STUDENTS' OPINIONS ABOUT SCHOOL CLIMATE IN A CAREER ACADEMY

IN A METROPOLITAN AREA IN THE SOUTHEAST

by

FREDRICK A. GLENN

(Under the Direction of MYRA N. WOMBLE)

ABSTRACT

The purpose of this causal comparative study was to examine the perceptions of

school climate of students enrolled in a career academy. It was also important to determine if

there were differences in how students perceived the school climate (quality of the

instructional programs, support for student learning, environment for learning, and

student/school relationships) of the career academy where they were enrolled based on the

independent variables of the study which were gender, grade level, and race/ethnicity. Of the

approximately 800 high school students enrolled in the career academy, 646 students

received parental consent and/or volunteered to participate in the study. There were 315

male and 331 female students. The race/ethnicity of these students included African

American (214), Caucasian (182), Hispanic (167), Asian American (28), Multiracial (28),

and Other (27). For each of the four dependent variables, quality of the instructional

programs, support for student learning, environment for learning, and student/school

relationships, a majority of the participants indicated a positive perception of school climate

in the career academy. There were no significant differences found between the students'

perceptions of school climate (four subscales) based on grade level or race/ethnicity.

However, a significant difference was found between the students' perceptions of school

climate and the subscale student/school relationships, based on gender. Female students were

more positive about student/school relationships than male students.

INDEX WORDS:	School Climate, Career academy, Instructional programs, Student

learning, Environment for learning, Student-school relationships,

Gender, Grade level, and Race, Ethnicity

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DEDICATION

My dissertation is dedicated to my family and friends who support me through the difficult process. Specifically, I would like to give special thanks to my grandmother, Ms. Alene Reid, and my mother, Ms. Patsy Reid. Each of these women encouraged me to strive for greatest in spite of the obstacles that I might face. I would also like to thank Lewis and Constance Jackson, my father and stepmother, whom have offered much wisdom, support, and encouragement through the many challenges in this process. I would like to thank my sisters, Yolanda Glenn, Tayloria Glenn, Niama Jackson, Crystal Jackson, and my brother Edward J. Jackson for their support. A special dedication of my dissertation is to my daughter, Ms. Sydney Joi Glenn. She is my inspiration. I also like to thank my close friends who have supported me through this difficult process. They include: Xerxses Bailey, James Davis, Willie Fleming, Lamar Hill, Debbie Howard, Kimberly Howie, LaKesha McGee, Lorenzo McIver, Carlton Paylor, Barbara Scarboro, Clarence Wallace, Melanie Wallace, Detra Weaver, and Gregorio Welch.

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CHAPTER I

INTRODUCTION

Students in both traditional high schools and career academies are exposed to an abundance of educational programs and activities. Traditional high schools are grades 9-12 environments that provide general core academics and other electives courses. Career academies are typically small and personalized Career and Technical Education (CTE) environments located in facilities separate from the main high school. Students voluntarily enter career academies through an application process and are accepted with parental knowledge and support (Stone, Kowske, & Alfeld, 2004). School climate can strongly affect students' participation in these educational environments, either positively or negatively. As more school districts consider using career academies, there must be significant evidence that the overall school climate in such educational settings supports learning. According to Tableman (2004), "school climate reflects the physical and psychological aspects of the school that are more susceptible to change and that provide the preconditions necessary for teaching and learning to take place (p.1)." School climate encompasses the physical structure of the school building and the interactions between students, teachers and other school staff. It can influence students, parents, school personnel, and the community on multiple dimensions (Marshall, 2000). While there is an array of stakeholders influenced by school climate, the perceptions of those most affected—the students—will help identify what aspects of career academies are most effective.

School climate can greatly affect various aspects of a school environment. According to Freiberg (1998), a positive and supportive school climate for students is important for a smoother and easier transition to a new school. Some research has indicated that a positive school climate has been associated with fewer discipline issues and emotional concerns for students. Positive school climates are supportive educational environments that help students develop positive perceptions of school and make the necessary behavioral changes (Kuperminc, Leadbeater, Emmons, & Blatt, 1997). Haynes and Comer (1993) found that in high-risk urban environments, school climate can shape the degree of academic success, if it is positive, supportive, and culturally conscious. In particular, positive perceptions of school climate by young boys have resulted in preventing them from exhibiting antisocial behavior (Haynes & Comer, 1993). This is also reflective for high-risk students as well (Haynes, 1998; Kuperminc et al., 1997; McEvoy & Welker, 2000). In addition to supporting positive interpersonal relationships, school climate has been shown to promote high quality learning opportunities for students in all types of educational environments that result in higher achievement levels (McEvoy & Welker). Taylor and Tashakkori (1995) also found that a positive school climate is associated with increased job satisfaction for school personnel. These consequences of a supportive school climate can be generalized to most types of learning environments. In addition, there are specific benefits of a positive school climate within specialized situations of career and technical academies.

A study of career academies in California indicated that their success was based on a solid curriculum, an environment that sheltered students from hostile or indifferent school environments, a large amount of start-up resources; and a committed and supportive administration, school staff, and community (Maxwell & Rubin, 2001). Another research

study by Kemple and Snipes (2000) concluded that a career academy can be an effective means of reducing high school dropout rates and enhancing students' engagement with school. Career academies have helped with the dropout dilemma by providing more personal support from teachers and fellow peers. Career academies have also created programs that deal with nontraditional careers. Several states have implemented initiatives for school systems to promote non-traditional careers based on gender. Such programs have considered the importance of fast-growing occupations that also lower barriers for entry into traditionally gender-specific fields (Lucci, 2007). Finally, Kemple (2001) provided a comprehensive study of career academies and concluded that such environments improved students' average level of school engagement, the rate at which they combined academic and career-related courses, and the rate at which students participated in career awareness and work-related learning activities. Results such as these have increased students' chances of making a successful transition to post-secondary educational environments. While school climate is comprised of many features, the following are four features that encompass school climate *and* its impact on educational settings: quality of the instructional programs, support for student learning, environment for learning, and student-school relationships, which were the dependent variables of importance to this study.

The *quality of the instructional programs* found within schools can have a significant impact on school climate. Quality instructional programs are designed to meet the diverse needs and learning styles of students. The curriculum in a quality instructional program offers clear goals and objectives in all content areas for what students need to achieve and is aligned to meet district and state standards (Maxwell & Rubin, 2001). Teachers use research-based frameworks on how instruction should be organized to promote student learning of

content material (Newmann, Smith, Allensworth, & Bryk, 2001). Effective instructional programs emphasize engaged learning where the student is an active learner in the classroom and is able to work independently and in groups. Today's quality instructional programs emphasize the use of technology and project-based learning in the classroom. Students' understanding is checked regularly and lessons are structured so that while most students are moving forward with increasingly challenging tasks, struggling students receive extra attention and support (Newmann, Smith, Allensworth, & Bryk, 2001). The keys to designing effective instructional programs are facilitating a process of inquiry, sharing decision making and developing innovative ideas to apply to the unique setting of the individual school or district (Brunn, 2000). Some recent findings suggest that instructional programs use the career academy model at the high school level to better prepare students to meet new academic standards as well as prepare for post-secondary educational options and opportunities in business and industry (Kemple, 2001). Career academies build instructional programs based on industry jobs, occupations, and professions that are in demand for local and state labor markets. Regardless of the innovations, instructional programs will fail if grounded research, accumulated knowledge of best practices, and sharing of responsibilities by the school personnel are ignored (Brunn, 2000). The results of such actions impact the school environment and thus, can greatly affect the school's climate as a whole.

The *support for student learning* is another key factor affecting a learning environment that simultaneously affects school climate. It is essential for school settings to endorse academic environments that promote student learning and self-fulfillment (Johnson & Johnson, 1993). While there is a focus on meeting specific academic standards, all types of intelligence and competence should be respected and supported (Johnson, Johnson, &

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Zimmerman, 1996). Tableman (2004) identified additional elements that illustrate support for student learning: (a) teachers who are confident and knowledgeable with information to assist students, (b) methods of teaching in school environments to embrace the differences in ways students learn, (c) supportive classroom settings for learning that have a high expectation for all students as well as regular monitoring of student progress, (d) assessment results are communicated promptly to students and parents and used in evaluating and redesigning teaching procedures and content, and (e) reward and praise of student achievement and performance.

The *environment for learning* is another vital factor affecting school climate. Research has indicated that the learning environment as it relates to school climate can be broken into two key components (Tableman, 2004). One of these key components is based on the physical environment, while the other reviews the social aspects of the school setting. The physical environment, as defined by school climate, is a welcoming and conducive school facility. One of the first elements of a welcoming and conducive facility is the school building itself—where students feel safe and secure—and the student body membership is limited. Another aspect of the physical environment is classrooms that are orderly, clean, and well-maintained, as well as visible and inviting. Finally, the areas for instruction are appropriately designed to accommodate various activities, and school and staff members are provided with the needed resources such as textbooks, computers, and other supplies (Tableman, 2004).

The environment for learning that is affective in nature is the second component Tableman (2004) believes to have an impact on the learning environment as it relates to school climate. These types of environments address students' emotions and feelings, thereby

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promoting a sense of belonging and self-esteem. Such positive environments are found

within schools where: an openness to diversity and welcoming to all cultures is practiced,

interaction of teachers and staff with all students is caring, responsive, supportive, and

respectful, and the students trust teachers and staff. Affective environments also exhibit a

high morale among teachers and staff and a sense of community. The school staff and

students are respected and valued, and feel that they are contributing to the success of the

school. Parents and community members perceive the school as warm, inviting, and helpful

(Tableman, 2004). These and many other factors like these have a significant influence on

the learning environment and creating a positive school climate (Freiberg, 1998).

Student and school relationships are also significant components that impact school

climate. Research has shown that students need to be engaged within their environment in

order to exhibit positive results. There has been considerable evidence that students, who are

not engaged with their teachers, classmates, and other school staff, will revert to potentially

disruptive behaviors (Restructuring *Schools* for Young Adolescents, 1990). This

troublesome conduct caused by lack of positive interactions leads to conflict between

students, parents, and school personnel, and makes students' social and intellectual

development difficult (Haynes, 1998). As a result, disconnected students become disciplinary

problems to the school and the community at large (Lumsden, 2000).

Student and school relationships must exhibit a social environment that promotes

communication and interactions. Teachers play a key role in establishing meaningful

relationships with students and must be the initial school personnel who encourage

interactions and communication (Haynes, Emmons, & Comer, 1993). Parents and teachers

should work collaboratively as partners in the educational process. School officials must be

open to students' suggestions and provide them opportunities to participate in school decision-making (Tableman, 2004). The school staff and students should be trained to prevent and resolve conflict. If actions such as these are implemented, the relationships between students, teachers, parents and other school personnel are positive with the school climate being ideal for learning (Freiberg, 1998; Marshall 2000)

Rationale

Researchers have identified several demographic descriptors that are influential to school climate (Hanna, 1998; Haynes, Emmons, & Comer, 1993; Hoy, Smith, & Sweetland, 2002; Marshall, 2000). These demographic descriptors include: gender, grade level, and race/ethnicity just to name a few. Such demographics are important when studying school climate at the secondary level and, therefore, are the independent variable of interest for the planned study. Several school climate studies have shown that many students become dissatisfied with school during the latter stages of middle school (Hoy & Sabo, 1998) and early stages of high school (Kuperminc, Leadbeater & Blatt, 2001; Kuperminc, Leadbeater, Emmons & Blatt, 1997; Restructuring Schools for Young Adolescents, 1990). This social disconnect begins to widen for various reasons as students continue to progress through high school, with their potential of being a drop-out relatively high (Berktold, Geis, & Kaufman, 1998; Jimerson, Egeland, Sroufe, & Carlson, 2000; Restructuring Schools for Young Adolescents, 1990). Obviously, if students have a negative perception of high school, that impact on students' academic and social development puts the students at-risk of school failure. Such circumstances support a critical need for educators to further examine how school climate affects high school students as a first measure to reclaim at-risk students.

Keeping in mind the original purpose of career academies—to help inner-city students stay in school and obtain meaningful occupational experience—and the current multi-purpose nature of career academies, a positive school climate is imperative (Coffee & Pestridge, 2001). Consequently, the benefits of a positive school climate to students at risk of school failure have been studied and identified in the literature by any number of researchers. In addition to benefits previously mentioned, researchers have found relationships between school climate and academic improvement. For example, a positive school climate has been associated with fewer behavioral and emotional problems for students, and unfortunately, students at risk of dropping out are often those with behavioral and emotional problems. A relationship between a positive, supportive, and culturally conscious school climate and academic success experienced by urban students has been demonstrated. Likewise, students who are potential dropouts are often those in urban areas of our country. A positive school climate may have the ability to give at-risk students a supportive learning environment, one that is healthy and prevents antisocial behavior. Interestingly, the literature has also shown that students actively engaged in extracurricular activities are less likely to drop out of school. Finally, a positive school climate, one where interpersonal relationships and optimal learning opportunities are available for all students, has been shown to increase achievement levels and reduce dysfunctional behavior (Kuperminc et al., 1997; Haynes & Comer, 1993; Haynes, 1998; Kuperminc et al., 1997; McEvoy & Welker, 2000) as cited in Marshall (Center for Research on School Safety, School Climate and Classroom Management).

While research has addressed benefits of career academies and their ability to intervene with high school dropouts, today's career academies have greatly advanced to address the needs of all students. Career academies have grown from being vocational

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training centers that prepare students simply for employment after high school to include post-secondary educational opportunities beyond high school (Maxwell, & Rubin, 2000; Stern, Dayton, & Raby, 2000). Currently, career academies support student learning by offering smaller learning environments with college preparatory curriculum. They have also established partnerships with business and industry based on their specific career themes (Delano & Hutton, 2007). Since career academies incorporate both work-bound and college-bound students, future research must address the existing conditions of these educational delivery systems and specifically the climate of these environments (National Career Academy Coalition, 2008).

The use of career academies at the secondary level has been introduced as an alternative means to traditional high schools that combines both core academics and development of work skills for business and industry (Kemple, Poglinco, & Snipes, 1999). There is evidence that the career academy model has been an effective model (Kemple, 2001; Maxwell, & Rubin, 2001), perhaps even more effective than the traditional high school model. Today, as many traditional high schools are underperforming, many students attending career academies are exceeding expectations. However, every career academy must be accountable and must examine its success which includes assessing the impact of its school climate. A primary objective when examining school climate is to consider the perceptions of the most vulnerable stakeholders—the students. A better understanding of a career academy's school climate and its impact as perceived by students may provide valuable information for climate change and the potential for student success.

Purpose Statement

Each year, high school students in the U.S. are exposed to an array of education opportunities and programs in combination at traditional high schools and career academies that prepare them for post-secondary education and the world of work (Lynch, 2000). These educational environments provide experiences that are strongly influenced by a variety of elements, in particular the school's climate. Such elements can have a significant impact on the educational environments (Marshall, 2000) and ultimately, the success of the students enrolled. According Freiberg (1998), "School climate can be a positive influence on the health of the learning environment or a significant barrier to learning (p. 22)." As a result, one contributor to students' success or failure may lie with their perception of their school's climate (Marshall, 2000).

The purpose of this study was to examine the perceptions of school climate of students enrolled in a career academy. Essentially, I sought to determine if students perceived differences in the school climate of the career academy where they were enrolled. The dependent variables examined included quality of the instructional programs, support for student learning, environment for learning, and student/school relationships. The independent variables of the study were gender, grade level, and race/ethnicity.

Research Questions

The overall purpose of this study was to describe the perceptions of school climate of high school students who attend a career academy. Specific research questions were:

1. What are the perceptions of school climate (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school*

relationships) of students enrolled in a career academy in a metropolitan area in the southeast?

2. Are there significant differences in perceptions of school climate (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on gender?

3. Are there significant differences in perceptions of school climate (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on grade level?

4. Are there significant differences in perceptions of school climate (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on race/ethnicity?

Theoretical Framework

In devising a theoretical perspective for the study of school climate in career academies, the use of social learning theory is appropriate to identifying students' beliefs, expectations, and perceptions in this educational setting. Social learning theory focuses on the learning that occurs within a social context (Bandura, & Walters, 1963; Rotter, 1954). In general, it has been used to explain the way people learn behavior and how their actions are accepted or not accepted in various social environments (Taylor, 1992).

Several of the works by Bandura analyzed social learning theory from both a behavioral and cognitive standpoint along with a review of environmental concerns as

perceived by Rotter (1954). Bandura believed that people could learn new information and behaviors as they watch people in a social context. His theory was principally concerned with reinforcement and imitation as they related to the control of behavior. Two basic elements of his hypothesis include the concept of observation and the inclusion of a model as a learning variable (Bandura, 1973; Bandura, 1977; Bandura, 1982; Bandura & Walters, 1963).

Research on social learning theory is rooted not only in describing people's learned behavior, but socially acceptable behavior. McNeil (1969) suggested that the roles of home and school were to foster the early development of appropriate behaviors. These environments are vital to transmitting the culture of the society to an individual and teaching the appropriate behaviors for their specific sex and social class. This would suggest that social learning theory would have an impact on an individual's personality and self-efficacy as it relates to specific social conditions. From this theory, an individual would have a set of ideologies for different social settings and situations (Demrba & Yabasan, 2006; Khan & Cangemi, 1979).

Social learning has covered a wide array of behavior issues. Several researchers have used social learning theory to look closer at non-conforming behaviors (Bandura, 1973). These include factors that promote delinquency and aggressive behavior in certain environments. An abundance of variables have been examined in social learning theory including achievement, self-esteem, goal setting, feedback, performance, differences, competitiveness, gender, sex role, race/ethnicity, deviance, and pathological behavior (Battle & Rotter, 1963; Houts & Kassab, 1997; Midkiff & Burke, 1991).

In this study, social learning theory contributed to an understanding of school climate in a career academy by explaining students' perceptions and beliefs that evolve from the

psychosocial influences on behavior. Primarily, this influence pertains to the variety of elements that make up the school environment (Clary & Orenstein, 1991). This study used a framework based on the major constructs found in social learning theory. These constructs help explain the dynamics of an individual's behavior (both internally and externally) and the influence of the environment. They include:

1. Environment – factors that are physically external to the person;
2. Situation – the individual's perception of the environment;
3. Expectations – anticipated outcomes of a behavior or participation in a program;
4. Observational learning – behavioral acquisition that occurs by watching the actions and outcomes of other's behavior;
5. Reinforcement – responses to a person's behavior that increase or decrease the likelihood of the behavior's reoccurrence; and
6. Self-efficacy – the person's confidence in performing a particular behavior (Baranowski, Perry, & Parcel, 2002; Klein & Sondag, 1994).

Each of these constructs were rooted within the framework of this study of school climate and looked to apply previous research characteristics of gender, school level, and race/ethnicity (Battle & Rotter, 1963; Demrba & Yabasan, 2006; Midkiff & Burke, 1991; Taylor, 1992). The following statement illustrated the underlying logic in the design and conducting of this study related to school climate in a career academy. If students perceive many attributes of a positive school climate in career academies, then I expect to find that the quality of the instructional programs, support for student learning, environment for learning, and student/school relationships are better than comparable students (in terms gender, grade level, and race/ethnicity) who do not perceive climate as positive.

