postsecondary Educators

Studies have also been conducted that report findings about collaboration efforts between secondary and postsecondary institutions. Many early intervention programs exist in the United States. Laguardia (1995, 1998) conducted a study which focused on comprehensive partnerships between K-12 schools and postsecondary institutions that were created to improve college academic preparation, college enrollment, and postsecondary success of minority and disadvantaged students. The partnerships examined in this study were programs in the United States that had been in existence for more than five years. Several resources were used to identify and select partnerships for the study. Five national directories of partnerships were used to determine the universe of desired partnerships. An ERIC search and a database search by the National Center for the Study of Partnerships at Syracuse University were also conducted to identify partnerships that met the criteria for the study.

Twenty-one partnerships were identified as meeting the criteria for the study. The participants were surveyed with a 12-item questionnaire that inquired about their structural characteristics, funding, success in achieving goals and objectives, and collection of data to measure success. Responses were analyzed to determine the degree to which these partnerships had been successful in

achieving their goals and to identify the areas in which they experienced success. Two of the most successful partnerships were selected for case studies. These partnerships were visited to collect information regarding the factors that affected their success and to interview five key participants who represented schools and postsecondary institutions in each of the partnerships.

Analysis of the surveys, partnership materials, and the interviews provided a comprehensive portrait of each of the partnerships. The survey results indicated that a majority of the partnerships considered themselves somewhat successful in achieving their goals, and have improved high school preparation and college enrollments. The most significant characteristics for success were the existence of leadership capable of negotiating change within several institutions with different organizational cultures and the need to recognize that partnerships are unique organizations with some of the same peculiarities, structures and needs as other organizations.

The need for leadership capable of implementing change warrants further investigation into the perceptions that college students have about their college preparation experiences. The perceptions that students share can be used by leadership at all institutional levels to collaborate and implement change.

Student Perceptions on College Preparation

A limited number of studies have been published that share student perceptions on their college preparation and the transition to college. This section will review some of these studies. A study conducted by Terenzini (1993).

Terenzini facilitated a series of cross-sectional focus group interviews with 132 diverse and new students entering either a community college; a liberal arts college; an urban, commuter, comprehensive university; or a larger research university. Data were gathered in interviews with groups of varying sizes from one to eight students. Four institutions were selected in order to provide a variety of student characteristics such as race/ethnicity, gender, age, and socioeconomic class. The institutions also varied in mission, size, curricular emphasis, type, and presence/absence of residential facilities.

The contact persons at each institution were asked to form a specified number of groups consisting of students with characteristics that were typical of the overall entering student population on each campus. Some groups were homogeneous, while others were heterogeneous. The protocol for the interviews was purposefully open-ended and broadly structured to prompt students for information about their backgrounds and decisions to go to college, their expectations versus the reality of college, the significant people and events in their transition, selected characteristics of the transition itself, and the general effects students felt college was having on them. Interviews were conducted and transcribed by a seven person research team. Individual and group analyses of the interview transcripts were conducted and themes were identified that ran through each interview session and through the set of interviews for each campus.

The results indicated that the transition from high school to college is a complex phenomenon. The nature and dynamics of the transition process varied according to the student's social, family, and educational background; personality; educational and occupational orientations and aspirations; the nature and mission of the institution attended; the kinds of peers, faculty, and staff members encountered; the purpose and nature of those encounters, and the interactions of all these variables. The study identified the human relationships, experiences, and themes that were characteristic of the processes by which students become or fail to become members of the academic and social communities on the college campus. There are a variety of factors that play a significant role in college preparation. Some of these factors will now be presented.

Family Income Level

Family income level can also play a role in high school students' perspectives of college preparation. King (1996) investigated the attitudes and experiences that distinguish the low-income high school students who decide to attend college from those who do not chose to attend college. Data were gathered from 900 seniors in the class of 1995 who took the Scholastic Aptitude Test (SAT) through a telephone survey. Data included gender, race, national language, family income, parents' educational level, parents' occupations, SAT scores, post-high school plans, sources of college and financing information, academic self-confidence, degree aspiration, influences on college decision-

making, preferred college attributes, college preparation, sources of and plans for financing college, and college acceptances. The primary sample was 300 of those students who reported a family income under \$20,000. In this small group, 66% reported that they planned to attend a four-year college or university after high school. The study found that rigorous high school courses, high expectations of all students, and availability of college counseling and information were important elements in the decision to attend college.

At-Risk Students

The perceptions of at-risk students add additional insight into college preparation experiences. In 2001, Galligan interviewed first semester college students to examine the needs and beliefs of at-risk students as they transitioned from urban high schools to a rural community college. Participants in the study were of traditional age, 18 to 23, and were enrolled in two or more developmental courses during their first semester of college. The study focused on issues concerning developmental education, retention in college, and human development during the transition from adolescence to adulthood. Students who were enrolled in college for their first semester were invited to participate in a series of individual taped interviews during their first months of college enrollment. Many of these students were first generation students. Most of them took 4 ½ to 5 years to complete high school. Four dominant themes emerged from Galligan's study. First, at-risk students relied on the advice of others to make decisions. Counselors, advisors, and teachers are examples of the others

upon which the at-risk students relied. Second, at-risk students did not take personal responsibility for their academic performance. Third, when these urban students enrolled in a rural community college, they were not prepared for their loss of anonymity. Fourth, successful students were those students who demonstrated mature coping skills and were growing in competence and autonomy (Galligan).

First-Year College Students

Brady and Allingham (2005) examined the perceptions of preparedness for postsecondary education of a group of first-year college students in Ontario. Participants were 272 university students who were enrolled in their first year of a four or five-year concurrent teacher education program. The participants consisted of both prospective elementary and secondary teachers. The students represented two distinct groups: entrants who had completed the old five-year Ontario Academic Credit system, and those who were admitted to the university after completing the new four-year program. Participants responded to a questionnaire which inquired about the degree to which they felt that their final year of secondary school had adequately prepared them for the transition to university level studies.

The questionnaire had three parts. The first part asked for demographic information. The second section examine students' perceptions regarding the degree to which they believed their final year of high school adequately prepared them for the challenges inherent to the transition to college. The third section was

an open-ended response item that invited participants to share anything else about the transition from high school to university they would like to tell the researchers. A t-test was used to determine whether or not there was a significant difference in the degree to which either sample perceived that their final year of secondary school had prepared them for university-level studies. Qualitative methods were used to analyze the responses to the open-ended question. Respondents' comments were analyzed and as themes emerged, were coded with descriptive codes. Data analysis did not reveal any significant differences between the two groups in terms of academic achievement. However, the students who completed the new four-year program reported feeling less prepared overall for the challenges of the university, especially in terms of the acquisition of specific academic skills, as well as adjustment to the social aspect of the university.

First-Generation College Students

Byrd and MacDonald (2005) explored the nature of college readiness from the perspectives of first-generation college students. The eight participants of this study had transferred to a university from a community college, were older than 25, and were of the first generation in their families to attend college. The participants were undergraduate students in a liberal arts program at a small urban university located in the Pacific Northwest. The researchers explored four questions: (a) What does it mean to be ready for college? (b) What do successful nontraditional students bring to their college experiences that contribute to their

success? (c) How can nontraditional learners be seen to have strengths and not just deficits? and (d) How are students prepared or not prepared for college in ways not measured by standardized tests?

The researchers conducted 30 to 60 minute interviews with individual participants to gather data about their backgrounds and experiences as college students. Each interview followed the same structured protocol in order to increase reliability. Following each interview, the interviewer wrote a reflective journal entry, noting emerging themes and highlights from the interview. Each interview was transcribed and all transcripts were coded. Participants were invited to critique field notes and tape recordings. Ten themes emerged and were organized into three categories: skills and abilities perceived as important for college readiness, background factors and life experiences that contribute to college readiness, and nontraditional student self-concept. Participants in this study indicated that skills in time-management, the ability to apply oneself and focus on a goal, and skills for advocating for oneself as a learner are essential for college readiness.

High School Students

Researchers have also sought the perspectives of students who have just begun their high school years of study. Gibbons, Borders, Wiles, Stephan, and Davis (2006) surveyed a group of ninth graders in North Carolina to determine their current educational and career plans, including the factors they were considering and the resources they were using in their planning, as well as the

information and resources they desired. Ninth graders in North Carolina were chosen for this study because they have had some career and college planning information in middle school and the ninth grade year is a critical time in making decisions about high school coursework relevant to college. Parents were also surveyed regarding their involvement with their ninth graders in gaining career and college information as well as concerns about their child's future success.

All 117 school districts in North Carolina were included in a stratified sample. Every 14th district was identified for the study. A total of eight different districts were in the sample population. None of the eight were large, urban districts. A ninth district which represented one of the largest school districts in the state was added to the sample. Seven of the nine school districts agreed to participate in the study. One school from each district was then selected for the research study. Each school was asked to survey between 85 and 115 ninth grade students selected from physical education or homeroom classes. There were a total of 222 usable surveys completed and returned. The student survey instrument included 101 questions related to career and college planning. The parent survey form consisted of seven questions.

Chi-squares and one-way ANOVAs were calculated to determine differences ethnicity, gender, and parent education group for predetermined questions of interest. Most students reported being enrolled in a college/university preparation track in high school. The majority said they planned to attend a four-year college and also thought their parents wanted them

attend a four-year college. Most students also reported that grades were important to them and to their parents. Respondents tended to rate themselves academically as average or above in comparison to their peers. Most participants listed a career interest that required a four-year college degree and they also indicated they had been interested in this career choice for 2 or more years.

The quality of programs, cost, and financial aid opportunities were rated most important when choosing a college. Parents reported finances and grades as being the main obstacles that would prevent their student from continuing his or her education. Finances, making good choices about a career and college, maintaining motivation, focus, and confidence, being able to accomplish the goals were the biggest concerns reported by parents. Fewer parents reported that they provided encouragement, took their child to visit a college, research schools on the Internet, and created a college savings plan.

All of the above factors have an impact on the college preparation of high school students. High school teachers, high school counselors, parents, and admissions and recruiting staff also play a significant role in college readiness (Sokol, 2000). There is a lack of research related to the role that these factors play in college preparation. Therefore, further investigation is needed.

College Preparation Questionnaire

The roles that high school teachers, high school guidance counselors, parents, and students play in preparing for college were examined by Sokol (2000). Data were analyzed and differences were compared by race, gender,

and type of English class in which students were enrolled. Race, gender, and type of English class served as the independent variables. The roles that high school teachers, high school guidance counselors, parents, and students play in college preparation were the dependent variables. Participants were freshmen enrolled in remedial English or college level English at one community college and one four-year college during the fall semester of 1999. The community college was located in a rural section of a mid-Atlantic state. The four-year college was also located in a rural section of the same mid-Atlantic state.

There were 446 participants who completed a 60 item survey with questions that investigated the role of high school teachers, high school guidance counselors, parents, and self in college preparation. Three hundred and eighteen of the participants were enrolled in the four-year college. One hundred and twenty-five of the participants were enrolled in the community college. The survey instrument was the College Preparation Questionnaire which was discussed earlier in this chapter. The questionnaire was administered between the second week of November and the first week of December 1999. Sokol selected this timeframe because it was far enough into the fall semester for teachers to have established expectations for the classes. Also, students who were not serious about getting a college education would have had time to drop out of the courses. Since the survey was administered in the fall, Sokol felt that the students would answer the questionnaire with some degree of accuracy when recalling their recent high school experiences.

Data were analyzed by calculating the mean scores for each of the dependent and independent variables and by conducting ANOVAs for each group. The results revealed significant differences by race, gender, type of class and interactions between the effects. The data provided an opportunity to make recommendations to high school administrators and local school boards concerning ways to better prepare high school students for college (Sokol, 2000).

North Carolina Education System

High School Graduation Requirements

Measuring Up, the national report card for higher education provides the public and policymakers with information to assess and improve postsecondary education in each state. North Carolina is a top performing state in the percentage of high school students taking upper level mathematics courses and this has increased substantially over the past decade (Callan, 2004, 2006). Since the early 1990s, the number of 9th to 12th graders enrolled in at least one upper level math course has improved from 40% to 72% (Callan, 2006). This performance may be a reflection on expectations that the Public Schools of North Carolina have set in their high school graduation requirements. The K-12 public school system of North Carolina requires all students to meet specific requirements in order to receive a high school diploma. The requirements are applied to all students to help ensure that all graduates have met certain standards and are prepared for higher education and for work as adults (Public Schools of North Carolina, n.d.). The *North Carolina Standard Course of Study*

requires ninth graders who entered high school for the first time in the 2000-2001 school year or later to select and complete one of four courses of study before they graduate. Students must meet three requirements: total course credits, select a course of study, and successfully pass standardized tests. The four courses of study are: Career Preparation (Career Prep), College Technical Preparation (College Tech Prep), College/University Preparation (College/University Prep), and Occupational Course of Study. Career Prep, College Tech Prep, and College/University Prep are designed to prepare students going directly to work or to a community college, technical college, or four-year college or university. The Occupational Course of Study is for students with disabilities who have an Individualized Educational Plan. Educators hope this will spur students to consider more carefully their future opportunities and to plan accordingly (Public Schools of North Carolina).

University of North Carolina Minimum Course Requirements

Administrators at North Carolina institutions of higher education are also working to encourage high school students to plan for their future. The University of North Carolina is a 16 campus system. The system publishes the minimum courses that are required to enter into any of the 16 institutions. The minimum course requirements effective fall 2006 require 6 units in language, including 4 units of English. Four units of mathematics, in any of the following combinations are also required: Algebra I and II, Geometry, and 1 unit beyond Algebra II; Algebra I and II, and 2 units beyond Algebra II; or Integrated Math I, II, and III,

and 1 unit beyond Integrated Math III. Three course units are required in science including at least 1 unit in Life or Biological Science, at least 1 unit in Physical Science, and at least 1 laboratory course. Two course units are also required in social studies, including 1 unit in U.S. History (The University of North Carolina, n.d.).

