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# Implementing Career Academies in a Large, Comprehensive High School

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IMPLEMENTING CAREER ACADEMIES IN A LARGE, COMPREHENSIVE HIGH  
SCHOOL

by

DELMAS L. WATKINS SR.

(Under the Direction of Charles Reavis)

ABSTRACT

The purpose of this study is to examine the experiences of high school individuals in implementing and sustaining Career Academies in a large comprehensive high school. The Career Academy is a high school reform model that integrates school-to-work elements in a personalized learning environment. The Career Academy structure provides partnerships between high schools and employers to enhance students' exposure to career development and work-based learning opportunities. The Career Academy model has proven to be a successful reform initiative for keeping students in school and positively impacting their post-secondary outcomes. Success is dependent of the contingent on the full implementation including a strong curriculum and instruction component.

The researcher gathered information by using the qualitative method to examine the experiences of how one large high school implemented and sustained Career Academies. Face-to-face interviews were conducted with individuals from one high school involved in the successful implementation and sustenance of Career Academies. A case study narrative format was used to document the experiences of individuals involved in the implementation and sustenance of Career Academies.

Three conclusions can be drawn from the results of the study. First, high school leaders must have a clear reason for implementing Career Academies. The administrators and teachers in the study are focused on educating all students by providing a challenge integrated curriculum and establishing relationships that prepare them for life beyond high school.

Secondly, there must be buy-in to the implementation of Career Academies. The Board of Education and district was supportive to implementing Career Academies. Professional development needs to be continuous and ongoing as improvements and adjustments are made steady implementation.

Lastly, the structure and support of Career Academies must be a priority for effectiveness of the initiative. Career Academies do require additional work and, therefore, entail additional expense. Teachers must meet on a regular basis as a team to develop integrated curriculum, coordinate employer involvement, and organize links to college and other postsecondary options for students.

**INDEX WORDS:** High School Reform, Career Academy, Career Technology Education, Vocational Education, High School Transitions, Smaller Learning Communities, School-with-in-a-school

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## DEDICATION

This dissertation is dedicated to my loving and understanding wife, Chantsy, without whose, patience and support my completion of this project would not have been possible. Also, to my daughter, Hannah, and my son, Delmas Jr. for the sacrifice of our time together on many Saturdays to allow me the time to meet the requirements of this program.

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I thank God for His grace and mercy for allowing me to accomplish this endeavor. I am grateful for the number of people He has placed in my life to set me on this journey. I have faith in Him and I am even more convinced that I can do all things through Christ who strengthens me.

My steps are ordered by God and no project or accomplishment of this scope is the product of a sole individual. Many people have contributed to me getting to this point of my life. In spite of the many disadvantages that started my life, I now realize that with God I am more than a conquer and that all things work together for my good.



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## CHAPTER I

### INTRODUCTION

A growing concern has developed regarding the diminishing value of a standard high school diploma and the inability of high schools, particularly those in large cities serving low-income communities, to equip their graduates with the qualifications and job-readiness skills they need to make successful transitions to college and/or the workforce (Mittlesteadt & Reeves, 2003). According to Elliott, Hanser, and Gilroy (2002), the nation is also experiencing a widening gap between the earnings of young workers, particularly young men, who have only a high school diploma and those who have some post-secondary education. In response to these trends, education policymakers and practitioners are pursuing a variety of strategies for improving American high schools (Almeida & Steinberg, 2001). A recent study by Pucel (2001), indicates that federal and state educational funds have been used effectively in achieving successful transitions to the world of work by assisting large high schools in preparing students to achieve the necessary skills to pursue further education.

In America's large traditional comprehensive high schools, Career Academies have experienced exceptional growth since the first academy was established in 1969 as a dropout prevention program in Philadelphia (Legters, Balfanz, Jordan, & McPartland, 2002). Since 2000, the Department of Education has provided federal grant funds as start-up resources to assist large high schools that have an enrollment of more than 1000 students to implement Smaller Learning Communities (SLC). The grant funds are used to implement or expand the SLC initiative by applying the following strategies: schools with-in schools, Career Academies, restructuring the school day, instituting personal

adult advocates, developing teacher advisory systems and other innovations designed to create personalized high school experiences for students that improve student achievement and performance (<http://www.ed.gov/programs/slcp/strategies.html>).

National and regional reports have warned that education is failing to meet the needs of many of the nation's youth (Benson, 1997). This failure has economic and social consequences causing America to fall behind in the international marketplace and incur spiraling costs for welfare programs, social services, and prisons (Kemple, 1997).

America is facing a shortage of well-educated and well-trained workers (Hershey, Hudis, Silverberg, & Haimson, 1997). To address this challenge, a high school curriculum that integrates core academic and Career and Technical Education (CTE) will prepare students for new technology and expanding job responsibilities (Kemple & Snipes, 2000). Mittlesteadt and Reeves (2003) suggest that the traditional design format of high school instruction will not prepare students for the kinds of skills needed in the 21<sup>st</sup> century workplace. Pucel (2001) points out that the structure and rigor in Career Academies provides a focus on learning activities aimed at developing the intellectual skills students will need in today's labor market.

#### Development of Career Academies

The Career Academy structure evolved from improving Career and Technical Education by integrating core academic subjects. The purpose of Career and Technical Education is to develop students in five areas: (1) personal skills and attitudes, (2) communication and computational skills and technological literacy, (3) employability skills, (4) broad and specific occupational skills and knowledge, and (5) foundations for career planning and lifelong learning. These areas have changed over the years due to

new technologies and skills needed in the workplace. This nation has moved from an industrial era to an information age and from a domestic to a global economy (Lynch, 2000). In the industrial era, employees were expected to do only what their supervisors told them (Pucel, 2001). Today in the information age, employees are expected to participate in teams, learn new skills quickly and accept more responsibility (Underdue, 2000).

Career Academies were originally designed as a lifeline for students at risk of dropping out of school (Maxwell & Rubin, 2001). The Career Academy concept evolved more than 30 years ago when the city of Philadelphia, out of concern over high school dropout and unemployment rates among their youth, began pursuing education reform (Kemple, 1997). Out of the collective efforts of community, business, education, labor, and government leaders came an innovative new approach to education reform, the Career Academy (Shorr & Hon, 1999). Since that reform, Career Academies have proven to be rightly effective. A comprehensive study conducted by the Manpower Demonstration Research Corporation (MDRC) found that students who participate in Career Academies have improved attendance and grades; higher self-esteem and satisfaction with school; improved sense of connection with teachers, students, school programs, lower dropout rates, fewer discipline problems and incidence of school violence; and reduced student apathy, isolation, and alienation (Almeida & Steinberg, 2001). Most importantly, students are connected with employers through the employer involvement in the curriculum development and delivery in Career Academies (Kemple, 1997).

In the first two decades after the 1969 inception, the growth of Career Academies was gradual, but steady (Lynch, 2000). In the early 1980s the Career Academies movement spread to California, the only state to define them by legislation, where it has flourished (Maxwell & Rubin, 2001). Since 1990 growth in the number of academies has accelerated. Most recently, some communities have adopted academies as a school-wide high school reform strategy (Lee & Smith, 2001). Career Academies now number more than 3,000 nationwide (Kemple & Snipes, 2000).

#### Elements of a Career Academy

Career Academies historically held a place in education. Through academies, students experience a combination of school and work-based learning resembling the belief that education through occupations combines within itself more of the factors conducive to learning than any other method (Dewey, 1916).

A Career Academy is distinguished by three core elements: organization, curriculum, and partnerships. First, Career Academies are organized as schools-within-schools or small learning communities in which high school students stay with a core group of teachers over three or four years (Elliott, Hanser, & Gilroy, 2002). Each academy within the large comprehensive high school has 100 to 300 students in grades 9 to 12 or grades 10 to 12. In this environment, students are able to build strong relationships with peers, teachers, and employers. Secondly, Career Academies offer a combination of academic and Career and Technical Education curricula and use a career theme to integrate the two (Maxwell & Rubin, 2001). The curriculum usually includes math, English, social studies, and/or science combined with occupational-related classes that focus on a career theme such as business and finance, computers and electronics, or



travel and tourism. Third, Career Academies establish partnerships with local employers in an effort to build stronger connections between school and work and to provide students with a range of career development and work-based learning opportunities such as supervised internships (Hershey, Hudis, Silverberg, & Haimson, 1997).

The Career Academy is a type of school-within-a-school that provides a college-preparatory curriculum with a career-related theme (Emeagwall, 2004). The Career Academy structure provides successful transitions to postsecondary education and employment because the structure keeps students engaged in school and interested in the world beyond high school (Almeida & Steinberg, 2001). For this reason, Career Academies have become a widely used high school reform initiative with more than 2500 having been established across America (Kemple & Snipes, 2000).

#### Autobiographical Roots of the Study

When I began to determine how I would address the topic of implementing and sustaining Career Academies, I started to reflect upon my own experiences and beliefs toward education. I decided to reflect on my journey through the public education system and now as an educator.

Throughout my elementary and middle school education, school was not important and I was just another body in the building with hundreds of others. It was not until I started high school that school started to have some importance. At that time, I transferred from a large high school to a smaller high school. The difference maker in my high school experience was a Career and Technical Education teacher. I continued to take those courses not because I was interested in the program, but because the teacher was interested in me. Through my high school years, this Career and Technical

Education teacher helped me make connections with what I was learning in class to future plans. The relevance to what I needed to take became clear.

The concept of Career Academies is designed to link academic and career instruction in meaningful ways. Earlier in my career as a Career and Technical teacher, I organized my classroom instruction to give students experiences with post-secondary and employers. As my students gained skills in my class, emphasis was given to the core academic subjects as projects were completed by students. Many students have returned to tell me they were better prepared for college, military, and jobs.