Significance of the Study

Although considerable research has been done regarding school climate, research focused specifically on students' perceptions of career academies is limited. More research about school climate as it relates to career academies and students' perceptions may lead to

valuable information about the potential for student success in these environments. Such research may also increase awareness of the need for a positive school climate in career academies, and may provide information useful to traditional high schools, especially those where the career academy concept has not been implemented. If the findings of the study are favorable, showing that these students perceive the school climate of their career academy to be positive; and showing distinct relationships between students' positive perceptions and gender, grade level, or race/ethnicity, school districts may consider more career academies as an alternative high school model (Kemple, Poglinco, & Snipes, 1999). Growth of career academies as a result of this type of finding would mean high school students would have more options—enrolling in a designated traditional high school—or choosing between one or more local career academies (Kemple, 2001; Maxwell, & Rubin, 2001). Even if positive results from a study such as this do not give rise to more career academies, the career academy in this study will be able to discern what it is doing right or wrong with regard to the school climate and make adjustments accordingly.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Students in both traditional high schools and career academies are exposed to an abundance of educational programs and activities. Traditional high schools are grade 9-12 environments that provide general core academics and other electives courses. Career academies are typically small and personalized Career and Technical Education (CTE) environments located in facilities separate from the main high school. Students voluntarily enter career academies through an application process and are accepted with parental knowledge and support (Stone, Kowske, & Alfeld, 2004).

School climate can strongly affect students' participation in these educational environments, either positively or negatively. As more school districts consider using career academies, there must be significant evidence that the overall school climate in such educational settings support learning. According to Tableman (2004), "school climate reflects the physical and psychological aspects of the school that are more susceptible to change and that provide the preconditions necessary for teaching and learning to take place (p.1)." School climate encompasses the physical structure of the school building and the interactions between students, teachers and other school staff. It can influence students, parents, school personnel, and the community on multiple dimensions (Marshall, 2000). While there is an array of stakeholders influenced by school climate, the perceptions of those

most affected—the students—will help define what aspects of career academies are most effective.

<div align="center">The Development of Career Academies</div>

This section of the literature review provides an historical examination of career academies with emphasis on post-secondary education and the types of students who enroll in career academies.

Historical Perspective

Career academies originated from high schools that focused on dropout prevention and vocational preparation. The city of Philadelphia established the first career academy in 1969. Known as the Electrical Academy at Edison High School, it was a program backed by the Philadelphia Electric Company. From this initial career academy, others that covered many career fields were instituted at local high schools in Philadelphia. Career fields available included business, automotive, health, environmental technology, law, horticulture, tourism, and aviation. The career academies in Philadelphia continued to grow and expand to a network of 29 academies in 12 different career occupations. Several nonprofit organizations speared the career academy movement and in 1982 came together as one organization known as Philadelphia Academies, Inc. This organization was funded through the support of many corporate sponsors and foundational grants. Today, it continues to coordinate and subsidize career academies in Philadelphia, supporting the city's school district by supplying teachers and classrooms. While the original career academies of Philadelphia were designed to be vocational training programs, these programs now send the majority of their students on to post-secondary colleges and universities (Stern, Dayton, & Raby, 2000).

The state of California was the next location to establish the idea of career academies. In 1981 near the Silicon Valley area, the "Computer Academy" at Menlo-Atherton High School and an "Electronics Academy" at Sequoia High were introduced. The evaluation of these programs demonstrated significant improvement of students' academic performance. With such initial success, the state of California passed legislation for more career academies and an additional ten more career models. The implementation of these academies demonstrated continued success and in 1987, a second state bill was passed to support 40 more career academies. The concept of the career academy observed even more support from legislation in California with bills being passed in 1993 and 1999 that expanded the number of academies to 290 by the year 2000. These academies expanded to more than 25 different career fields. With such success of the career academy model in California, many school districts in the state started their own non-funded academies. There are now as many non-funded as there are state funded career academies with approximately 500 academies. At the present, California has implemented the involvement of three core academic courses as a part of their model with one career-related course for students in grades 10-12. There is also an emphasis placed on preparing students for post-secondary education and the world of work simultaneously (Maxwell, & Rubin, 2000; Stern, Dayton, & Raby, 2000).

During the 1980s, New York City sought to implement its first group of career academies. These were called "Academies of Finance" and were supported by the American Express Company. It, along with other corporations, created the National Academy Foundation (NAF). This newly formed organization added the field of "Travel and Tourism" in 1987, "Public Service" in 1990, and "Information Technology" in 1999. NAF supplies an array of curriculum, technical support, and professional development for teachers who work

in career academies. NAF academies primarily focus on grades 11-12, but some of these academies have shifted towards the academy models in Philadelphia and California. These career academies have chosen to add earlier high school grade levels with the integration of core academic classes. NAF academies have focused on connecting high school students to post-secondary education opportunities from their inception (Maxwell & Rubin, 2000; Stern, Dayton, & Raby, 2000).

During the start of the 1990s, many other cities and states began to implement the career academy model. The state of Illinois established California-style academies that included 20 academies in 1994-1995 and 50 academies by 2000. Several other major cities embraced the career academy model and started growing these programs in their urban school districts. These included Atlanta, Chicago, Denver, Sacramento, Seattle, Oakland, and Washington, D.C. (Stern, Dayton, & Raby, 2000).

Emphasis on Post-Secondary Education

Career academies have evolved, from the traditional vocational education program that emphasized preparation for work, to programs focused on preparing high school students for both the world of work and post-secondary education. Based on past federal law, the expectation of students who participated in vocational education was not focused on a bachelor's or other advanced degree. Vocational education has been viewed by students and parents as a less significant educational option compared to completion of a four-year degree. Supporting this view is the fact that the job market has continued to grow and the need of some form of post-secondary education is now a must (Quint, 2008). The direction of career academies at the present is far different from the traditional vocational academies that were once so attractive. Today's career academies introduce students to a wide range of careers

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that require various levels of formal education. They provide a foundation that prepares students for more advanced training in a post-secondary environment. These educational institutions also offer rigorous academic curricula that enable students to transition into a four-year colleges or universities. By combining core academics with a career theme and workplace experience, career academies demonstrate a history of encouraging students to stay in school and build toward a better future (Kemple, 2001; Maxwell & Rubin, 2000; Stern, Dayton, & Raby, 2000).

Types of Students Enrolled in Career Academies

Career academies were originally designed as high school reform models to address the needs of at-risk students. These environments were intended to better draw on students' interests by combining core academic and Career and Technical Education curriculum based on a career theme. In the early years of the 1970s and 1980s, career academies acted as mainly vocational education programs that focused on keeping high risk students from dropping out of high school. Students in the 9th and 10th grade either volunteered or were referred to a specific program by teachers and/or counselors and remained in the academy throughout their high school years. At the conclusion of the academy, students would have completed coursework, designed for both academic and technical, for a specific occupational setting. The primary goals of career academies were to keep students engaged at the high school level, provide them with work-related learning experiences both in the classroom and worksite, and establish clearer pathways between high school and post-secondary education (Kemple, 2001; Kemple, Poglinco, & Snipes, 1999; Maxwell & Rubin, 2000).

Starting in the late 1980s, as the goals for most career academies changed, so did the targeted population. To be specific, there was a consensus that career academies should

distinguish themselves from traditional vocational education by seeking to prepare students for both work and college. Historically, federal legislation had directed vocational education programs solely towards preparing young people for an occupation that did not traditionally require an advanced degree. Recently, federal legislation has required vocational education to make significant changes to recruit students into their various programs including career academies. A new emphasis for vocational education, that includes a name change to Career and Technical Education, required career academies to seek a wider range of students and to combine a rigorous academic curriculum with exposure to extensive information about an industry both in the workplace and in the classroom. An integrated curriculum framework that combines core academics and career and technical courses is intended to expose students to a broader array of careers in a given field rather than simply preparing students for a specific job in a career field (Kemple, 2001; Maxwell & Rubin, 2000; Stern, Dayton, & Raby, 2000).

Research has demonstrated several benefits to, as well as limitations of, students enrolled in career academies. Some of the benefits for students enrolled have included an increase in the level of interpersonal supports received from their teachers and peers, reduction in potential high school dropouts, improvement in attendance, and an increase in the number of credits earned toward graduation. Also, students enrolled in career academies are more likely to combine academic and career coursework and to participate in career awareness and work-based learning activities compared to their non-academy counterparts, Even for students with medium to low risk of dropping out, career academies increased the number of Career and Technical Education courses taken and participation in career development activities, while not reducing their academic courses. Several findings illustrate

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some limitations that have been observed in career academies. Some of these include a significant percentage of students (as high as one-third) have left the academy before the end of their senior year, the increase of interpersonal support from teachers and peers was not as substantial in some academies, and some reduction in engagement and academic course-taking by some students has been observed. Other concerns include use of curricula and instructional strategies generally similar to those used in the traditional high school and little to no impact on standardized test scores for students enrolled (Kemple, 2001).

While there will be challenges for career academies, this education model has been most effective at creating communities of support for teachers and students within smaller learning environments and connecting students to life beyond high school. Students have shown that these highly engaged settings create a "family-like" atmosphere which is reflected in their high attendance rates and low dropout rates (Conchas & Clark, 2002).

The Concept of School Climate

The concept of school climate can be traced back to the early works of Perry (1908). He was one of the first researchers to explicitly write about school climate effects on students and the learning process. Later, Halpin and Croft (1963) researched school climate and viewed it from the aspect of morale. Their research focused on the social interaction between the principal and the teacher and various factors that not only affected their working relationship, but the entire school environment. The method of how school climate is examined today grew out of organizational research and studies of school effectiveness (Anderson, 1982; Creemers & Reezigt, 1999; Kreft, 1993; Miller & Fredericks, 1990; Purkey & Smith, 1983). While there is no common definition for school climate, many researchers and practitioners have provided their own meaning of the concept. Tableman (2004) defined

school climate based on the physical and psychological aspects of the school that are easier to change with pre-existing conditions and that allow for teaching and learning. Others such as Marshall (2000) describe school climate as an environment that encompasses the physical structure of the school building and relationships between students, teachers, and other staff. Most researchers agree that school climate in general, reflects the subjective experiences in school (Cohen, 2006).

How School Climate and School Culture Differ

The terms school climate and school culture are sometimes used interchangeably in research, but are vastly two different concepts. It is important to illustrate the difference between the two terms beginning with school culture. School culture focuses on shared ideas that are based on assumptions, values, and beliefs that provide an identity and standard for an organization and its expected behavior. These ideas in school culture are considered deeply embedded in the organization and to some degree, operate unconsciously. These ideas are so ingrained in students and school personnel that they are often taken for granted. There is a common understanding shared by teachers, staff, and students of how to respond to the demands that occur both inside and outside of the school setting. In general, school culture centers on past school experiences of teachers, staff, and students and provides an outline for future action based on how business is conducted in the school setting (Tableman, 2004).

There are components of school culture reflected in the school's atmosphere and moral code. Three concepts used in defining school culture for school districts are artifacts and symbols, values, and assumptions. Artifacts and symbols represent the way in which the school building is decorated and maintained. Values center on the manner in which the school administration and staff function and interact. Assumptions consider the beliefs that

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are taken for granted by the entire school's staff and students. Several practices develop over time in a school district concerning its school's culture. Such practices include common beliefs and values that key individuals communicate and enforce and heroes and heroines whose actions and accomplishments embody these values. Other practices are rituals and ceremonies that reinforce these values and stories that reflect what the organization stands for (Tableman, 2004).

School climate can be defined as the physical and psychological aspects of the school that are likely to change and the existing conditions for teaching and learning to take place. School climate focuses on the feelings and attitudes of students, teachers, other school staff, and parents about a school. Although there is not an agreed upon definition, school climate reflects the social, emotional, and ethical behavior of students, school personnel and parents. School climate also reflects students' experiences of school life. The concept of school climate has been used to improve academic performance through school-wide reform. Such reform considers meeting the challenges of students bullying, inter-student conflicts, suicide, and dropping out. The literature does not reveal consistent agreement on specific components of school climate, but many researchers emphasize caring and safety as core elements. While there are many features of school climate that encompass a school's physical and social environment, eight common characteristics have been identified. These characteristics are appearance and physical plant, faculty relations, student interactions, leadership/decision making, disciplined environment, learning environment, attitude and culture, and school-community relations (Freiberg, 1998; Tableman, 2004).

Characteristics of Positive and Negative School Climates

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School climate is an important concept that can impact the school environment both positively and negatively. According to Freiberg (1998), "School climate can be a positive influence on the health of the learning environment or a significant barrier to learning (p. 22)." Four aspects of school climate can either support learning or impede it. These are physical, social, affective, and academic environments. The physical environment focuses on a school setting that is welcoming and conducive to learning. One positive element of the physical environment that supports student learning is a school building where students feel safe and secure with a limited student body. Another positive aspect of the physical environment is classrooms that are orderly, clean, and well-maintained, as well as visible and inviting. Other positive components are the areas for instruction are appropriately designed to accommodate various activities, and school and staff members are provided with the needed resources such as textbooks, computers, and other supplies. Some of the negative elements that impede learning are overpopulated school buildings, lack of supervision of students, disorganized classrooms, insufficient school supplies and materials, and poorly maintained school facilities (Freiberg, 1998; Marshall, 2000).

The social environment is another component that applies to school climate and promotes communication and interaction. Some positive elements of the social environment that support learning are continuous communication and interaction between teachers, students, and parents and decision making is made locally with input from teachers and students. Another key piece is providing training for school personnel and students on preventing and resolving conflict. Some of the negative elements that impede learning are limited interaction between students, teachers, and parents, decision making is made by the

central administration or principal only, and restricted student input and involvement (Freiberg, 1998; Kuperminc, Leadbeater, & Blatt, 2001).

Another aspect that relates to school climate and focuses on promoting a sense of belonging and self-esteem is the affective environment. Some positive elements of the affective environment that support learning include a school that is open to diversity and welcoming to all cultures, the interaction of teachers and staff with all students is caring, responsive, supportive, and respectful, and the students trust teachers and staff. Affective environments also exhibit a high morale among teachers and staff and a sense of community. The school staff and students are respected and valued, and feel that they are contributing to the success of the school. Parents and community members perceive the school as warm, inviting, and helpful. Some of the negative elements that impede learning are: minimal interaction of teachers and staff with students, the student lack of trust in teachers and staff, and low sense of morale throughout the school. Other negative elements are unfriendly interaction between students and staff, lack of positive reinforcement of students' work or actions, and teachers, staff and students feel they have little impact on the happenings in the school. Finally, negative affective environments can make parents feel that they are not welcomed and parents often receive blame for their child's difficulties (Freiberg, 1998; Marshall, 2000; Kuperminc, Leadbeater, & Blatt, 2001).

The academic environment is the final component that applies to school climate and supports learning and self-fulfillment. Some positive elements of the academic environment that support learning are all types of intelligence and competence are respected and supported; teaching methods embrace differences in which students learn; and teachers are confident and knowledgeable in their skills to assist students. Other positive elements include

supportive classroom settings with high expectations for all students; regular monitoring of student progress; results of assessments are used to evaluate and redesign teaching procedures and content; and student achievement and performance are rewarded and praised (Freiberg, 1998). Some of the negative elements that impede learning are academic performance is downplayed or not rewarded; teaching methods do not allow for multiple learning styles; expectations of students are low with the anticipation that some will fail; and there is minimal or no periodic assessment of students. There are some other harmful elements to slow down learning such as little communication about results of assessments, academic results are not used to improve teaching and learning, reward and praise is minimal, and teachers are unsure or under-prepared in their content area (Freiberg, 1998; McEvoy & Welker, 2000). Finally, these four aspects of the school environment have interrelationships and significant influence on creating a positive or negative school climate (Freiberg, 1998).

Students and School Climate

There are some advantages and disadvantages of school climate that affect students even more directly. Research has indicated that a positive school climate has been associated with fewer discipline issues and emotional concerns for students. Positive school climates are supportive educational environments that help students develop positive perceptions of school and make necessary behavioral adjustments. In negative school environments, students become disconnected and behavior exhibits a lack of respect for their school and an unwillingness to change their inappropriate conduct (Kuperminc, Leadbeater, Emmons, & Blatt, 1997). Haynes and Comer (1993) found that in high-risk urban environments, school climate can shape the degree of academic success for students if it is positive, supportive, and

culturally conscious. In particular, positive perceptions of school climate by young boys have resulted in preventing them from exhibiting antisocial behavior. This is also reflective for high-risk students who are potential dropouts. If schools do not provide environments that are supportive, caring and nurturing of students, it should anticipate low academic performance, disruptive behavior and an increase of dropouts (Haynes, 1998; Kuperminc et al., 1997; Jimerson, et al, 2000; McEvoy & Welker, 2000). Many of these disconnected students become disciplinary problems not only for the school, but the community at large (Restructuring Schools for Young Adolescents, 1990). In addition to supporting positive interpersonal relationships, school climate has been shown to assist high quality learning opportunities for students in all types of educational environments that result in higher achievement levels. When this is not the case, students may think that the teachers and staff do not have their best interests in mind. In such school environments, students may not see the benefits of the various academic subjects and performance assessments. The students are less likely to perform at their best (McEvoy & Welker, 2000).

Potential Challenges Affecting School Climate

Some human components have potential to affect development of a positive school climate and its ability to be successful. For example, family must be a central part of the change for a school or school district to be successful and flourish. Parents should be involved with the school early to create a positive school climate. Parents need to be recruited to work as volunteers and chaperones at various school programs, events, and activities. Teachers also need to communicate with parents about their student's progress on a continuous basis throughout the school year. This assures the parent that their child is making adequate progress in order to transition to the next grade level. Parents should be

encouraged to join various local school committees and boards so that they can be active members in the decision making process (Marshall, 2000; Tableman, 2004).

Some initiatives of school reform that focus on school climate may seek to look at gender as a specific area to make an impact. Specifically, some school districts have chosen to use same-sex classes or same-sex schools. Such school models have been used primarily to impact on student behavior. The notion from these models are that students show signs of better school behavior and are more focused, compared to environments that are gender integrated. These types of school reform may lead to change, but the buy-in to such programs should be headed with precaution (Parker, & Rennie, 2002).

Two other possible obstacles to improving school climate pertain to the specific educational level and race/ethnicity. Research has shown that significant school reform to improve school climate is much easier in lower grade levels such as elementary school compared to high school. As students transition from elementary to middle to high school, the ability to improve school climate gets increasingly more difficult (McEvoy & Welker, 2000). Finally, improving school climate will face some obstacles based on race/ethnicity. School reform used in promoting a positive school climate has been more visible in inner city school districts and urban school systems. Many of these urban areas have a high concentration of minority groups where the number of school dropouts increase as students transition from elementary to middle to high school. School reform to promote a positive school climate is currently being implemented more at the high school level in urban school systems to try and curb dropouts. Such school reform to improve school climate has been beneficial to various racial/ethnic groups, but has also faced some resistance and barriers

from the same community that it is trying to serve (Berktold, Geis, & Kaufman, 1998; Jimerson, et al, 2000; Restructuring Schools for Young Adolescents, 1990).

<center>Quality of the Instructional Programs</center>

The section examines the quality of instructional programs available in career academies beginning with a review of standards of practice parents and students may expect and concluding with curriculum strategies teacher may use.

Standards of Practice for Career Academies

Career academies are designed to prepare high school students for both college and careers. To ensure that there are common principles among academies, several leading organizations developed parameters to describe a career academy. These parameters are (1) "a small learning community, comprised of a group of students within the larger high school, who take classes together for at least two years, and are taught by a team of teachers from different disciplines; (b) a college preparatory curriculum with a career theme, enabling students to see relationships among academic subjects, and their application to a broad field of work; and (3) partnerships with employers, the community, and local colleges, bring resources from outside of the high school to improve student motivation and achievement" (National Career Academy Coalition, 2008, p.1).

To continue the success of career academies from a national perspective, an informal consortium of leading career academy organizations came together to form national standards. These organizations include: Career Academy Support Network (CASN), National Academy Foundation (NAF), National Career Academy Coalition (NCAC), National Center for Education & the Economy (NCEE) America's Choice, Southern Regional Education Board (SREB), High Schools That Work, and Talent Development High Schools/Center for

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Research on Education of Students Placed at Risk (CRESPAR). The Career Academy National Standards of Practice are based on ten key elements that are drawn from years of research and experiences nationwide. There are several reasons for the development of such standards. First, research did not indicate the differences academies made in academic achievement. The standards are designed to demonstrate that career academies would adhere to rigor at various levels including core academics. Secondly, the use of the term "career academy" was loosely applied and being defined in various ways. The National Standards of Practice (NSOP) for career academies has provided their definition for what would constitute a career academy. The Career Academy National Standards of Practice include the following:

1. Defined Mission and Goals–calls for a well-defined mission and goals of the academy that focused on careers and college, raising student aspirations and increasing student achievement.