North Carolina Community College System Admissions Requirements

The North Carolina Community College System does not have minimum course requirements. Admission into institutions in this system is open to any individual who is a high school graduate or at least 18 years of age. Students are admitted regardless of race, national origin, religion, sex, handicap, age or political affiliation. Students only submit a high school transcript and take appropriate placement tests (NCCCS, Division of Business & Finance, 2006).

In North Carolina, 48% of college students are enrolled in community colleges, 36% are enrolled in public four-year colleges, and 16% are enrolled in private four-year colleges (Callan, 2004). From 1999 to 2004, the North Carolina Community College System grew from having a total of 144,283 full-time equivalent students to 188,610 full-time equivalent students. This presents a total growth of 30.7% (NCCCS, Division of Business & Finance, 2004).

Enrollment of full-time equivalent students has continued to rise. During the 2006-2007 academic year, there were 193,027 full-time equivalent students enrolled in the North Carolina Community College System (NCCCS, Division of Business & Finance, 2006). Despite requirements that the Public Schools of

North Carolina have set in their high school graduation requirements, many high school graduates are coming to North Carolina community colleges ill prepared. Statistics on the 2001-2002 high school graduating class that enrolled directly in community colleges in North Carolina indicate the following: 27.1% took a developmental English course, 19.3% took a developmental reading course, 41.6% took a developmental mathematics course, and 51.4% took one or more developmental courses (NCCCS, Division of Business & Finance, 2004).

This section has summarized the North Carolina high school enrollment demographics. It has also described high school courses of study, and course requirements for admission to community colleges and four-year institutions. Despite steps to standardize the high school course of study and publish minimum course requirements for admission to higher education institutions, statistics indicate that there are a high percentage of students who must enroll in developmental courses when they enter institutions of higher education in North Carolina (NCCCS, Division of Business & Finance, 2004). The gap that exists between secondary course requirements, postsecondary admissions requirements, and lack of college readiness may be better addressed by investigating students enrolled at North Carolina institutions of higher education. Therefore, the study investigated the perceptions of college freshmen regarding factors that influenced their preparation for college.

Conceptual Framework

Hossler and Gallagher (1987) developed a college choice model that culminated from the work of Jackson (1982) and Litten (1982). Jackson and Litten each constructed a three phase model of college choice. In phase one, both Jackson and Litten describe a phase in which students begin to have a desire to attend college. Jackson describes this desire as a preference or attitude toward college enrollment. Litten proposes that the second phase includes the investigation of potential colleges and universities. Jackson adds that this second phase also involves exclusion. Students begin to form a choice set and identify institutions for which they would like to gather more information. Students evaluate the choice set during the third phase and select an institution to enter (Jackson). Litten adds that the third phase incorporates the application process, admission, and enrollment. The three stage model developed by Hossler and Gallagher consists of the predisposition phase, the search phase, and the choice phase (see Table 1). At each stage of the college choice model, individual and organizational factors interact to produce outcomes. The outcomes influence the student college choice process.

Predisposition Phase

The first phase, predisposition, is a developmental stage where students determine if they want to pursue education beyond high school. Factors that influence students during this phase are: student characteristics, significant others, and educational activities. Organizational factors that influence students

Table 1

A Three Phase Model of College Choice

Model Dimensions	Influential Factors		Student Outcomes
	Individual Factors	Organizational Factors	
Predisposition (Phase One)	<ul style="list-style-type: none"> • Student characteristics • Significant others • Educational activities 	<ul style="list-style-type: none"> • School characteristics 	Search for: <ul style="list-style-type: none"> a. college option b. other option
Search (Phase two)	<ul style="list-style-type: none"> • Student preliminary college values • Student search activities 	<ul style="list-style-type: none"> • College and university search activities (search for students) 	<ul style="list-style-type: none"> a. choice set b. other options
Choice (Phase three)	<ul style="list-style-type: none"> • Choice set 	<ul style="list-style-type: none"> • College and university courtship activities 	<ul style="list-style-type: none"> • choice

Note. Hossler and Gallagher (1987).

are school characteristics. All of these factors interact with individual student characteristics and influence college choice. Hossler and Gallagher share several background characteristics that appear to be positively correlated with college attendance. These characteristics are: socioeconomic status, student ability, the attitudes of parents and peers, the quality of high school curricula, and the proximity of the high school to a college campus (Hossler & Gallagher, 1987).

Search Phase

Students begin to gather information about colleges during the search phase. The phase may entail searching for the attribute values which characterize the college choices and identifying the right attributes to consider. Interaction between the student and the institutions of higher education begin to transpire during the search phase. Student preliminary college values and student search activities are individual influential factors. College and university search activities are organizational influential factors. Hossler and Gallagher share that at the same time students are searching for institutions, the institutions are also searching for the students. There is a correlation between student ability level and the amount of time and efficiency in which students conduct their college search. Students with higher ability levels tend to conduct more sophisticated searches. Minority students, students from low-income families, and students whose parents have less education tend to conduct searches that take longer and are less efficient. These students are more likely to depend on high school counselors for assistance. The interaction of individual

and organizational factors equip students with a college choice set. The choice set is the group of institutions the student shows interest in attending and will apply. Some students make the decision not to attend college during this phase (Hossler & Gallagher, 1987).

Choice Phase

In the final phase, choice, students evaluate their choice set and narrow their choice to a specific institution in which to attend. The choice set and the student's interaction with the institutions are the influential factors in this phase. Student perception of the quality of the institution appears to be a factor in choosing a specific institution. The amount of financial aid that a student can receive also plays a role in narrowing the choice to a specific institution. The end result of the interactions of these factors during the choice phase is that the student selects an institution to attend (Hossler & Gallagher, 1987).

The college choice model developed by Hossler and Gallagher (1987) will be used as the theoretical framework for this research study. The roles of high school teachers, high school counselors, parents, and college admissions and recruiting staff are influential factors in the college preparation of high school students (Sokol, 2000). These factors are also individual and organizational influential factors that Hossler and Gallagher proposed to be significant in the college choice model and a student's decision to attend college (see Table 2).

According to Hossler and Gallagher (1987), there are individual and organizational factors that influence students in their college choice process.

Table 2

Factors that Influence the College Preparation of High School Students

Influential Factors	
Individual Factors	Organizational Factors
<ul style="list-style-type: none"> • Student • Parents 	<ul style="list-style-type: none"> • High school teachers • High school counselors • College admissions and recruiting staff

Note. Sokol (2000).

Sokol's (2000) work proposes that parents play a significant role in the college preparation of high school students. Parents are an individual influential factor in the college choice model during the predisposition and search phases.

Organizational factors also play a role in Hossler and Gallagher's college choice model. High school teachers, high school counselors, and college admissions and recruiting staff are organizational factors that influence college choice during the predisposition and search phases. During the search and choice phases, college admissions and recruiting staff also serve as an organizational factor in college choice. High school teachers, high school counselors, parents, and college admissions and recruiting staff all play a significant role in the college choice process (see Table 3).

Summary

There are a large number of American college students enrolled in remedial education (NGA, 2003; Oudenhoven, 2002). The number of students enrolled in remedial education is on the increase (Wirt et al., 2004). Students in remedial education are diverse with many different backgrounds and many different needs, but a majority of these students are minorities (McCabe, 2003; NGA, 2003). Since the population of students who need remediation is so diverse, there is a lack of consensus amongst educators as to what constitutes a remedial student (Oudenhoven). There is also debate over which institutions should teach remedial courses, which re-teach skills that should have been learned in high school (Parsad et al., 2003). It is critical that colleges offer

Table 3

Hossler & Gallagher's Model Incorporating Sokol's Factors

Model Dimensions	Influential Factors		
	Individual Factors	Organizational Factors	Student Outcomes
Predisposition (Phase One)	<ul style="list-style-type: none"> • Student characteristics • Parents • Significant others • Educational activities 	<ul style="list-style-type: none"> • School characteristics • High school teachers • High school counselors 	Search for: <ul style="list-style-type: none"> a. college option b. other option
Search (Phase two)	<ul style="list-style-type: none"> • Student preliminary college values • Student search activities • Parents 	<ul style="list-style-type: none"> • College and university search activities (search for students) • High school teachers • High school counselors • College admissions and recruiting staff 	<ul style="list-style-type: none"> a. choice set b. other options
Choice (Phase three)	<ul style="list-style-type: none"> • Choice set 	<ul style="list-style-type: none"> • College and university courtship activities 	<ul style="list-style-type: none"> • choice

Note. Hossler and Gallagher (1987); Sokol (2000).

remedial education so that students can obtain the skills necessary to compete in society and in the workplace (Day & McCabe, 1997). Community colleges teach a greater number of remedial courses than four-year institutions (Parsad et al.). It is imperative that secondary educators and high school educators collaborate with one another to align expectations so that high school students are adequately prepared to meet the requirements of colleges (Achieve, Inc. & NGA, 2005). High school counselors and college admissions staff must collaborate and help students attain necessary skills and information to increase college preparedness (Lowery & Associates, 1982). Teachers and parents of high school students also play a vital role in preparing students for college (Gross, 1988).

This study compared perceptions about high school preparation experiences of college sophomores enrolled at the community college and at the university level in North Carolina. The study obtained students' perceptions of factors that influenced their college preparedness. The factors were high school teachers, high school counselors, parents, and college admissions and recruiting staff. This study attempted to bridge the gap that exists in the literature because there is a lack of research on student perceptions of their college preparation experiences while still in high school and the roles that high school teachers, high school counselors, parents, and college admissions and recruiting staff play in the college preparation experience.

CHAPTER 3: METHODOLOGY

Type of Research

The purpose of this chapter is to discuss the research design and the procedures used to conduct this study. This was a quantitative study that used a survey research methodology. The College Preparation Questionnaire was used to collect information from participants (see Appendix C). The purpose of this study was to address the perceptions regarding high school preparation experiences of college freshmen enrolled at the community college and at the university level. Although the purpose was to compare perceptions of college freshmen, data collection did not begin until the students were enrolled for their second year of college. Therefore, the participants were sophomores. The research question was: what is the difference in the perceptions about the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff play in preparing high school students for college between community college and university students?

Null Hypotheses

H₀1. There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.

Independent Variables- Questions 2 and 4 of the College Preparation Questionnaire served as the independent variables. These sections

indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the gender of the student.

Dependent Variables- Participant responses to items 7(A-O) on the College Preparation Questionnaire served as the dependent variable.

These items indicated the role that the high school teacher plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college females, community college males, four-year college females, and four-year college males. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀2. There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.

Independent Variables- Questions 3 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the race of the student.

Dependent Variables- Participant responses to items 7(A-O) on the College Preparation Questionnaire served as the dependent variable.

These items indicated the role that the high school teacher plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college American Indian/Alaskan Native students, community college Asian/Asian American students, community college Black/African-American students, community college Hispanic/Latino students, community college Native Hawaiian/Pacific Islander students, community college White/Caucasian students, community college other students, four-year college American Indian/Alaskan Native students, four-year college Asian/Asian American students, four-year college Black/African-American students, four-year college Hispanic/Latino students, four-year college Native Hawaiian/Pacific Islander students, four-year college White/Caucasian students, and four-year college other students. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

- H₀3. There is no statistically significant difference between the course of study of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.

Independent Variables- Questions 1 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the high school course of study of the student.

Dependent Variables- Participant responses to items 7(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the high school teacher plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students whose high school course of study was career prep, community college students whose high school course of study was college tech prep, community college students whose high school course of study was college/university prep, community college students whose high school course of study was occupational prep, four-year college students whose high school course of study was career prep, four-year college students whose high school course of study was college tech prep, four-year college students whose high school course of study was college/university prep, and four-year college students whose high school course of study was occupational prep. One-way analyses of variance (ANOVAs) was conducted to explore the significant difference

between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

- H₀4. There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.

Independent Variables- Questions 4 and 5 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the level of English course placement of the student.

Dependent Variables- Participant responses to items 7(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the high school teacher plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students enrolled in developmental/remedial English, community college students enrolled in curriculum level English, four-year college students enrolled in developmental/remedial English, and four-year college students enrolled in curriculum level English. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis

was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

- H₀5. There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.

Independent Variables- Questions 4 and 6 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the level of mathematics course placement of the student.

Dependent Variables- Participant responses to items 7(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the high school teacher plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students enrolled in developmental/remedial math, community college students enrolled in curriculum level math, four-year college students enrolled in developmental/remedial math, and four-year college students enrolled in curriculum level math. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference

between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

- H₀6. There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college.

Independent Variables- Questions 2 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student is enrolled in a 2-year community college or a 4-year college or university and also indicated the gender of the student.

Dependent Variables- Participant responses to items 8(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the high school counselor plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college females, community college males, four-year college females, and four-year college males. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

- H₀7. There is no statistically significant difference between the race of community college and four-year university students regarding their

perceptions of the role high school counselors played in preparing them for college.

Independent Variables- Questions 3 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the race of the student.

Dependent Variables- Participant responses to items 8(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the high school counselor plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college American Indian/Alaskan Native students, community college Asian/Asian American students, community college Black/African-American students, community college Hispanic/Latino students, community college Native Hawaiian/Pacific Islander students, community college White/Caucasian students, community college other students, four-year college American Indian/Alaskan Native students, four-year college Asian/Asian American students, four-year college Black/African-American students, four-year college Hispanic/Latino students, four-year college Native Hawaiian/Pacific Islander students, four-year college White/Caucasian students, and four-year college other students. One-way analyses of variance (ANOVAs) were conducted to

explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

- H₀8. There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college.