Schools today are missing the mark of connecting learning. Accountability measures of the No Child Left Behind legislation are a road block to schools attempting to be creative in educating the whole child and not focusing primarily on high stakes tests. I believe school administrators are taking these high stakes tests as the means to an end. In reality, those tests are just a step toward that young person's future.

Because of my own positive and negative educational experiences in school and as a teacher, I am intrigued about how education can be more meaningful and realistic. I am not convinced that our declining position in global competition is because of less rigorous education, but I do believe that isolated instruction is a waste of time. It may prepare students for the short term, but is useless for long term benefits. This is the reason my research topic is important to me. I believe Career Academies make the proper connections for preparation to have a quality life beyond high school.

The researcher chose this topic for a study because he believes that Career Academies provide the necessary components high schools need to prepare students for postsecondary. This research is written by an individual that is in favor of Career

Academies. The researcher believes that Career Academies that are unsuccessful in improving high school performance are a result of improper implementation. For this reason, a proven standard of implementation for Career Academies is provided to identify the elements needed for success.

#### Statement of the Problem

The Career Academy is a high school reform model that integrates school-to-work elements in a personalized learning environment. The primary mission of a Career Academy is dropout prevention and school engagement through integrated academic and technical instruction. The Career Academy structure provides partnerships between high schools and employers to enhance students' exposure to career development and work-based learning opportunities. Teachers and employers are the primary leaders of Career Academies and meet on a regular basis to share in decision-making related to administrative policies, curriculum content, and instruction. Since 2000, the USDOE has provided funds to assist large comprehensive high schools with enrollment of more than 1000 students to create smaller learning communities to address individual needs of students. High school dropout rates, a downward trend in college attendance particularly in low-income and minority communities and high remediation rates at the postsecondary level, are reasons change is necessary at the high school level (<http://www.ed.gov/programs/slcp/index.html>). The Career Academy model has proven to be a successful reform initiative for keeping students in school and positively impacting their post-secondary outcomes. The evidence also shows that this success is contingent on the full implementation including a strong curriculum and instruction component.

Even though Career Academies have existed for over 35 years, high school reform has just recently become an educational priority. Since funds have become available, many school districts throughout the country have applied and received grant awards to implement Career Academies as smaller learning communities. Current research does not describe how large comprehensive high schools make the transition to selecting students and teachers into Career Academies.

This researcher intends to explore the experiences of individuals from one high school encounter to implement and maintain Career Academies. Therefore, the purpose of this study is to examine the experiences of high school individuals in implementing and sustaining Career Academies in a large comprehensive high school.

#### Research Questions

The guiding concept for this investigation is as follows: To describe the experiences of high school personnel in implementing exemplary Career Academies in a large high school. This initial concept will be examined by addressing the following sub-questions:

1. What are the factors that have led one high school to implement Career Academies as their high school improvement model?
2. How have administrators, teachers, students, employers, and parents viewed the decision to implement Career Academies?
3. What are the major challenges in implementing Career Academies?

The researcher will describe the experiences of one high school as it implements and sustains exemplary Career Academies.

### Significance of Study

Our society is continuously changing and high school reform is necessary to keep pace with change. Students gain new skills to stay current and learn relevant curriculum to prepare them for careers in the 21<sup>st</sup> century. Technological change is inevitable. The traditional school structure does not provide the knowledge and skills necessary for a career in the 21<sup>st</sup> century. The demands of the labor market now force high schools to implement new strategies to prepare students for the digital age.

Many school districts across America have decided to use the Career Academy high school reform model for school improvement. The Career Academy constitutes a “school-within-a-school” that coordinates curriculum and activities around a single career theme, profession, or industry that is of importance in the local labor market. This study will describe the process of how one high school has used these techniques as it implemented Career Academies. Leadership in school districts that are considering Career Academies as one of their high school reform models can use this study in the decision-making process for implementing a Career Academy. Although substantial variations exist in Career Academy models across the country, this study will have a collection of lessons learned from one high school to provide guidance for future implementation.

By conceptualizing learning around a specific career, students begin to realize that knowledge and skills learned in school can lead to productive, interesting, and rewarding work and careers after high school. High school reform is needed to prepare students for the 21<sup>st</sup> century. The information from this study will provide beneficial learning experiences to assist high school leaders to implement a high school reform initiative that

will better prepare students for college and careers. The major purpose for this research is to describe the experiences of those involved in the process to transform from a traditional large comprehensive high school to one that implements Career Academies.

#### Procedures

The researcher gathered information by using the qualitative method to examine the experiences of how one large high school implemented and sustained Career Academies. Interviews were conducted with individuals from one high school involved in the successful implementation and sustaining of Career Academies. Success will be identified as meeting the standards of practice outlined in the National Standard of Practice established by the National Career Academy Coalition. The criteria for selection was based on the high school being a member of one of the national Career Academy support organizations, having established Career Academies of one or more years, and having student enrollment of 1000 or more. Observations and face-to-face interviews were used to collect data to examine the experiences of implementing and sustaining Career Academies. A case study narrative format was used to document the experiences of individuals involved in the implementation and sustenance of Career Academies.

The structure of Career Academies is a change in the culture of large comprehensive high schools. The cause and effect is not a direct connection to one activity, but to a cultural framework that enables the change from a larger traditional comprehensive high school to smaller learning communities called Career Academies. Examining the experiences of this complex social phenomenon such as Career Academies requires an in-depth qualitative research design to illustrate and explain the

transformation process that will assist high schools who may wish to start Career Academies.

A cultural perspective of Career Academies requires an in-depth description and explanation of the experiences of individuals involved in the transformation process from a large comprehensive high school (Marshall & Rossman, 1999). The researcher conducted one visit with a large comprehensive high school that has implemented and sustained Career Academies. The visit allowed the researcher to conduct observations and face-to-face interviews to gain an in-depth understanding of the cultural aspects involved in implementing Career Academies. The open ended interview questions and observations have allowed the researcher to describe the experiences individuals had during the process of transforming to accommodate a Career Academy. The researcher relied on interviews, observations and supporting artifacts as the primary data sources. Face-to-face interviews, recordings of meetings, and observations of school setting will also supplement descriptive information data used in this study. The information collected will allow the reader to trace the experiences of implementation and sustainability of transforming a large traditional comprehensive high school to the Career Academy structure.

The National Career Academy Coalition provided a list of high schools that have sustained Career Academies for one or more years. The high school used in this study was selected from that list. After obtaining Institutional Review Board (IRB) approval, the researcher contacted the assistant principal to request the school's participation in this study. This was initiated by phone calls and email communication. A signed letter from

the principal gave the approval to move forward in scheduling school visits and interviews.

The researcher traveled to the school site to conduct the open-ended interviews with individuals. The individuals will include: principal, assistant principal responsible for instruction, one lead teacher from each academy, one student from each academy, one parent, and one employer. The researcher conducted in-depth interviews in order to gather complete information regarding each individual's experiences as the school transformed from a large comprehensive high school to a Career Academy.

The assistant principal assisted the researcher in getting the Informed Consent Form signed by all participants prior to visiting the school. The researcher visited the school site for three days to complete all interviews and observations. The interviews were audio and video recorded to ensure that all information given by participants was captured for analysis. Denzin and Lincoln (2003) stated the following about recording interviews:

We cannot rely on our own recollections of conversations. Certainly, depending on memories, we can usually summarize what different people said. But it is simply impossible to remember (or even to note at the time) such matters as pauses, overlaps, and inbreaths (p.354).

The researcher also took handwritten notes during each interview. At the end of the school visit, the researcher transcribed the notes from the interviews to determine the perspective of participants on their experiences on implementing and sustaining Career Academies. Follow-up phone calls and email communication was used for additional information as needed.



### Limitations/Delimitations

This study will use the data base of the National Career Academy Coalition. Only schools that selected Career Academies as their high school improvement model will be used in this study. The leadership teams that implemented the Career Academy in their schools may not be the same group that initiated the process. The researcher is also relying on the honesty of the participants in giving complete and accurate responses to the open-ended interview questions. The following factors will delimit this study: (1) high schools that are members of one of the national Career Academies support organization, (2) schools that chose Career Academies as their high school reform structure model, and (3) schools that have been using the Career Academies model for a minimum of five years. Supporting data from this study will come from each membership database from the national supporting organizations, which is continuously collecting data from schools that submit implementation strategies and evaluation support of Career Academies. Face-to-face interviews of teachers in the academies, students, participating employers, parents, school and district administrators, and school building visits will be conducted.

Although this case study may not be relevant to the general population, it will provide high school leaders with valuable examples and best practices for transforming large comprehensive high schools into smaller learning communities using the Career Academy structure. The process of the implementation described in this study may be helpful in terms of guiding future leaders through the change process involved in implementing Career Academies.

Another limitation is that the participants for this study were selected by the assistant principal of the participating high school. The assistant principal may have selected individuals that are in favor of the Career Academy initiative. The researcher did request that the assistant principal select individuals that are in favor and those that are not as supportive to the implementation of Career Academies. After that was said, the selection was done solely by the assistant principal of instruction.

The researcher's positive bias toward Career Academies is a limitation that is addressed by providing a definition. The researcher is investigating how Career Academies can work. Only a focus on the exemplary Career Academy implementation is examined in this study.

#### Definition of Terms

*Academic Rigor and Relevance* refers to a demanding curriculum aligned with state, national, and international standards that also challenges students to apply knowledge, technologies, and critical-thinking skills to solve real-world problems.