2. Academy Structure–involves a well-defined structure within the career academy that provides cross-age articulation, a student recruitment and selection process, cohort scheduling, physical space physical space for the career academy, a career or industry theme and a small size supportive atmosphere;

3. Host District and High School–requires that career academies exist in a variety of district and high school context with support from the Board of Education and the superintendent, support from the principal and high school administration, and adequate funding, facilities, equipment and materials;

4. Faculty and Staff–involves an appropriate selection process of leaders (including teacher leaders, team leaders, coordinators, directors, etc.), teachers who are

credentialed in their field and committed to the mission and goals and counselors and non-academy teachers who are supportive;

5. Professional Development–includes common planning time for academy staff, professional development for teachers and an orientation for parents and other district employees;

6. Governance and Leadership–involves an advisory board with broad representation from all aspects of the industry as well as all stakeholders, regular advisory meetings, evidence of a healthy partnership between the school and the community and an opportunity for student input;

7. Curriculum and Instruction–entails a curriculum framed around state or national standards that is sequenced, integrated and relevant, rigorous learning meeting college entrance requirements, dual credit and articulation options and post-graduate planning;

8. Employer, Higher Education & Community Involvement–includes a career theme that fits the local economy, community involvement, work based learning, experiential components such as shadowing, mentoring, guest speakers and the incorporation of citizenship;

9. Student Assessment–requires the collection of student data, multiple measurements which include items such as student attendance, retention, credits, grade point averages, state test scores, graduation rates and college going rates, accurate reporting, the assessment of technical learning and skills and the evidence of the impact of the academy on student performance;

10. Cycle of Improvement–involves the examination of an academy's mission, design

and implementation, planned refinements for the academy which include timetables

and measurable outcomes (Career Academy Support Network, 2005).

Career academies have blazed a trail to reduce large high schools into smaller

learning environments, create personalized learning opportunities, make learning relevant by

using careers, and help high school students learn about future career choices. The NSOP

assists in this process by providing the support needed as school districts consider career

academies as a reform initiative for potential failing high schools. It is strongly suggested

that educators and policymakers rely on these standards as they develop effective high school

career academies that result in positive outcomes for students (Career Academy Support

Network, 2005; National Career Academy Coalition, 2008).

Curriculum Strategies for Career Academies

Career academies in high schools are based on combining a college preparatory

curriculum with the connection of a career theme. This concept enables students to see

relationships among core academic subject such as mathematics, English, social studies, and

science and their application to broad fields of work. Some of the career themes can range

from health to electronics, banking/finance, marketing, agriculture,

telecommunications/media, construction, domestic/international trade, and many others.

Selection of the career field in a career academy is determined by an analysis of the local

labor market. It is imperative to focus on career fields that are healthy and growing and offers

job opportunities with career ladders. It is also important to enlist support of companies

willing to support the program. The coursework in career academies is expected to meet

high school graduation and college entrance requirements along with linking technical

courses on the academy's field of work. Teachers in career academies are likely to have shared planning time to coordinate course content and instructional strategies. Employability skills may be used in one or more courses. Work-based learning opportunities are viable options in career academies that link students' classroom activities to internships with local employers. Finally, course curriculum within a career academy is structured to expose students to a focused career field along with meeting the required internal and external standards that allow for a smooth transition to college (Kemple, 2001; Kemple, Poglinco, & Snipes, 1999).

The curriculum found within a career academy is designed to meet state standards. The academic curriculum in a career academy is framed around state guidelines for completing a high school diploma. The curriculum also takes into consideration the national standards such as the Career Academy National Standards of Practice and those provided by the Secretary's Commission on Achieving Necessary Skills (SCANS). These standards require instruction within a career academy to be rigorous and enable students to meet minimum college requirements. Such rigor includes coursework that reaches high levels of English and math, generally four years of each, as well as significant coursework in science and social studies. Graduates of career academies are well-prepared to attend post-secondary educational environments with four-year colleges as an option. Curriculum in career academies is sequential, integrated, and relevant. A well-designed curriculum offers a logical, linked sequence of courses for high school students over a period of two to four years. This type of curriculum is essential for success. The curriculum provides a course sequence that prepares students for advanced work. A defined course sequence involves at least two core academic classes and one career-focused class per year. The use of curriculum

integration between core academic courses and Career and Technical Education courses is expected. It is also expected that learning illustrates coursework being applied outside of the classroom that incorporates current technology and authentic assessments (National Career Academy Coalition, 2008; Smith, 2002).

Since career academies have been used as reform models for learning at the high school level, there has been a continuous opportunity to design and implement curriculum that addresses reform challenges and revitalizes student interests. There are also significant pressures that school districts are facing under the No Child Left Behind Act such as increasing the number of students meeting state-test benchmarks every year that include special populations including Special Education and English Language Learners. In particular, high schools will have to maintain a high graduation rate. As a result, a number of curriculum trends have emerged over the years. The latest curriculum trends are designed so that students are meeting the minimum state standards along with the necessary skills needed for the 21st century workplace (Kazis, 2005). Examples of curriculum for learning employed in career academies are problem-based, contextual, and integration models. The problem-based curriculum presents students with "real world" problems and allows them to investigate in-depth "what they need and want to know." This curriculum has been popular and used exclusively in science subject matters. Problem-based curriculum provides an opportunity to integrate various subject areas and assist students in cultivating their knowledge and skills in planning and allocating use of available resources. The curriculum gives students a chance to collaborate, while meeting the needs of multiple learning styles. It includes the use of cognitive, affective, and psychomotor learning. The implementation process for a problem-based curriculum includes identifying the problem for students'

investigation, choosing the level of participation being either individual, small group, or the entire class, establishing goals for the activity, determining desired student outcomes, and developing a plan for assessment (Greenwald, 2001). Career academies can benefit from examples used in post-secondary educational environments. In these school settings, students have been provided with well-structured and engaging problems for defined learning, opportunities to work in more authentic environments, and more holistic learning outcomes (Stinson & Milter, 1996).

Contextual curriculum in career academies connects learning to the student's interest and experiences. The curriculum considers the value of learning at work, home, community, and other real world environments. It puts an emphasis on student-directed learning and the use of various forms of authentic assessments. Contextual curriculum should be structured and sequenced experiences that allows for learning to occur in a variety of educational settings. To implement context curriculum, there are some necessary components to consider. For example, a lecture to explain the activity, showing or demonstrating the activity to be conducted, providing practical hands-on experience, and participating in a real world experience (Bolt & Swartz, 1997). Some of the contextual learning experiences in career academies that have shown success include job shadowing, service learning, internships, and problem-based learning with real world problems (Cantor, 1999).

Curriculum integration is the most important piece of curriculum development criteria used in career academies. It brings together the theoretical concepts taught in Career and Technical Education and core academics. Curriculum integration produces an increase in students' retention, while deepening their understanding of the subject matter covered. With pressures of federal legislation and greater emphasis on rigorous standards, career academies

are the ideal educational models to integrate core academics across all coursework taught at the high school level (Hoachlander, 1999; Smith, 2002). Currently, curriculum integration in career academies has been focused on subject areas of math, science, and technology (Predmore, 2004).

As a part of curriculum in career academies, post-secondary educational planning and advising is essential. Students in career academies are provided access to career and college information along with counseling as they begin to consider their post-secondary options. Students are expected to develop a written post-graduate plan by the end of their junior year in high school. Dual credit options create many post-secondary incentives for career academy students. Career academies are expected to have obtained articulation agreements with local two- and four-year colleges. These agreements would provide dual credit at both the academy and college for upper high school students and articulates at least their upper-level curriculum with relevant college programs (Career Academy Support Network, 2005).

<div align="center">Support for Student Learning</div>

The support for student learning in career academies can be framed within three common components that define them, a small learning community, a college preparatory curriculum with a career theme, and partnerships with employers, the community, and local colleges. Each of these components is vital for career academies to thrive (Career Academy Support Network, 2005).

Small Learning Communities

The use of small learning communities is the first of three essential components for career academies. These are learning environments that are comprised of a group of students within a larger high school setting, who take courses together for a minimum of two years,

and are taught by teachers from an array of career disciplines. To establish a successful career academy, it is important to develop a master plan for this learning environment. This plan should set forth annual and five-year growth goals. The master plan should consider the economic development and community infrastructure needs and should be developed with the help of business and community partners along with school/district personnel. The career academy programs, including all Career and Technical Education and career choice options, should be under the leadership of a single district leader. This individual focuses his/her energies toward developing a unified set of goals. This position also eliminates the potential of conflicting communication channels and unneeded competition with a district for business attention. Funding sources are prioritized in successful programs to expand the number of career academies and increase the quality of existing ones. Since career academy programs are funded from a variety of sources such as the Perkins' legislation, community grants, and business and industry foundations, it is important that these monies are geared to launch new career academy programs. Funding resources should also be used to protect what makes these learning communities special. Some examples could include common planning time for teachers, release time for academy leaders, professional development, and priority scheduling. Career academies should use a marketing plan to promote their programs. All individuals in the community including parents, students, business leaders, and educators need to be aware of the career academies. These marketing strategies should reach down to elementary and middle schools and should be presented in a variety of languages if needed. Tours of the career academies for potential candidates must be an integral part of the marketing plan. Finally, these small learning environments should encompass an evaluation tool for continuous improvement. Career academies are best served when an evaluation

rubric is used to help gauge success. On-going evaluations should be a part of a career academy's progress as well and serve as a professional development tool for the academy's leaders and business advisory community (Delano & Hutton, 2007; Kemple, 2001; Stern, Dayton, & Raby, 2000).

College Preparatory Curriculum

College preparatory curriculum with a career theme is the second component that defines a career academy and provides students an opportunity to see the relationship of core academic subjects and their application to specific career fields. Some of the best practices for the area involve the use of career clusters to help standardize Career and Technical Education coursework. State Directors for Career and Technical Education have worked to organize occupations into 81 career pathways and 16 career clusters. This curriculum framework is designed to assist school districts with prioritizing their career academy themes and specific career pathways. This curriculum framework also provides detailed information about a specific occupation and the work setting to parents, students, educators, and business leaders. The curriculum provided in a career academy should seek academically challenging Career and Technical Education curricula. The curriculum should provide a real opportunity to both integrate contextual content in academic courses and develop skills to compete in the 21st century workplace. The curriculum should ensure that students in the career academy can earn college credit. Career academies should be affiliated with one or more post-secondary institutions that will reward students with college credit based on meeting curriculum course requirements and standards provided in articulation agreements (Delano & Hutton, 2007; Maxwell & Rubin, 2001; Stern, Dayton, & Raby, 2000).

Partnerships with Employers, the Community and Local Colleges

Partnerships with employers, the community, and local colleges are the third component that helps define a career academy. This component focuses on bringing resources from outside the high school to improve student motivation and achievement. One essential practice for this area is establishing and maintaining strong and engaging relationships with business, industry and higher education leaders in the community. These individuals must remain fully aware of the plans for the career academy because they play a vital role in helping to sustain the integrity of the program. Career academies need steady leadership from companies who understand the value of being involved with school programs and a commitment to its students and staff. Career academies must look for other career academy supporters. The National Employer Associations and other business and industry organizations are supporting existing career academies and can provide a community with a set of prospective partners (Delano & Hutton, 2007; Kemple, 2001; Kemple, Poglinco, & Snipes, 1999; Stern, Dayton, & Raby, 2000).

Environment for Learning

The section of the literature review examines major aspects of the learning environment that should be found in a career academy. Maintenance and change of the school climate, safety, and the affective nature expected in an environment conducive to learning are summarized.

Maintenance and Change of School Climate in Career Academies

For school districts to improve their career academies, changing the school climate must be at the forefront. This change requires moving individuals and organizations within the school district along a continuum. This continuum ranges from "at-risk" to "safe" to

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"thriving." It should be understood that changing the school's climate will require time. Such change to school climate in career academies must be lead by the individuals at the top of the organization beginning with the academy's principal with the support of the school district's superintendent, central administration, and the school board. The principal's decision-making should initiate and promote change in school climate for the career academy. His or her decisions on school building size, budget allocation, selection of staff, along with the mission statement, training priorities, and promotional activities, should all encourage change. Due to the current requirements of the No Child Left Behind (NCLB) Act, change must remain proactive at all time. School personnel are now held to a higher standard for students' academic performance and achievement. There are some approaches to assist career academies with establishing a positive school climate for the learning environment. For example, promoting a safe and orderly environment and promoting a positive affective environment (Marshall, 2000; Tableman, 2004) both contribute to a positive school climate.

Promoting a Safe and Orderly Environment

Promoting a safe and orderly environment in career academies is critical to making the necessary changes to school climate. Some of the important elements that promote change are to maintain buildings in good physical condition, reward students for appropriate behavior, enforce consequences for inappropriate behavior, use contracts with students to reinforce behavioral expectations, post behavioral policies on bulletin boards, periodically announce behavioral policies over the public address system, and initiate anti-bullying, conflict resolution and peer mediation programs (Restructuring Schools for Young Adolescents, 1990). School districts that support safe and orderly environments engage students, staff, and parents in planning school safety activities, as well as increase the number

and accessibility of counselors, social workers, and mentors. Promoting safe environments might also include creating anonymous tip lines or suggestion boxes for students, parents and the community at-large for reporting potentially dangerous situations or providing ideas to improve school climate. Other options for career academies to consider are to develop strategies to ensure safety during lunch periods and between classes, provide accommodation or time-out rooms throughout the day, provide in-school suspension programs with academic supports and consistent staffing (Marshall, 2000; Tableman, 2004).

Encouraging an Affective Environment

Promoting a positive affective environment in career academies is another approach to change school climate. Career academies must create school environments that are caring and nurturing in order for learning to begin. Some positive components of an affective environment include use of summer school rather than retention in grade for failing students, promoting cooperation rather than competition, and avoiding the perceptions of winners and losers within the classroom. Development of the affective component of a career academy is supported is the career academy assures that every student has an active connection to at least one adult in the school, and provides professional development on such issues as cultural and class differences, emotional needs of other children, parental involvement, bullying and harassment. If actions such as these are implemented, the necessary changes that impact relationships between students, teachers, staff, parents, and the community at-large are possible with the school climate being ideal for learning (Freiberg, 1998; Marshall 2000; Tableman, 2004).

Student-School Relationships

A large part of developing a positive school climate depends on the people involved and the relationships they share. This section examines the relationships between the students and the career academy and focuses on facilitating interaction and relationships as well as teacher support.

Facilitating Interaction and Relationships

Facilitating interaction and relationships in career academies is essential for promoting positive school climate. One important feature that assists with changing the school climate in career academies, if possible, is building smaller academies. If this is not possible, career academies can choose to follow examples that larger schools have chosen to consider. Such schools have reduced the impact by dividing large middle and high schools into smaller self-contained units. Schools can organize students into cohorts that move through classes as a group. Career academies can choose to organize students based on career themes that also include these students taking core academic courses together. This would increase interaction between students, teachers, and staff with like interests for a career area. Other suggestions for facilitating interactions and relationship include using smaller teacher-student ratios (no more than 80 students per teacher in a secondary school, if possible), providing for small group activities, and providing multiple and varied opportunities to participate in extracurricular activities (Hoy, Smith, & Sweetland, 2002; Tableman, 2004).

Teacher Support

Teachers play a major role in career academy settings and have a significant impact on its climate, especially with regard to facilitating interactions and relationships. Teachers are able to connect to the academy and its surroundings from a social and academic

standpoint. Socially, teachers are able to establish meaningful relationships with students. They are key school personnel who encourage interactions and communication to promote a positive school climate (Haynes, Emmons, & Comer, 1993). Teachers must work collaboratively with parents as equal partners in the educational process. They should be open to students' suggestions and encourage them to be active members in school decision-making (Tableman, 2004). Teachers can create an environment that promotes a sense of belonging. Teachers must be welcoming to all cultures and exhibit behaviors and interactions to students that are caring, responsive, supportive, and respectful. Teachers have a unique ability, unlike other school staff, to help students feel valued and have a high regard for school and themselves (Freiberg, 1998; Shore, 1995).

Teachers are essential to supporting student learning in career academies. Teachers are also vital to the school settings since they can help set high academic standards for achievement and self-fulfillment (Johnson & Johnson, 1993). While teachers are helping students meet specific academics standards, all types of intelligence and competence should be respected and supported (Johnson, Johnson, & Zimmerman, 1996). Teachers should be confident and knowledgeable and their teaching style should embrace the different ways in which students learn. Teachers should have supportive classroom settings for learning that have a high expectation for all students as well as regular monitoring of student progress. They should communicate assessment results promptly to students and parents and these results should be used by teachers in evaluating and redesigning teaching procedures and content. Finally, teachers should reward and praise student achievement and performance (Tableman, 2004).

The quality of instruction presented by teachers in career academies can have a significant impact on school climate. Teachers' instructional material should be designed to meet the diverse needs and learning styles of students. Their curriculum needs to offer clear goals and objectives in their specific content area for what students need to achieve and should be aligned to meet these standards (Maxwell & Rubin, 2001). Effective instructional programs require teachers to use research-based frameworks focused on how instruction should be organized to promote student learning of content material (Newmann, Smith, Allensworth, & Bryk, 2001). Teachers in effective instructional programs should emphasize engaged learning where students are active learners in the classroom and are able to work independently and in groups. Teachers should use quality instructional programs that emphasize the use of technology and project-based learning in the classroom. Teachers should regularly check students' understanding and lessons should be structured so that while most students are moving forward with increasingly challenging tasks, struggling students receive extra attention and support (Newmann, Smith, Allensworth, & Bryk, 2001). Teachers can assist in designing effective instructional programs by facilitating a process of inquiry, sharing decision making, and developing innovative ideas to apply to the unique setting of a career academy (Brunn, 2000). Essentially, teachers will fail if their instructional programs are not grounded in research and the accumulated knowledge of best practices, and the sharing of responsibilities with other school personnel is ignored. The results of such actions impact the school environment and thus, can greatly affect the school's climate as a whole (Brunn, 2000).

Potential Challenges for Career Academies

There are a number of issues with potential to affect the progress of career academies as well as the ability of career academies to become successful. Family involvement in a career academy is essential to a program succeeding and thriving. Parents should be involved from the initial stages of the career academy. The selection process should include parental knowledge and approval to enroll into the career academy. Activities such as *open house orientation* and *parent-focused* night should be offered to expose all career options available at the career academy to all its constituents. The career academy can also create closer relationship with parents by providing them with volunteer opportunities. Such involvement with parents can help with buy-in to the career academy programs. Teachers also need to communicate with parents about their student's progress on a continuous basis throughout the program. This reassures parents that their student is meeting the requirements necessary to succeed at the career academy and for transition to a post-secondary school. Parents should also be active members on various steering committees and advisory boards of the career academy (Career Academy Support Network, 2005; National Career Academy Coalition, 2008).

Career academies are also faced with the challenges of offering gender-specific career themes. There is concern that career academies will have to deal with career programs that are gender dominant. Many states have implemented initiatives for school districts to promote non-traditional careers based on gender. It will be important for career academies to consider faster-growing occupations that lower barriers for entry into traditionally gender-specific fields (Lucci, 2007).