Independent Variables- Questions 1 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the high school course of study of the student.

Dependent Variables- Participant responses to items 8(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the high school counselor plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students whose high school course of study was career prep, community college students whose high school course of study was college tech prep, community college students whose high school course of study was college/university prep, community college students whose high school course of study was occupational prep, four-

year college students whose high school course of study was career prep, four-year college students whose high school course of study was college tech prep, four-year college students whose high school course of study was college/university prep, and four-year college students whose high school course of study was occupational prep. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

- H₀9. There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college.

Independent Variables- Questions 4 and 5 of the College Preparation Questionnaire served as the independent variables. These sections indicate if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the level of English course placement of the student.

Dependent Variables- Participant responses to items 8(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the high school counselor plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students enrolled in developmental/remedial English, community college students enrolled in curriculum level English, four-year college students enrolled in developmental/remedial English, and four-year college students enrolled in curriculum level English. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀10. There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college.

Independent Variables- Questions 4 and 6 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the level of mathematics course placement of the student.

Dependent Variables- Participant responses to items 8(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the high school counselor played in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students enrolled in developmental/remedial math, community college students enrolled in curriculum level math, four-year college students enrolled in developmental/remedial math, and four-year college students enrolled in curriculum level math. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀11. There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

Independent Variables- Questions 2 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the gender of the student.

Dependent Variables- Participant responses to items 9(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the parent plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college females, community college males, four-year college females, and four-year college males. One-way analyses of

variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀12. There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

Independent Variables- Questions 3 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the race of the student.

Dependent Variables- Participant responses to items 9(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the parent plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college American Indian/Alaskan Native students, community college Asian/Asian American students, community college Black/African-American students, community college Hispanic/Latino students, community college Native Hawaiian/Pacific Islander students, community college White/Caucasian students, community college other students, four-year college American Indian/Alaskan Native students, four-year college Asian/Asian American students, four-year college

Black/African-American students, four-year college Hispanic/Latino students, four-year college Native Hawaiian/Pacific Islander students, four-year college White/Caucasian students, and four-year college other students. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀13. There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

Independent Variables- Questions 1 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the high school course of study of the student.

Dependent Variables- Participant responses to items 9(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the parent plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students whose high school course of study

was career prep, community college students whose high school course of study was college tech prep, community college students whose high school course of study was college/university prep, community college students whose high school course of study was occupational prep, four-year college students whose high school course of study was career prep, four-year college students whose high school course of study was college tech prep, four-year college students whose high school course of study was college/university prep, and four-year college students whose high school course of study was occupational prep. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀14. There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

Independent Variables- Questions 4 and 5 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the level of English course placement of the student.

Dependent Variables- Participant responses to items 9(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the parent plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students enrolled in developmental/remedial English, community college students enrolled in curriculum level English, four-year college students enrolled in developmental/remedial English, and four-year college students enrolled in curriculum level English. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀15. There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

Independent Variables- Questions 4 and 6 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the level of mathematics course placement of the student.

Dependent Variables- Participant responses to items 9(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that the parent plays in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students enrolled in developmental/remedial math, community college students enrolled in curriculum level math, four-year college students enrolled in developmental/remedial math, and four-year college students enrolled in curriculum level math. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀16. There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.

Independent Variables- Questions 2 and 4 of the College Preparation served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the gender of the student.

Dependent Variables- Participant responses to items 10(A-O) on the College Preparation Questionnaire served as the dependent variable.

These items indicated the role that college admissions and recruiting staff played in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college females, community college males, four-year college females, and four-year college males. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀17. There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.

Independent Variables- Questions 3 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the race of the student.

Dependent Variables- Participant responses to items 10(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that college admissions and recruiting staff play in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college American Indian/Alaskan Native students,

community college Asian/Asian American students, community college Black/African-American students, community college Hispanic/Latino students, community college Native Hawaiian/Pacific Islander students, community college White/Caucasian students, community college other students, four-year college American Indian/Alaskan Native students, four-year college Asian/Asian American students, four-year college Black/African-American students, four-year college Hispanic/Latino students, four-year college Native Hawaiian/Pacific Islander students, four-year college White/Caucasian students, and four-year college other students. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀18. There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.

Independent Variables- Questions 1 and 4 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the high school course of study of the student.

Dependent Variables- Participant responses to items 10(A-O) on the College Preparation Questionnaire served as the dependent variable.

These items indicated the role that college admissions and recruiting staff play in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students whose high school course of study was career prep, community college students whose high school course of study was college tech prep, community college students whose high school course of study was college/university prep, community college students whose high school course of study was occupational prep, four-year college students whose high school course of study was career prep, four-year college students whose high school course of study was college tech prep, four-year college students whose high school course of study was college/university prep, and four-year college students whose high school course of study was occupational prep. One-way analyses of variance (ANOVAs) were conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀19. There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.

Independent Variables- Questions 4 and 5 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the level of English course placement of the student.

Dependent Variables- Participant responses to items 10(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that college admissions and recruiting staff play in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students enrolled in developmental/remedial English, community college students enrolled in curriculum level English, four-year college students enrolled in developmental/remedial English, and four-year college students enrolled in curriculum level English. One-way analyses of variance (ANOVAs) was conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

H₀20. There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college.

Independent Variables- Questions 4 and 6 of the College Preparation Questionnaire served as the independent variables. These sections indicated if a student was enrolled in a 2-year community college or a 4-year college or university and also indicated the level of mathematics course placement of the student.

Dependent Variables- Participant responses to items 10(A-O) on the College Preparation Questionnaire served as the dependent variable. These items indicated the role that college admissions and recruiting staff play in preparing high school students for college.

Statistics- The mean score was calculated for each of the following groups: community college students enrolled in developmental/remedial math, community college students enrolled in curriculum level math, four-year college students enrolled in developmental/remedial math, and four-year college students enrolled in curriculum level math. One-way analyses of variance (ANOVAs) was conducted to explore the significant difference between the means of each group. The hypothesis was tested at $p \leq 0.05$ level of significance. The F value was also determined for each group.

Research Participants

The participants of this study were college sophomores at community colleges and universities in North Carolina. Colleges were selected from the 58 institutions that are a part of the North Carolina Community College System and the 16 institutions that are a part of the University of North Carolina System so

that data could be gathered from community college and university students. Sophomores selected to complete the survey instrument were Spring 2008 graduates of a North Carolina public high school who enrolled in their 1st semester of college in Fall 2008 and continued to be enrolled in Fall 2009. The researcher selected this group of high school graduates on the assumption that students who graduated from high school in the Spring and went on to enroll in college in the Fall would have a more recent and vivid account of their high school experiences and how those experiences influenced their preparation for college.

The institutions selected to participate in this study were community colleges and universities that are located within the same county. There were 12 universities and 13 community colleges that met these criteria. Since this was large number of institutions, additional criteria were used for selection. Community colleges and universities were also selected based on their Carnegie Foundation for the Advancement of Teaching classification (June, 2006). The students selected to participate in this study were graduates of a North Carolina public high school that is located in the same county as the college they attend. The rationale for selecting community colleges and universities within the same county and for surveying high school graduates also from the same county was that the students would have similar high school experiences within that county. Also, the students would more than likely have had some type of interaction with admissions and recruiting staff from their local community college or university

while still in high school. The results of the study are analytically generalizable to the state of North Carolina because there is geographic diversity across the state in the institutions that were selected. In addition, participants had similar high school experiences because they all followed a standard course of study approved by the state of North Carolina.

The following 12 community colleges were considered for participation because they are located within the same county as a university that is part of the University of North Carolina System: Asheville-Buncombe Community College, Cape Fear Community College, Central Piedmont Community College, College of the Albemarle, Durham Technical Community College, Fayetteville Technical Community College, Forsyth Technical Community College, Guilford Technical Community College, Pitt Community College, Robeson County Community College, Southwestern Community College, and Wake Technical Community College.

The following 13 universities were considered for participation because they are located within the same county as a community college that is part of the North Carolina Community College System: East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina A & T State University, North Carolina Central University, North Carolina State University, University of North Carolina at Asheville, University of North Carolina at Charlotte, University of North Carolina at Greensboro, University of North

Carolina at Pembroke, University of North Carolina at Wilmington, Western Carolina University, and Winston-Salem State University.

The researcher labeled all of the 12 community colleges and 13 universities by their Carnegie Foundation for the Advancement of Teaching classification. Upon reviewing the classifications, the researcher concluded that all of the community colleges labeled as public rural, serving large were located within the same county as a University. There were 4 community colleges with this label: Asheville-Buncombe Technical Community College, Cape Fear Community College, Fayetteville Technical Community College, and Pitt Community College. These 4 institutions were also representative of each region of the state of North Carolina. Asheville-Buncombe Technical Community College is in the western part of the state. Cape Fear Community College and Pitt Community College are in the eastern part of the state. Fayetteville Technical Community College is in the central part of the state. The researcher then selected universities based on their location. The University of North Carolina at Asheville and Asheville-Buncombe Technical Community College are both in Buncombe County. The University of North Carolina at Wilmington and Cape Fear Community College are both in New Hanover County. Fayetteville State University and Fayetteville Technical Community College are both in Cumberland County. East Carolina University and Pitt Community College are both in Pitt County.

The researcher is a graduate student at East Carolina University and an employee at Pitt Community College. Due to the researcher's relationship with each of these institutions, they were initially eliminated from the sample population. Administrators at each of the six remaining institutions were contacted by phone in Spring 2008 to ask if they could provide email addresses of first-year students who would be Spring 2008 high school graduates from a high school in the same county and who would enroll at their institution in Fall 2008. Administrators at The University of North Carolina at Wilmington and Cape Fear Community College both declined to allow their students to take part in this study. Therefore, four institutions remained as potential institutions for the sample population. The institutions were The University of North Carolina at Asheville, Asheville-Buncombe Technical Community College, Fayetteville State University, and Fayetteville Technical Community College.

An official request for email addresses was sent to each of the four institutions in Spring 2009. Email addresses were only received from Asheville-Buncombe Community College and the University of North Carolina at Asheville. Fayetteville Technical Community College and Fayetteville State University declined to participate in the study. In order to have as large of a sample as possible, all sophomores enrolled at these two institutions who were Spring 2008 graduates of a high school located within the same county as the college of attendance were administered the survey. Email addresses were not received until July 2009. The survey was not launched until Fall 2009. Therefore, the

participants had completed their freshmen year and were now enrolled in their sophomore year of college.

Instrumentation

College Preparation Questionnaire

The College Preparation Questionnaire (see Appendix B) was designed by Sokol (2000) to investigate four factors involved in preparing students for college: teachers, guidance counselors, parents, and students. The instrument contained 60 items and used a Likert-type rating scale. Participants were instructed to assign a rating of 1 to 5, including non-integers, for each item. A rating of 1 indicated strongly disagree and a rating of 5 indicated strongly agree. The items were written after Sokol identified issues in the literature related to factors that prepare high school students for college-level academic work. The instrument is divided into five sections. The first section collected demographic information from the participants. Participants were asked to indicate the high school attended, month and year of graduation, if they were or were not in college track classes, gender, if they were enrolled at a two-year or a four-year college, if they were in developmental English or English 101, if they were a freshman, sophomore, junior, or senior, and their age.

Each of the next four sections contained 15 items. One section was devoted to each of the four factors that Sokol found to play a role in preparing high school students for college. The first of the four sections contained items 1 through 15 and was designed to investigate how participants perceived their high

school teachers prepared them for college. Questions in this section explored the use of teaching materials, how thorough teachers were in teaching concepts, the teaching strategies that they believed were effective in the classroom, how teachers encouraged participation in the classroom and challenged participants to develop their skills. The second section contained items 16 through 30 and was designed to investigate how participants perceived their high school guidance counselor prepared them for college. The items in this section investigated how the counselor helped prepare students for college, how the counselor helped students select classes that would prepare them for college-level work, how the counselor helped students select colleges, how the counselor helped students set academic and social goals, and if the students felt the counselor had prepared them for admission to college. The third section contained items 31 through 45 and asked participants to respond regarding the role parents played in college preparation. The items in this section examined the extent of parental involvement in planning the high school program, parental involvement in the participant's high school performance, and parental assistance in preparing the participant for college. The final section of the survey contained items 46 through 60. The items asked questions about the participant's own role in preparing for college. The items focused on self-identified weaknesses, the use of standardized test results, involvement in setting goals for college, and explored how participants felt they were responsible for improving their high school performance (Sokol, 2000).

G. R. Sokol (personal communication, January 8, 2008) shared with the researcher that the College Preparation Questionnaire has not been used in other research studies. He developed this questionnaire after searching for other standardized questionnaires on college preparation and being unsuccessful in his efforts. The College Preparation Questionnaire (Sokol, 2000) was adapted for the current study.