*Career Academy* is defined as sub-groups within schools, organized around particular themes. For example, career academies combine key principles of the school-to-career movement - integrating academic and vocational instruction, providing work-based learning opportunities for students, and preparing students for postsecondary education and employment - with the personalized learning environment of a small, focused learning community. Teachers and students integrate academic and occupation-related classes as a way to enhance real-world relevance and maintain high academic standards. Local employer partnerships provide program planning guidance, mentors, and work internships. Career academies and other restructuring initiatives share an emphasis on

building relationships between students and adults. This includes teachers as well as work-site supervisors and other employer representatives providing school-based leadership. (<http://www.ed.gov/programs/slcp/strategies.html>)

*Integration* refers to the career-related and core academic curricula that are scheduled together in an instructional plan.

*School-Within-a-School* operates within a larger school in which students and teachers have autonomy. This structure has its own personnel and program, and its students and teachers are self-selected.

*Smaller Learning Community* is defined as any separately individualized learning unit within a larger school setting. Students and teachers are scheduled together and frequently have a common area of the school in which to hold most or all of their classes.

### Summary

Chapter I begins with identifying the challenges high schools are having in preparing students for the life beyond high school. The Career Academy concept has proven to be a successful strategy for high school improvement. A brief history on the beginning of Career Academies provided foundation of the components and structure of Career Academies.

Career Academies is a structure that assists high schools in addressing the challenge of preparing students for life beyond high school. The Department of Education provides funding to high schools for use in creating different instructional structures to address those challenges. This study will present a framework designed to give the reader examples of experiences of individuals involved in implementing and sustaining Career Academies.

The literature review supports the elements of reform discussed that are far-reaching and require a systemic approach to change which the Career Academy structure provides. Creative collaborations among local schools and businesses will be required for reform design leadership teams to be successful in making the transition from large comprehensive high schools to smaller learning communities such as Career Academies.

## CHAPTER II

### REVIEW OF LITERATURE

The focus of this literature review first explores the historical perspective of Career Academies, the effects on student performance, and the definition that will be used in this study. Secondly, this chapter continues with the evolution of Career and Technical Education, which led to the integration of academic and technical curriculum used in the Career Academy structure. Third, a brief overview is given of the skilled workforce that is needed for the 21<sup>st</sup> century in which Career Academy implementation prepares students to be successful. Fourth, a description of national Career Academies support organizations will be listed as a resource for school districts. Fifth, an overview of current literature is given for the need to reform high schools. And sixth, since Career Academies vary from traditional practices in large comprehensive high schools, implementation and sustainability issues are explored to identify leadership strategies that are often associated with the successful transformation of school culture.

#### Historical Overview

Career Academies are a school-within-a-school model that links students with peers, teachers, and community partners in a disciplined environment, fostering academic success and mental and emotional health (Elliott, Hanser, & Gilory, 2002). Originally created to help inner city students stay in school and obtain meaningful occupational experience, Career Academies have evolved into a multifaceted, integrated approach to reducing delinquent behavior and enhancing protective factors as students belong to a smaller learning community and connect what they learn in school with their career aspirations and goals (MDRC, 2006).

The Career Academies approach is distinguished by three core features that offer direct responses to several problems that have been identified in high schools, particularly, those schools that serve students in low-income communities and students at risk of school failure (Cotton, 2001). The following components were evident in all Career Academies found in the description of the model and will serve as the definition of Career Academies in this study. First, Career Academies are organized as a school-within-a-school in which students stay with a group of teachers over the three or four years of high school. Second, students receive a combination of academic and Career and Technical Education curricula and use a career theme such as Business and Marketing, Engineering, or Healthcare Science to integrate the two. Third, partnerships with local employers are established to build connections between school and work and to provide relevance for students with a wide range of career development and work-based learning opportunities (USDOE, 2006). These work-based learning opportunities include field trips designed to expose students to various work environments, job shadowing, internships, summer employment and mentoring programs with adults who can provide career guidance (Elliott, Hanser, & Gilroy, 2002).

The first Career Academy in 1969, the Electrical Academy in Thomas Edison High School, was initiated by the Philadelphia Urban Coalition (Ross & Lowther, 2003). The program was established as a strategy to address Edison's high dropout rates and lowest attendance rates in the city (Conchas & Clark, 2002). By 1991, more than 16 additional high schools in the Philadelphia school district were created using the same model and experienced student success similar to that obtained by Thomas Edison High School (Kemple & Snipes, 2000). The first academies integrated high school core

academic and Career and Technical Education (CTE) curricula, along with work-based learning, to connect student interest (Ross, & Lowther, 2003).

In 1981, Career Academies were initiated in California, starting with a Computer Academy at Menlo-Atherton High School and an Electronics Academy at Sequoia Union High School near Silicon Valley (Maxwell & Rubin, 2001). Based on a series of evaluations that demonstrated improved student performance, the state of California passed legislation in 1984 that supported ten high schools that used the model created at Menlo-Atherton and Sequoia Union high schools (Maxwell & Rubin, 2001). By the year 2000, the state of California passed legislation that expanded Career Academies to 290 high schools with career themes that included more than 25 different career fields (Stern, Dayton, Raby, & Lenz, 2000).

Also in the 1980s, a nonprofit organization called the National Academy Foundation (NAF) based in New York City created the first “Academies of Finance,” sponsored by the American Express Company (NAF, 2006). The program was designed specifically to address the lack of opportunities for young people in New York City. Between 1987 and 2000, NAF supported Career Academies in more than 30 different states (Emeagwall, 2004).

Philadelphia, California and the National Academy Foundation used the following components to implement Career Academies:

- A smaller learning community—a school-within-a-school
- Block scheduling of classes and students
- Common teacher planning time
- Career theme focus

- Integrated academic and career and technical curriculum
- Reduced student-teacher ratio
- Partnerships with business

The following outcomes have been reported as the result of students participating in Career Academies from Philadelphia, California, and National Academy networks:

- Higher student satisfaction, attendance, grade point averages, and course credits earned
- Lower absenteeism and dropout rates
- Improved postsecondary-related outcomes—preparation, enrollment (particularly in 4-year colleges), and success
- Higher student performance, particularly for at-risk students, than for general education or vocational students.

Table 1 shows the growth of Career Academies of three networks.



*Table 1: Growth of Three Career Academy Networks*

Year	Philadelphia	California	National Academy Foundation (NAF)
When Founded	1969: 1Academy	1981: 2 Academies	1982: 1 Academy
1980	Approximately 5	--	--
1985	Approximately 10	12	8
1990	Approximately 20	29	54
1995	28	45	167
1998	28	200	289
2000	29	290	400

(Career Academy Support Network, 2006)

Since 2000, the United States Department of Education (USDOE) has provided federal funding to high schools with an enrollment of 1000 students or greater to assist with implementation of Academies. The USDOE definition is as follows:

#### **Career Academies Structure**

**Career Academies** are sub-groups within schools, organized around particular themes. For example, career academies combine key principles of the school-to-career movement - integrating academic and vocational instruction, providing work-based learning opportunities for students, and preparing students for postsecondary education and employment - with the personalized learning environment of a small, focused learning community. Teachers and students integrate academic and occupation-related classes as a way to enhance real-world relevance and maintain high academic standards. Local employer partnerships provide program planning guidance, mentors, and work internships. Career academies share with other restructuring initiatives an emphasis on building relationships between students and adults (teachers as well as work-site supervisors and other employer representatives).

(<http://www.ed.gov/programs/slcp/strategies.html>)

Over 500 high schools from 272 districts have been awarded a smaller learning communities grants to implement the Career Academy model as defined by the USDOE (<http://www.sedl.org/cgi-bin/mysql/slcawards.cgi>).

### The Need for High School Reform

The following evidence indicates that American students are not sufficiently prepared for the demands of the new economy. Many high schools are failing to meet the needs of youths to experience success after high school. Indeed, almost one-third of students entering high school never complete it, with rates of graduation varying widely for different ethnic and racial groups (Burnett, 1992). White students graduate from high school at the rate of 78 percent, compared to 51 percent for black students and 52 percent for Latino students (ACTE, 2006).

After high school graduation, entrance to and continuation in postsecondary education also proves to be a challenge. While 66% of students who graduate from high school enroll in postsecondary education institution, only 25 percent earn a Bachelor's degree (ACTE, 2006). Students from various backgrounds and ethnicities enter postsecondary education and experience success at different rates (Conchas & Clark, 2002). Of those who enroll in postsecondary education almost one-third require at least one remedial course (Kerka, 2000). It is evident that many of these problems can be attributed to inadequate high school preparation.

In 1983, the report *A Nation At Risk* brought to America's attention that young people in our society do not possess the skill level, literacy, and training currently needed to be successful. Today's student performance data indicate that America's youth continue to have the same struggles. Jordan, McPartland, Legters, and Balfanz (2000),

state there are currently between 900 and 1,000 high schools in the country in which students have only a 50/50 chance of graduating. In 2000, a freshman class in a typical high school in America shrinks by 40 percent or more by the time the students reach their senior year (Mullen & Sullivan, 2002).

#### Effects of Career Academies on Student Performance

In today's global and technological economy, few employment opportunities are available to students who have only a high school diploma (Lynch, 2000). A measure of how well Career Academies fulfill their mission to prepare students for this new world is to examine how academy graduates compare to their non-academy peers (Maxwell & Rubin, 2001).

In California's Career Academies, students performed better than similar students in the same high school who were individually matched with academy students on demographic characteristics (Maxwell & Rubin, 2001). An evaluation of the first two Career Academies in California in the early 1980s found that academy students in grades ten through twelve had better attendance, earned more credits, obtained higher grades, and were more likely to graduate than the comparison groups (Stern, Dayton, Raby and Lenz, 2000). From 1985 through 1988, an evaluation of the ten initial state-funded Career Academies in California showed substantial and statistically significant advantages in the same categories (Maxwell & Rubin, 2001).