Another potential challenge for career academies is the timeframe to start the program. As previously discussed, students usually volunteer to enroll in a specific career academy program during their 9th or 10th grade year. The start of the program will depend on the infrastructure of the program and the support from school district lead officials. It is ideal for students to remain in the career academy until graduation (Career Academy Support Network, 2005). Finally, career academies will face some obstacles based on race/ethnicity. Historically, career academies were first established in urban areas where there was a high concentration of minority groups. Since these programs were originally implemented to curb high school dropout rates, there has been some perception that these environments were for lower level, minority, students. Career academies will have to emphasize that they are an option for all students regardless of race and that their programs are academically rigorous. Despite race or ethnicity, career academies must illustrate that the results for all students will be a selection of multiple post-secondary options (Maxwell & Rubin, 2000).

<div align="center">Conclusion</div>

Career academies will continue to provide high school students with a variety of career- themed programs that prepare them for the world of work. These programs will also continue to provide an integrated curriculum that is both academically and technically rigorous. To be successful, these programs must continue to demonstrate that they provide educational opportunities beyond the high school environment with rigor and relevance as a core component (Vail, 2007). The concept of school climate will continue to impact educational environments such as career academies. Schools that promote caring and nurturing environments, along with clean, safe, and orderly settings, are likely to see their students' progress and thrive regardless of their backgrounds. School personnel such as

teachers and other staff members will play a critical role in establishing the school climate. However, it is important to note that school climate is a multi-dimensional concept, influenced not only by individuals within the school building such as administrators, teachers, staff, and students, but also by individuals outside of the school including parents and community members at-large.

CHAPTER III

METHOD

This chapter describes the method and procedure used to conduct this study. The following sections are included: (1) purpose statement, (2) research questions, (3) design, (4) participants, (5) instrument, (6) procedure, and (7) data analysis.

Purpose Statement

Each year, high school students in the U.S. are exposed to an array of education opportunities and programs in combination at traditional high schools and career academies that prepare them for post-secondary education and the world of work (Lynch, 2000). These educational environments provide experiences that are strongly influenced by a variety of elements, in particular the school's climate. Such elements can have a significant impact on the educational environments (Marshall, 2000) and ultimately, the success of the students enrolled. According Freiberg (1998), "School climate can be a positive influence on the health of the learning environment or a significant barrier to learning (p. 22)." As a result, one contributor to students' success or failure may lie with their perception of their school's climate (Marshall).

The purpose of this study was to examine the perceptions of school climate of students enrolled in a career academy. Essentially, I sought to determine if students perceived differences in the school climate of the career academy where they were enrolled. The dependent variables examined included quality of the instructional programs, support for

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student learning, environment for learning, and student/school relationships. The independent variables of the study were gender, grade level, and race/ethnicity.

Research Questions

The overall purpose of this study was to describe the perceptions of school climate of high school students who attend a career academy. Specific research questions were:

1. What are the perceptions of school climate (*quality of the instructional programs*, s*upport for student learning*, *environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast?

2. Are there significant differences in perceptions of school climate (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on gender?

3. Are there significant differences in perceptions of school climate (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on grade level?

4. Are there significant differences in perceptions of school climate (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on race/ethnicity?

Design

A causal comparative research design was used to study students' perceptions of school climate in a career academy in a metropolitan area in the southeast. Causal comparative research designs use pre-existing or derived groups to review differences between or among those groups on outcome variables. The causal comparative design can also be used to examine cause-effect relationships. However, the independent variable is not manipulated in an effort to make a causal connection (Schenker & Rumrill, 2004). The study of students' perception of school climate in a career academy provides an opportunity to determine whether there are favorable perceptions of school climate in the career academy of interest to this study. The primary advantage of a causal comparative research design is that it provides a means of exploring causal relationships to help identify variables worthy of experimental investigation. Primary disadvantages of a causal comparative research design are a lack of randomization and manipulation of independent variables, as well as a lack of control of most extraneous variables (Schenker & Rumrill).

Since independent variables are not manipulated, internal validity of causal-comparative research, cannot be guaranteed. In other words, because the characteristics of independent variables in a causal-comparative study existed prior to the study, researchers cannot be certain that the independent variables caused changes in the dependant variables. Since internal validity is hard to prove, external validity of a causal-comparative design is of even greater importance (Borg, & Gall, 1996; Fraenkel & Wallen, 2006; Gay, Mills, & Airasian, 2006). External validity can be enhanced by selecting individuals so that the research sample is representative of the population along with as many relevant demographic characteristics as possible (Gay, Mills, & Airasian, 2006). Again, it should be noted that

while this research design examines potential causal relationships, there should not be an assumption of causality (Schenker & Rumrill, 2004).

Population and Sample

The study population was all high school students enrolled in career academies in metropolitan areas in the southeast. The convenience sample consisted of students enrolled in a single career academy in one metropolitan area in the southeast. For the purposes of this study, this convenience sample was used to study and describe, in an exploratory way, all students enrolled in the selected career academy within the school district.

The career academy from which the study sample originated opened for the 2008-2009 school year with approximately 800 students, juniors (15%) and seniors (85%). Approximately 65% of the students were on an education track to receive a tech prep diploma, while 35% of the students expected to receive a college prep diploma. The student enrollment in the career academy increased each year over several years. The student enrollment was Caucasian (52%), African American (27%), Hispanic (15%), Asian (4%), and other (2%). Forty-eight percent of students were on a free or reduced lunch program and approximately one-third of the population was classified as either having special learning needs (25%) or English Language Learners (7%). Auto services, healthcare sciences, and cosmetology had the largest enrollments with approximately 16.6% per program. These programs comprised 50% of the career academy's student body. Program enrollment for the remaining students included: auto collision repair (10%), early childhood education (10%), construction (5%), public safety (5%), commercial arts (3%), computer aided drafting and design (3%), computer technology (3%), electronics (3%), graphic arts (3%), welding (3%), and horticulture (2%). Students enrolled in this career academy have seen a history of

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academic success in years past with a 90% or more passing rate over the past 5 years (Maxwell High School of Technology, 2009). Due to the academic success and achievement over the past several years, this career academy has garnished a high reputation among high school counselors within the school system.

Students enrolled in the career academy received instructions in a variety of Career and Technical Education (CTE) programs. Most students participate in these CTE programs for one year, but at the time of this study, second-year students had been allowed to participate in an apprenticeship program where they gained hands-on experience by working in local businesses. The study sample was further defined to include students enrolled in the district's career academy who were either completing a tech prep or college prep diploma. By participating in career academy programs, students receive a total of 3 units in a concentrated technical area. These units encompass the number of units students needed for a technical focus area and to complete their high school requirements (Southern Regional Education Board, 2000).

The primary advantage of using this sample was that each student had a significant amount of experience in a traditional high school, 9th and 10th grades, and an equal amount of experience in a career academy, exclusively made up of students in their junior or senior year (11th and 12th grades). Therefore, findings were expected to indicate potential benefits within a career academy based on students' perceptions of school climate. Although the ability to generalize to the larger population was expected to be limited, the study sample was ideal for studying high school students' perceptions about the school climate of a career academy (Cohen, 1988).

Instrument

AdvancED, a parent organization for the North Central Association Commission on Accreditation and School Improvement (NCA CASI), the Southern Association of Colleges and Schools Council on Accreditation and School Improvement (SACS CASI), and the National Study of School Evaluation (NSSE) provides a variety of perception assessment surveys known as *The Opinion Inventory Series*. These series of surveys cover specific groups that include the following: *Student (Grades 5-12), Elementary Student (Grade 3-5), Teacher, Parents, Community, Preschool Parent, and Preschool Teacher*. Each of these opinion inventories shares four common subscales and seven common statements (with the exception of the *Elementary Student, and Preschool Parent and Preschool Teacher Opinion Inventories*) used to compare opinions among different groups.

For this study, *The Student Opinion Inventory (Grades 5-12)* was used to measure students' perceptions of school climate (see Appendix A). This instrument measures the opinions of participants in four subscale categories. These subscale categories include: quality of the instructional program, support for student learning, environment for learning, and student/school relationships and were the dependent variables for this study. This instrument also consists of three demographic categories that include: gender, grade level, and race/ethnicity which were the independent variables for this study. The instrument is comprised of 40 total questions with the option of using additional open-ended questions. The option of open-ended questions was not used as a part of this study, therefore the timeframe for completing administration of the instrument was approximately 45 minutes to

one hour. The instrument contains groups of questions, from as few as seven to as many as 13, combined to indicate categorical scale titles.

Responses for the instrument were recorded using a 6-point Likert-type scale and ranged from *strongly agree* to *strongly disagree*, with three intermediate selections and an optional *Does not apply or Do not know*. The survey was scored 5 to 0, respectively (strongly agree = 5; agree = 4; neutral = 3; disagree = 2; and strongly disagree = 1; does not apply or do not know = 0). The *Student Opinion Inventory* has four subscales. The *Quality of the Instructional Program* subscale has 9 items with a range of scores from 0 to 45. This subscale reported alpha levels of $\alpha = .097$ for gender, $\alpha = .536$ for grade, and $\alpha = .864$ for ethnicity. The *Support for Student Learning* subscale has 13 items with a range of scores from 0 to 65. This subscale reported alpha levels of $\alpha = .073$ for gender, $\alpha = .253$ for grade, and $\alpha = .822$ for ethnicity. The *Environment for Learning* subscale has 11 items with a range of scores from 0 to 55. This subscale reported alpha levels of $\alpha = .077$ for gender, $\alpha = .504$ for grade, and $\alpha = .961$ for ethnicity. Finally, the Student/School Relationships subscale has 7 items with a range of scores from 0 to 35. This subscale has reported alpha levels of $.\alpha = .017$ for gender, $\alpha = .659$ for grade, and $\alpha = .961$ for ethnicity.

The Student Opinion Inventory has been administered to more than 79,590 students during national pilot and normative studies. The internal consistency coefficients have been calculated for each subscale based on data collected in pilot and normative studies. The average reliability of the Student Opinion Inventory subscale is $\alpha = .87$, with a range from .82 to .89 (AdvancED, 2008). Test-retest reliabilities for the scales and validity coefficients can be found in the Technical Manual and are considered adequate for the purposes of this study.

Procedure

Prior to implementation, permission to conduct this study was obtained from the
University of Georgia Institutional Review Board (UGA IRB) and the participating school
system, Gwinnett County Public School (GCPS). Copies of the IRB and GCPS approval
requests and notifications are provided in Appendix B. An initial cover letter (see Appendix
C) along with consent forms (see Appendix D) were provided to each student's parents or
guardians. At the beginning of the month of April 2009, all students enrolled at Maxwell
School of Technology who had returned signed parental consent forms, were invited to
complete the Student Opinion Inventory. Since the instrument was to be completed online,
the school's Internet sever was used to host the instrument for data collection. Therefore, all
computers in the school's computer lab were setup for the students to complete the
instrument prior to data collection beginning. Next, each teacher at Maxwell School of
Technology was provided a specific day and time during the month of April to bring their
students who had provided signed consent forms and accepted the invitation to participate in
the study (volunteered) to the computer lab to complete the online instrument.

On each day in April 2009 that teachers brought their students to the computer lab,
the researcher welcomed each the students and provided guided instructions (see Appendix
E) for completing the online instrument. Students were given an opportunity to ask questions
before beginning to complete the online instrument. The survey took approximately 10-15
minutes for each student to complete. Students who did not accept the invitation to
participate in the study and/or did not have parental consent remained in their classroom and
continued instruction with their program teacher. Students who did accept the invitation to
participate and had parental consent received make-up instruction on material missed as a

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result of their participation. Students who were absent from school on the day their class completed the instrument were allowed to complete the instrument on a specified make-up day and time prior to the end of April 2009.

It should be noted that the researcher who administered the instrument also acts as the students' counselor, therefore, student responses may be reflective of a positive or negative opinion of the researcher (counselor). Since the researcher's presence could have influenced students' responses, the interpretation of results should be observed with some precaution.

Data Analysis

Differences in the post-test only implementation scores were assessed on each of the scales on the school climate survey using descriptive statistics (mean, standard deviation, range, and percentage), t-tests, and one-way analysis of variance (ANOVA). Descriptive statistics were used for each independent variable of gender, grade, and race/ethnicity. Independent sample t-tests were used for the independent variables of gender and grade, while a one-way analysis of variance (ANOVA) was used for the independent variable of race/ethnicity. Results of both test analyses were compared to the dependent variables of students' perceptions of a career academy (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships*).

The t-test is a statistical test of significance used in inferential statistics to determine whether there is a significant difference between two group means. The assumptions of t-tests are that the population is normally distributed, samples are independent, and variance of population means is equal. T-tests assist in addressing the essential question: do the two groups come from the same population, and only appear different because of chance errors,

or is there some significant difference between these two groups, such that we can say that they come from two entirely different populations?

There are several factors to consider that help determine whether the difference between two groups is a true difference or simply an error due to chance. These factors are based on the following: the larger the sample, the less likely that the difference is due to sampling error or chance, the larger the difference between the two means, the less likely the difference is due to sampling errors, and the smaller variance among the participants, the less likely that the difference was created by sampling errors (Aron & Aron, 1999; Georgetown College, N.A.; McMillan, 2000; Patten, 2002; Solso, Johnson, & Beal, 1998).

One-way Analysis of variance (ANOVA) was also an inferential statistic used for data analysis in this study. In general, the assumptions of ANOVA are that the population is normally distributed, samples are independent, and the population means are equal. Analysis of variance is used to compare two estimates of population variances. One variance is identified as a within-group estimate and the other is the between-group estimate. The within-group estimate is a measurement calculated by averaging the variance estimates from each of the samples. The between-group estimate is based on the variation among the means of the samples. Analysis of variance is mainly used with three groups or more because if a researcher had only two groups to compare, a t-test would be sufficient (Aron & Aron, 1999; Georgetown College, N.A).

This study used both three independent variables (gender, grade level, and race/ethnicity) and four dependent variables (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships). Researchers have the option between two types of t-tests depending on their groups or samples. If their

two groups or samples are independent or not related at all, they would choose the independent samples t-test. The analysis for this study used independent samples t-tests to measure differences between the two independent variables (gender and grade level) that had only two groups and the four dependent variables. For example, gender consisted of male and female and grade level consisted of only 11th and 12th graders. Reporting of data results for a t-test included whether the t was significant, the observed value of t, the degrees of freedom, the alpha level, and the type of t-test used. This study used two-tailed independent sample t-tests. The general hypothesis for this study questioned if there were significant differences in perceptions of school climate of students enrolled in a career academy in a metropolitan area in the southeast based on gender, grade, and race/ethnicity (Georgetown College, N.A.; McMillan, 2000; Patten, 2002; Solso, Johnson, & Beal, 1998).

Since the independent variable *race/ethnicity* had more than two groups, one-way analysis of variance (ANOVA) was used to examine whether the group means differed from one another. Also, one-way ANOVA is more beneficial than using multiple t-tests because it reduces the probability of a type-I error (McMillan, 2000). This study used one-way ANOVA to determine if there were statistically significant differences in perceptions of school climate (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on ethnicity. The results for one-way ANOVA are calculated with an F test by dividing the mean squared by the mean squared within. This F calculated is illustrated with an F ratio parameter (normally two numbers), the degrees of freedom, and the significance level or alpha which, for this study, was set at .05 for all tests (Aron & Aron, 1999; Georgetown College, N.A. (McMillan, 2000; Patten, 2002;

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Solso, Johnson, & Beal, 1998). Data were analyzed using the Statistical Package for the Social Sciences (SPSS) software.

For this study, effect sizes were computed to provide a frame of reference and meaning to the results. Effect size is a statistical measurement of strength based on the relationship between the variables in population or a sample-based estimate of that quantity. It can be described as a measure of which a phenomenon exists in a population (Cohen, 1988). The use of effect size was beneficial in evaluating the practical significance of the research results that were statistically significant for a pre-determined alpha level (Huck & Cormier, 1996). Cohen's d was used in this study for interpreting statistically significant results for t-test and analysis of variance (ANOVA). It provided specific measures for effect sizes based on standardized mean differences that include the following: small (.20), medium (.50), and large (.80). Cohen's d also helped to gauge the degree to which the null hypothesis was false (Cohen, 1988). Table 1 provides a summary of the data analyses used in this study.

Table 1
Data Analyses for Research Objectives

Research Objectives	Independent Variable	Dependent Variable	Data Analysis
1. What are the perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast?		Perceptions of School Climate Continuous	Means, standard deviations, range 1. Quality of Ins. 2. Support for Students 3. Environment 4. Student/School
2. Are there significant differences in perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on gender?	Gender Categorical Male and Female	Perceptions of School climate Continuous	4- Independent Sample T-Tests 1. Quality of Ins. 2. Support for Students 3. Environment 4. Student/School
3. Are there significant differences in perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on grade level?	Grade Level Categorical 11th and 12th	Perceptions of School Climate Continuous	4- Independent Sample T-Tests 1. Quality of Ins. 2. Support for Students 3. Environment 4. Student/School
4. Are there significant differences in students' perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on race/ethnicity?	Race/Ethnicity Categorical African-American, Asian/Pacific Islander, Caucasian, Hispanic, Multiracial, Native American Other	Perceptions of School Climate Continuous	4-One-Way ANOVAs 1. Quality of Ins. 2. Support for Students 3. Environment 4. Student/School

CHAPTER IV

RESULTS

The purpose of this study was to examine the perceptions of school climate of

students enrolled in a career academy in a metropolitan area in the southeast United States.

Essentially, I wanted to determine if students perceived differences in the climate of the

career academy where they were enrolled. The dependent variables examined included

quality of the instructional programs, *support for student learning*, *environment for learning*,

and *student/school relationships*. The independent variables for this study were gender, grade

level, and race/ethnicity.

This chapter presents a description of the sample and the results of the analyses

conducted to address each of the research questions posed. Separate comparative analyses

were conducted assessing the effect of each independent variable on each of the four

dependent variables, using a convenience sample of n = 646 and an alpha level of .05.

Descriptive statistics for each of the dependent variables were used to address research

question 1. Independent sample t-tests were used for the independent variables of gender and

grade level to address research questions 2 and 3. One-way analysis of variance was used for

the independent variable of ethnicity to address research question 4. Descriptive statistics

were also used to support findings for research questions 2 through 4.

Description of Sample

The sample for this study consisted of 646 (n = 646) students. Students who were

juniors accounted for only 11% and 89% were seniors. Only 33% (n = 214) were African

American, 28% (n = 182) were Caucasian, 26% (n = 167) were Hispanic, and 4% (n = 28) were Asian. Students identifying themselves as multiracial accounted for 4% (n = 28) of the sample and 4% (n = 27) identified themselves as "other." The gender makeup of the sample was almost even in that 49% (n = 315) were male and 51% (n = 331) were female.

<div align="center">Results Specific to Research Questions</div>

The following sections provide results for each research question posed for this study. The instrument used in this study is designed to measure student opinions about school climate (see Appendix A). It has a total of 40 questions written using positive statements about factors related to school climate and is divided into four subscales The four subscales were the dependent variables for school climate which are quality of the instructional programs (9 questions), support for student learning (13 questions), environment for learning (11 questions), and student/school relationships (7 questions). The survey was scored 5 to 0, respectively (strongly agree = 5; agree = 4; neutral = 3; disagree = 2; and strongly disagree = 1; does not apply or do not know = 0).

Research Question 1

What are the perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast?

Table 2 provides descriptive statistics for the dependent variables examined in this study of perceptions of school climate of students enrolled in a career academy in a metropolitan area in the southeast. All mean scores were calculated by dividing the sum of observations by number of observations. The mean score of M = 35.64 was calculated for *quality of instructional programs.* Since the statements on the instrument are all written from

a positive perspective (i.e., the education offered to students at our school is of high quality)

the findings indicate that these students (n = 646) held positive opinions on each of the

subscales related to school climate. For example, 43.00% (n = 277) of the students strongly

agreed with the positive statements about quality of instruction and another 28.33% (n = 183)

agreed for a total of 71.33% (n = 461) of students with a positive opinion about the quality of

the instructional program. Student responses for each subscale, including the number of

students and percentage of responses for each statement in the four subscales, are presented

in Appendix F.