The researcher received permission to use The College Preparation Questionnaire from Sokol on January 18, 2007 via email correspondence (see Appendix A). The College Preparation Questionnaire was modified into an online survey using Perseus for the present study (see Appendix C). The first section of the survey consisted of demographic items. The survey asked the participants to provide the high school course of study, gender, race, currently enrolled in a 2-year community college or 4-year university, level of English course placement and level of mathematics course placement. The term “guidance counselor” used by Sokol (2000) was replaced with “school counselor”. In the early 1900s the term guidance was used in the profession because of the vocational guidance role which emphasized a focus on the transition from school to work. Toward the end of the 20th century the role of the counselor had transformed into a comprehensive school counseling program that included academic, career, personal, and social development. The American School Counselor Association and school counselor preparation programs advocated to reconfigure the identity of the role to school counselor (Lambie & Williamson, 2004). The section on the

role that students play in college preparation was deleted. The researcher replaced that section with 15 items related to the role that college admissions and recruiting staff play in preparing students for college. This study focused on more extrinsic factors versus intrinsic factors that influence college preparation. The modified survey contained 60 items. The instrument was divided into five sections. The first section collected demographic information. Sections two-five each contained 15 items. Participants were asked to respond using a Likert scale to their perceptions about the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff played in preparing them for college.

Validity and Reliability

Sokol (2000) field tested the items he created to establish the content validity of the instrument. A panel of 10 experts was asked to review the instrument. The experts were professional educators and guidance counselors. The panel of experts read through the items and compared them to the research questions for the study. The instrument was rated on the clarity of instructions and on the individual items. Any items that were difficult to understand or were too vague were rewritten based upon the comments of the experts. Sokol conducted a pilot study to enhance the reliability of the College Preparation Questionnaire. The questionnaire was piloted using 16 college students who had been enrolled in college English classes. The questionnaire was administered twice in a two week period and responses were calculated to determine which

responses were similar on both administrations. Students were asked to make comments regarding the readability of the statements and clarity of the instructions. The comments were used to rewrite any statements or instructions that were unclear. Two estimates of reliability were computed for the questionnaire, test-retest and item analysis. The test-retest was determined to be $r=0.87$ expressed as a Pearson Product Moment correlation. For the item analysis coefficient alpha was calculated for each of the instrument's subscales (teachers, parents, counselors, and student). All of the correlations were greater than .52. Sokol determined that no items needed to be eliminated from the instrument.

The researcher asked two experts to review the additional 15 items that were added to the questionnaire. The experts were Marguerite Stephens, Student Recruitment Coordinator at Pitt Community College and Tarrick Cox, Associate Director of Admissions for Special Populations at East Carolina University. These individuals were chosen because of their connection to the topic of college preparation and because they work at higher education institutions in North Carolina. The researcher also piloted the questions to a group of college freshmen at Pitt Community College and East Carolina University which are located within the same county.

Data Collection

The researcher received approval from the Institutional Review Board prior to conducting the study. The approval letter was dated May 12, 2009. A

letter was then sent to the Registrar at each selected institution that explained guidelines and procedures for the study. The letter requested that the Registrar send the researcher an electronic file of email addresses for all students who were selected based on the criteria that was provided (see Appendix D). Email addresses were received from Asheville-Buncombe Technical Community College and University of North Carolina at Asheville in July 2009. In September 2009, Fayetteville Technical Community College and Fayetteville State University responded that they would not be able to provide email addresses. The URL and instructions for completing the College Preparation Questionnaire were emailed to 188 students on October 9, 2009 (see Appendix E). A 2nd email was sent to students who had not responded on October 16, 2009. A 3rd attempt was made with those students who still had not responded to the survey on October 19, 2009. A final email was sent to students who had not responded on October 17, 2009. Only 21 students in this group responded to the survey.

The response rate was very small. A decision was made to include more institutions in the sample population. An email was sent to the Registrar at East Carolina University and to the Registrar at Pitt Community College in November 2009 that explained guidelines and procedures for the study. The letter requested that the Registrar send the researcher an electronic file of email addresses for all students who were selected based on the criteria that was provided. The same criteria was used for these two institutions as was used in selecting the previous sample population. Email addresses were received for

students at East Carolina University on November 23, 2009. Email addresses were received for students at Pitt Community College on December 21, 2009. The last set of emails was received during the break between fall and spring semesters. The URL and instructions for completing the College Preparation Questionnaire were emailed to 323 students on January 15, 2010, the week after classes began for spring semester 2010. A 2nd email was sent to students who had not responded on January 19, 2010. A third email was sent to students who had not responded on January 24, 2010. Responses were received from 45 students.

The online survey was administered using the Perseus Survey Solutions software program. Perseus is a web-based software package that allows individuals to develop, implement, and analyze online surveys that are unique to their individual research goals. The software is capable of collecting and storing participant responses. Data can be saved to a local database or exported to a number of different statistical analysis applications (*Perseus at a glance*, n.d.). After data were collected for this study, student responses were downloaded to the Statistical Package for the Social Sciences (SPSS).

Data Analysis

The dependent variables in this study were the students' perceptions of the roles that high school teachers, high school counselors, parents, and college admissions and recruiting staff play in preparing them for college. Students' race, gender, high school course of study, level of English course placement at the

college, and level of mathematics course placement at the college, and whether the students were community college or four-year university students were independent variables. College students' perceptions of their high school preparation experience were the dependent variables. The perceptions were examined by the College Preparation Questionnaire.

Descriptive and comparative statistics were used to present the data. Mean scores for each of the independent variables were calculated: high school teachers, high school counselors, parents, and college admissions and recruiting staff. Differences were also explored by high school course of study, gender, race, level of English course placement at the college, and level of mathematics course placement at the college. Differences were compared between community college and four-year university students. The research questions were examined through a series of one-way analyses of variances (ANOVAs) that tested for significant differences between group means. Data was then interpreted through Hossler and Gallagher's (1987) model of college choice.

Summary

The participants in this study were college sophomores who were Spring 2008 high school graduates of a North Carolina public high school and who enrolled for their first semester in selected North Carolina Community Colleges and Universities during Fall 2008 and continued to be enrolled in Fall 2009. Survey research was used to collect data and to test null hypotheses regarding the role that high school teachers, high school counselors, parents, and college

admissions and recruiting staff play in the college preparation of high school graduates. The survey was deemed valid by a panel of experts. A pilot study was conducted to test for reliability.

CHAPTER 4: RESULTS

Introduction

The guiding research question for this study was: what is the difference in the perceptions about the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff play in preparing high school students for college between community college and university students?

Twenty null hypotheses guided the data analysis for the present study in order to examine the guiding research question. The difference between changes in the levels of the independent variables (gender, race, high school course of study, first level of English course enrollment, and first level of mathematics course enrollment) on the dependent variable (perceptions of the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff played in college preparation identified by the College Preparation Questionnaire) were examined using one-way analysis of variance (ANOVA).

Response Rate

Data were collected using an online survey via the Perseus Survey Solutions software package. The survey population was made up of 511 sophomore college students from selected two-year community colleges and four-year colleges in North Carolina. Selected institutions included in this study were: Asheville-Buncombe Technical Community College; East Carolina University; Pitt Community College; University of North Carolina at Asheville. A total of 66 participants responded to the survey for a total response rate of

12.9%. Of the 66 respondents, only 62 of the survey respondents completed all of the survey items. The response rate for participants who completed all survey items was 12.1%. Several attempts were made to persuade students to complete the survey. An initial invitation followed by three reminder emails was sent to students at Asheville-Buncombe Technical Community College and University of North Carolina at Asheville. Participants at East Carolina University and Pitt Community College received an initial invitation followed by two reminder emails. Although this is a small sample, it is representative of the population at each of these institutions, which is the purpose of survey research (Babbie, 1973).

Data Aggregation

Upon completion of data collection, the data were downloaded from the Perseus Survey Solutions software into SPSS. The software provided the means for statistical analysis once data were coded into the database. Through the use of the College Preparation Questionnaire, survey respondents were asked to rate their perceptions of the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff played in their preparation for college. Rating was done using a five-point Likert scale- "1" meaning strongly disagree and "5" meaning strongly agree. As noted in chapter 3, certain items on the survey aligned with the role of high school teachers, high school counselors, parents, or college admissions and recruiting staff. Table 4 illustrates how these

Table 4

Construction of College Preparation Questionnaire Items by Role

Role	Items from College Preparation Questionnaire
High School Teachers	7a, 7b, 7c, 7d, 7e, 7f, 7g, 7h, 7i, 7j, 7k, 7l, 7m, 7n, 7o
High School Counselors	8a, 8b, 8c, 8d, 8e, 8f, 8g, 8h, 8i, 8j, 8k, 8l, 8m, 8n, 8o
Parents	9a, 9b, 9c, 9d, 9e, 9f, 9g, 9h, 9i, 9j, 9k, 9l, 9m, 9n, 9o
College Admissions & Recruiting Staff	10a, 10b, 10c, 10d, 10e, 10f, 10g, 10h, 10i, 10j, 10k, 10l, 10m, 10n, 10o

items relate to the roles of high school teachers, high school counselors, parents, or college admissions and recruiting staff.

Descriptive Data

As demographic variables served as categories of the independent variables, it is important to provide an overview of the demographic characteristics of the survey population. The frequency distributions of the demographic variables are presented in Table 5. An equal number of two-year community college and four-year college students responded to the survey. Thirty-one two-year community college students responded. The number of students who responded from those attending a four-year college was also thirty-one.

The majority of respondents were white/Caucasian females. Females made up the majority of respondents, (67.7%), while male respondents totaled 32.3%. White/Caucasian made up an overwhelming majority of respondents, (74.2%). The second largest race category was Black/African American (13.6%). A very small number of Hispanic/Latino, (3.0%), and Other, (1.5%) were represented. This sample is demographically representative of the student population of the institutions surveyed. The enrollment report from Asheville-Buncombe Technical Community College for fall semester 2009 indicated that 54.9% of the student population was female and 45.1% was male. While the ratio of female and male students was closer than in the sample population for the current study, the report from Asheville-Buncombe Technical Community College

Table 5

Demographic Characteristics of Population

Characteristic	<i>frequency</i>	%
High School Course of Study		
Career Prep	2	3.2
College Tech Prep	6	9.7
College/University Prep	52	83.9
Occupational Prep	2	3.2
Gender		
Female	42	67.7
Male	20	32.3
Race		
American Indian/Alaskan Native	1	1.6
Black/African American	9	14.5
Hispanic/Latino	2	3.2
White/Caucasian	49	79.0
Other	1	1.6

Table 5

Demographic Characteristics of Population (continued)

Characteristic	<i>frequency</i>	%
Currently Enrolled		
2-year community college	31	50.0
4-year college or university	31	50.0
Level of English		
Developmental/Remedial English	17	27.4
Curriculum Level English	45	72.6
Total	62	100.0
Level of Mathematics		
Developmental/Remedial Math	17	27.4
Curriculum Level Math	45	72.6
Total	62	100.0

indicated that 84.1% of the student population in fall 2009 was white as compared to 5.8% African American (Asheville-Buncombe Technical Community College, n.d.). According to the *Facts & Figures* report of The University of North Carolina (n.d.), 58.9% of the undergraduate population at East Carolina University in fall 2009 consisted of females. Males represented 41.1% of the student population. Within this population, 75.2% of the students were white and 14.45% were African American. A similar trend was evident at Pitt Community College. The *Pitt Community College Fall 2009 Final Enrollment Demographic Report* noted that 57.31% of the student population was female and 42.69% was male (n.d.). By race, 60.93% were white while 31.62% were African American. During fall 2009, 56.6% of the undergraduate student population at University of North Carolina at Asheville was female compared to 43.4% male (The University of North Carolina, n.d.). When looking at this population by race, the sample at University of North Carolina at Asheville was skewed. White students represented 86.89% of the student undergraduate population in fall 2009 compared to 3.19% of students who were African American.

Survey participants were asked to indicate which high school course of study they were enrolled in while still in high school. The majority of respondents, (83.9%) indicated they were in the college/university prep course of study. The second largest category of respondents was college tech prep (9.7%). Both career prep and occupational prep had an equal, very minute number of respondents (3.2%).

Respondents self-reported the level of English course they were able to enroll in after completing the college admissions and placement test process. The number of students who reported they were able to enroll in curriculum level English, (72.6%), was substantially higher than students who reported having to enroll in developmental/remedial English, (27.4%). The same trend was found among students when asked which level of mathematics they were able to enroll in after completing the college admissions and placement test process. An equal number of respondents, (72.6%), reported they were able to enroll in curriculum level mathematics, while 27.4% reported they had to enroll in developmental/remedial mathematics.

Tests of Statistical Significance

One-way analyses of variance were conducted to determine if a statistically significant difference existed between levels of the independent variables (gender, race, high school course of study, first level of English course enrollment, and first level of mathematics course enrollment) on the dependent variables (perceptions of the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff played in college preparation identified by the College Preparation Questionnaire). The null hypotheses were rejected at the $p \leq 0.05$ level.

Null Hypotheses One

There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions

of the role high school teachers played in preparing them for college. The difference between the levels of the independent variable (gender) on the dependent variable (perception of the role of high school teachers as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The two categories of the independent variable were female and male.

It is assumed when using ANOVA that equal variance exists among groups under the study. The Levene test for homogeneity is used to test for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.58$. The ANOVA indicated that there was not a statistically significant relationship between gender and perception of the role of high school teachers ($F = .58, p < 0.81$). Therefore, the null hypothesis was not rejected. The results are presented in Table 6. The lack of a statistically significant difference rendered post hoc testing unnecessary.

There was a slight difference in the overall mean scores between female and male students to one survey item related to the role that high school teachers played in preparation for college. A higher margin of female students felt their high school teachers encouraged them to take college preparatory classes, ($M= 2.13, SD= 0.97$). Male students did not indicate the same level of perception ($M= 1.79, SD= 0.78$). An independent t-test was conducted to

Table 6

One-Way ANOVA: Gender and Perception of High School Teacher

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	4.50	1	4.50	.058	.81
Within Groups	4420.08	57	77.55		
Total	4424.58	58			

determine if the difference in the means was significant. This difference was not statistically significant ($t= 0.24$, $df= 57$, $p < 0.81$).