Kemple and Snipes (2000), conducted a national study to compare a group of Career Academy students to a group of non-academy students over a ten-year period to identify the impact of Career Academies on students' engagement and performance in high school. The students were randomly selected and had similar background

characteristics (Kemple & Snipes, 2000). Kemple (2001) found that Career Academies that gave students more personal support, career guidance, technical classes, and school-supervised work experience during high school succeeded in retaining more high-risk students through spring of the senior year. Kemple's and Snipes' (2000) results also showed evidence of a positive impact on employment and earnings after high school, especially for young men and for students whose initial characteristics indicated high or medium risk of not finishing high school.

Large comprehensive high schools have been criticized for being impersonal and for preventing students and teachers from working in teams to create a sense of community and common values (Blondeau, 2001). Students in such schools do not have a consistent group of teachers who are accountable for their success, and they see few of the same classmates from course to course (Kemple & Rock, 1996). Teachers rarely share the same group of students with a small number of colleagues, and they have few opportunities to coordinate their coursework with teachers in other disciplines (Bragg, 2000). Career Academies can provide well-defined and effective approaches to addressing such problems.

Another common problem identified in high schools is that students and teachers are isolated from other institutions in the community, particularly employers (Kincheloe, 1995). Such isolation insulates students from the world of work and results in missed opportunities to provide them with learning-oriented exposure at a particularly formative point in their development (Little, 1995). With few connections among classes or between school and work, many students are inadequately informed about or are unprepared for post-secondary education and employment opportunities (Maxwell &

Rubin, 2001). Even with the rise of the school-to-work movement and with the federal School-To-Work Opportunities Act of 1994, there has been a struggle to identify widely implemented strategies that address these concerns (Little, 1995). Career Academies can provide concrete meaningful examples of partnerships between schools and employers and can substantially enhance students' exposure to career development and work-based learning opportunities (Elliott, Hanser, & Gilroy, 2002).

### Evolution of Career and Technical Education

Vocational education, as we know it today in the United States, dates back to the early part of the 20<sup>th</sup> century (Hawkins, Prosser & Wright, 1951). However, the causal factor of the vocational movement in education occurred during the 19<sup>th</sup> century, and the historical roots can be traced to ancient times, with significant European connections (Bragg, 2000). Before then, most Americans quit school to go to work without a high school diploma (Little, 1995). As we begin to talk about early education, first we think of the agricultural period, then move to the industrial revolution and lastly into the information/technology age we live in today (Lynch, 2000).

Early education began with the family unit and the church (Seybolt, 1917). Families served as the nucleus for education. The primary educational needs were met by the church and family until the apprenticeship training programs were developed to concentrate the learning process for skills and trades of the period (Hershey, Prosser, Silverberg & Haimson, 1997). Apprenticeships were for working class people who wanted their children to learn a skill or trade (Kincheloe, 1995).

Turning back 200 years to 1776, education was best described as a way in which a person prepared for work (Lazerson & Grubb, 1974). Vocational education began in the

19<sup>th</sup> century because generations of students were needed for an agrarian and industrial workplace (Prosser & Allen, 1925). The demand for skilled workers in the middle of the 18<sup>th</sup> century led Benjamin Franklin to start a new kind of secondary school (McClure, Chrisman, & Mock, 1985). This led to the American Academy School that was established in Philadelphia in 1751. Until the 19<sup>th</sup> century, such education was provided only through apprenticeship (Prosser & Allen, 1925). Apprenticeships provided young people with a means to make a living and to take care of themselves and their families. These first experiences were preparing for work by mother-daughter, or father-son relationships in which fundamentals of a trade or occupation were taught to children in the family (Gordon, 1999). In the colonial period, involuntary apprenticeship provided a way for towns to take care of their child welfare cases (Prosser & Allen, 1925).

The public school vocational education in the United States consisted of manual training and practical arts (Gordon, 1999). Congressional support of vocational education as part of the public school system emerged in 1862, with the passage of the Morrill Tarriff Act (Lazerson & Grubb, 1994). This law encouraged the establishment of land grant colleges to teach agricultural and mechanical skills (Gordon, 1999).

People went through apprenticeship programs for one of two reasons (Mason & Paris, 1996). Some went through the programs voluntarily so they could learn a trade and make a living and others were forced into apprenticeships (Little, 1995). Apprentices were often in a bound agreement with the proprietor as to how long they would participate in the program (Mason & Paris, 1996). The agreements were usually set up through the families in exchange for the student receiving training, food, and board (Hershey, Hudis, Silverberg & Haimson, 1997). Apprenticeships are still active today

and serve an important function in the transfer of knowledge and skills in a high-tech, high performance workplace (Pucel, 2001).

Early in the 20<sup>th</sup> century, manual training was beginning to be questioned regarding its effectiveness (Lynch, 2000). During that time period, the Industrial Arts Movement was coming onto the scene, along with vocational education (Hawkins, Prosser & Wright, 1951). Industrial arts, formerly manual arts, was to be education based on industry (Evanciew & Rojewski, 1999). Its goal was to teach students about the industry around them; make them aware of career opportunities while giving them options for different jobs in varying fields and continue to be a component of general education (Thompson, 1973). Being an element of general education would mean all students would continue to take industrial arts. It was broken down into the areas of management, communications, power, transportation, and manufacturing (Scott & Sarkees-Wircenski, 2001). Industrial arts continued on this same basic path until it was converted to technology education sometime in the 1980s.

Vocational education was to teach students skills they would need for entry-level jobs in the industry (Hawkins, Prosser & Wright, 1951). It was implemented with some of the manual training programs that existed in the public schools (Thompson, 1973). Vocational education was thought to better prepare students for life in a modern industrial economy, thus helping them and the economy (Barlow, 1967).

Career and Technical Education, formerly known as Vocational Education, was established in the early 1900s as a means to train students for working class jobs after high school (Bragg, 2000). Previously, public secondary schools had been designed to serve a small percentage of students completing elementary school (Finch & Crunkilton,

1999). Most children were expected to learn a trade in the traditional apprentice fashion, by the side of a family member, farmer, or craftsman (Grubb, 1995). The businessmen, educators, and politicians of the time were concerned with the shift from an agrarian economy to an industrial economy and the lack of skilled workers available for industry (Little, 1995). When compulsory schooling extended into the teen years, students began to be sorted by likely outcomes (Hawkins, Prosser & Wright, 1951). The sorting itself tended to ensure a practical education for the great majority of students and effectively ensured an introductory preparation for students in Career Technology education (Kincheloe, 1995).

Historically, vocational education programs tended to include those students who were at risk of not finishing high school (Thompson, 1973). They were students who counselors and other adults assumed would not go on to any postsecondary education. These students were provided with vocational education so they could earn a decent living after leaving school. Although vocational education in America did not enjoy high status, it did prepare generations of young people for the work roles that awaited them in factories, farms, and offices (Pucel, 2001). Vocational education succeeded at this mission as long as there were enough jobs in these areas, but such use of secondary education has become obsolete due to the advances in technology and the higher level of skills needed in the workplace (Mason & Paris, 1996). Stone (2000) summarized this expanded view of CTE in which students are prepared for the contemporary workplace along three non-exclusive vectors: education that uses work as a context for developing broader general skills, education that uses work as a context for developing more widely recognized skills required for long-term occupational and career success, and, education



that uses work as a context for developing occupationally specific skills. The old expectation that a young person could get a job in the plant where his father had worked no longer held and in many cases, fathers were unable to keep those jobs themselves (Lynch, 2000).

Today, the skills needed in the workplace have been impacted by a move from an industrial era to an information age and from a domestic to a global economy (Mittlesteadt & Reeves, 2003). Students in America's educational system must be prepared for a new world and dramatic changes taking place in what workers are expected to know and be able to do. All students should have the opportunity to learn school subjects with work as the context of their learning. Dewey called this "education through occupations" (1916, p. 309). Career and Technical Education has evolved to develop students in personal skills and attitudes, communication and computational skills, technological literacy, employability skills, broad and specific occupational skills and knowledge, foundations for career planning and life-long learning.

In 1990, the renewal of the Carl Perkins Vocational Technical Education Act changed the landscape of CTE with the integration of academic and CTE curriculum to better prepare students for life after high school (ACTE, 2006). Also, included in this renewal of Carl Perkins was a new program called Tech Prep, which links the integration of academics and CTE to postsecondary education (Pucel, 2001). Now federal funds assist school districts in improving high school instruction with a mode of teaching and learning called contextual learning (USDOE, 2006). All teachers are needed in this interdisciplinary endeavor, as Raywid (2002) noted, "because most real-world problems do not fit neatly within the bounds of any one subject area" (p.39).

CTE traditionally has been directed toward occupations not requiring a Bachelor's or advanced degree (Lynch, 2000). Because of these factors, CTE has been viewed by some students and parents as a less desirable option than college prep. However, Career Academies have now evolved from that initial focus on traditional CTE to preparation of high school students for both work and college (ACTE, 2006). Career Academies build from CTE to provide broad information about an industry, exposing students to a range of careers requiring various levels of formal education, and building a foundation on which to add more advanced and specialized postsecondary education (Hershey, Hudis, Silverberg & Haimson, 1997).