Table 2
*Descriptive Statistics for Quality of the Instructional Programs (QIP), Support for Student
Learning (SSL), Environment for Learning (SEL), and Student/School Relationships (SSR)*

Measure	n	*M*	SD	Range
QIP	646	35.64	8.07	11-45.00
SSL	646	50.51	12.44	0-65.00
SEL	646	42.58	10.82	0-55.00
SSR	646	26.25	7.10	0-35.00

Research Question 2

Are there significant differences in perceptions of school climate (quality of the instructional

programs, support for student learning, environment for learning, and student/school

relationships) of students enrolled in a career academy in a metropolitan area in the

southeast based on gender?

Independent sample t-tests were conducted to evaluate the relationship between

gender and students' perceptions of school climate. With an alpha level of .05, there were no

statistically significant differences found between gender and the subscales *quality of the*

instructional programs (t(644) = -1.663, p = .097), *support for student learning* (t(644) = -

1.793, p = .073), and *environment for learning* (t(644) = -1.772, p = .077). However, there

was a statistically significant difference found between gender and the subscale

student/school relationships, (t(644) = -2.403, p = .017, d = .09). These findings indicate that

male and female students in this study differ with regard to perceptions about the school

climate subscale *student and school relationships.* Female students were more positive about

student and school relationships than the male students. However, effect size calculations (*d*

= .09) indicate a small effect size, but not so small as to be trivial (Cohen, 1988). Table 3

presents descriptive statistics for the four subscales of school climate by gender. The mean

score for *quality of instructional programs (QIP)* was M = 35.10 (sum of observations

divided by number of observations). Student responses for each subscale, including the

number of students and percentage of responses for each statement in the four subscales, are

presented in Appendix F.

Table 3
*Descriptive Statistics for Quality of the Instructional Programs (QIP), Support for Student
Learning (SSL), Environment for Learning (SEL), and Student/School Relationships (SSR) by
Gender* (n = 646)

		Male				Female		
Measure	*n*	*M*	*SD*	*Range*	*n*	*M*	*SD*	*Range*
QIP	315	35.10	7.78	14-45	331	36.15	8.32	11-45
SSL	315	49.61	11.49	4-65	331	51.36	13.25	0-65
SEL	315	41.81	10.02	7-55	331	43.32	11.51	0-55
SSR	315	25.57	6.78	1-35	331	26.90	7.35	0-35

Research Question 3

Are there significant differences in perceptions of school climate (quality of the instructional

programs, support for student learning, environment for learning, and student/school

relationships) of students enrolled in a career academy in a metropolitan area in the

southeast based on grade level?

Independent sample t-tests were conducted to evaluate the relationship between grade level and students' perceptions of school climate. With an alpha level of .05, the data displayed no statistically significant difference between grade level of participants and school climate subscales for *quality of the instructional programs* (t(644) = -.619, p = .536), *support for student learning* (t(644) = -1.143, p = .253, *environment for learning* (t(644) = -.668, p = .504), and *student/school relationships* (t(644) = -.441, p = .659). These finding indicate that there were no statistical differences in how these 11th and 12th graders perceived their school's climate. Table 4 provides descriptive statistics for the four subscales of school climate based on grade level. The mean score for *quality of instructional programs (QIP)* was M = 35.08 (sum of observations divided by number of observations). Student responses for each subscale, including the number of students and percentage of responses for each statement in the four subscales, are presented in Appendix F.

Table 4
Descriptive Statistics for Quality of the Instructional Programs (QIP), Support for Student Learning (SSL), Environment for Learning (SEL), and Student/School Relationships (SSR) by Grade Level (n = 646)

Measure	11th Grade				12th Grade			
	n	*M*	*SD*	*Range*	*n*	*M*	*SD*	*Range*
QIP	72	35.08	8.72	12-45	574	35.72	7.99	11-45
SSL	72	48.93	14.12	0-65	574	50.73	12.22	13-65
SEL	72	41.78	11.75	0-55	574	36.10	10.71	0-55
SSR	72	25.90	7.75	1-35	574	26.30	7.01	0-35

Research Question 4

Are there significant differences in students' perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on race/ethnicity?

A one-way between-subjects analysis of variance was conducted to evaluate the relationship between race/ethnicity and students' perceptions of school climate. With an alpha level of .05, the data shows no statistically significant difference between the race/ethnicity of participants and the four school climate subscales. Thirty-three percent (33%) of these students identified themselves as African American, 28% were Caucasian, and 26% were Hispanic. Four percent (4%) identified themselves as Asian American, 4% were Multiracial, and 4% were identified as Other. These results indicate that regardless of race/ethnicity, these students' perceptions about their school's climate did not differ. Table 5 provides descriptive statistics based on race/ethnicity. The mean score for *quality of instructional programs (QIP)* was M = 36.02 (sum of observations divided by number of observations). Student responses for each subscale, including the number of students and percentage of responses for each statement in the four subscales, are presented in Appendix F.

Table 5
Descriptive Statistics for School Climate by Race/Ethnicity

Measure	*n*	*M*	*SD*	*Range*
Quality of the Instructional Programs				
African American	214	36.02	7.74	11-45
Caucasian	182	35.84	7.94	13-45
Hispanic	167	35.06	8.65	12-45
Asian American	28	36.10	8.26	15-45

Multiracial	28	35.04	7.45	16-45
Other	27	34.96	8.70	15-45

Support for Student Learning

African American	214	51.38	11.73	4-65
Caucasian	182	50.34	12.75	13-65
Hispanic	167	49.75	12.70	0-65
Asian American	28	49.61	13.62	21-65
Multiracial	28	51.43	11.77	19-65
Other	27	50.33	12.75	13-65

Environment for Learning

African American	214	42.87	10.73	7-55
Caucasian	182	42.71	10.95	0-55
Hispanic	167	42.08	11.08	0-55
Asian American	28	41.89	10.78	13-55
Multiracial	28	43.71	8.76	18-55
Other	27	42.04	11.83	13-55

Student/School Relationships by Ethnicity

African American	214	26.74	6.59	7-35
Caucasian	182	25.57	7.78	0-35
Hispanic	167	26.32	7.22	1-35
Asian American	28	26.40	6.27	11-35
Multiracial	28	26.82	6.59	9-35
Other	27	25.78	7.78	0-35

Table 6 presents results for one-way analysis of variance (ANOVA) pertaining to race/ethnicity for the four school climate subscales. Student responses for each subscale, including the number of students and percentage of responses for each statement in the four subscales, are presented in Appendix F.

Table 6
One-way ANOVAs for School Climate Subscales by Race/Ethnicity

Source	df	F	η^2	p
Quality of Instructional Program				
Race/Ethnicity	5	.377	.003	.864

Subjects within-group error	640	(65.536)		
Support for Student Learning				
Race/Ethnicity	5	.439	.003	.822
Subjects within-group error	640	(155.519)		
Environment for Learning by Race/Ethnicity				
Race/Ethnicity	5	.203	.002	.961
Subjects within-group error	640	(117.953)		
Student/School Relationships by Race/Ethnicity				
Race/Ethnicity	5	.602	.005	.698
Subjects within-group error	640	(50.592)		

Note. Values enclosed in parentheses represent mean square errors.

In summary, this study examined the perceptions of school climate of students enrolled in a career academy. It also determined if there were differences in how students perceived the school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of the career academy where they were enrolled based on the independent variables of the study which were gender, grade level, and race/ethnicity. Of the approximately 800 high school students enrolled in the career academy, 646 students received parental consent and/or volunteered to participate in the study. There were 315 male and 331 female students. Of these students, 11% were identified as 11th graders and another 89% of the students were 12th graders. The race/ethnicity of these students included African American 214 (33.13%), Caucasian 182 (28.17%), Hispanic 167 (25.85%), Asian American 28 (4.33%), Multiracial 28 (4.33%), and Other 27 (4.18%). For each of the four dependent variables, quality of the instructional

programs, support for student learning, environment for learning, and student/school relationships, a majority of the participants indicated a positive perception of school climate in the career academy. There were no statistically significant differences found between the students' perceptions of school climate (four subscales) based on grade level or race/ethnicity. However, a statistically significant difference was found between the students' perceptions of school climate and the subscale student/school relationships, based on gender. Female students were more positive about student/school relationships than male students.

CHAPTER V

DISCUSSION

This chapter begins with a summary of the study. Next, a summary of the results is provided. Conclusions drawn from the results are presented followed by implications for career academies. Finally, the chapter concludes with recommendations for career academies and for further research.

Summary of the Study

The following section provides a summary of the rationale for the study. The purpose and research questions are also restated.

Rationale

Today's career academies have greatly advanced to address the needs of all students. Career academies have grown from being vocational training centers that prepare students simply for employment after high school to include post-secondary educational opportunities beyond high school (Maxwell, & Rubin, 2000; Stern, Dayton, & Raby, 2000). Currently, career academies support student learning by offering smaller learning environments with college preparatory curriculum. They have also established partnerships with business and industry based on their specific career themes (Delano & Hutton, 2007). Since career academies incorporate both work-bound and college-bound students, there is a need to examine the existing conditions of these educational delivery systems and specifically the climate of these environments (National Career Academy Coalition, 2008).

Several school climate studies have shown that many students become dissatisfied with school during the latter stages of middle school (Hoy & Sabo, 1998) and early stages of high school (Kuperminc, Leadbeater & Blatt, 2001; Kuperminc, Leadbeater, Emmons & Blatt, 1997; Restructuring Schools for Young Adolescents, 1990). This social disconnect begins to widen for various reasons as students continue to progress through high school, with their potential of being a drop-out relatively high (Berktold, Geis, & Kaufman, 1998; Jimerson, Egeland, Sroufe, & Carlson, 2000; Restructuring Schools for Young Adolescents, 1990). Obviously, if students have a negative perception of high school, that impact on students' academic and social development puts the students at-risk of school failure. Such circumstances support a critical need for educators to further examine how school climate affects high school students as a first measure to reclaim at-risk students.

Keeping in mind the original purpose of career academies—to help inner-city students stay in school and obtain meaningful occupational experience—and the current multi-purpose nature of career academies, a positive school climate is imperative (Coffee & Pestridge, 2001). Finally, a positive school climate, one where interpersonal relationships and optimal learning opportunities are available for all students, has been shown to increase achievement levels and reduce dysfunctional behavior (Kuperminc et al., 1997; Haynes & Comer, 1993; Haynes, 1998; Kuperminc et al., 1997; McEvoy & Welker, 2000) as cited in Marshall (Center for Research on School Safety, School Climate and Classroom Management).

The use of career academies at the secondary level has been introduced as an alternative means to traditional high schools that combines both core academics and development of work skills for business and industry (Kemple, Poglinco, & Snipes, 1999).

There is evidence that the career academy model has been an effective model (Kemple, 2001; Maxwell, & Rubin, 2001), perhaps even more effective than the traditional high school model. Today, as many traditional high schools are underperforming, many students attending career academies are exceeding expectations. However, every career academy must be accountable and must examine its success which includes assessing the impact of its school climate. Therefore, a primary objective when examining school climate is to consider the perceptions of the most vulnerable stakeholders—the students. A better understanding of a career academy's school climate and its impact as perceived by students may provide valuable information for climate change and the potential for student success in a career academy.

Purpose

The purpose of this study was to examine the perceptions of school climate of students enrolled in a career academy. Essentially, I sought to determine if students perceived differences in the school climate of the career academy where they were enrolled. The dependent variables examined included *quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships*. The independent variables of the study were gender, grade level, and race/ethnicity.

Research Questions

The overall purpose of this study was to describe the perceptions of school climate of high school students who attend career academies. Specific research questions were:

1. What are the perceptions of school climate (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school*

relationships) of students enrolled in a career academy in a metropolitan area in the southeast?

2. Are there significant differences in perceptions of school climate (*quality of the instructional programs, support for student learning, environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on gender?

3. Are there significant differences in perceptions of school climate (*quality of the instructional programs, support for student learning, environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on grade level?

4. Are there significant differences in perceptions of school climate (*quality of the instructional programs, support for student learning, environment for learning*, and *student/school relationships*) of students enrolled in a career academy in a metropolitan area in the southeast based on race/ethnicity?

Summary of Results

Of the approximately 800 high school students enrolled in the career academy, 315 male students and 331 female students were given parental consent and volunteered to participate in this study for a total of 646 participants. The race/ethnicity of these students included African American (214), Caucasian (182), Hispanic (167), Asian American (28), Multiracial (28), and Other (27). The following paragraphs summarize the results of the study for each research question.

Research question one examined the perceptions of school climate of students enrolled in a career academy in a metropolitan area in the southeast. Means, standard

deviations, and ranges were used to illustrate the results for the four dependent variables (*quality of the instructional programs*, *support for student learning*, *environment for learning*, and *student/school relationships)* used in the study (see Table 2). Results indicated that these students (n = 646) held positive opinions on each of the subscales related to school climate. For example, 43.00% (n = 277) of the students *strongly agreed* with the statements about *quality of instructional programs* and another 28.33% (n = 183) *agreed* for a total of 71.33% (n = 461) of students with a positive opinion about the *quality of their instructional program*. Students either *strongly agreed*, 39.34% (n = 254) or *agreed,* 29.24% (n = 189) with the positive statements on the *Support for student learning* subscale for a total of 68.58% (n = 443) of students with positive opinions about their school's support for student learning. On the *environment for learning* subscale, 42.83% (n = 277) of students were found to *strongly agree* with the subscale statements while another 27.76% (n = 179) *agreed* for a total of 70.59% (n = 456) of students with a positive opinion about their environment for learning. Finally, 35.25% (n = 229) of students *strongly agreed* with the positive statements about *student/school relationships* and another 29.77% (n = 192) of students *agreed* with the statements for a total of 65.02% (n = 421) of students with positive opinions about *student/school relationships*.

Research question two sought to determine if there were significant differences in perceptions of school climate based on gender. Independent sample t-tests were conducted to evaluate the relationship between gender and students' perceptions of school climate and no significant differences were found with regard to the subscales *quality of the instructional programs, support for student learning, and environment for learning*. However, there was a statistically significant difference found between male and female students regarding the

school climate subscale *student/school relationships*. This statistically significant difference was relatively small with an effect size of $d = .09$, suggesting that the female students were only slightly more positive about *student and school relationships* than the male students.

Research question three sought to determine if there were significant differences in perceptions of school climate based on grade level. Independent sample t-tests were conducted to evaluate the relationship between grade level and students' perceptions of school climate in a career academy. There were no significant differences found for *quality of the instructional programs, support for student learning, environment for learning*, and *student/school relationships* based on grade level. These results indicate that there were no differences in opinions for students in the 11th and 12th grade with regard to the school climate of the career academy in which they were enrolled.

Research question four sought to determine if there were statistically significant differences in students' perceptions of school climate based on race/ethnicity using one-way analysis of variance. Results indicated no statistically significant difference between race/ethnicity and students' perceptions of school climate in a career academy. There were no statistically significant differences found with regard to *quality of the instructional programs, support for student learning, environment for learning,* and *student/school relationships*. These results indicate that students' opinions about the career academy's school climate did not differ based on race/ethnicity.

Conclusions

This study examined perceptions of school climate of students enrolled in a career academy in a metropolitan area in the southeast. For each of the four dependent variables, *quality of the instructional programs*, *support for student learning*, *environment for learning*,

and *student/school relationships*, a majority of the students who participated in this study indicated positive perceptions of the career academy's school climate based on grade level and race/ethnicity. Likewise, a majority of the students who participated in this study indicated positive perceptions of the career academy's school climate based on gender, with one exception. There were significant differences for male and female students on the school climate subscale, *student/school relationships*. Male and female students' perceptions did not differ with regard to the *quality of the instructional programs*, *support for student learning*, and *environment for learning*. Therefore, results of this study clearly indicate that there were no significant differences in these students' perceptions of their career academy's school climate, except with regard to male and female students' perceptions of student/school relationships.

<div align="center">Implications</div>

Perhaps one of the most important findings of this study is that a majority of the students had a positive opinion of the school climate in their career academy. Since a majority of the participants in this study expressed positive opinions towards each school climate subscale, which are also defined elements of a career academy, results of this study provide further support to the literature that continues to stress a career academy education environment as a viable option for school districts (Maxwell & Rubin, 2000; Stern, Dayton, & Raby, 2000). For example, the statement "Teachers hold high expectations for student learning" is one of nine statements on the school climate subscale *quality of instructional program* and 76.62% (n = 495) of the students in this study responded positively (strongly agreed or agreed) to this statement. Zeichner (1995) and Bernard (1995) both stress the value and importance of teachers holding high expectations of their students. Likewise, research

has shown that a teacher's expectations have a powerful effect on a student's performance and that high expectations of students serve to motivate students (Davis, 1999; Tomlinson, 1992). Students in this study indicated positive opinions when responding to the statements "My teachers use a variety of teaching strategies and learning activities to help me learn" and "My teachers challenge me to do my best work." Approximately 70% of the students agreed or strongly agreed with each of these statements which support previous findings in the literature and further illustrate the positive opinions held by students attending this career academy. The positive findings of this study were expected by the researcher because the career academy examined has had a history of academic success and achievement, and the opinions of the students should have reflected such positive experiences. Students attending the career academy examined have had a 90% or higher passing rate each semester over the last five years that the researcher has been employed by the academy. The career academy examined has a staff of veteran teachers who have an abundance of industry experience that hold students accountable while also preparing them for post-secondary opportunities and the world of work.

Prior research had indicated that the *quality of instructional programs* can significantly impact school climate (Maxwell & Rubin, 2001; Newmann, Smith, Allenworth, & Bryk, 2001). With this in mind, results of this study suggest that the career academy examined has a high quality instructional program, at least in the opinions of its students. For example, a majority of students enrolled expressed positive opinions about their school's climate with regard to *quality of the instructional programs* regardless of gender, grade level, or race/ethnicity. Further, nearly 80% of the students expressed positive opinions (strongly agreed or agreed) on statements such as, "The education offered to students at our school is

of high quality" and "Students are provided with opportunities to learn important knowledge and skills in each subject," two of nine statements on the school climate subscale *quality of instructional program.* These results suggest that this career academy can provide students with an effective learning environment that gives them an opportunity to develop knowledge and skills essential to a specific discipline. Finally, approximately 75% (n = 488) of students responded positively to these statements on the school climate subscale *quality of instructional program:* "My teachers challenge me to do my best work" and "Teachers hold high expectations for student learning." These findings indicate that in the opinions of its students, this career academy is an effective learning environment where teachers have high expectations and challenge students to achieve. Such positive results are found in the literature for effective instructional programs (Kemple, 2001; Kemple, Poglinco, & Snipes, 1999; Maxwell & Rubin, 2001; National Career Academy Coalition, 2008) and are reflective of the researcher's experience as an employee of the career academy examined. Specifically, a majority of students indicated that the teachers held high expectations and challenge them to do their best. These findings can be explained by the research found in social learning theory that acknowledges how teachers with high expectations can anticipate a desired outcome of work produced by their students (Baranowski, Perry, & Parcel, 2002; Klein & Sondag, 1994).

Results of this study show that students in this career academy, regardless of gender, grade level, and race/ethnicity, had positive opinions (strongly agreed or agreed) of school climate as it relates to the school climate subscale, *support for student learning*. These findings support the literature which suggests that career academies can provide assistance that accommodates all types of intelligence and competency levels (Johnson, Johnson, &

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Zimmerman, 1996, Neubig, 2006). For example, statements such as "I receive feedback from my teachers that helps me improve my learning," "Teachers give me extra help in class when it is needed," and "The grading and evaluation of my schoolwork is fair" are three of 13 statements on the school climate subscale *support for student learning*, implying that a variety of student competency and intelligence levels are supported by this career academy.