Null Hypotheses Two

There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college. The difference between the levels of the independent variable (race) on the dependent variable (perception of the role of high school teachers as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: American Indian/Alaskan Native, Black/African American, Hispanic/Latino, White/Caucasian, Other.

It is assumed through the use of ANOVA that equal variance exists among the groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance among groups, $p < 0.50$. The ANOVA revealed that there was not a statistically significant relationship between race and perception of the role of high school teachers ($F = 1.45$, $p < 0.23$). Therefore, the null hypothesis was not rejected. The results are presented in Table 7. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted between the two larger populations represented in the sample, white/Caucasian (74.2%) and

Table 7

One-way ANOVA: Race and Perception of High School Teacher

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	428.14	4	107.04	1.45	.23
Within Groups	3996.44	54	74.01		
Total	4424.58	58			

black/African American (13.6%). This difference was not statistically significant ($t = -1.961$, $df = 53$, $p < 0.05$).

Null Hypotheses Three

There is no statistically significant difference between the course of study of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.

The difference between the levels of the independent variable (high school course of study) on the dependent variable (perception of the role of high school teachers as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Career Prep, College Tech Prep, College/University Prep, Occupational Prep.

It is assumed through the use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.05$. The ANOVA revealed that there was a statistically significant relationship between high school course of study and the perception of the role of the high school teacher as identified by the College Preparation Questionnaire ($F = 2.80$, $p < 0.05$). Therefore, the null hypothesis was rejected at the $p \leq 0.05$ level. The results are presented in Table 8.

Table 8

One-Way ANOVA: High School Course of Study and Perception of High School Teacher

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	586.91	3	195.64	2.80	.05
Within Groups	3837.67	55	69.78		
Total	4424.58	58			

Post hoc tests are statistical tests that operate under the assumption of equal variance and can be utilized to identify which means differ among variable being considered by the ANOVA when those variable exceed two. Although there were more than two categories of the independent variable, only one category was heavily represented. Due to limited representation in the other categories, it was not necessary to utilize the post hoc test. Therefore, the test of statistical significance through ANOVA was the only one used with regard to the independent variable, high school course of study. An independent t-test was not utilized due to the disproportionate number of participants in each category of high school course of study.

Null Hypotheses Four

There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college.

The difference between the levels of the independent variable (level of English class) on the dependent variable (perception of the role of high school teachers as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were:

Developmental/Remedial English and Curriculum level English.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.03$. The ANOVA revealed that there was not a significant difference between level of English course and perception of the role of high school teachers ($F = 1.26, p < 0.27$). Therefore, null hypothesis was not rejected. The results are presented in Table 9. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted to determine if the difference in the means of was significant. This difference was not statistically significant ($t = -1.12, df = 57, p < 0.27$).

Null Hypotheses Five

There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role high school teachers played in preparing them for college. The difference between the levels of the independent variable (level of mathematics class) on the dependent variable (perception of the role of high school teachers as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Developmental/Remedial mathematics and Curriculum level mathematics.

Table 9

One-way ANOVA: Level of English and Perception of High School Teacher

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	95.41	1	95.41	1.26	.27
Within Groups	4329.16	57	75.95		
Total	4424.58	58			

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.50$. The ANOVA revealed that there was not a significant difference between level of mathematics course and perception of the role of high school teachers ($F = .05$, $p < 0.83$). Therefore, the null hypothesis was not rejected. The results are presented in Table 10. The lack of a statistically significant difference rendered post hoc testing unnecessary.

There was a slight difference in the overall mean scores between students who enrolled in a curriculum level mathematics course and those who enrolled in a developmental/remedial mathematics course. Students who enrolled in curriculum level mathematics felt more encouraged by their high school teachers to take college preparatory courses ($M = 2.38$, $SD = 0.96$) when compared to students enrolled in developmental/remedial mathematics ($M = 1.88$, $SD = 0.85$). An independent t-test was conducted to determine if the difference in the means was significant. This difference was not statistically significant ($t = -0.21$, $df = 57$, $p < 0.83$).

Null Hypothesis Six

There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college. The difference between the levels of the independent variable (gender) on the

Table 10

One-Way ANOVA: Level of Mathematics and Perception of High School Teacher

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	3.46	1	3.46	.05	.83
Within Groups	4421.11	57	77.56		
Total	4424.58	58			

dependent variable (perception of the role of high school counselors as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The two categories of the independent variable were female and male.

It is assumed when using ANOVA that equal variance exists among groups under the study. The Levene test for homogeneity is used to test for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.54$. The ANOVA indicated that there was not a statistically significant relationship between gender and perception of the role of high school counselors ($F = .09$, $p < 0.76$). Therefore, the null hypothesis was not rejected. The results are presented in Table 11. The lack of a statistically significant difference rendered post hoc testing unnecessary.

There was a slight difference in mean scores between female and male respondents on two items related to the role that high school counselors play in college preparation. When asked if they felt their high school counselors encouraged them to develop leadership goals, females displayed less enthusiasm ($M = 2.35$, $SD = 1.19$) compared to their male peers ($M = 2.89$, $SD = 1.18$). A similar trend was found when students were asked if the high school counselors taught them the importance of balancing and managing social and academic time during high school. The perceptions of the female participants were not as high ($M = 2.83$, $SD = 1.36$) compared to those of their male peers ($M =$

Table 11

One-Way ANOVA: Gender and Perception of High School Counselor

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	23.76	1	23.76	.09	.76
Within Groups	14108.40	56	251.94		
Total	14132.16	57			

3.11, $SD= 1.37$). This would appear to indicate that the males in this sample population felt more encouraged by the high school counselors. An independent t-test was conducted to determine if the difference in the means was significant. This difference was not statistically significant ($t= -0.31$, $df= 56$, $p < 0.760$).

Null Hypotheses Seven

There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college. The difference between the levels of the independent variable (race) on the dependent variable (perception of the role of high school counselors as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: American Indian/Alaskan Native, Black/African American, Hispanic/Latino, White/Caucasian, Other.

It is assumed through the use of ANOVA that equal variance exists among the groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance among groups, $p < 0.86$. The ANOVA revealed that there was no a statistically significant relationship between race and perception of the role of high school counselors ($F = .54$, $p < 0.71$). Therefore, the null hypothesis was not rejected. The results are presented in Table 12. The lack of a statistically significant difference rendered

Table 12

One-Way ANOVA: Race and Perception of High School Counselor

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	555.95	4	138.99	.54	.71
Within Groups	13576.20	53	256.16		
Total	14132.16	57			

post hoc testing unnecessary. An independent t-test was conducted between the two larger populations represented in the sample, white/Caucasian (74.2%) and black/African American (13.6%). The difference was not statistically significant ($t = -1.29$, $df = 52$, $p < 0.20$).

Null Hypotheses Eight

There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college. The difference between the levels of the independent variable (high school course of study) on the dependent variable (perception of the role of high school counselors as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Career Prep, College Tech Prep, College/University Prep, Occupational Prep.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.41$. The ANOVA revealed that there was not a significant difference between high school course of study and perception of the role of high school counselors ($F = 2.18$, $p < 0.10$). Therefore, the null hypothesis was not rejected. The results are presented in Table 13. The lack of statistically significant difference rendered

Table 13

One-Way ANOVA: High School Course of Study and Perception of High School Counselor

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	1528.66	3	509.55	2.18	.10
Within Groups	12603.50	54	233.40		
Total	14132.16	57			

post hoc testing unnecessary. An independent t-test was not utilized due to the disproportionate number of participants in each category of high school course of study.

Null Hypotheses Nine

There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college. The difference between the levels of the independent variable (level of English class) on the dependent variable (perception of the role of high school counselors as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Developmental/Remedial English and Curriculum level English.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.91$. The ANOVA revealed that there was not a significant difference between level of English course and perception of the role of high school counselors ($F = 1.63$, $p < 0.21$). Therefore, the null hypothesis was not rejected. The results are presented in Table 14. The lack of a statistically significant difference rendered post hoc testing unnecessary.

Table 14

One-Way ANOVA: Level of English and Perception of High School Counselor

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	399.91	1	399.91	1.63	.21
Within Groups	13732.25	56	245.22		
Total	14132.16	57			

There is one item that is worth noting from the survey that has slight statistical significance. Respondents were asked if their high school counselors assisted in identifying social, personal and career goals. Students who indicated they enrolled in developmental/remedial English had an overall lower mean score ($M= 2.50$, $SD= 1.21$) than students who enrolled in curriculum level English ($M= 2.98$, $SD= 1.24$). This could imply that students who placed into curriculum level English felt their high counselors had more of a significant impact on their college preparation. An independent t-test was conducted to determine if the difference in the means was significant. This difference was not statistically significant ($t= -1.28$, $df= 56$, $p < 0.21$).

Null Hypotheses Ten

There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role high school counselors played in preparing them for college. The difference between the levels of the independent variable (level of mathematics class) on the dependent variable (perception of the role of high school counselors as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Developmental/Remedial mathematics and Curriculum level mathematics.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.95$. The ANOVA revealed that there was not a significant difference between level of mathematics course and perception of the role of high school counselors ($F = 2.22$, $p < 0.14$). Therefore, the null hypothesis was not rejected. The results are presented in Table 15. The lack of a statistically significant difference rendered post hoc testing unnecessary.

One item is worth noting from the survey that had a slight statistical significance. Respondents were asked if their high school counselors encouraged them to set goals for themselves. Students who indicated they enrolled in curriculum level mathematics had an overall higher mean score ($M=2.67$, $SD= 1.18$) than their peers who indicated they enrolled in developmental/remedial mathematics ($M=1.88$, $SD= 0.81$). This could indicate that students who placed into curriculum level mathematics felt their high school counselors had more of a significant impact on their college preparation. An independent t-test was conducted to determine if the difference in the means was significant. This difference was not statistically significant ($t= -2.11$, $df= 57$, $p < 0.83$).

Null Hypotheses Eleven

There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions

Table 15

One-Way ANOVA: Level of Mathematics and Perception of High School

Counselor

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	539.60	1	539.60	2.22	.142
Within Groups	13592.56	56	242.72		
Total	14132.16	57			

of the role their parents played in preparing them for college. The difference between the levels of the independent variable (gender) on the dependent variable (perception of the role of parents as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The two categories of the independent variable were female and male.

It is assumed when using ANOVA that equal variance exists among groups under the study. The Levene test for homogeneity is used to test for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.35$. The ANOVA indicated that there was not a statistically significant relationship between gender and perception of the role of parents ($F = .19, p < 0.67$). Therefore, the null hypothesis was not rejected. The results are presented in Table 16. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted to determine if the difference in the means of was significant. This difference was not statistically significant ($t = -43, df = 55, p < 0.67$).

Null Hypotheses Twelve

There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college. The difference between the levels of the independent variable (race) on the dependent variable

Table 16

One-Way ANOVA: Gender and Perception of Parents

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	22.89	1	22.89	.19	.67
Within Groups	6803.25	55	123.70		
Total	6826.14	56			

(perception of the role of parents as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: American Indian/Alaskan Native, Black/African American, Hispanic/Latino, White/Caucasian, Other.

It is assumed through the use of ANOVA that equal variance exists among the groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance among groups, $p < 0.13$. The ANOVA revealed that there was no a statistically significant relationship between race and perception of the role of parents ($F = 1.09$, $p < 0.37$). Therefore, the null hypothesis was not rejected. The results are presented in Table 17. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted between the two larger populations represented in the sample, white/Caucasian (74.2%) and black/African American (13.6%). There difference was not statistically significant ($t = -1.66$, $df = 51$, $p < 1.04$).

Null Hypotheses Thirteen

There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college.

The difference between the levels of the independent variable (high school

Table 17

One-Way ANOVA: Race and Perception of Parents

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	528.94	4	132.24	1.09	.37
Within Groups	6297.20	52	121.10		
Total	6826.14	56			

course of study) on the dependent variable (perception of the role of parents as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Career Prep, College Tech Prep, College/University Prep, Occupational Prep.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.71$. The ANOVA revealed that there was not a significant difference between high school course of study and perception of the role of parents ($F = .34$, $p < 0.80$). Therefore, the null hypothesis was not rejected. The results are presented in Table 18. The lack of a statistically significant rendered post hoc testing unnecessary. An independent t-test was not utilized due to the disproportionate number of participants in each category of high school course of study. Participants were overrepresented in the College/University Prep course of study. Participants were underrepresented in the Career Prep, College Tech Prep, and Occupational Prep courses of study.

Null Hypotheses Fourteen

There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college. The

Table 18

One-Way ANOVA: High School Course of Study and Perception of Parents

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	128.81	3	42.94	.34	.80
Within Groups	6697.32	53	126.37		
Total	6826.14	56			

difference between the levels of the independent variable (level of English class) on the dependent variable (perception of the role of parents as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Developmental/Remedial English and Curriculum level English.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.16$. The ANOVA revealed that there was not a significant difference between level of English course and perception of the role of parents ($F = .77, p < 0.38$). Therefore, null hypothesis was not rejected. The results are presented in Table 19. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted to determine if the difference in the means was significant. This difference was not statistically significant ($t = -0.88, df = 55, p < 0.38$).