To reflect this change in philosophy and the kinds of programs offered, in 1998 the professional support organization American Vocational Association, changed its name to the Association for Career and Technical Education (ACTE, 2006). The new ACTE urged its members to use the term "career and technical education" (CTE) in place of "vocational education" (Lynch, 2000). The most important changes included: a focus on increasing the academic skills of CTE students, on trying to erase the stigma attached to vocational education, and on having all students meet the higher standards that had become the demand of employers (ACTE, 2006). The goal of CTE became that all students finish high school prepared to either enter the workplace or to go on to postsecondary education (Lynch, 2000). This broader mission challenged CTE educators to teach beyond the confines of specific occupations and instead to prepare students for a more demanding world of work.

## National Career Academies Support Organizations

As high schools and districts investigate the possibility of implementing Career Academies, a list of resources and contact information of organizations is provided to assist in making the decision to use the Career Academy model for high school improvement. This section offers a list of the main national organizations with a summary of the materials each provide.

The Association of Career and Technical Education (ACTE) is the largest national education association dedicated to the advancement of education that prepares youth and adults for successful careers. ACTE provides leadership in developing an educated, prepared and competitive workforce. The strength of ACTE is reflected in its diverse membership composed of over 26,000 career and technical educators, administrators, researchers, guidance counselors and others involved in planning and conducting career and technical education programs at the secondary, postsecondary and adult levels. (<http://www.acteonline.org/>)

The Career Academy Support Network (CASN), established in 1998, is a center based at the University of California, Berkeley. The center focuses on high school reform and, in particular, supports the growth and improvement of Small Learning Communities (SLCs) and Career Academies, which many high schools are using to prepare students for college and careers. CASN also contracts directly with a number of high schools and districts around the country, providing professional development support and materials and conducting evaluations, while gathering information about SLCs and Career Academies. (<http://casn.berkeley.edu/>)

The National Academy Foundation (NAF) is a nonprofit 501(c)3 intermediary organization that sustains a national network of high school Career Academies in finance, hospitality and tourism, and information technology. NAF provides technical assistance and program support from startup planning through program growth to all schools that are members of the organization. ( <http://www.naf.org/>)

The purpose of the National Career Academy Coalition (NCAC) is to create and support a national network of existing and emerging high school career academies. The NCAC engages administrators, teachers, students, business, government and community partners, and families in an ongoing dialogue and provides services to help meet the needs of academies. NCAC has worked with the USDOE to create the National Standards of Practice for Career Academies. This organization has also published a self assessment (Appendix A) that schools can use to evaluate their progress in the implementation of Career Academies. ([www.ncacinc.org](http://www.ncacinc.org))

Philadelphia Academies, Incorporated is a private non-profit organization dedicated to strengthening public school students' academic and occupational skills, enhancing their in-school and post-graduate options, and contributing to the development of a stable skilled workforce. ([www.academiesinc.org](http://www.academiesinc.org))

#### The Career Academy National Standards of Practice Model

The National Standards of Practice (NSOP) for Career Academies were established by the national organizations such as National Academy Foundation (NAF), National Career Academy Coalition (NCAC), Southern Regional Education Board (SREB), Association of Career and Technical Education (ACTE), Career Academy Support Network (CASN), and Philadelphia Academies, Incorporated (CASN, 2006).

The standards created by this consortium of organizations developed a systematic approach to ensure formalized implementation of Career Academies.

Career Academies are schools-within-schools (Emeagwall, 2004). Most of them span the last two or three years of high school, but some cover all four years (Mullen & Sullivan, 2002). The curriculum simultaneously provides instruction to students in an occupational field and prepares them for college (Maxwell & Rubin, 2001). This appeals to students' practical interests but does not limit their future plan for careers. The National Standards of Practice for Career Academies develop standards that include three major components: small learning community structure; college preparatory curriculum with a career theme; and partnerships with employers, communities, and higher education (NCAC, 2006).

First, a career academy is a personalized small learning community within a high school with a selected subset of students and teachers for a two, three, or four-year span (NAF, 2006). Students enter through a voluntary process; they must apply and be accepted, with parental knowledge and support. Many Career Academies vary in size and they usually have from one to three groups of students at each grade level, or 100-300 students in all (Almeida & Steinberg, 2001). Academy classes are usually blocked back-to-back in the daily schedule and students attend them as a group (Blondeau, 2001). Students are able to complete Career Academy requirements and graduation requirements within the regular school day, with the exception of internships and possible college classes (Mittlesteadt & Reeves, 2003).

Another structural component is that Career Academies involve teachers from different subjects working together as a team (Jordan, McPartland, Legters & Balfanz,

2000). This team manages the program, with one member serving as the lead teacher or coordinator. Teams participate in professional development that allows them to improve implementation of the Career Academy model and gain exposure to the career field (Elliott, Hanser & Gilroy, 2002). Team members have shared planning time, usually a daily common planning period, and often release time (Conchas & Clark, 2002). The joining of a group of students for several periods each day with teachers who they come to know provides a family type atmosphere, nurturing close student-teacher ties (Kemple, 1997). A Career Academy functions within the larger high school and requires administrator and counselor support (Blondeau, 2001).

The second major component of Career Academies allows students to have a mixture of career and academic classes as their curriculum framework (Bragg, 2000). These classes meet entrance requirements for four-year colleges and universities. They are linked to academic and industry standards, encourage high achievement, and show students how their subjects relate to each other and the career field (Kemple & Snipes, 2000). Career classes develop knowledge in a given field and are designed to expose students to the full vertical range of careers in the industry of the Career Academy theme (Jordan, McPartland, Legters & Balfanz, 2000). Special projects require students to bring together academic skills across their subjects and apply to community and work settings outside of the school. Work experiences are provided for students during the junior and/or senior years (NAF, 2006). During the senior year students are provided with college and career counseling, forming a post-graduate plan which may include college, a mixture of work and college, or full-time employment.

The third major component of Career Academy is based on the National Standards of Practice and involves partnerships with employers, communities and higher education (Bragg, 2000). Employers from a group of companies in the selected field work as partners in the Career Academy and serve on advisory councils along with teachers, administrators, parents, and students to govern the development and operation (Kemple, 2001). Postsecondary educational institutions provide course articulation and concurrent enrollment options.

### Summary

The three major components are guiding elements for proper implementation of Career Academies based on the national standards of practice. Due to the usage of the term Career Academy in many types of high schools, the three major components provide a common definition that can provide clear guidance to proper implementation. The case studies and information compiled in this review of the literature reveals that there is a definite need for high school reform. Preparing all students for life beyond high school should be the primary focus of school districts across the country. As schools decide to implement Career Academies as their high school improvement strategy, school officials must have knowledge of the structure for proper implementation.

The collaboration of school and business makes the Career Academy structure ideal for high schools as they search for ways to better prepare students for the next step, whether career or college. The evidence of student performance gives examples of the possibilities Career Academies provide in assisting high schools to organize instructional programs for relevant skill attainment.

One of the reasons for the growth of Career Academies is the availability of federal grant monies for high schools with enrollments of 1000 students or more for start-up funding. Based on the literature review, Career Academies have shown positive results in meeting student performance challenges faced by high schools. Also, the increased number of high schools using the Career Academy model shows that school leaders recognize the potential benefit for student preparation. The national support organizations are available as resources to provide support for schools as they transform large comprehensive high schools into smaller learning communities such as Career Academies. The experiences from this study will add to the resources school leaders can use to as they transform high schools into Career Academies.



## CHAPTER III

### METHODOLOGY

The purpose of this study is to examine the experiences of individuals who implement exemplary Career Academies in a large high school. The natural setting in which Career Academies were implemented is documented so that the conditions for implementation can be understood from the perspective of different individuals involved. This chapter presents research rationale, research questions, procedures for data collection, role of the researcher, and data analysis.

This study examines the transformation process in three parts. The first focus draws attention to reasons for deciding to use the Career Academy model as a high school improvement structure. Since there are many different reasons why Career Academies could be used for school improvement, this first area gives the reader the rationale behind the school's decision to implement Career Academies (Denzin & Lincoln, 2003). The second focus of transforming a large comprehensive high school into smaller learning communities called Career Academies is explored. This section focuses on the actual structure of the high school from teacher, employer, student, parent, and administrator perspective. The third focus is on the challenges faced during implementation of the Career Academy structure.

This study provides a means of understanding, describing, and explaining the complex social phenomena of the cultural change experiences of principals, teachers, students, parents, and employers in a community to create Career Academies in a large high school (Marshall & Rossman, 1999). There are many different challenges and just as many school improvement initiatives that address those challenges which schools

could decide to use. High schools have their own reasons for reform implementation because each situation is unique and different. For this reason, case studies are the best research alternative to study reform implementation because each situation is unique and too complex to be studied quantitatively (Marshall & Rossman, 1999). Sources of data include open-ended interviews, and the researcher's impressions and reactions (Denzin & Lincoln, 2003).