One factor that may have contributed to the positive responses from students is use of teacher employment contracts that extend beyond regular school hours. Teachers in the career academy examined spend an extended amount of time each day afterschool working with students one on one. Such assistance is targeted for those students struggling to retain specific concepts or who would like to broaden their knowledge in a specific subject matter. Students' positive responses to statements on the subcale *support for student learning* are reflective of what is found in the literature regarding social learning theory which suggests that demonstration, evaluation, and reinforcement are precursors for producing the necessary skills to complete a given task (Bandura, 1973). In addition, other statements on this subscale such as "In our school, students have access to a variety of resources to help them succeed in their learning, such as technology, media centers, and libraries" and "Our school's facilities are adequate to support students' learning needs" received positive responses (strongly agreed or agreed) from more than 75% (n = 491) of the students further supporting the implication that this career academy finds ways to support all types of intelligence and competency levels. Each of these examples further illustrate that students had positive opinions about this career academy's educational environment and its ability to provide the necessary tools to support their learning. The students attending the career academy examined expressed opinions that the academy assisted them in producing desire outcomes—an essential element

of this study's theoretical framework. Overall, these findings suggest that this career academy provides sufficient resources to help all its students reach high academic goals as they prepare for life beyond high school.

While career academies were originally designed to assist at-risk high school students from becoming potential dropouts, results of this study suggest that this career academy is a supportive educational environment that could potentially benefit all its students regardless of gender, grade level, or race/ethnicity. For example, the statement "All students and staff at our school are treated with respect, regardless of race, religion, or gender" is found on the school climate subscale *environment for learning* where 72.91% (n = 471) of the students held positive opinions (strongly agreed or agreed). Another example "Students have access to a variety of resources to help them succeed in their learning, such as technology, media centers, and libraries" is a statement found under the school climate subscale *support for student learning* and a majority of students (76.47%, n = 494) responded positively to this statement (strongly agreed or agreed). Such results confirm prior research findings that suggest a career academy can meet the needs of high risk youth, but also students who seek an alternative to the traditional educational environment (Kuperminc, Leadbeater, Emmons, & Blatt, 1997; Haynes & Comer, 1993). The career academy examined has had a history of successfully working with at-risk youth as well as students from all academic levels within the school system. Over the last several years, this career academy has seen a student population growth of at-risk youth as well as students with special needs and still has maintained the academic rigor that allows students to transition to a post-secondary school or job training environment.

Past research has shown that teachers who exhibited a sense of fairness are essential elements for a productive learning environment and especially one occupied by adolescent students (Nichols, & Good, 1998). Results of this study revealed that slightly under 75% (74.30%) of these students responded positively (strongly agreed or agreed) to the statement, "My teachers treat me fairly." This finding suggests that these students believed their career academy was indeed a productive learning environment. Further, this finding illustrates how a career academy, through its school climate, has the ability to connect with students, perhaps even those who have been dissatisfied with their prior high school experiences. Similarly, prior research indicates that while there are limitations in changing the individual, family, or community, the school can implement protective factors such as a safe and nurturing learning environment that helps students stay focused and engaged (Christle, Jolivette, & Nelson, 2007). For example, on the statement "Our school provides a safe and orderly environment for learning," one of 11 items on the school climate subscale *environment for learning,* 74.92% (n = 484) of the students in this study responded positively to this statement (strongly agreed or agreed). The career academy examined in this study has been able to establish a rapport with students likely due in part to its "family-like" environment where students' needs can be met immediately by personnel who are readily available to assist students. Whether it is educational, personal or social, this career academy has prided itself in addressing the specific needs of students as it prepares them for life after high school.

These findings regarding the school climate subscale *environment for learning* also support prior research that suggests a career academy can potentially accommodate for an affective and physical environment that is necessary for student success (Cohen, 2006; Cohen, McCabe, Michelli, & Pickeral, 2009; Johnson, & Johnson, 1996; Ma, 2002; Plucker,

1998). For example, statements such as "My teachers treat me fairly," "Staff in our school display a caring attitude toward students," and "All students and staff at our school are treated with respect, regardless of race, religion, or gender" are three of 11 statements on the school climate subscale *environment for learning*. Each of these statements suggests the interactions of teachers and staff with students in a career academy reflects an environment that is fair, caring, and respectful. They also mirror concepts of social learning theory that suggest people learn through observing others' behavior, attitudes, and outcomes of those behaviors as expressed in the theoretical framework for this study. Apparently, these students' positive perceptions of their career academy are shaped and molded by the teachers and staff that make up the environment, perhaps through modeling. Other statements such as "Our school provides a safe and orderly environment for learning" where 74.92% strongly agreed or agreed and "Security measures at my school help me feel safe" where 64.71% strongly agreed or agreed" indicate positive opinions of well over half of these students about the safety in their school, the career academy. These results also suggest that a career academy such as the one these students attend can provide students with a safe and secure environment for learning. The career academy examined has offered students opportunities to participate in activities such as membership in the student organization SkillsUSA and other extracurricular programs that involve students from each of the Career and Technical Education (CTE) program areas available. Results of this study suggest that the students view these activities as meaningful and all students, unlike some student organizations found in a traditional high school, are able to participate in SkillsUSA. Therefore, this student organization and other activities have likely been at the forefront of shaping a positive school environment regardless of gender, grade, or race/ethnicity.

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Finally, results of this study suggest that the students enrolled in this career academy had positive perceptions of school climate with regard to *student/school relationships* regardless of grade level or race/ethnicity. Results also suggest that this career academy could possibly serve as a high school model that counters social disconnection of high school students as previous research has exhibited (Berktold, Greis, & Kaufman, 1998; Jimerson, Egeland, Sroufe, & Carlson, 2000; Restructing Schools for Young Adolescent, 1990). For example, the statement "My family members feel welcome at my school" is one of seven statements on the school climate subscale *school/student relationships* where a majority of the students (63.31%, n = 409) indicated positive perceptions (strongly agreed or agreed) of their career academy. These findings support previous research that suggests if schools are able to keep families connected to the education process, parents are more likely to see their children perform at an optimal level (Cohen, McCabe, Michelli, & Pickeral, 2009; Constantino, 2003). The career academy examined has been able to offer "transition" services both in and outside of the classroom environment. Counselors in the career academy are able to conduct a variety of activities and seminars in the classroom that assist students with applying to post-secondary schools and financial aid. Students can receive career and personal counseling within the same day they request these services. Parents are able to schedule meetings with program teachers, counselors, or both to assist them with helping their children make a smooth transition to post-secondary school or the world of work.

The findings in this study suggest that this career academy likely cultivates positive relationships that allow students to be actively involved in a variety of school activities. For example, more than half of these students (66.10%) responded positively to the statement "I have an opportunity to participate in the activities that interest me (e.g., clubs, sports, music)"

and more than half (67.34%) responded positively to the statement "I am satisfied with the quality of our school's student activities." Both of these statements, two of seven on the school climate subscale *student/school relationships,* illustrate that this career academy is providing interesting and quality activities for its students. As mentioned earlier, SkillsUSA is the main student organization active on the campus of the career academic examined. Through this vocational student organization, all students enrolled in the academy are allowed to participate in a variety of extracurricular activities sponsored by the organization. For example, students are given an opportunity to participate in competitions at the local, state, and national level. On the other hand, unlike grade level and race/ethnicity, there was a statistically significant difference found on the school climate subscale *student/school relationships* based on gender. However, this difference was relatively small, with females slightly more positive about *student/school relationships* than males ($d = .09$). This finding suggests that this and likely other career academies may need to provide more support for students, males in particular, in making important decisions that affect them and their relationships with the school. This reflects prior research findings that indicate females have more positive school relationships than males (Booth, Farrell, & Varano, 2008). Prior research also indicates that actively involved students are less likely to deal with negative perceptions. For example, only 59.13% (n = 392) of the students provided positive responses (strongly agreed or agreed) to the statement "Students' opinions are considered when important school decisions are made." Similarly, only 58.20% (n = 376) of the students provided positive responses (strongly agreed or agreed) to the statement "Students help plan our school activities." While these are still positive results for the school climate subscale *student/school relationships*, prior literature indicates that school environments such as a

career academy must pay special attention to how they encourage students' to become integral parts of the school (Marsh, Martin, & Cheng, 2008; Sullivan, Riccio, & Reynolds, 2008). The career academy examined has some limitations to how influential students will be with helping to plan for activities that affect the school beyond one year because most of the programs offered are for only one year. Some students do return to the career academy for a second year, but on a limited basis. Students enrolled in the career academy are also limited to the number of courses they can take based on high school diploma requirements.

Recommendations

The following recommendations for practice and further research are made based upon the findings and conclusions of this study.

1. This career academy appears to be a positive high school model and one that offers a very acceptable alternative to the traditional education model as perceived by its primary stakeholders—students enrolled. School district leaders researching and planning to implement an alternative high school model for their school system may want to consider results of this and similar research about career academies to learn why a career academy may be a viable option, favored by the main individuals it serves—the students. While career academies such as the one examined in this study have experienced success, more school systems today will have to review their own educational model for high school to better gauge success or failure. Due to the continued pressures found in the federal legislation of No Child Left Behind, the career academy model may be a better educational setting to help increase the number of students who become high school graduates.

2. While career academies have been successful with potential high school dropouts, the results of this study illustrate that this school model also has potential to make an impact for all high school students, therefore, it is recommended that students and parents be informed through the local education agency about their local career academy as a viable high school alternative. Career academies such as the one examined in this study have been able to appeal to not only high school dropouts, but all students. School systems with career academies can use these educational settings to establish positive relationships with their immediate stakeholders--students and parents. Career academy environments similar to the one examined in this study are likely able to help students satisfy requirements needed for a high school diploma and create educational and career pathways for students beyond high school—two essential elements success in life.

3. This study would suggest that a career academy should consider increasing potential avenues of shared decision-making that not only affect the students, but the school as a whole. However, a career academy should be precautious in making any decision that may impact the students as it relates to gender issues or biases. This study illustrated that female students demonstrated similar opinions to male students and were even more positive about student/school relationships than their male counterparts. While earlier designs of career academies were established primarily for dropouts and specifically males, as other career academies grow and develop, there is a need to closely monitor their influences on females who are just as significant as the males they will serve.

4. Since this study indicated a very positive perception of the career academy examined by the students enrolled, this educational model may be of practical use for middle grade education as well. For a number of years, school systems have had a continued concern about potential high school dropouts. Many of these students can be identified at the middle school level (Hoy & Sabo, 1998). This process may allow for a smoother transition from middle to high school with a potential increase of high school graduates. An example would be to create a middle school summer camp that provides rising 9th graders an opportunity to participate in a summer enrichment program that focuses on a specific career area. The use of such successful components found in the career academy model would expose young people to a career pathway prior to high school. Ideally, middle school students would have an opportunity to see the benefits of further education and training at an earlier age.

5. While this research focused on the opinions of current high school students enrolled in a career academy, further research with graduates of a career academy would provide information about the benefits former students attribute to their career academy experience. In particular, a follow-up study of former career academy students could provide information about their post-secondary endeavors, degree options, and employment status, as well as their opinions about the role the career academy played in their decisions and preparation. Results from such a study could provide valuable information to a career academy seeking to make productive adjustments to its existing CTE programs.

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APPENDIX A
REQUEST FOR APPROVAL TO USE THE OPINION INVENTORY AND SURVEY

Permission to Use Intellectual Property

Date of Request: ___1/7/2009___

Requestor Contact Information

Name: ___Fredrick Glenn___
Address: ___1640 Riverpark Drive, Dacula, Georgia 30019_____
Phone/Fax: ___(770) 335-2490_____
Email: ___fglenn@uga.edu_____

School/University: ___University of Georgia___
Degree: ___Ed.D in Workforce Education___

Request: I am requesting permission to use the Student Opinion Inventory for Middle/High School Students (Gr.5-12). This survey is a part of The Opinion Inventory Series. The survey will be used as a part of a dissertation study of high school students enrolled in a suburban career academy. The survey will be administered to approximately 900 students.

Resources (Please list all publications/surveys, including specific questions/page numbers that you wish to utilize): Both page 1 and 2 of the Student Opinion Inventory will be used as a part of this study. Specifically, I will be using the sections on quality of the instructional programs; support for student learning; school climate/environment for learning; and student/school relationships. The area of the survey identified as "Information About Me" will also be used. The section identified as "Open-ended Items" of the survey will not be utilized.

Upon receipt of permission to utilize the above identified resources for the sole purpose of using the information as outlined in my request, I agree to provide AdvancED with a copy of all documents, surveys and communication utilized as a result of the granted request, as well as a copy of the data derived as a result of this research.

Signed **Fredrick Glenn** Digitally signed by Fredrick Glenn
DN: CN = Fredrick Glenn, C = US
Date: 2009.01.07 17:39:39 -05'00'

November 18, 2009

To Whom It May Concern:

NCA CASI
Arizona State University
P. O. Box 871008
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(p)480.773.6900
  800.825.9517
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NSSE
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Schaumburg, IL 60173

(p)847.995.9080
  800.843.6773
(f)847.995.9088

This letter grants permission and a limited license to <u>Fredrick Glenn</u> to utilize the identified survey questions and data for the sole purpose of using the information in a dissertation in the manner outlined in your request. The following conditions must also be met:

1. AdvancED must be cited as the source of the survey questions and data.
2. AdvancED has the right to use research and conclusions from the dissertation that are congruent with our intellectual property.
3. Neither the whole nor any portion of the dissertation that includes the intellectual property of AdvancED may be published for profit, recognition or any unauthorized use at a future date without written permission from AdvancED.

This permission does not authorize the user to utilize the intellectual property in any form outside the parameters of the scope indicated in user's request. As to the intellectual property rights conveyed by this letter, AdvancED expressly reserves any and all other rights, title and interest not expressly granted herein.

Thank you in advance for your consideration and support.

Sincerely,

Yvonne Caamal Canul
Chief Innovation Officer
AdvancED

STUDENT OPINION INVENTORY

ADVANCED
Advancing Excellence in Education — Worldwide

Name of School: _____

• Please use a pencil to fill in the circles

INSTRUCTIONS: The purpose of this survey is to find out your opinions about your school. This is not a test. Please answer each question honestly. Your answers will be completely confidential. Read each statement about your school. Decide to what extent you agree or disagree with each statement, and blacken the corresponding circle.

PLEASE USE NO. 2 PENCIL

Information About Me

Gender
- ○ Male
- ○ Female

Ethnicity *(Select only one)*
- ○ African-American
- ○ Asian/Pacific Islander
- ○ Hispanic
- ○ Multi-Racial
- ○ Native American
- ○ White
- ○ Other

Current Grade in School
- ○ 5th
- ○ 6th
- ○ 7th
- ○ 8th
- ○ 9th
- ○ 10th
- ○ 11th
- ○ 12th
- ○ 13th+

For School Use Only -
Do not mark unless told to do so.

A ⓪①②③④⑤⑥⑦⑧⑨

B ⓪①②③④⑤⑥⑦⑧⑨

Response columns: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), Strongly Disagree (SD), Does Not Apply or Do Not Know (NA)

Quality of the Instructional Program

1. The education offered to students at our school is of high quality.
2. Students are provided with opportunities to learn important knowledge and skills in each subject.
3. Our school is preparing students to deal with issues and problems they will face in the future.
4. Students see a relationship between what they are studying and their everyday lives.
5. My teachers use a variety of teaching strategies and learning activities to help me learn.
6. My teachers challenge me to do my best work.
7. Teachers hold high expectations for student learning.
8. Students are motivated to do their best work.
9. The amount of homework I am given helps me succeed in my studies.

Support for Student Learning

10. Teachers give me extra help in class when it is needed.
11. Teachers are willing to give me individual help outside of class time.
12. My school recognizes the achievements of students for all types of accomplishments.
13. I receive feedback from my teachers that helps me improve my learning.
14. In addition to written tests, I am provided with a variety of ways to show my learning (e.g., projects, presentations, portfolios).
15. The grading and evaluation of my schoolwork is fair.
16. A counselor/advisor is available to help me select classes and provide guidance in planning for the future.
17. If I have a personal problem, I can talk with a staff member (e.g., counselor, teacher) at our school.
18. In our school, students have access to a variety of resources to help them succeed in their learning, such as technology, media centers, and libraries.
19. Up-to-date computers and other technologies are used in our school to help students learn.
20. My school provides textbooks and supplies that are current and in good condition.
21. Our school's facilities are adequate to support students' learning needs.
22. I am encouraged to use school and community resources (e.g., library, Internet) to help me with my schoolwork.

- Please use a pencil to fill in the circles

PLEASE USE NO. 2 PENCIL

Column headers (diagonal, from left): Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, Does Not Apply or Do Not Know

School Climate/Environment for Learning

23. My teachers treat me fairly. SA A N D SD NA
24. Staff in our school display a caring attitude toward students. SA A N D SD NA
25. All students and staff at our school are treated with respect, regardless of race, religion, or gender. SA A N D SD NA
26. Cheating is strongly discouraged at our school. SA A N D SD NA
27. School rules apply equally to all students. SA A N D SD NA
28. Substance abuse (e.g., drug/alcohol) is not a problem at our school. SA A N D SD NA
29. Our school provides a safe and orderly environment for learning. SA A N D SD NA
30. Security measures at my school help me feel safe. SA A N D SD NA
31. There are no problems with bullies at our school. SA A N D SD NA
32. I look forward to going to school each day. SA A N D SD NA
33. For the most part, I am satisfied with our school. SA A N D SD NA

Student/School Relationships

34. Students' opinions are considered when important school decisions are made. SA A N D SD NA
35. Students help plan our school activities. SA A N D SD NA
36. I have opportunity to participate in the activities that interest me (e.g., clubs, sports, music). SA A N D SD NA
37. I am satisfied with the quality of our school's student activities. SA A N D SD NA
38. School rules are clearly communicated to students. SA A N D SD NA
39. Our school uses technology to provide students with information about our school. SA A N D SD NA
40. My family members feel welcome at my school. SA A N D SD NA

Additional School-specific Items

If you have been provided with additional items, please respond in this area.

44. A B C D E F
45. A B C D E F
46. A B C D E F
47. A B C D E F
48. A B C D E F
49. A B C D E F
50. A B C D E F
51. A B C D E F
52. A B C D E F
53. A B C D E F
54. A B C D E F
55. A B C D E F
56. A B C D E F
57. A B C D E F
58. A B C D E F
59. A B C D E F
60. A B C D E F
61. A B C D E F
62. A B C D E F
63. A B C D E F

Open-ended Items

(Use a separate sheet if additional space is needed.)

41. What do you like best about your school? _____

42. What do you like least about your school? _____

43. What is one suggestion that you would like to offer to improve your school? _____

APPENDIX B
REQUEST FOR APPROVAL OF RESEARCH

New Application: ☒

612 Boyd GSRC

Resubmission*: ☐ **Revision** ☐ (*All changes must be highlighted*)

Athens, GA 30602-7411

*NOTE: A new application is required every five years.

(706) 542-3199

IRB APPLICATION

MAIL 2 COPIES OF APPLICATION TO ABOVE ADDRESS

(*Check One*) **Dr.** ☐ **Mr.** ☒ **Ms.** ☐   (*Check One*) **Dr.** ☐ **Mr.** ☒ **Ms.** ☐

(*Check One*) **Faculty** ☐ **Undergraduate** ☐ **Graduate** ☒   (*Check One*) **Faculty** ☐ **Undergraduate** ☐ **Graduate** ☒

Dr. Myra N. Womble   8100204150   Mr. Fredrick Glenn

Principal Investigator   UGA ID – last 10 digits only   Co-Investigator   UGA ID – last 10 digits

Workforce Education, River's Crossing   Workforce Education, River's Crossing

Department, Building and + Four   Department, Building and + Four
(*Include department even if living off campus or out of town*)

Mailing Address (if you prefer not to receive mail in dept.)   Mailing Address (if you prefer not to receive mail in dept.)