Null Hypotheses Fifteen

There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role their parents played in preparing them for college. The difference between the levels of the independent variable (level of

Table 19

One-Way ANOVA: Level of English and Perception of Parents

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	94.42	1	94.42	.77	.38
Within Groups	6731.71	55	122.40		
Total	6826.14	56			

mathematics class) on the dependent variable (perception of the role of parents as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were:

Developmental/Remedial mathematics and Curriculum level mathematics.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.83$. The ANOVA revealed that there was not a significant difference between level of mathematics course and perception of the role of parents ($F = .36, p < 0.55$). Therefore, the null hypothesis was not rejected. The results are presented in Table 20. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted to determine if the difference in the means was significant. This difference was not statistically significant ($t = 0.60, df = 55, p < 0.55$).

Null Hypotheses Sixteen

There is no statistically significant difference between the gender of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college. The difference between the levels of the independent variable (gender)

Table 20

One-Way ANOVA: Level of Mathematics and Perception of Parents

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	44.42	1	44.42	.36	.55
Within Groups	6781.72	55	123.30		
Total	6826.14	56			

on the dependent variable (perception of the role of college admissions and recruiting staff as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The two categories of the independent variable were female and male.

It is assumed when using ANOVA that equal variance exists among groups under the study. The Levene test for homogeneity is used to test for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.02$. The ANOVA indicated that there was not a statistically significant relationship between gender and perception of the role of college admissions and recruiting staff ($F = .00$, $p < 0.96$). Therefore, the null hypothesis was not rejected. The results are presented in Table 21. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted to determine if the difference in the means was significant. This difference was not statistically significant ($t = 0.05$, $df = 54$, $p \leq 0.96$).

Null Hypotheses Seventeen

There is no statistically significant difference between the race of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college. The difference between the levels of the independent variable (race) on the dependent variable (perception of the role of college admissions and

Table 21

One-Way ANOVA: Gender and Perception of College Admissions and Recruiting

Staff

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	.40	1	.40	.00	.96
Within Groups	7535.81	54	139.55		
Total	7536.21	55			

recruiting staff as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: American Indian/Alaskan Native, Black/African American, Hispanic/Latino, White/Caucasian, Other.

It is assumed through the use of ANOVA that equal variance exists among the groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance among groups, $p < 0.51$. The ANOVA revealed that there was no a statistically significant relationship between race and perception of the role of college admissions and recruiting staff ($F = .75$, $p < 0.56$). Therefore, the null hypothesis was not rejected. The results are presented in Table 22. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted between the two larger populations represented in the sample, white/Caucasian (74.2%) and black/African American (13.6%). The difference was not statistically significant ($t = -1.57$, $df = 50$, $p < 0.12$).

Null Hypotheses Eighteen

There is no statistically significant difference between the high school course of study of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in

Table 22

One-Way ANOVA: Race and Perception of College Admissions and Recruiting

Staff

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	419.14	4	104.78	.75	.56
Within Groups	7117.08	51	139.55		
Total	7536.21	55			

preparing them for college. The difference between the levels of the independent variable (high school course of study) on the dependent variable (perception of the role of college admissions and recruiting staff as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Career Prep, College Tech Prep, College/University Prep, Occupational Prep.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.83$. The ANOVA revealed that there was not a significant difference between high school course of study and perception of the role of college admissions and recruiting staff ($F = .11$, $p < 0.96$). Therefore, the null hypothesis was not rejected. The results are presented in Table 23. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was not utilized due to the disproportionate number of participants in each category of high school course of study. Participants were overrepresented in the College/University Prep course of study. Participants were underrepresented in the Career Prep, College Tech Prep, and Occupational Prep courses of study.

Table 23

One-Way ANOVA: High School Course of Study and Perception of College

Admissions and Recruiting Staff

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	46.86	3	15.62	.11	.96
Within Groups	7489.36	52	144.03		
Total	7536.21	55			

Null Hypotheses Nineteen

There is no statistically significant difference between the English course placement of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college. The difference between the levels of the independent variable (level of English class) on the dependent variable (perception of the role of college admissions and recruiting staff as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Developmental/Remedial English and Curriculum level English.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.57$. The ANOVA revealed that there was not a significant difference between level of English course and perception of the role of college admissions and recruiting staff ($F = 1.54$, $p < 0.22$). Therefore, the null hypothesis was not rejected. The results are presented in Table 24. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted to determine if the difference in the means of was significant. This difference was not statistically significant ($t = -1.24$, $df = 54$, $p < 0.22$).

Table 24

One-Way ANOVA: Level of English and Perception of College Admissions and Recruiting Staff

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	208.86	1	208.86	1.54	.22
Within Groups	7327.35	54	135.69		
Total	7536.21	55			

Null Hypotheses Twenty

There is no statistically significant difference between the mathematics course placement of community college and four-year university students regarding their perceptions of the role college admissions and recruiting staff played in preparing them for college. The difference between the levels of the independent variable (level of mathematics class) on the dependent variable (perception of the role of college admissions and recruiting staff as identified by the College Preparation Questionnaire) was examined using a one-way analysis of variance (ANOVA). Through statistical operation, presence or lack of statistically significant differences was indicated in the means of the variables. The categories of the independent variable were: Developmental/Remedial mathematics and Curriculum level mathematics.

It is assumed through use of ANOVA that equal variance exists among groups under study. The Levene test for homogeneity tests for this assumption. The Levene test demonstrated equal variance between groups, $p < 0.50$. The ANOVA revealed that there was not a significant difference between level of mathematics course and perception of the role of college admissions and recruiting staff ($F = .00$, $p < 0.96$). Therefore, the null hypothesis was not rejected. The results are presented in Table 25. The lack of a statistically significant difference rendered post hoc testing unnecessary. An independent t-test was conducted to determine if the difference in the means of was significant. This difference was not statistically significant ($t = -0.06$, $df = 54$, $p < 0.96$).

Table 25

*One-Way ANOVA: Level of Mathematics and Perception of College Admissions
and Recruiting Staff*

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between Groups	.432	1	.43	.00	.97
Within Groups	7535.78	54	139.55		
Total	7536.21	55			

Summary

The guiding research question for this study was: what is the difference in the perceptions about the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff play in preparing high school students for college between community college and university students? The survey population was composed of 511 college sophomores from selected two-year community colleges and four-year colleges in North Carolina. Survey participants were asked to share their perceptions of the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff played in their preparation for college using the College Preparation Questionnaire. A total of 62 completed surveys were returned.

The results of this study did not show any major statistically significant differences between the categories of the independent variables and the dependent variables. One ANOVA did reveal that there was a statistically significant relationship between the high school course of study and the perception of the role that high school teachers played in preparation for college. However, due to the predominant number of respondents being in one category of the independent variable, college/university prep, the data is skewed and must be interpreted with caution. There were slight statistically significant differences in the overall means when comparing gender and perception of high school teachers, gender and perception of high school counselors, first level of mathematics course enrollment and high school teachers, first level of English

course enrollment and high school counselors, and first level of mathematics course enrollment and high school counselors. However, these findings must be viewed cautiously due to the limited number of survey respondents. The data did not show any statistically significant differences between the categories of the independent variables: race and level of English class. There was also no statistically significant difference in survey responses between community college and university students. The small sample size and the lack of variance in the sample population may impinge on the generalizability of the findings presented in the present study. However, certain trends emerged within the demographics that were represented in the current sample population.

These findings have some interesting implications given the existing literature and the college choice model of Hossler and Gallagher (1987). The final chapter will provide an analysis of the findings, conclusions, suggest some implications for practitioners in higher education, and suggest recommendations for further research.

CHAPTER 5: DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

Introduction

Chapter 1 of this study provides an introduction and background relevant to the lack of college readiness for a large proportion of college students. A review of the literature and research related to this topic is presented in chapter 2, which discusses Hossler and Gallagher's (1987) college choice model and its relevance to the present study. Chapters 3 and 4 provide a description of the research methodology of this study as well as the results. This chapter offers a discussion of the findings, implications for practice, and recommendations for future research.

The participants in the study are enrolled in a community college or university in North Carolina. Specifically, they are college sophomores enrolled at either Asheville-Buncombe Technical Community College, University of North Carolina at Asheville, Pitt Community College, or East Carolina University. The students were surveyed in Fall 2009 or Spring 2010. The majority of respondents are white/Caucasian females. An equal number of community college and university students completed the survey.

Major Findings of the Study

The significant finding of this study is that students enrolled in the College/University Prep course of study while in high school feel their high school teachers had a stronger influence on their college preparation than their peers enrolled in either the Career Prep, College Tech Prep, or Occupational Prep

course of study. Students enrolled in the College/University Prep course of study feel their high school teachers encouraged them to take college preparatory classes and that their high school teachers held high academic expectations for them. Perhaps this major finding is associated with the content covered in the courses taught by teachers in the College/University Prep course of study. In addition to the subject matter, it is possible that teachers who instruct students in the College/University Prep course of study spend time discussing college preparation, goal setting, college admissions, and expectations since these students are planning to pursue a college education after high school. This finding is consistent with the literature in that students who are enrolled in a rigorous college preparation curriculum while in high school are better prepared for college (Achieve & NGA, 2005; Oudenhoven, 2002). Furthermore, the number and difficulty level of core courses taken in high school is strongly associated with how prepared high school graduates feel when entering college (Peter D. Hart Research Associates/Public Opinion Strategies, 2005).

There are also some meaningful, yet not significant results. These findings indicate that students enrolled in a curriculum level mathematics course as the first level course feel their high school teachers had a greater influence on their college preparation than did their peers enrolled in developmental/remedial mathematics. This suggests that students in a curriculum level mathematics course as the first level course feel more encouraged by their high school teachers to enroll in college preparatory courses. It is possible that the majority of

these students enrolled in curriculum level mathematics were in the College/University Prep course of study while still in high school. This course of study would have required them to take more advanced mathematics, equipping them to be better prepared for college mathematics. Research suggests that students who take rigorous mathematics courses as an academic component of their high school curriculum are better prepared for college (Hartman & Feir, 2000). The coursework and the guidance of those who teach advanced mathematics courses could influence student perceptions regarding college preparation.

Additional meaningful results indicate that students who enroll in curriculum level English as their first level of English course feel that their high school counselors assisted them with setting goals to prepare for higher education as opposed to students enrolled in developmental/remedial English. The same trend is found when comparing students by their first level of mathematics course. Students initially enrolled in curriculum level mathematics have a higher regard for the role that their high school counselors played in their college preparation when compared to students initially enrolled in developmental/remedial mathematics. These findings are consistent with research related to the role that high school counselors play in college preparation. High school counselors help promote college preparation by encouraging students to enroll in courses that will equip students with the skills and knowledge needed to be successful in college and by providing advice and

help in decision-making (Farmer-Hinton & Adams, 2006; Galligan, 2001; Hoyt, 2001; Hugo, 2004).

Students believe that parents played a minimal role in their college preparation. One possible reason for the lack of importance of this variable is the disparity of accessible information that is available to parents. Research suggests that not all parents have the same level of access to college information (Allen, 2004; Cagampang, 1992). Parents do not always know how to ask questions and get the critical information that is needed to assist their children with college preparation (Oakes, 2002). The parents of the students who participated in this study may have lacked the knowledge to assist their children in the college preparation process. These parents may not have provided encouragement, taken their children to visit a college campus, researched colleges, or created a college savings plan. Therefore, the students who responded to this survey may not have felt strongly that their parents played a significant role in their college preparation.

Students in this study indicate that college admissions and recruiting staff did not play a crucial role in their high school to college transition. It is possible that college admissions and recruiting staff did not visit the high schools that were attended by these students. If college staff did visit these high schools, perhaps contact was not made with these particular students or materials about their institutions were not made accessible to these students. It is also possible that college staff visited these high schools and left materials, yet the students

did not take advantage of the information. It is unfortunate that the students do not feel the college staff played an important role in their college preparation process which is contrary to what the literature suggests in that college admissions and recruiting staff can serve as advocates for students who are making a transition from high school to college (Komives et al., 2003; Lowery & Associates, 1982). College admissions and recruiting staff have the potential to build positive relationships with prospective students and with high school counselors. They can play an active role in providing essential information to students and high school counselors (Hoover, 2008). College admissions and recruiting staff are able to assist high school students in making decisions that can lead to positive academic and career decisions (Komives et al.).

Theoretical Framework

This study used Hossler and Gallagher's (1987) college choice model as the conceptual framework. There are three phases that students progress through when making decisions about postsecondary education: the predisposition phase, the search phase, and the choice phase. During each phase of the college choice model, there are individual and organizational factors that interact to produce outcomes. Those outcomes affect the student college choice process.

This study supports one phase of Hossler and Gallagher's model. The predisposition phase is supported by the findings as they imply that high school teachers and high school counselors tend to play a role in preparing high school

students to make a successful transition to college. The impact of high school teachers and high school counselors serve as the individual and organizational factors that influence students through the predisposition phase of college preparation and the college choice process. During the predisposition phase, students begin to desire to attend college. High school teachers and high school counselors serve as the significant others that Hossler and Gallagher suggest are factors in college preparation. High school teachers and high school counselors help students make decisions in regards to high school course selection, goal setting, and decision-making.

Implications for Educational Leaders

The following implications for practice in higher education are based on the outcomes of this study:

Secondary and postsecondary educators are encouraged to increase collaboration efforts to assist in articulating clear standards as students prepare to transition from high school to college. K-12 and college educators can be advocates for students by providing resources and materials to students and parents. As noted in the literature, these efforts could help to encourage a seamless transition for students as they graduate from high school and enter college (Hartman & Feir, 2000; McCabe, 2003; NGA, 2003; Reed & Conklin, 2005). The findings of this study do not suggest that students felt the college admissions and recruiting staff played a significant role in their preparation for

college. More collaboration may be needed between secondary and postsecondary educators so that students are better prepared for college.