### Rationale for Qualitative Research Design

The researcher conducted a qualitative study in order to gather data to be used to examine the experiences of individuals involved in the process of a large high school in implementing an exemplary smaller learning community called Career Academy. The researcher interviewed ten individuals from one high school that is a member of the National Career Academy Coalition with a student enrollment of 1000 or greater. The school used in this study has three Career Academies. The lead teacher from each Career Academy was interviewed. The following are the names of the Career Academies: Arts & Communications, Business & Science, and Engineering & Leadership. The researcher believes that information received from the selected individuals will give other high schools pertinent new and different practices and strategies to implement Career Academies in their high school structures. The researcher obtained permission from each participant to audio and video record their interviews to ensure that all comments made in the interviews were accurately documented. A case study with face-to-face open-ended interviews of teachers, administrators, students, parents, and employers was conducted to gain more detailed data for this study. Marshall and Rossman (1999) state that a case study approach is appropriate because it will allow for the documentation of the history,

culture, capacity and will, and resources to implement Career Academies at this school. Dividing a large comprehensive high school into smaller learning communities such as Career Academies results in a cultural change in a school setting, and qualitative research allows the researcher to be flexible to include relevant variables which have yet to be identified (Marshall & Rossman, 1999). A case study is useful in studying the practical or ethical reasons for organizational change in a high school setting (Denzin & Lincoln, 2003). This case study highlights the experiences of the individuals involved in implementing Career Academies. The interview questions are designed for each participant to give a description from their perspective of the implementation to Career Academies. Those that read this dissertation will get a sense of each participant's reaction and how they perceived the implementation process. Follow-up interviews will be conducted as deemed necessary. The researcher will seek details of the experiences of individuals who have implemented Career Academies at a large high school. The data collection will be completed when a full description of the implementation process of Career Academies from start to where the school is currently operating is described. Once each participants' response to the four research questions is documented, the case study will be complete.

The strengths of qualitative research are derived primarily from its inductive approach, its focus on specific situations, and its emphasis on words rather than numbers (Denzin & Lincoln, 2003). This study fits this inductive approach by examining the experiences of individuals involved in implementing Career Academies in one high school. A qualitative case study research design was chosen to provide clear understanding of individuals who have implemented Career Academies (Merriam, 1998).

Yin (1994) also states that the case study method is preferred when the focus is on a contemporary experience, such as the Career Academy model. The researcher assumes that case studies are the best research alternative to study implementation of Career Academies because each high school has too many distinctive and multifaceted components to be studied quantitatively (Marshall & Rossman, 1999).

A qualitative research design is well suited for this project because the objective of this study is to gain an understanding of the unique experiences of particular individuals as they move through an attempt to implement a different approach to educating students. Yin (1994) discusses the importance of choosing a method of study based on the type of research questions being asked such as open-ended questions that give the participant the opportunity to give more in depth description about the decision for using Career Academies as their school improvement model. Qualitative research is appropriate for this study because the researcher will investigate the reasons why the participating school decided to use Career Academies and how they proceeded in implementing the structure (Marshall & Rossman, 1999). The researcher will use open-ended interview questions to generate responses that allow the researcher to understand and capture the points of view of the participants (Marshall & Rossman, 1999).

#### Research Questions

The over-arching concept guiding this investigation is to: describe the experiences of high school personnel in implementing exemplary Career Academies in a large high school. This initial concept will be examined by addressing the following questions:

1. What are the factors that have led one high school to implement Career Academies as their high school improvement model?

2. How have administrators, teachers, students, employers, and parents viewed the decision and transition of Career Academies?
3. What are the major challenges in implementing Career Academies?

Therefore, the researcher will examine the experiences of various groups interviewed and how one high school dealt with the challenges of implementing Career Academies.

#### Participant Selection and Data Collection

The criteria for selection will be based on the following criteria: membership in the National Career Academy Coalition organization, established Career Academies for one or more years, and student enrollment of 1000 or more. Community High School (CHS) has three highly functioning Career Academies exceeding the majority of the ten standards of the National Standards of Practice for Career Academies. A copy of the National Standards of Practice is included in Appendix B. The Career Academies have well-defined mission statements. The integration of academics with career programs provides the application and contextual learning that meets the high quality demand of Career Academies. Business partners are matched with each of the three Career Academies and are involved through advisory councils. A well defined sequence of elective and academic coursework provides a clear framework to prepare students for life beyond high school. The Career Academies give the students opportunities to learn about and prepare for postsecondary education and careers. Career Academies are located in their own dedicated areas of the school. The board of education has supported the implementation of Career Academies with the funding to build the school to accommodate the program. The researcher describes the factors that make this school an

exemplary school to examine and serve as a model for implementation and the best example for this study.

The National Career Academy Coalition organization provided a list of high schools that are members and the researcher used this list to contact the assistant principal of instruction who is responsible for Career Academy implementation in the high school. The following individuals will be interviewed: principal, assistant principal responsible for instruction, three lead teachers, three students, one parent, and one employer. These individuals were chosen to be interviewed because they are the key participants in the design of the Career Academy structure based on the National Career Academy Standards of Practice. A high school can have more than one Career Academy. Each Career Academy operates independently from the others. The selected school has three Career Academies. For this reason, a teacher and a student from each Career Academy were interviewed. Perspectives from teachers and students from each Career Academy will provide additional information to the process of implementation. Observations and face-to-face open-ended interviews were used to collect data to examine the experiences of implementing Career Academies. One interview with each participant was done and follow-up interviews will be conducted as deemed necessary.

The researcher traveled to the school site to conduct the open-ended interviews with individuals. The researcher sent a copy of the Informed Consent Form for all participants to sign prior to visiting the school. The researcher visited the school site for three days; two days will be spent conducting interviews and the third will be used for rescheduling any participants that were missed. The interviews were audio and video recorded to ensure that all information given by participants is captured for analysis. The

researcher also took handwritten notes of the interviews. The researcher transcribed the notes from the interviews in order to learn the perspective of participants on their experiences in implementing Career Academies.

The primary method of collecting data for this study will be through open-ended interviews. This study provides the experiences of individuals involved in the process of implementing Career Academies and documents for the use of learning best practices for high school reform. The collection of data is described in the following steps.

1. Develop interview questions for the different individuals involved in the implementation of Career Academies.
2. Contact national Career Academies support organizations for the database membership list.
3. Contact the schools that meet the criteria for participation in the study.
4. Get written consent to participate in the study to all individuals to be interviewed.
5. Set up school visits and interviews of selected individuals from each Career Academy well in advance.
6. Ask for permission to audio tape conferences and video tape supporting visual data.
7. Make travel arrangements to conduct school visits.

The national Career Academies support organizations' website provided the contact information for the members of each high school.

### Role of the Researcher

The researcher is currently the Director of Career and Technical Education in DeKalb County Schools. The responsibility of this position is to be the instructional leader to design and build Career and Technical Education programs in 20 middle and 21 high schools in the district. Since 2001, 13 high schools in the district have been awarded federal Smaller Learning Communities grants to implement Career Academies. The researcher has been involved in the planning and budgeting process of those SLC grants. The researcher will use this experience to improve the implementation of Career Academies in DeKalb County Schools. The role of the researcher will be to design research questions and schedule times and dates to interview participants. The researcher will contact the national Career Academy support organizations to select the appropriate high schools for this study. The researcher will be responsible for collecting the information from the structured interviews and observations to be compiled for information to present in Chapter IV.

### Open-ended Interviews

The researcher has designed interview questions to assist in documenting the experiences of individuals involved in the implementation of Career Academies. One high school was selected to gather in-depth descriptions of experiences of individuals regarding the process of implementing exemplary Career Academies in a large high school. The school principal, assistant principal for instruction, one teacher and one student from each of the three Career Academies, one parent, and one employer were interviewed during the school visit. Interview questions are exhibited in Appendix E.



### Data Management

The data collected from each interview were typed and stored on the researcher's computer and on a USB 2.0 travel drive in his home. The audiotapes from the interviews were securely stored at the home of the researcher. None of the data collected or the audiotapes are accessible to anyone other than the researcher and the members on the researcher's dissertation committee. All audio-tapes and written interview notes will be destroyed after one calendar year. Typed notes and transcripts from interviews on the researcher's computer and travel drive will be erased after one calendar year.

### Data Analysis

Contact was made with the National Career Academy Coalition organization to retrieve access to the list of members. One high school was selected for this study. The researcher conducted an onsite visit for open-ended interviews of individuals involved in the implementation of Career Academies. The site visit was coordinated with the school's administration to ensure the ability to make relevant observations and attend any appropriate meetings. All interviews were transcribed, coded and grouped into categories, which facilitated final analysis. Maxwell (1996) states a key feature of coding "is developed in interaction with, and is tailored to the understanding of, the particular data being analyzed" (p.79). Artifacts will also be collected as supporting documents to the activities derived from implementing Career Academies.

The researcher will use the Creswell Data Analysis spiral to analyze the data for this study. Creswell (1998) developed a data analysis spiral for use in qualitative studies. This spiral takes the researcher through the data several times before a final report is achieved. The following steps will be used to analyze the data for this study.

1. Organize the data by using index cards, manila folders, or a computer database. Break large bodies of text into smaller units, perhaps in the form of stories, sentences, or individual words. This step also assists the researcher in managing the data.
2. Peruse the entire data set several times to get a sense of what it contains as a whole. In the process, the researcher will develop possible data categories for interpretation.
3. After identifying general categories or themes, and sub-themes, the researcher classifies each piece of data accordingly. This step will give the researcher a sense of what the data mean.
4. The data will be integrated and summarized.

The researcher will review the tapes from the structured interviews with the selected ten individuals and compile the responses according to those thoughts and ideas that are similar and those that are different. The researcher also will compile any unique experiences that each participant described during implementation of Career Academies.

#### Summary

The purpose of this study is to examine the experiences of individuals involved in the implementation of exemplary Career Academies into a large high school. The overarching concept guiding this investigation is to: describe the experiences of high school personnel in implementing exemplary Career Academies into a large high school. This initial concept will be examined by addressing the following questions:

1. What are the factors that have lead one high school to implement Career Academies as their high school improvement model?
2. How have administrators, teachers, students, employers, and parents viewed the decision and transition of Career Academies?
3. What are the major challenges in implementing Career Academies?

One high school considered as successfully implementing and sustaining Career Academies, was chosen for this study. Portraiture of the high school will be included to provide background context. The data from the structured interviews of each individual group will be compiled, organized, and analyzed. Findings and conclusions will be presented in Chapter IV.