706-542-4091   770-335-2490
mwomble@uga.edu   fglenn@uga.edu

Phone Number (s)   E-Mail (REQUIRED)   Phone Number (s)   E-Mail

**Signature of Principal Investigator   Signature of Co-Investigator (*use additional cover sheets for more than one Co-Investigator*)

**UGA Faculty
Advisor:**   Dr. Myra N. Womble   Workforce Ed, River's Crossing   Mwomble@Uga.Edu   706-542-4091

                    Name   **Department, Bldg+ Four   E-Mail (REQUIRED)   Phone No.**

**Signature: **UGA ID – last
                                    Date: 10 digits only**   8100204150

****Your signature indicates that you have read the human subjects guidelines and accept responsibility for the
research described in this application.**

If
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        ***Sponsored Programs Proposal#   Name of Funding Agency
*****By listing a proposal number, you agree that this application matches the grant application and that you have
disclosed all financial conflicts of interest (see Q6a)**

Stakeholders Beliefs, Satisfaction, and Assessment of School Climate in a Career Academy

NOTE: SUBMIT 4-6 WEEKS PRIOR TO YOUR START DATE
APPROVAL IS GRANTED ONLY FOR 1 YEAR AT A TIME
CHECK ALL THAT APPLY:

Investigational New Drug☐   **Exceptions to/waivers of Federal regulations**☐
*If yes to the above, provide details***:**

Data Sets☐   **Existing Bodily Fluids/Tissues**☐   **RP Pool**☐   **Deception**☐
Illegal Activities☐   **Minors**☐   **Moderate Exercise**☐   **Audio/ Video taping**☐
MRI/EEG/ECG/NIRS/Ultrasound/ Blood Draw☐   **X-RAY/DEXA**☐   **Pregnant**
Women/Prisoners☐
HUMAN SUBJECTS RESEARCH APPLICATION

INSTRUCTIONS:
 1. *Type responses to all 11 questions (all parts) listed below (12 pt. font only).*
 2. *Do not answer any question with "see attachments" or "not applicable".*
 3. *Submit original plus one copy to the Human Subjects Office.*
 4. *We will contact you via email if changes are required. Allow 4-6 weeks.*

IMPORTANT: Before completing this application, please determine if the project is a research project. Check the federal definition of research at **http://www.ovpr.uga.edu/faqs/hso.html#7** or call the Human Subjects office at 542-3199. The IRB only reviews research projects.

1.   **PROBLEM ABSTRACT:** *State rationale and research question or hypothesis (why is this study important and what do you expect to learn?).*
    As more school districts consider using career academies, there must be significant evidence that the overall school climate in such educational settings supports learning. According to Tableman (2004), "school climate reflects the physical and psychological aspects of the school that are more susceptible to change and that provide the preconditions necessary for teaching and learning to take place (p.1)." The use of career academies at the secondary level has been introduced as an alternative means to traditional high schools that combines both core academics and development of work skills for business and industry (Kemple, Poglinco, & Snipes, 1999). There is evidence that the career academy model has been a more effective model (Kemple, 2001; Maxwell, & Rubin, 2001), but study of school climate in career academies is limited. The primary objective of examining school climate is to consider the perceptions of the student stakeholders. Those individuals who are the most vulnerable are the students. A better understanding of the school climate in career academies and students' perceptions of such school environments could be valuable in exploring additional benefits of career academies.

    The overall purpose of this study is to describe the perceptions of school climate of high school students enrolled in a career academy. Specific research questions are:

    1. What are the perceptions of school climate (quality of the instructional programs, support for

student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast?

2. Are there significant differences in perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on gender?

3. Are there significant differences in perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on grade level?

4. Are there significant differences in students' perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on race/ethnicity?

2.   **<u>RESEARCH DESIGN</u>:** *Identify specific factors or variables, conditions or groups and any control conditions in your study. Indicate the number of research participants assigned to each condition or group, and describe plans for data analysis.*
Research Design

A causal comparative research design will be used to study students' perceptions of school climate in a career academy. Causal comparative research designs use pre-existing or derived groups to review differences between or among those groups on outcome variables. The study of students' perceptions of school climate in career academies provides an opportunity to determine whether there are favorable perceptions of school climate in career academies. The primary advantage of a causal comparative research design is identifying variables worthy of experimental investigation while the disadvantages are a lack of randomization and manipulation of independent variables, as well as a lack of control of most extraneous variables. Therefore, it should be noted that while such a research design examines potential causal relationships, there should not be an assumption of causality (Schenker & Rumrill, 2004).

Participants

The population for this study will be high school students' who are enrolled in a southeastern suburban school district's career academy. For the purpose of the study, a convenience sample will be used. The school district consists of 15 traditional high schools, where students who are rising juniors and seniors have the option of enrolling in the district's career academy.

Instrument

For this study, THE STUDENT OPINION INVENTORY (Grades 5-12) PRODUCED BY ADVANCED will be used to measure students' perceptions of school effectiveness and the overall school climate. The instruments measure the opinions of participants in 4 subscale categories. These categories include: quality of the instructional program, support for student learning,

environment for learning, and student/school relationships. These subscale categories will be the dependent variables in the study. The instrument consists of 40 total questions. The survey should take approximately 10-15 minutes to administer. There are groups of questions, from as few as seven to the largest group of 13, and are combined to indicate categorical scale titles. Responses are on a 5-point Likert-type scale.

Procedures

Prior to implementation, permission to conduct this study will be obtained from the University of Georgia Institutional Review Board (UGA IRB) and Gwinnett County Public School (GCPS). Copies of the IRB and GCPS approval requests and approval notifications will be provided in Appendix A. For purposes of this study, consent forms will be sent home to each student's parents or guardians. During the MONTH of April 2009, all students enrolled at Maxwell High School of Technology will be invited to complete the Student Opinion Inventory online in the school computer lab. Each teacher at Maxwell School of Technology will have a designated time during the MONTH of April to have their students who volunteered to complete the online survey. The researcher will be providing all guided instructions to the students for completing the online survey as they enter the computer lab. All computers in the lab will be setup for the students to complete the survey immediately. The researcher will welcome each class of students to the computer lab and provide directions for completing the online survey. Students will be given an opportunity to ask questions before and after the completion of the online survey. The survey should take approximately 10-15 minutes to complete. Students who are absent will be allowed to complete the survey on a make-up day PRIOR TO THE END OF April.

Data Analysis

Differences in the post-test only implementation scores will be assessed on each of the scales on the Student Opinion Inventory using Analysis of Variance (ANOVA). A one-way ANOVA will be used to compare the amount of between groups variance in individuals' scores with the amount of within-groups variance. The independent variables will be gender, grade level, and race/ethnicity. The dependent variables will be: quality of the instructional programs; support for student learning; environment for learning; and student/school relationships. Using this statistical procedure should allow me to determine whether any of the independent variables have a statistically significant effect on the dependent variable.

3. **RESEARCH SUBJECTS:**

    a. *List maximum number of subjects 1,000, targeted age group 16-19 Years Old (<u>this must be specified in years</u>) and targeted gender* Male And Female**;**

    b. *Method of selection and recruitment - list inclusion and exclusion criteria. Describe the recruitment procedures (including all follow-ups).*
    A convenience sample will be used for this study. The participants will include all students enrolled in the high school who volunteer to participate. All students will be provided the opportunity to complete the study's survey with approval of the parent or guardian.

c. *The activity described in this application involves another institution (e.g. school, university, hospital, etc.) and/or another country.* **Yes**☒ **No**☐
If yes, provide the following details:
1) Name of institution: Maxwell High School of Technology
2*) County and state: Gwinnett County, Georgia
3) Country: USA
4) *Written letter of authorization (<u>on official letterhead only</u>)*/ **IRB approval:**
   Attached: ☐
   Pending: ☒

d. *Is there any working relationship between the researcher and the subjects*?
Yes☒ **No**☐, *If yes, explain*.
Researcher is an employee of Gwinnett County Public Schools. The researcher works specifically at Maxwell High School of Technology as a school counselor. He is one of two school counselors employed at the school.

e. *Describe any incentives (payment, gifts, extra credit).*
<u>Extra credit cannot be offered unless there are equal non-research options available.</u>
None.

4.   **<u>PROCEDURES</u>:** *State in chronological order what a subject is expected to do and what the researcher will do during the interaction. Indicate time commitment for each research activity. And detail any follow-up.*
Prior to implementation, permission to conduct this study will be obtained from the University of Georgia Institutional Review Board (UGA IRB) and Gwinnett County Public School (GCPS). Copies of the IRB and GCPS approval requests and approval notifications will be provided in Appendix A. For purposes of this study, consent forms will be sent home to each student's parents or guardians. During the MONTH of April 2009, all students enrolled at Maxwell High School of Technology will be invited to complete the Student Opinion Inventory online in the school computer lab. Each teacher at Maxwell School of Technology will have a designated time during the MONTH of April to have their students who volunteered to complete the online survey. The researcher will be providing all guided instructions to the students for completing the online survey as they enter the computer lab. All computers in the lab will be setup for the students to complete the survey immediately. The researcher will welcome each class of students to the computer lab and provide directions for completing the online survey. Students will be given an opportunity to ask questions before and after the completion of the online survey. The survey should take approximately 10-15 minutes to complete. Students who are absent will be allowed to complete the survey on a make-up day PRIOR TO THE END OF April. STUDENTS WHO DO NOT WISH TO PARTICIPATE IN THE SURVEY STUDY WILL REMAIN IN THEIR CLASS WITH THEIR PROGRAM TEACHER TO CONTINUE CLASSROOM INSTRUCTION. STUDENT WHO DO PARTICIPATE IN THE STUDY WILL RECEIVE MAKE-UP INSTRUCTION ON ANY MATERIAL THEY MISS UPON RETURNING TO CLASS. THE LOCAL SCHOOL INTERNET SEVER WILL HOST THE SURVEY.

Duration of participation in the study: 1 *Months*
No. of testing/training sessions: 1 *Length of each session:* 15 minutes

Start Date: April 13, 2009

Only if your procedures include work with blood, bodily fluids or tissues, complete below:
Submit a MUA from Biosafety: Attached☐ *Pending*☐
If you are exempted from obtaining a MUA by Biosafety, explain why?

Total amount of blood draw for study: ml *Blood draw for each session:* ml

5. **MATERIALS**: *Itemize all questionnaires/instruments/equipment and attach copies with the corresponding numbers written on them.*
Copy of the sample survey is attached.

Check all other materials that apply and are attached:
Interview protocol☐ **Debriefing Statement**☐ **Recruitment flyers or advertisements**☐
Consent/Assent forms☒
If no consent documents are attached, justify omission under Q. 8

6. **RISK**: *Detail risks to a subject as a result of data collection and as a direct result of the research and your plans to minimize them and the availability and limits of treatment for sustained physical or emotional injuries.*
   NOTE: REPORT INCIDENTS CAUSING DISCOMFORT, STRESS OR HARM TO THE IRB IMMEDIATELY!
   a. **CURRENT RISK**: *Describe any psychological, social, legal, economic or physical discomfort, stress or harm that might occur as a result of participation in research. How will these be held to the absolute minimum*?
   There will be no risk to students.

   Is there a financial conflict of interest (see UGA COI policy)? **Yes**☐ **No**☒
   If yes, does this pose any risk to the subjects?

   b. **FUTURE RISK**: *How are research participants to be protected from potentially harmful future use of the data collected in this project? Describe your plans to maintain confidentiality, including removing identifiers, and state who will have access to the data and in what role. Justify retention of identifying information on any data or forms*.
   DO NOT ANSWER THIS QUESTION WITH "NOT APPLICABLE"!
   Anonymous☐ **Confidential**☒ **Public**☐ *Check one only and explain below.*
   All participants who volunteer will complete the study's survey online. Only the researcher will have access to the data collected for the online survey. THE DATA WILL BE KEPT BY THE RESEARCHER FOR AT LEAST THREE YEARS AFTER COMPLETION OF THE STUDY.

   Audio-taping☐ **Video-taping**☐
   If taping, how will tapes be securely stored, who will have access to the tapes, will they be publicly disseminated and when will they be erased or destroyed? Justify retention.

7. **<u>BENEFIT</u>:** *State the benefits to individuals and humankind. Potential benefits of the research should outweigh risks associated with research participation.*

a. *Identify benefits of the research for participants, e.g. educational benefits*:

Although considerable research has been done regarding school climate, research focused specifically on students' perceptions of career academies is limited. More research about school climate as it relates to career academies and students' perceptions may lead to valuable information about the potential for student success in these environments. Such research may also increase awareness of the need for a positive school climate in career academies, and may provide information useful to traditional high schools, especially those where the career academy concept has not been implemented. If the findings of the study are favorable, showing that these students perceive the school climate of their career academy to be positive; and showing distinct relationships between students' positive perceptions and gender, grade level, or race/ethnicity, school districts may consider more career academies as an alternative high school delivery model (Kemple, Poglinco, & Snipes, 1999). Growth of career academies as a result of this type of finding would mean high school students would have more options—enrolling in a designated traditional high school—or choosing between one or more local career academies (Kemple, 2001; Maxwell, & Rubin, 2001). Even if positive results from a study such as this do not give rise to more career academies, the career academy in this study will be able to discern what it is doing right or wrong (as percieved by its students) with regard to the school climate and make adjustments accordingly.

b. *Identify any potential benefits of this research for humankind in general, e.g. advance our knowledge of some phenomenon or help solve a practical problem.*

Although considerable research has been done regarding school climate, research focused specifically on students' perceptions of career academies is limited. More research about school climate as it relates to career academies and students' perceptions may lead to valuable information about the potential for student success in these environments. Such research may also increase awareness of the need for a positive school climate in career academies, and may provide information useful to traditional high schools, especially those where the career academy concept has not been implemented. If the findings of the study are favorable, showing that these students perceive the school climate of their career academy to be positive; and showing distinct relationships between students' positive perceptions and gender, grade level, or race/ethnicity, school districts may consider more career academies as an alternative high school model (Kemple, Poglinco, & Snipes, 1999). Growth of career academies as a result of this type of finding would mean high school students would have more options—enrolling in a designated traditional high school—or choosing between one or more local career academies (Kemple, 2001; Maxwell, & Rubin, 2001). Even if positive results from a study such as this do not give rise to more career academies, the career academy in this study will be able to discern what it is doing right or wrong with regard to the school climate and make adjustments accordingly.

8. **CONSENT PROCESS:**
    a. *Detail how legally effective informed consent will be obtained from all research participants and, when applicable, from parent(s) or guardian(s).*
    All Maxwell students will be provided a detailed letter about the proposed study and a request for their informed consent to participate. Parents will be provided a detailed letter about the proposed study. Their letter will indicate that their student's participation is strictly voluntary. It will also notify parents that there child can choose not to participate in the study.

    Will subjects sign a consent form? Yes☒ No☐
    If No, request for waiver of signed consent – Yes☐
    Justify the request, including an assurance that risk to the participant will be minimal. Also submit the consent script or cover letter that will be used in lieu of a form.

    b. **Deception Yes☐ No☒**
    If yes, describe the deception, why it is necessary, and how you will debrief them. The consent form should include the following statement: "In order to make this study a valid one, some information about my participation will be withheld until completion of the study."

9. **VULNERABLE PARTICIPANTS: Yes☒ No☐**
    Minors☒ Prisoners☐ Pregnant women/fetuses☐ Elderly☐
    Immigrants/non-English speakers☐ Mentally/Physically incapacitated☐ Others☐ *List below.*
    Outline procedures to obtain their consent/assent to participate. Describe the procedures to be used to minimize risk to these vulnerable subjects.
    A parent consent form and student assent form will be issued to all potential participants in the study. They must be signed and returned in order for the subjects to participant. The student's involvement in the study is voluntary, and they may choose not to participate or to stop at any time without penalty or loss of benefits to which they are otherwise entitled. Any individually-identifiable information collected will be held confidential unless otherwise required by law. The student's identity will be coded, and all data will be kept in a secured location. The results of the research study may be published, but the student's name will not be used. In fact, the published results will be presented in summary form only. The student's identity will not be associated with their responses in any way.

10. **ILLEGAL ACTIVITIES: Yes☐ No☒**
    If yes, explain how subjects will be protected.

    NOTE: Some ILLEGAL ACTIVITIES must be reported, e.g. child abuse.

11.   *STUDENTS*

This application is being submitted for **:**
Undergraduate Honors Thesis☐
Masters Applied Project, Thesis or Exit Exam Research☐
Doctoral Dissertation Research☒

Has the student's thesis/dissertation committee approved this research? Yes☒ **No**☐
The IRB recommends submission for IRB review only after the appropriate committees have conducted the necessary scientific review and approved the research proposal.

Date: Mon 20 Apr 13:27:46 EDT 2009
From: "Larie Sylte" <lsylte@uga.edu>
Subject: IRB Approval- Womble
To: "Dr. M. N. Womble" <mwomble@uga.edu>
Cc: "fglenn@uga.edu" <fglenn@uga.edu>

PROJECT NUMBER: 2009-10743-0
TITLE OF STUDY: Stakeholders Beliefs, Satisfaction, and Assessment of School Climate in a Career Academy
PRINCIPAL INVESTIGATOR: Dr. Myra N. Womble

Dear Dr. Womble,

Please be informed that the University of Georgia Institutional Review Board (IRB) has reviewed and approved your above-titled proposal through the exempt (administrative) review procedure authorized by 45 CFR 46.101(b) (1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

You may now begin your study. Your approval packet will be sent by mail.

Please remember that no change in this research proposal can be initiated without prior review by the IRB. Any adverse events or unanticipated problems must be reported to the IRB immediately. The principal investigator is also responsible for maintaining all applicable protocol records (regardless of media type) for at least three (3) years after completion of the study (i.e., copy of approved protocol, raw data, amendments, correspondence, and other pertinent documents). You are requested to notify the Human Subjects Office if your study is completed or terminated.

Good luck with your study, and please feel free to contact us if you have any questions. Please use the IRB number and title in all communications regarding this study.

Regards,

LaRie Sylte, M.H.A, M.A., CIP
Human Subjects Office
University of Georgia
www.ovpr.uga.edu/hso/

LOCAL SCHOOL RESEARCH REQUEST FORM

Name of School: University of Georgia

Name of Researcher: Fredrick A. Glenn

Position or Grade: Head Counselor, Maxwell High School of Technology

A. Research Project

a. **Title:** Stakeholder's Beliefs, Satisfaction, and Assessment of School Climate in Career Academies

b. **Statement of Problem and research question:**

The overall purpose of this study is to describe the perceptions of school climate of high school students enrolled in a career academy. Specific research questions are:

1. What are the perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast?

2. Are there significant differences in perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on gender?

3. Are there significant differences in perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on grade level?

4. Are there significant differences in students' perceptions of school climate (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships) of students enrolled in a career academy in a metropolitan area in the southeast based on race/ethnicity?

c. **Subjects or population for the study:** All students enrolled at Maxwell High School of Technology.___

d. **Reason for doing this research:**

___X___ Graduate Study at ___University of Georgia___ University/College

_____Publication/Presentation

_____ Other (please specify) _____

e. **Dates research will be conducted**: ____March 23, 2009____ to ____April 31, 2009____

B. **All research and researchers must** a) Protect the rights and welfare of all human subjects, b) Inform students and/or parents that they have the right not to participate in the study, c) Adhere to board policies and applicable laws which govern the privacy and confidentiality of students records.

C. This request applies to research conducted within and by local school personnel. All other research requests must be submitted to the Research & Evaluation Office according to the GCPS Research Proposal Format.