Educational leaders, legislators, and policymakers can work together to write educational policies that promote the communication between secondary and postsecondary institutions regarding expectations of high school graduates. Leadership in these areas could empower secondary and postsecondary institutions to review their structure and expectations and to collaborate with one another to better align expectations. This communication could help to articulate high school graduation requirements and college admission requirements which foster a more seamless transition from K-12 to higher education. Such collaboration is important as supported in the literature (Achieve, Inc. & NGA, 2005; Hebel, 2003).

High school teachers and high school counselors may wish to consider spending time discussing high school course selection, goal setting, and the college application and admissions process with all students, not just students enrolled in the College/University Prep course of study. This guidance could help to equip students with the information they need to be better prepared for college. The findings of this study indicate that high school teachers and high school counselors play a significant role in college preparation of students who are enrolled in the College/University Prep course of study. Secondary educators influence high school students as they prepare for college. This recommendation has validity given the research on the involvement that secondary educators play

in college preparation (Achieve, Inc. & NGA, 2005; Hugo, 2004). It is crucial that students are equipped with the requisite skills and knowledge to be successful as they transition from high school to college.

It is important to encourage parents to participate in helping students prepare for and transition to college. Students in this study indicate that parents played a minimal role in their college preparation. Research indicates that there is a large disparity in access to college information amongst parents, regardless of whether parents obtain information from their own activities or from programs initiated by the school (Cagampang, 1992). Toward that end, information can be made readily available to parents regarding the college admissions process. High school educators and college admissions and recruiting staff can help by providing college planning information sessions for parents and students. The literature suggests that these conditions are relevant to college preparation for students and to the parents who desire to participate in the process (Allen, 2004; Hollie-Major, 2003).

Recommendations for Future Research

The following recommendations are made for areas of additional research as indicated from the outcomes of this study:

Replicate this study using a larger sample drawn from other community colleges and universities nationwide. Such findings could be more generalizable to secondary and postsecondary institutions.

Examine student perceptions of high school preparation during the first semester they are enrolled in college so that students have a more vivid recollection of their high school experiences. If students have a more vivid recollection, the results could be more reliable. Administering a survey during the first semester of enrollment could also foster a greater response rate.

Investigate the courses that are required in each high school course of study (College/University Prep, College Tech Prep, Career Prep, Occupational Prep) to determine specific courses taught in each curriculum and the skills that are required of students in order to graduate. Each high school course of study requires different courses. Not all courses have the same rigorous requirements. Students who are enrolled in different high school courses of study, and are therefore held to different requirements, could have different perceptions of their college preparation experience.

Conduct a qualitative study on the role that high school teachers, high school counselors, parents and college admissions and recruiting staff play in the college preparation experience of high school students. First-hand accounts by participants who are interviewed may produce more descriptive and rich explanations beyond what is measured in a survey.

Explore student perceptions of college preparation in different geographic regions of the country. This would shed light on whether perceptions vary based on the region of the country and colleges in which students are enrolled.

Conduct research that compares the perspectives of students who attended different types of secondary and postsecondary institutions. Examine different combinations of institutions where secondary schools are either public, private or magnet schools. Postsecondary institutions are either public, private, or elite colleges and universities. Examining the perspectives of students who graduated from different types of high schools could provide insight into the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff play in the college preparation experiences of students who attend different categories of colleges and universities.

Examine the perspectives of first-generation students to determine if there are any significant differences in perceptions when compared to students who are not first-generation. Research suggests that first-generation college students seek the advice of teachers, counselors, and college advisors when making academic decisions (Farmer-Hinton & Adams, 2006; Galligan, 2001; Hollie-Major, 2003).

Examine the perspectives of at-risk students to determine if there are any significant differences in perceptions when compared to students who are not considered at-risk. Research suggests that at-risk students seek the advice of teachers, counselors, and college advisors when making academic decisions (Byrd & MacDonald, 2005; Hugo, 2004).

Conduct research to determine if students who graduated from high schools that offered a specialized college readiness program during the senior year in

high school felt better prepared for college when compared to college students who did not graduate from high schools that offered a specialized college readiness program. The findings would help to determine if high schools who offer specialized college readiness programs are providing effective programs for students as they plan to transition for high school to college.

Limitations of the Study

Despite attempts to have a generous sample size, the study encompasses student responses from only four different institutions. Within the sample population, participants are disproportionate in the categories of race and high school course of study. Unfortunately, the low response rate and the disproportion of certain participant demographics limit the generalizability of the findings to a larger population. Additionally, the initial purpose of the study was to survey students during their first year of college. Since student email addresses were received after the students completed their first year of college, the survey had to be administered during their second year. Students may not have shared the same recollection of their college preparation experiences as they would have indicated if the survey had been administered closer to the time they had graduated from high school. The length of the survey could also be a factor in the low response rate. The survey consists of 60 items and some students may have been discouraged by the length and not patient enough to complete all of the items.

Summary

The purpose of this study was to examine the perceptions of students enrolled at selected community colleges and universities in North Carolina about their college preparation experiences. The study specifically gathers student perceptions as to the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff played in their college preparation experience. Gender, race, high school course of study, level of first English course, and level of first mathematics course are considered in gathering student perceptions.

The findings suggest that students who enroll in curriculum level English and mathematics as the first level course have a higher regard for their college preparation experience when related to high school teachers and high school counselors. Gender, race and high school course of study are not viewed as significant variables due to the disproportionate number of participants within the demographic categories of each of these variables. Future research is needed in this area because the findings of this study are not deemed as generalizable due to the low response rate and the homogeneity within the demographic categories of the independent variables. Suggestions for future research have been indicated.

Preparation for higher education is an essential element of a high school education. Postsecondary as well as secondary educational leaders have accountability in preparing students for college (Achieve, Inc. & NGA, 2005). This

study takes one step towards collecting data on college students and their perceptions of college preparation. The outcomes of this study can be used by educational leaders as they work to improve collaboration and to provide a framework for a seamless transition from high school to college.

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APPENDIX A: PERMISSION FOR USE OF SURVEY

From: Sokol, Gerry [sokolgr@longwood.edu] Sent: Thu 1/18/2007 9:20 AM
To: Williamson, Kimberly Fairless
Cc:
Subject: RE: Dissertation
Attachments:

Kimberly - you have have permission to use any and all parts of my questionnaire - I would also be interested in seeing the results of your study -- Good luck with the dissertation "process" - Gerry At 04:35 PM 1/17/2007, you wrote:

>Dr. Sokol,

>

>Thank you so much for contacting me. I am a doctoral student at East
>Carolina University in Greenville, North Carolina. My degree will be in
>Educational Leadership with a concentration in Higher Education
>Administration. I was a middle grades teacher for three years, a middle
>school guidance counselor for 4 years, and I have been at the community
>college for seven years in the student services area. My research
>interests are very similar to yours. I have been reviewing dissertations
>related to college preparation. When I read your abstract on ProQuest I
>immediately felt a connection to it. I ordered it and have read your study.

>

>I really like the College Preparation Questionnaire that you created and
>used in your study. If you are willing, I would like your permission to
>replicate the questionnaire in my study. I will be looking at the role
>high school teachers, high school guidance counselors, and parents play in
>college preparation. I am not planning to use the section designed to
>answer how students themselves see their role in college
>preparation. Instead, I would like to substitute 15 questions related to
>the role that college admissions and recruiting staff play in college
>preparation. My sample will be students from North Carolina Community
>Colleges and Universities who attended high school in the same county
>where they now attend college. I will be comparing responses between the
>two groups and also looking at gender, ethnicity, and high school course
>of study.

>

>I will be happy to share my study with you once I have finished.

>

>Thank you again for contacting me!

>

>Kimberly Williamson

>

>

>

>

>-----

>From: Sokol, Gerry [mailto:sokolgr@longwood.edu]

>Sent: Wed 1/17/2007 2:25 PM

>To: Williamson, Kimberly Fairless

>Subject: Dissertation

>

>Kimberly - I received an e-mail from Lisa Carper from Jefferson County

>Schools - Lisa indicated you were trying to track me down about my

>dissertation -- I would be glad to talk with you about it -- feel free to

>e-mail me or call me (434) 395-2687. I am currently an assistant professor

>at Longwood University in Farmville, Va. -- Hope to hear from you - Gerry

APPENDIX B: SOKOL'S COLLEGE PREPARATION QUESTIONNAIRE

COLLEGE PREPARATION QUESTIONNAIRE

- A. High School Attended: _____
- B. Month and year graduated from high school: _____
- C. I was enrolled in college track classes during high school (select one):
 Yes: _____
 No: _____
- D. Gender: Female: _____
 Male: _____
- E. Ethnicity (select one):
 African-American: _____ Asian: _____
 Native American: _____ Hispanic: _____
 Caucasian: _____ Other: _____
- F. I am currently enrolled at (select one):
 2 Year College: _____
 4 Year College: _____
- G. I am currently enrolled in the following class (select one):
 Developmental English: _____
 English 101: _____
- H. I am currently a (select one):
 Freshmen: _____
 Sophomore: _____
 Junior: _____
 Senior: _____
- I. Age: _____

Instructions

This survey is designed to solicit your opinion about your high school experience. Each item asks you to rate the extent to which you agree with the statement. Please rate each statement on the scale: 1 = Strongly Disagree 5 = Strongly Agree

You may use any whole number or non-whole number in rating your response. For example, if your opinion of a statement falls somewhere between 2 and 3, you could respond with the rating of 2.4. Here are some statements and responses to give you an idea of how to complete the survey.

Statement	Level of Agreement
SAMPLE: My high school friends urged me to go to college.	<u>4.2</u>
Most of my high school friends went to college after graduation.	<u>3.0</u>
Most of my high school friends received good grades in high school.	<u>2.9</u>

Statement	Level of Agreement
SAMPLE: My high school friends urged me to go to college.	<u>4.2</u>
Most of my high school friends went to college after graduation.	<u>3.0</u>
Most of my high school friends received good grades in high school.	<u>2.9</u>

STATEMENT	LEVEL OF AGREEMENT
1 My high school teachers encouraged me to take college preparatory classes.	_____
2 My high school teachers encouraged me to be a life long learner.	_____
3 My high school teachers tested me primarily on information that required me to recall facts.	_____
4 My high school teachers delivered instruction primarily through class lectures.	_____
5 My high school teachers helped me individually with my class work.	_____
6 My high school teachers provided me with opportunities to be involved in class discussions.	_____
7 My high school teachers encouraged me to discuss course work in class.	_____
8 My high school teachers relied on reading materials as the sole source of information in class.	_____
9 My high school teachers kept me on task during class sessions.	_____
10 My high school teachers reviewed my test performances with me after each test.	_____
11 My high school teachers relied solely on my writing skills to evaluate my knowledge.	_____
12 My high school teachers discussed standardized test (high school and college achievement test) results with me.	_____
13 My high school teachers recognized my academic strengths and talents.	_____
14 My high school teachers allowed me to participate in decisions regarding the curriculum (books, projects) used in class.	_____
15 My high school teachers held high academic expectations for me.	_____

Statement	Level of Agreement
SAMPLE: My high school friends urged me to go to college.	<u>4.2</u>
Most of my high school friends went to college after graduation.	<u>3.0</u>
Most of my high school friends received good grades in high school.	<u>2.9</u>

	STATEMENT	LEVEL OF AGREEMENT
16	My high school guidance counselor assisted me in developing a better understanding of academic strengths and weaknesses.	_____
17	My high school guidance counselor assisted me in outlining a series of classes that would help me reach my educational goals.	_____
18	My high school guidance counselor assisted me in developing a schedule of classes that would help me achieve my career goals.	_____
19	My high school guidance counselor assisted me in developing skills that allowed me to be diverse in my selections of classes and activities.	_____
20	My high school guidance counselor explained to me college admission requirements.	_____
21	My high school guidance counselor assisted me in developing skills that would help me manage my time more effectively.	_____
22	My high school guidance counselor encouraged me to set goals for myself.	_____
23	My high school guidance counselor encouraged me to develop leadership skills.	_____
24	My high school guidance counselor assisted me in completing college applications.	_____
25	My high school guidance counselor assisted me in completing college financial aid applications.	_____
26	My high school guidance counselor assisted me in identifying social, personal and career goals.	_____
27	My high school guidance counselor helped me understand the connection between my career goals and the classes I took.	_____
28	My high school guidance counselor taught me the importance of balancing and managing my social and academic time during high school.	_____
29	My high school guidance counselor helped me set goals for what I wanted to do after high school.	_____
30	My high school guidance counselor helped me understand my college options.	_____

Statement	Level of Agreement
SAMPLE: My high school friends urged me to go to college.	<u>4.2</u>
Most of my high school friends went to college after graduation.	<u>3.0</u>
Most of my high school friends received good grades in high school.	<u>2.9</u>

STATEMENT	LEVEL OF AGREEMENT
31 My parents assisted me in choosing courses to take in high school.	_____
32 My parents were aware of the classes I needed to take to get into college.	_____
33 My parents were aware of college admission requirements.	_____
34 My parents reviewed my high school standardized achievement test results with me (PSAT's, SATs, ACTs)	_____
35 My parents were aware of what standardized tests I needed to take for college admissions.	_____
36 My parents required me to reserve time during the week to do homework and study for tests.	_____
37 My parents provided me with tangible support (money, access to an automobile, etc.) throughout high school.	_____
38 My parents met with my teachers throughout high school to discuss my school performances.	_____
39 My parents knew what materials were covered in my high school classes.	_____
40 My parents asked my teacher if I was learning what I needed to learn in each class to prepare for college.	_____
41 My parents were generally involved in my school activities.	_____
42 My parents were aware of who my high school friends were.	_____
43 My parents encouraged me to take college admission practice tests and regular college admission tests during high school.	_____
44 My parents provided me with positive encouragement in my school activities.	_____
45 My parents provided me with emotional support throughout high school	_____

Statement	Level of Agreement
SAMPLE: My high school friends urged me to go to college.	<u>4.2</u>
Most of my high school friends went to college after graduation.	<u>3.0</u>
Most of my high school friends received good grades in high school.	<u>2.8</u>

STATEMENT	LEVEL OF AGREEMENT
46 I recognized my weak academic areas in high school.	_____
47 I was self-motivated on improving my academic achievement while in high school.	_____
48 I took classes in high school that effectively prepare me for college.	_____
49 I utilized my standardized test scores to assist me in selecting the high school classes I should take.	_____
50 I planned the courses I needed to take in high school that would prepare me for college.	_____
51 I used good study habits in my final three years of high school.	_____
52 I set aside study times at home each week to prepare for my high school classes.	_____
53 I evaluated my high school performance and compared that to how my parents and teachers evaluated my performance.	_____
54 I asked questions in my high school classes to be sure I understood what was taught in class.	_____
55 I received adequate academic preparation for college in high school.	_____
56 I asked my parents for emotional support (advice, guidance, reinforcement, etc.) while I was in high school.	_____
57 I set going to college as an educational goal I wanted to reach.	_____
58 I was aware of the role my high school teachers played in preparing me for college.	_____
59 I was aware of the role my high school guidance counselor played in preparing me for college.	_____
60 I put forth the effort in high school needed to prepare me for college.	_____

APPENDIX C: COLLEGE PREPARATION QUESTIONNAIRE

College Preparation Questionnaire

Thank you for taking the time to complete this questionnaire. Your participation will provide feedback that can be used to improve the college preparation experience and the transition from high school to college for many students.