## CHAPTER IV

### REPORT OF DATA AND DATA ANALYSIS

#### Introduction

This study was designed to gather data to be used in examining the experiences of individuals involved in the process of implementing exemplary Career Academies into a large high school. One high school identified by the National Career Academy Coalition as being a member and having been evaluated on implementing the major components of the National Standards of Practice (Appendix B) was used in this study.

The method of discovery in this research study was qualitative. The researcher conducted the interviews during the month of March 2007. Each interview was conducted at the respective school. Each participant and the researcher read and signed the Participant Informed Consent Forms (Appendix C) before the interviews were conducted. The researcher further emphasized three important facts from the Informed Consent Form; the interviews would be recorded, there might be a need for follow-up interviews, and the identities of all participants would remain anonymous.

#### Research Questions

The over-arching concept guiding this investigation is to: describe the experiences of high school personnel in implementing exemplary Career Academies into a large high school. This initial concept will be examined by addressing the following questions:

1. What are the factors that have led one high school to implement Career Academies as their high school improvement model?
2. How have administrators, teachers, students, employers, and parents viewed the decision and transition of Career Academies?

### 3. What are the major challenges in implementing Career Academies?

#### Research Design

The researcher employed a qualitative research design because this approach allowed for deep and intense questioning about the perspective of each participant's experience in implementing Career Academies in a larger high school. This research design was effective because the participants were able to relax and express sincerity in their comments, suggestions, and perspectives. The interview questions were developed from ideas that emerged from the review of the literature regarding the implementation of small learning communities into large high schools called Career Academies.

The researcher interviewed ten individuals from one high school that implemented Career Academies. The researcher also created portraiture of the school that provides context information about the conditions of implementation. Participants from a metro area city in Florida were chosen because they represent the size school that has met the National Standards of Practice to implement Career Academies.

#### Portraiture of Researched School

The researcher created a portraiture of the research site to provide additional descriptive information of the process to implement Career Academies in the high school setting. In order to maintain the confidentiality of the school, school district, and participants, the names were deleted from the data and responses coded. The school portraiture was written to assist the reader in connecting the different perspectives to the description of the process of implementing a large high school into Career Academies. The school is named Community High School (CHS) for the purpose of presenting the data. Participants will be identified by their position associated with the school. For

example, student and teacher responses from the Business & Science Academy will be identified as Business & Science Academy student and teacher. Also, the name of business is not used in order to maintain confidential its identity. Any names used will reflect the individual's involvement associated with the Career Academy.

The planning for Community High School began two years prior to the school opening. The district planned for the building to be constructed so that the school could accommodate smaller learning communities called Career Academies. Also, the administrators were selected for the purpose of implementing the initiative. The administrators hired the teaching staff based on their ability to teach collaborate lessons across content instructional areas.

Community High School is one of six high schools in a district serving over 42,000 students. The district offers school choice options to students and CHS is one school of choice option. Students apply through the Career Academy and when accepted, complete a School Choice application. CHS is a comprehensive high school with an enrollment of almost 1100 students in grades nine through eleven. Next year, another grade will be added to make this a ninth through twelfth grade school. CHS is a wall-to-wall academy school. Wall-to-wall means that all students belong to one of the four academies. Currently, CHS has three Career Academies and one ninth grade Success Center Academy. The three Career Academies are The Academy of Arts & Communications, The Academy of Business & Science, and The Academy of Engineering and Leadership. The ninth graders are placed in the 9<sup>th</sup> Grade Success Center Academy. Each Career Academy is led by a teacher that teaches in that Career Academy. The three Career Academies has been evaluated by the National Career

Academy Coalition based on the National Standards of Practice of Career Academies and have met all standards. The evaluation process evaluates each Career Academy separately.

The student population is 74% White, 14% Hispanic, 9% Black, and 3% Asian, with 20% of students eligible for the free or reduced lunch and breakfast program. The mission statement of CHS is to create strong, responsible leaders who value personal integrity, academic excellence, and civic involvement. The chief priority of CHS is to facilitate learning by providing a variety of instructional approaches to meet individual student needs.

Integration of core academics and career instruction are the primary emphasis at CHS. Each Career Academy operates as a separate school-within-a-school where activities are delivered based on the theme and industry. Classrooms are located based on Career Academy and not the traditional method based on subject area. Each of the three Career Academies has its own language arts, math, science, and social studies departments that focus curriculum on the Career Academy theme. The career programs are selected based on the skills taught in the courses. For example, the Academy of Engineering and Leadership has Technology career curriculum included in the Career Academy. CHS practices the belief that students should be challenged by many hands-on activities and practical applications of knowledge and increasing students' understanding of how each subject relates to another.

An organizational chart in Appendix D provides additional information describing the structure of CHS. The chart also shows the types and number of employers associated with each Career Academy.

## Respondents

The participants from CHS who were chosen as respondents for this study were the principal, assistant principal in charge of instruction, one lead teacher and one student from each of the three Career Academies, one parent and one employer. The total number of interviewees is ten.

## Participants' Interviews

In this section responses from each participant's interview are documented. In order for the participants to feel relaxed, they were interviewed at CHS. The population for this study consisted of ten individuals representing the following positions at CHS: principal, assistant principal of instruction, one lead teacher from each of three Career Academies, one student representative from each of the three Career Academies, an employer, and a parent. The assistant principal of instruction assisted the researcher in scheduling the interviews around times that best suited them. The interviews were done during the school day. Each interview was tape-recorded and transcribed by the researcher. Responses were organized as they relate to the interview questions. To ensure the anonymity of participants, they are only identified by their position in the school.

## Finding of Participants

Ten individual participant interviews, consisting of nine questions developed by the researcher, were taped recorded and transcribed by the researcher. The school was initially contacted by email to determine if they would be willing to participate in the study after the researcher gained Georgia Southern University Institutional Review Board (IRB) approval. Once the researcher gained IRB approval, the assistant principal for



instruction was sent an email explaining the research project. The researcher then followed up the email with a telephone call to arrange the school visit and interview appointments. Each participant agreed to do an interview.

The data derived from the interviews with the participants are presented to correspond with the interview questions and then the research questions of this study. The researcher has taken particular care to present the perspectives of each participant in a logical and sequential order as guided by the research questions. Also, any thoughts, central ideas, unique responses or similarities of their responses were emphasized in this section.

#### Interview Questions Results

Ten individuals' interviews were tape recorded and transcribed from the nine questions that were developed and asked by the researcher.

*Interview Question 1: During 2005-2006 school-year your school implemented the Career Academy structure. Why did your school decide to use Career Academies as your school improvement model?*

**Principal:** We had implemented Career Academies at my previous school in which I was principal. As a matter of fact, we were the first ones in the district with the national certification for Career Academies. I had been at that school almost 17 years and I saw lots of students disengaged in their learning and they were not that interested in going straight to college. When we implemented the Agricultural Career Academy, suddenly we saw students buying in and when they left our high school students became interested in going into the agricultural career area by going to the University and pursuing a degree in agriculture. Because of the student success in the previous school, this current new

high school was designed for Career Academy implementation. I was appointed the principal here and provided input to the building construction to provide the integrated instruction as indicated in the National Standards of Practice (NSOP) for Career Academies. Our state (Florida) department of education has a big emphasis in majors and minors and the Career Academy design supports that framework.

**Assistant Principal for Instruction:** I believe both of us my principal and I, came to open this school knowing that the facility was built for Career Academies. The experience we gained from implementing successful Career Academies at our previous schools was valuable as we implemented the program here at this new school. I am extremely passionate about the philosophy of the Career Academy concept design. I did my dissertation for my doctorate on Career Academies. I believe that large comprehensive high schools have larger failure and higher drop out rates than schools that have students in smaller learning units. I believe that there are students that go through the high school where no one knows their name. I felt it was important to allow students to have a time of exploration through careers. For this reason, our 9<sup>th</sup> graders started with a Career Choices class where they explore the 16 different career pathways. During the 9<sup>th</sup> grade, students develop a resume, complete an interest inventory survey, and an aptitude assessment to determine which type of Career Academy would best fit their educational needs. At the last school when Career Academies were fully developed, we found out that not only did students have a sense of belonging to a group, but the teachers came out of isolation and began working as a team. We wanted to duplicate that same culture when we opened this school. We wanted to make all curriculum and instruction relevant for students. During the planning of construction of this school, we

wanted the facility built conducive to accommodate the smaller learning communities of Career Academies. We had science and other academic classrooms in every hallway to cluster the teachers based on Career Academies rather than departments in traditional high schools. We believe this model will provide the structure for the students to receive rigorous and relevant curriculum and instruction based around career theme programs. This will allow for the types of relationships students need to be successful.