D. **Principals ONLY need to approve Local School Research Requests. The copy sent to the Research & Evaluation Office is for filing purposes only. No further approval is necessary.**

E. After approval by the principal, please forward a copy of this completed form to:

Via GCPS Courier:	Via US Mail:	Via Fax:
Colin Martin GCPS - Research & Evaluation ISC	Dr. Colin Martin, Executive Director Research & Evaluation Office Gwinnett County Public Schools 437 Old Peachtree Road, NW Suwanee, GA 30024	Colin Martin 678-301-7088

Donna Powers   _3/9/09_
Principal's Signature   **Date of Approval**

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APPENDIX C
INITIAL COVER LETTER FOR STUDY

April 13, 2009

Dear Maxwell Parent and Student:

I am the Head Counselor at Maxwell High School of Technology and a doctoral candidate under the supervision of Dr. Myra N. Womble, Associate Professor in the Department of Workforce Education, Leadership, and Social Foundations at The University of Georgia. I invite you to participate in a research study entitled "Stakeholders' Beliefs, Satisfaction, and Assessment of School Climate in Career Academies" that will be conducted during the month of March and April 2009. The purpose of this study is to describe the perceptions of school climate of high school students enrolled in a career academy.

Your student's participation will involve completing a brief online survey in the school's computer lab. The survey consists of 40 questions and should take approximately 10-15 minutes to complete. Your student's involvement in the study is voluntary, and he/she may choose not to participate or to stop at any time without penalty or loss of benefits to which he/she is otherwise entitled. Your student's participation will be anonymous, therefore, there will be no individually-identifiable information collected. Your student's identity will be coded, and all data will be kept in a secured location. The results of the research study may be published, but your student's name will not be used. In fact, the published results will be presented in summary form only. Your student's identity will not be associated his/her responses in any published format.

The findings from this research study may provide information on the potential for student success in a career academy. I also hope to gain information useful for school districts considering implementation of the career academy model. There are no known risks or discomforts associated with this research.

If either of you have any questions about this research project, please feel free to call me now or during the course of the study. I can be reached by telephone at: (770) 338-4604. You may also contact the professor supervising the research, Dr. Myra N. Womble, Major Advisor, Workforce Education, at (706) 542-4091 or mwomble@uga.edu.

Questions or concerns about you're your student's rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, 612 Boyd GSRC, Athens, Georgia 30602-7411; telephone (706) 542-3199; email address irb@uga.edu.

By completing and returning the parent and student consent forms, you are agreeing to participate in the above described research project.

Thank you for your consideration! Please keep this letter for your records.

Sincerely,

Fredrick Glenn, Ed.S
Head Counselor
Maxwell High School of Technology

APPENDIX D
PERMISSION LETTERS FOR STUDENTS AND PARENTS

Student Consent Form

Dear Participant:

You are invited to participate in my research project titled, "Stakeholders' Beliefs, Satisfaction, and Assessment of School Climate in Career Academies." Through this project, I hope to describe the perceptions of school climate of high school students enrolled in a career academy. It is my interest to address student perceptions of school climate in a career academy based on quality of the instructional programs, support for student learning, environment for learning, and student/school relationships.

If you decide to be part of this study, you will complete a brief online survey in the school's computer lab. The survey consist of 40 questions and should take approximately 10-15 minutes to complete. Through your completion of the survey, I may expect from this study is that positive results may indicate the potential for student success in a career academy. The researcher also hopes to learn that such research may provide useful information for school districts considering implementation of the career academy model.

If you choose not to participate, you are free to do so on the day the survey is scheduled. If you have any questions or concerns, you can always ask me or contact, Dr. Myra N. Womble, Major Advisor, Workforce Education, at (770) 542-4091 or mwomble@uga.edu.

Sincerely,

Fredrick Glenn, Ed.S
Maxwell Head Counselor
Workforce Education, Leadership, and Social Foundation
University of Georgia
Telephone: (770) 338-4604
Email: fglenn@uga.edu

I understand the project described above. My questions have been answered and I agree to participate in this project. I have received a copy of this form.

_____
Signature of the Participant/Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

Parental Permission Form – School Climate of Career Academies

I agree to allow _____ to take part in a research study titled, Stakeholders' Beliefs, Satisfaction, and Assessment of School Climate in Career Academies, which is being conducted by Mr. Fredrick Glenn, Maxwell's Head School Counselor and Doctoral Candidate in the Department of Workforce Education, Leadership, and Social Foundations at the University of Georgia under the direction of Dr. Myra N. Womble, Major Advisor, Workforce Education. My child's participation is voluntary. My child can refuse to participate or stop taking part at any time without giving any reason, and without penalty or loss of benefits to which she/he is otherwise entitled. I can ask to have the information related to my child returned to me, removed from the research records, or destroyed.

- The purpose of the study is to describe the perceptions of school climate of high school students enrolled in a career academy.

- Specific research questions will address the perceptions of school climate based on quality of the instructional programs, support for student learning, environment for learning, and student/school relationships.

- The results of the study will examine significant differences based on gender, grade level, and race/ethnicity for each of the four areas (quality of the instructional programs, support for student learning, environment for learning, and student/school relationships).

- The benefit that I may expect from this study is that positive results may indicate the potential for student success in a career academy and may provide information useful for school districts considering implementation of the career academy model.

- During the second week in April 2009, my child will be asked to take a brief online survey in the school's computer lab. The survey consists of 40 questions and should take approximately 10-15 minutes to complete.

- The research is not expected to cause any harm or discomfort. My child can choose not to take the survey at any time. My child's grade will not be affected if my child decides not to participate.

- Any individually-identifiable information collected about my child will be held confidential unless otherwise required by law. My child's identity will be coded, and all data will be kept in a secured location.

- The researcher will answer any questions about the research, now or during the course of the project, and can be reached by telephone at: (770) 338-4604.   I may also contact the professor supervising the research, Dr. Myra N. Womble, Major Advisor, Workforce Education, at (770) 542-4091 or mwomble@uga.edu.

- I understand the study procedures described above. My questions have been answered to my satisfaction, and I agree to allow my child to take part in this study. I have been given a copy of this form to keep.

Mr. Fredrick Glenn   Mr. Fredrick Glenn   _____
Name of Researcher   **Signature**   **Date**
Telephone: (770) 338-4604
Email: fglenn@uga.edu

Name of Parent or Guardian   **Signature**   **Date**

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your child's rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX E
DIRECTIONS FOR ONLINE SURVEY

Maxwell High School of Technology

Online Surveys

Survey 1: Maxwell HS of Technology Perception Survey

The survey is design to review your perception of Maxwell. The survey covers content based on Quality of the Instructional Program, Support for Student Learning, School Climate/Environment for Learning, and Student/School Relationships. After completing demographic information, you will you answer 40 questions based on your perception and experience of Maxwell. You will select from Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1), and Do Not Know/Do Not Apply (0) for each statement.

Please assess the internet on your desktop and log on to the following website:

- **www.quia.com/sv/281678.html**

APPENDIX F
OPINION SURVEY - STUDENT RESPONSES WITH AVERAGE NUMBER OF
STUDENTS AND PERCENTAGES FOR EACH SUBSCALE AND STUDENT
RESPONSES WITH NUMBER OF STUDENTS AND PERCENTAGES FOR EACH
QUESTION

Opinion Survey Student Responses

Quality of the Instructional Program

Rating	n	Percent
Strongly agree	278	43.00%
Agree	183	28.33%
Neutral	107	16.49%
Disagree	40	6.24%
Strongly disagree	30	4.68%
Does Not Apply or Do Not Know	8	1.27%

Support for Student Learning

Rating	n	Percent
Strongly agree	254	39.34%
Agree	189	29.24%
Neutral	116	17.91%
Disagree	45	6.91%
Strongly disagree	31	4.78%
Does Not Apply or Do Not Know	12	1.82%

Environment for Learning

Rating	n	Percent
Strongly agree	277	42.83%
Agree	179	27.76%
Neutral	106	16.41%
Disagree	32	5.01%
Strongly disagree	41	6.30%
Does Not Apply or Do Not Know	11	1.70%

Student/School Relationships

Rating	n	Percent
Strongly agree	229	35.52%
Agree	192	29.77%
Neutral	133	20.57%
Disagree	42	6.52%
Strongly disagree	28	4.31%
Does Not Apply or Do Not Know	21	3.32%

Opinion Survey Student Responses

Quality of the Instructional Program

Q1) The education offered to students at our school is of high quality.

Rating	n	Percent
Strongly agree	339	52.48%
Agree	168	26.01%
Neutral	79	12.23%
Disagree	28	4.33%
Strongly disagree	27	4.18%
Does Not Apply or Do Not Know	5	0.77%

Q2) Students are provided with opportunities to learn important knowledge and skills in each subject.

Rating	n	Percent
Strongly agree	337	52.17%
Agree	185	28.64%
Neutral	67	10.37%
Disagree	31	4.80%
Strongly disagree	25	3.87%
Does Not Apply or Do Not Know	1	0.15%

Q3) Our school is preparing students to deal with issues and problems they will face in the future.

Rating	n	Percent
Strongly agree	299	46.28%
Agree	188	29.10%
Neutral	92	14.24%
Disagree	36	5.57%
Strongly disagree	28	4.33%
Does Not Apply or Do Not Know	3	0.46%

Q4) Students see a relationship between what they are studying and their everyday lives.

Rating	n	Percent
Strongly agree	238	36.84%
Agree	195	30.19%
Neutral	129	19.97%
Disagree	51	7.89%
Strongly disagree	24	3.72%

Does Not Apply or Do Not Know   9   1.39%

Q5) My teachers use a variety of teaching strategies and learning activities to help me learn.

Rating	n	Percent
Strongly agree	270	41.80%
Agree	180	27.86%
Neutral	114	17.65%
Disagree	49	7.59%
Strongly disagree	33	5.11%
Does Not Apply or Do Not Know	0	0.00%

Q6) My teachers challenge me to do my best work.

Rating	n	Percent
Strongly agree	293	45.36%
Agree	188	29.10%
Neutral	96	14.86%
Disagree	39	6.04%
Strongly disagree	30	4.64%
Does Not Apply or Do Not Know	0	0.00%

Q7) Teachers hold high expectations for student learning.

Rating	n	Percent
Strongly agree	292	45.20%
Agree	203	31.42%
Neutral	87	13.47%
Disagree	33	5.11%
Strongly disagree	27	4.18%
Does Not Apply or Do Not Know	5	0.77%

Q8) Students are motivated to do their best work.

Rating	n	Percent
Strongly agree	240	37.15%
Agree	191	29.57%
Neutral	138	21.36%
Disagree	43	6.66%
Strongly disagree	27	4.18%
Does Not Apply or Do Not Know	7	1.08%

Q9) The amount of homework I am given helps me succeed in my studies.

Rating	n	Percent

Strongly agree	192	29.72%
Agree	149	23.07%
Neutral	157	24.30%
Disagree	53	8.20%
Strongly disagree	51	7.89%
Does Not Apply or Do Not Know	44	6.81%

Support for Student Learning

Q10) Teachers give me extra help in class when it is needed.

Rating	n	Percent
Strongly agree	276	42.72%
Agree	187	28.95%
Neutral	99	15.33%
Disagree	49	7.59%
Strongly disagree	31	4.80%
Does Not Apply or Do Not Know	4	0.62%

Q11) Teachers are willing to give me individual help outside of class time.

Rating	n	Percent
Strongly agree	229	35.45%
Agree	183	28.33%
Neutral	116	17.96%
Disagree	49	7.59%
Strongly disagree	38	5.88%
Does Not Apply or Do Not Know	31	4.80%

Q12) My school recognizes the achievements of students for all types of accomplishments.

Rating	n	Percent
Strongly agree	236	36.53%
Agree	185	28.64%
Neutral	140	21.67%
Disagree	48	7.43%
Strongly disagree	23	3.56%
Does Not Apply or Do Not Know	14	2.17%

Q13) I receive feedback from my teachers that helps me improve my learning.

Rating	n	Percent
Strongly agree	232	35.91%
Agree	210	32.51%

Neutral	129	19.97%
Disagree	39	6.04%
Strongly disagree	33	5.11%
Does Not Apply or Do Not Know	3	0.46%

Q14) In addition to written tests, I am provided with a variety of ways to show my learning (e.g., projects, presentations, portfolios).

Rating	n	Percent
Strongly agree	264	40.87%
Agree	181	28.02%
Neutral	112	17.34%
Disagree	57	8.82%
Strongly disagree	26	4.02%
Does Not Apply or Do Not Know	6	0.93%

Q15) The grading and evaluation of my schoolwork is fair.

Rating	n	Percent
Strongly agree	239	37.00%
Agree	205	31.73%
Neutral	132	20.43%
Disagree	43	6.66%
Strongly disagree	24	3.72%
Does Not Apply or Do Not Know	3	0.46%

Q16) A counselor/advisor is available to help me select classes and provide guidance in planning for the future.

Rating	n	Percent
Strongly agree	280	43.34%
Agree	188	29.10%
Neutral	103	15.94%
Disagree	34	5.26%
Strongly disagree	27	4.18%
Does Not Apply or Do Not Know	14	2.17%

Q17) If I have a personal problem, I can talk with a staff member (e.g., counselor, teacher) at our school.

Rating	n	Percent
Strongly agree	233	36.07%
Agree	165	25.54%
Neutral	121	18.73%
Disagree	55	8.51%

| Strongly disagree | 49 | 7.59% |
| Does Not Apply or Do Not Know | 23 | 3.56% |

Q18) In our school, students have access to a variety of resources to help them succeed in their learning, such as technology, media centers, and libraries.

Rating	n	Percent
Strongly agree	298	46.13%
Agree	196	30.34%
Neutral	89	13.78%
Disagree	28	4.33%
Strongly disagree	27	4.18%
Does Not Apply or Do Not Know	8	1.24%

Q19) Up-to-date computers and other technologies are used in our school to help students learn.

Rating	n	Percent
Strongly agree	275	42.57%
Agree	180	27.86%
Neutral	111	17.18%
Disagree	36	5.57%
Strongly disagree	37	5.73%
Does Not Apply or Do Not Know	7	1.08%

Q20) My school provides textbooks and supplies that are current and in good condition.

Rating	n	Percent
Strongly agree	281	43.50%
Agree	184	28.48%
Neutral	101	15.63%
Disagree	39	6.04%
Strongly disagree	29	4.49%
Does Not Apply or Do Not Know	12	1.86%

Q21) Our school's facilities are adequate to support students' learning needs.

Rating	n	Percent
Strongly agree	263	40.71%
Agree	225	34.83%
Neutral	101	15.63%
Disagree	26	4.02%
Strongly disagree	26	4.02%
Does Not Apply or Do Not Know	5	0.77%

Q22) I am encouraged to use school and community resources (e.g., library, Internet) to help me with my schoolwork.

Rating	n	Percent
Strongly agree	258	39.94%
Agree	212	32.82%
Neutral	108	16.72%
Disagree	42	6.50%
Strongly disagree	22	3.41%
Does Not Apply or Do Not Know	4	0.62%

Environment for Learning

Q23) My teachers treat me fairly.

Rating	n	Percent
Strongly agree	287	44.43%
Agree	193	29.88%
Neutral	91	14.09%
Disagree	30	4.64%
Strongly disagree	40	6.19%
Does Not Apply or Do Not Know	5	0.77%

Q24) Staff in our school display a caring attitude toward students.

Rating	n	Percent
Strongly agree	244	37.77%
Agree	214	33.13%
Neutral	114	17.65%
Disagree	36	5.57%
Strongly disagree	34	5.26%
Does Not Apply or Do Not Know	4	0.62%

Q25) All students and staff at our school are treated with respect, regardless of race, religion, or gender.

Rating	n	Percent
Strongly agree	284	43.96%
Agree	187	28.95%
Neutral	101	15.63%
Disagree	30	4.64%
Strongly disagree	37	5.73%
Does Not Apply or Do Not Know	7	1.08%

Q26) Cheating is strongly discouraged at our school.

Rating	n	Percent
Strongly agree	352	54.49%
Agree	150	23.22%
Neutral	76	11.76%
Disagree	20	3.10%
Strongly disagree	38	5.88%
Does Not Apply or Do Not Know	10	1.55%

Q27) School rules apply equally to all students.

Rating	n	Percent
Strongly agree	303	46.90%
Agree	169	26.16%
Neutral	104	16.10%
Disagree	32	4.95%
Strongly disagree	32	4.95%
Does Not Apply or Do Not Know	6	0.93%

Q28) Substance abuse (e.g., drug/alcohol) is not a problem at our school.

Rating	n	Percent
Strongly agree	230	35.60%
Agree	158	24.46%
Neutral	115	17.80%
Disagree	40	6.19%
Strongly disagree	72	11.15%
Does Not Apply or Do Not Know	31	4.80%

Q29) Our school provides a safe and orderly environment for learning.

Rating	n	Percent
Strongly agree	278	43.03%
Agree	206	31.89%
Neutral	102	15.79%
Disagree	27	4.18%
Strongly disagree	28	4.33%
Does Not Apply or Do Not Know	5	0.77%

Q30) Security measures at my school help me feel safe.

Rating	n	Percent
Strongly agree	224	34.67%
Agree	194	30.03%
Neutral	146	22.60%
Disagree	38	5.88%

| Strongly disagree | 36 | 5.57% |
| Does Not Apply or Do Not Know | 8 | 1.24% |

Q31) There are no problems with bullies at our school.

Rating	n	Percent
Strongly agree	288	44.58%
Agree	143	22.14%
Neutral	105	16.25%
Disagree	38	5.88%
Strongly disagree	49	7.59%
Does Not Apply or Do Not Know	23	3.56%

Q32) I look forward to going to school each day.

Rating	n	Percent
Strongly agree	199	30.80%
Agree	159	24.61%
Neutral	166	25.70%
Disagree	53	8.20%
Strongly disagree	65	10.06%
Does Not Apply or Do Not Know	4	0.62%

Q33) For the most part, I am satisfied with our school.

Rating	n	Percent
Strongly agree	255	39.47%
Agree	211	32.66%
Neutral	107	16.56%
Disagree	38	5.88%
Strongly disagree	30	4.64%
Does Not Apply or Do Not Know	5	0.77%

Student/School Relationships

Q34) Students' opinions are considered when important school decisions are made.

Rating	n	Percent
Strongly agree	190	29.41%
Agree	192	29.72%
Neutral	150	23.22%
Disagree	58	8.98%
Strongly disagree	33	5.11%
Does Not Apply or Do Not Know	23	3.56%

Q35) Students help plan our school activities.

Rating	n	Percent
Strongly agree	182	28.17%
Agree	194	30.03%
Neutral	148	22.91%
Disagree	57	8.82%
Strongly disagree	35	5.42%
Does Not Apply or Do Not Know	30	4.64%

Q36) I have an opportunity to participate in the activities that interest me (e.g., clubs, sports, music).

Rating	n	Percent
Strongly agree	241	37.31%
Agree	186	28.79%
Neutral	126	19.50%
Disagree	43	6.66%
Strongly disagree	30	4.64%
Does Not Apply or Do Not Know	20	3.10%

Q37) I am satisfied with the quality of our school's student activities.

Rating	n	Percent
Strongly agree	222	34.37%
Agree	213	32.97%
Neutral	140	21.67%
Disagree	38	5.88%
Strongly disagree	21	3.25%
Does Not Apply or Do Not Know	12	1.86%

Q38) School rules are clearly communicated to students.

Rating	n	Percent
Strongly agree	247	38.24%
Agree	203	31.42%
Neutral	123	19.04%
Disagree	38	5.88%
Strongly disagree	27	4.18%
Does Not Apply or Do Not Know	8	1.24%

Q39) Our school uses technology to provide students with information about our school.

Rating	n	Percent
Strongly agree	276	42.72%

	n	Percent
Agree	197	30.50%
Neutral	109	16.87%
Disagree	31	4.80%
Strongly disagree	23	3.56%
Does Not Apply or Do Not Know	10	1.55%

Q40) My family members feel welcome at my school.

Rating	n	Percent
Strongly agree	248	38.39%
Agree	161	24.92%
Neutral	134	20.74%
Disagree	30	4.64%
Strongly disagree	26	4.02%
Does Not Apply or Do Not Know	47	7.28%