1. I was enrolled in the following course of study while in high school:

- Career Prep
- College Tech Prep
- College/University Prep
- Occupational Prep

2. Gender:

- Female
- Male

3. Race:

- American Indian/Alaskan Native
- Asian/Asian American
- Black/African American
- Hispanic/Latino
- Native Hawaiian/Pacific Islander
- White/Caucasian
- Other

4. I am currently enrolled at a:

- 2-year community college
- 4-year college or university

5. After completing the college admissions/placement test, the results indicated that the first level of English I could enroll in was:

- Developmental/Remedial English
- Curriculum level English

6. After completing the college admissions/placement test, the results indicated that the first level of Mathematics I could enroll in was:

- Developmental/Remedial Math
- Curriculum level Math

The following questions relate to **your high school teachers**:

7. Please indicate your level of agreement with the following statements.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Encouraged me to take college preparatory classes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged me to be a lifelong learner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tested me primarily on information that required me to recall facts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delivered instruction primarily through class lectures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helped me individually with my class work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provided me with opportunities to be involved in class discussions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged me to discuss course work in class.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relied on reading materials as the sole source of information in class.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kept me on task during class sessions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reviewed my test performances with me after each test.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relied solely on writing skills to evaluate my knowledge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discussed standardized tests (high school and college achievement test) results with me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recognized my	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

academic strengths and talents.

Allowed me to participate in decisions regarding the curriculum (books, projects) used in class.

Held high academic expectations for me.

The following questions relate to **your high school counselors**:

8. Please indicate your level of agreement with the following statements.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Assisted me in developing a better understanding of my academic strengths and weaknesses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisted me in outlining a series of classes that would help me reach my educational goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisted me in developing a schedule of classes that would help me achieve my career goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisted me in developing the skills that allowed me to be diverse in my selection of classes and activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explained to me college admission requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisted me in developing skills that would help me manage my time more effectively.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Encouraged me to set goals for myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged me to develop leadership goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisted me in completing college applications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisted me in completing financial aid applications.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisted me in identifying social, personal and career goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helped me understand the connection between my career goals and the classes I took.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taught me the importance of balancing and managing my social and academic time during high school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helped me set goals for what I wanted to do after high school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helped me understand my college options.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following questions relate to **your parents**:

9. Please indicate your level of agreement with the following statements.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Assisted me in choosing courses to take in high school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were aware of the classes I needed to take to get into college.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were aware of college admissions requirements.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reviewed my high school standardized achievement test results with me (PSATs, SATs, ACTs).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were aware of what standardized tests I needed to take for college admissions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Required me to reserve time during the week to do homework and study for tests.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provided me with tangible support (money, access to an automobile, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

throughout high school.					
Met with my teachers throughout high school to discuss my school performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knew what materials were covered in my high school classes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asked my teachers if I was learning what I needed to learn in each class to prepare for college.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were generally involved in my school activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were aware of who my high school friends were.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encouraged me to take college admission practice tests and regular college admission tests during high school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provided me with positive encouragement in my school activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provided me with emotional support throughout high school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following questions relate to **your college admissions and recruiting staff**:

10. Please indicate your level of agreement with the following statements.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Were frequently present on my high school campus.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were open to talk with me about the college while they were present on my high school campus.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisted me in developing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a better understanding of how my standardized test scores and GPA are relative to my success in college.

Assisted me in outlining a series of classes that would help me reach my educational goals.

Explained to me college admissions requirements.

Explained to me placement test requirements.

Explained to me admissions requirements for my program of choice at the college.

Assisted me in completing an application to the college.

Assisted me in completing college financial aid applications.

Helped me set goals for what I want to do after high school.

Made me aware of different programs offered at the college.

Invited me to tour the college campus.

Encouraged me to involve my parents in planning for college and in the college admissions process.

Placed materials in my high school guidance and counseling office so that students could have access to information about the college.

Sent me information I requested about the

college if it was not available in my high school guidance and counseling office.

APPENDIX D: LETTER TO REGISTRARS



DEPARTMENT OF EDUCATIONAL LEADERSHIP

COLLEGE OF EDUCATION

208 Ragsdale Hall
Greenville, North Carolina 27858-4353
252-328-6862 office
252-328-4062 fax

May 1, 2009

Kimberly Williamson
Doctoral Student, East Carolina University
738 Gatewood Drive
Winterville, NC 28590

Scott Douglas
Registrar
Asheville-Buncombe Technical Community College
340 Victoria Road
Asheville, NC 28801

Mr. Douglas:

I am a doctoral student at East Carolina University pursuing an EdD in Educational Leadership. My professional background includes being a middle grades teacher, a middle grades school counselor, working in student services at the community college level, and working in teacher education at the university level. My topic of study involves college preparation and the role that high school teachers, high school counselors, parents, and college admissions and recruiting staff play in the college preparation experiences of high school students. I would like to survey students at selected North Carolina Community Colleges and University of North Carolina System institutions.

Your institution has been selected to participate in the study. I would like to send an online survey to students who are:

- 1st year students who enrolled in your institution for the first time in Fall 2008 and who are currently enrolled in Spring 2009
- Spring 2008 high school graduates from a high school located in the same county as your institution.
- I understand that there are strict requirements under the Family Educational Rights and Privacy Act of 1974 regarding release of student information. I feel that my research efforts fall under the exceptions granted because I am part of an organization conducting a research study and the goal is to improve educational instruction.

I understand the clauses of non-disclosure and destruction, and I am willing to certify this in writing. Please be assured that data from this study will be treated with the highest confidentiality and security. Any information obtained during this study will be destroyed upon completion and the students would not be able to be identified by myself or anyone else.

In order to complete the study, I need to send an online survey to students. **Please send me an electronic file of email addresses for students who are Spring 2008 high school graduates from a high school located in the same county as your institution AND who enrolled in your institution in Fall 2008 and are currently enrolled in Spring 2009. I would like to have the email addresses by May 29, 2009 so that I can get the survey out in a timely manner.**

I hope that this study will provide valuable information to K-12 and higher education institutions in North Carolina so that we can better prepare our high school graduates for college.

Thank you for your assistance!

Kimberly Williamson
Doctoral Student
East Carolina University
williamsonki@ecu.edu

Michael Pooch, PhD
Dissertation Chair
Associate Professor
Department of Educational Leadership
East Carolina University
poochm@ecu.edu

APPENDIX E: EMAIL TO PARTICIPANTS

As a doctoral student in Educational Leadership at East Carolina University, I am conducting a study on the college preparation experiences of students who have completed their first year of college. The purpose of the study is to examine students' perceptions about factors that influenced their college preparation. The factors examined in this study are high school teachers, high school counselors, parents, and college admissions and recruiting staff. The survey is being completed by college students who are in their second year at selected community colleges and universities throughout North Carolina.

Your voluntary participation will provide feedback that K-12 administrators and college level administrators can use to improve the college preparation experiences and the transition from high school to college for many college freshmen. Your input will give significant insight into increasing collaboration efforts between K-12 schools and colleges and universities.

The survey is a short, 60 item survey and should take you less than 15 minutes to complete.

Please be assured that data from this study will be treated with the highest regard for confidentiality and security. Data will be aggregated for reporting and no personal identifiers will be used. If you have questions regarding the survey or the research study, please contact me at williamsonki@ecu.edu.

Thank you for taking the time to participate in this study and to provide valuable information about your college preparation experience while you were still in high school.

Please begin the survey by clicking on the following link:

<https://survey.ecu.edu/perseus/se.ashx?s=0B87A6564391267D08CC1724DD042B210E>

APPENDIX F: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



University and Medical Center Institutional Review Board
East Carolina University • Brody School of Medicine
600 Moyer Boulevard • Old Health Sciences Library, Room 1L-09 • Greenville, NC 27834
Office 252-744-2914 • Fax 252-744-2284 • www.ecu.edu/irb
Chair and Director of Biomedical IRB: L. Wiley Nifong, MD
Chair and Director of Behavioral and Social Science IRB: Susan L. McCammon, PhD

TO: Kimberly Williamson, 738 Gatewood Dr., Winterville, NC 28590
FROM: UMCIRB *kw*
DATE: May 12, 2009
RE: Human Research Activities Determined to Meet Exempt Criteria
TITLE: "College Preparation: Perspectives of First-Year Community College and Four-Year University Students"

UMCIRB #09-0439

This research study has undergone IRB review on 5.6.09. It is the determination of the IRB Chairperson (or designee) that these activities meet the criteria set forth in the federal regulations for exemption from 45 CFR 46 Subpart A. These human research activities meet the criteria for an exempt status because it is a research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects and any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

The IRB Chairperson (or designee) deemed this **unfunded** study **no more than minimal risk**. This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any changes must be submitted to the UMCIRB for review prior to implementation to allow determination that proposed changes do not impact the activities eligibility for exempt status. Should it be found that a proposed change does require more substantive review, you will be notified in writing within five business days.

The following items were reviewed in determination exempt certification:

- Internal Processing Form (dated 4.29.09)
- Email to participants
- Letter to registrars
- College preparation questionnaire
- Methodology

It was furthermore determined that the reviewer does not have a potential for conflict of interest on this study.

The UMCIRB applies 45 CFR 46, Subparts A-D, to all research reviewed by the UMCIRB regardless of the funding source. 21 CFR 50 and 21 CFR 56 are applied to all research studies that fall under the purview of Food and Drug Administration regulations. The UMCIRB follows applicable International Conference on Harmonisation Good Clinical Practice guidelines.

APPENDIX G: INSTITUTIONAL REVIEW BOARD REVISION FORM

Apr 12 2010 10:19AM III DESKJET FAX

P-7

UMCIRB #:

UNIVERSITY AND MEDICAL CENTER INSTITUTIONAL REVIEW BOARD REVISION FORM

UMCIRB #: 09-0439

Date this form was completed: 4/12/10

Title of research: College Preparation: Perspectives of Second-Year Community College and Four-Year University Students

Principal Investigator: Kimberly Williamson

Sponsor: Dr. Michael Poock, Chair

Fund number for IRB fee collection (applies to all for-profit, private industry or pharmaceutical company sponsored project revisions requiring review by the convened UMCIRB committee):

Fund	Organization	Account	Program	Activity (optional)
		73065		

Version of the most currently approved protocol:

Version of the most currently approved consent document:

CHECK ALL INSTITUTIONS OR SITES WHERE THIS RESEARCH STUDY WILL BE CONDUCTED:

- East Carolina University Beaufort County Hospital
 Pitt County Memorial Hospital, Inc Carteret General Hospital
 Heritage Hospital Boice-Willis Clinic
 Other

The following items are being submitted for review and approval:

- Protocol: version or date
 Consent: version or date

Additional material: version or date 4/12/10. Dissertation title needs to be updated to reflect that "second-year" students were surveyed rather than "first-year" students

Complete the following:

- Level of IRB review required by sponsor: full expedited
- Revision effects on risk analysis: increased no change decreased
- Provide an explanation if there has been a greater than 60 day delay in the submission of this revision to the UMCIRB. Timing of survey changed after email addresses of participants were received.
- Does this revision add any procedures, tests or medications? yes no. If yes, describe the additional information:
- Have participants been locally enrolled in this research study? yes no
- Will the revision require previously enrolled participants to sign a new consent document? yes no

Briefly describe and provide a rationale for this revision. Would like title on IRB approval to match the title of the completed dissertation.

Principal Investigator Signature: Kimberly F. Williamson Print: Kimberly F. Williamson Date: 4/12/10

Box for Office Use Only

The above revision has been reviewed by:
 Full committee review on _____ Expedited review on 4/14/10

The following action has been taken:
 Approval for period of 4/14/10 to no expiration (Exempt #=2)
 Approval by expedited review according to date; any ESCFR #6.110
 See separate correspondence for further required action.

Signature: Susan McCammon Print: Susan McCammon Date: 4/14/10