**Arts & Communications Career Academy Lead Teacher:** My impression is that we know the school system as it is currently operating is broken where we are not serving our children the best we can nationally. There is a crisis and part of that crisis is that the educational system is out of touch with the professional world. How can we train our students to be young adults? What are we doing if we are not training them to meet the needs of the professional world? Traditionally, the education society tends to lump into common practice that academic preparation belongs over here and vocational training belongs over there. So, we said, “wait a minute; why not combine the best of both worlds and put all education into one focus driven medium that could address the needs of our students to be successful not only on a local level, but on a global one?” In the United States, with our technology and our know-how there is no excuse for our students not to be the best in the world and to be competitive. If you talk to anybody here, what brings us together, because we all have different personalities, is that we are all competitive and we are aware, not only locally what are standards are, but we are looking around the world. The world is growing in a fast pace and our students are not competing against their next door neighbors for jobs as it was in the past. They are competing with people in another country far away for similar jobs and in order to make our students

competitive we have to take that combination to include the business world. The business world needs to survive and needs to have a vested interest in our students to prepare them to have the skills needed for their business to compete. The other thing that it does is that it gives purpose to our students. Because they know that when they ask that question, “why do we have to learn this?” We always have the answer. Think about that as an educator, that all students understand how and what they are doing today will help them be successful in the future. Discipline will be almost non-existent. I was a bright kid in school, but never knew that what I was learning in high school would have an impact on my future. It was never properly addressed. Part of that was my own fault. Here we teach that learning is your responsibility. Imagine teaching a child; also seeing the transformation of a young child becoming an adult. They come in here as young children in the 9<sup>th</sup> grade and the child and the teacher enter that transition period from child to young adult. The greatest things are that you can teach them and give them the tools to educate themselves to look at the world. Students understand that they have a purpose and here is how I get to that purpose. That is our purpose in education. As teachers, we say to students, “here are the tools and it is your responsibility to educate to take advantage of those skills.” The most exciting thing about our school and Career Academies is that it is working here. The coolest thing is you see the difference in students that come here from other schools. Students that start out here as freshmen do not see it as much. Even we have a few international students remark about how in touch our school is with the business world; how much in touch we are with education that students see the marriage of how it works. And for them to see it at such a young age is a beautiful thing.

**Business & Science Career Academy Lead Teacher:** I think that statistic wise, schools are finding that what works is having a career theme and having a focus for the education is needed to assist students. Starting earlier it makes a big difference in the students' lives. That is a great way to start a school in the beginning and follow that structure the right way from the start.

**Engineering & Leadership Career Academy Lead Teacher:** I would think that the main reason for implementing Career Academies is that eventually everyone will go into a form of work or career. When preparing for the future, you will not just go to work in English or just science or just math or just in technology. In the real world, people will have to use all of those abilities to be successful in a career. The Career Academies allows us to make those subjects relevant for students, because that is their future. In careers, you do not just work in one area, employees have to be flexible and be able to adjust and be critical thinkers using academic and vocational abilities everyday. I think that is really important and Career Academies are getting that done and I think it is definitely a model for the future.

**Student (Arts & Communication Career Academy):** For what I understand, they wanted to implement learning communities so that students will be in similar environments with other students with the same interests; for the purpose to create study groups and to have similar class settings day in and day out that provide instruction based on students' interests.

**Student (Business & Science Career Academy):** Being this is a new school with all the new technology, the Career Academies was set up to meet the different goals for each student. The Career Academies can connect the new technology with student learning to

have a better future and reach their goals. I think that this school really helps students plan for the future. This school helps us to focus in on our interests to get us ready for college.

**Student (Engineering & Leadership Career Academy):** I think that Career Academies were implemented in my school because there is a big shift in the state of Florida toward students knowing what they want to do before the normal first year of college. The Governor has indicated that high school students must declare a major and a big part of declaring a major is to know what field you want to be in. This school is divided into some fields for students to choose from. The school gives students the opportunity to be placed in the right direction. Students may not know what career you want, but you know somewhat in a general area. So, students can move their way through a Career Academy and at least gain some skills before they leave high school.

**Parent:** I have been involved on the advisory council for the school since the school started two years ago. The reason why I am on that committee is because I am a business owner and my husband and I are committed to giving back to the community. We are a former Small Business of The Year winner as awarded by the Chamber of Commerce. As a member of the Chamber of Commerce, we want to keep the students connected to careers in the community. We want to make it attractive for them to stay here. We do not want to lose all of our young people to other communities and states. I believe the school went to Career Academies because it is the up and coming thing and since this was a new high school it is logical to build the facilities to accommodate the initiative. We have the best facilities and everybody wanted to come to teach here at this school.

**Employer:** My place of business is across the street from the school. I became involved mainly because of my company's close proximity to the school. Other than that I was not involved in the decision making of designing this school.

The researcher found that the participants had similar responses for the reasons why the Career Academies structure was decided upon for this school. Not all participants were involved in the planning and designing of the school. The administrators were involved and chosen to lead because of their previous experience with Career Academies. The teachers also were in agreement with the Career Academy structure and decided to teach at this school. The teachers also had previous experiences in working with Career Academies or in a career program area. The students were aware of the Career Academy initiative and understood how Career Academies related to helping them with future education and planning. The parent is involved on the school's advisory board and has a child attending the school. The new school is designed to accommodate the latest school improvement strategies, which are Career Academies. The employer is involved mainly because of the location of the business, near the school, and was not involved in the planning of the school.

*Interview Questions 2: Describe the activities of your school leading to the implementation of Career Academies.*

**Principal:** Buying in is critical for implementation of any initiative. We know that this is a different way of teaching for most teachers and it is important for teachers to buy in to this new way of educating students. We began by identifying a core group of leaders that understood and wanted to implement the initiative. These leaders did not necessarily come from all departments. Our philosophy is to include everyone in planning meetings.

During the planning stage, meetings were opened to all teachers that potentially wanted to participate with the new school. I believe it is important for teachers to understand that here they are going to integrate the curriculum. They are going to have a group of students that the English teacher and the Science teacher have in such they may all be working on a very similar projects. Teachers are to understand that allowing students to focus on multiple content areas on one project is acceptable and encouraged. We also had several information sessions with the community to assist them in how they are involved in the implementation. I have visited all our feeder schools and potentially major high schools in the district that we were getting students from. The Career Academy concept also guided our interview process for hiring teachers and staff.

**Assistant Principal for Instruction:** When we were hiring teachers we hired them with an understanding that they would be planning with a Career Academy team. During the interviews, we ensure that teachers and other staff understand interdisciplinary lessons and academic teachers are able to incorporate project based learning in their teaching. Many of our Career Academy teacher leaders came from the previous school in which we implemented Career Academies. So, professional learning is critical to the implementation of Career Academies. We are fortunate to have teachers come to this school that already know the Career Academy concept.

**Arts & Communications Career Academy Lead Teacher:** I was working at my previous high school and it was there that I started writing all our materials for the Arts & Communications Career Academy. I am not trained to be a teacher. I am a trained artist. I still am an artist. The assistant principal for instruction allows me to be creative in leading our Career Academy. I bring my professionalism into the classroom. I look at



teaching as the other thing I do. I am very passionate about it because it is like art. Art is what motivates me. It is a huge part of my life. Teaching just has been a positive experience; sharing what I have to offer with my students is just awesome. Students get to see and get first hand exposure of what I do as an artist and how all of their high school experience can be relevant to possible areas of interest from them. Also at my previous high school, I helped write the curriculum and when I was pulled over to this high school the administration saw some of my art work and wanted me to bring the corporate world into the classroom setting. When hiring for this school, they wanted teachers who were working professionals and who knew what was going on in the industry to make it real for students. Making the transition to this school was a natural fit for me. The ideas that I use with this Career Academy are to keep the staff in touch with what is going on in the real world. This is how our school is motivating students to perform at high levels. For example, one of the activities I am working on now is making people aware that graphic art design and web design is not just a business class, but also involves art. I think the educational world needs to catch up with the professional world or else we do a disservice to our students. We provide many staff developments to assist teachers to integrate education across content areas.

**Business & Science Career Academy Lead Teacher:** We definitely had staff development before the school opened. The administration ensured that teachers understood the concept and purpose of Career Academies. When teachers were interviewed, the interview panel was directed to ensure that candidates would be able to function in a Career Academy school structure. Candidates must understand the level of integration that is expected and be willing to continue to learn from and with colleagues.

We continually have opportunities to learn about Career Academies and I am going to attend a workshop in the next couple of weeks. We have a planning calendar to work on the remaining of this year and planning for next year. We have a whole day to work on that and collaborate as a team. California has been known as the state that is the leader in the country as it relates to Career Academy implementation. We have taken teams to California to visit school sites and talk to teachers and administrators that have implemented Career Academies in their high school reform efforts. The assistant principal for instruction and I have traveled to other schools across the country to look at how we can improve our Career Academies program.

**Engineering & Leadership Career Academy Lead Teacher:** In 1999 and 2000 school year I was teacher of the year. I had the opportunity to have the program of the year, teacher of the year and international teacher of the year for technology. Our program at my other school was phenomenal and we were state, national award winners. I wanted to come to this school with a Career Academy focus. I came here because I was totally impressed with the leadership and instructional focus of our district vocational director. He recommended that I come to this school to teach. This situation has worked out pretty well and I believe it has been a win for me as an educator and a win for the school. You want to keep teachers happy and make them all feel like they are a part of this whole collaborative effort. This is not a one man show by any means and just because of my past success does not mean I would have the last say in what goes on in this Career Academy. For this whole Career Academy concept to happen effectively, there has to be input from everybody and everybody pulling in the same direction. That is what we have here.

**Student (Arts & Communication Career Academy):** I thought it was a cool thing that they were trying to get the students so involved in the creation of the school. I think that a lot of the time when you hear complaints it is because the students are not involved in the process. Even though we were involved in the process, there was a vague description of what the Career Academy structure would be like at this school. It was not hammered home in the orientation. This is my second year at this school and I still have that vague picture of what the Career Academy is all about. We were involved in the creation of rules and the student handbook. The school officials had a thing that anyone could come and provide input about four to five months before the school-year started. The community could vote on the mascot and other aspects of the school. Monthly newsletters were sent out to keep everyone aware of the status of the school. Also during this time, the community could meet their administrators.

**Student (Business & Science Career Academy):** They prepared us to be more organized and be ready for high school. There were assemblies that provided information about all the Career Academies at this school. I chose Business & Science because that is what I plan on studying, in the area of business management. I also plan to take over the family business.

**Student (Engineering & Leadership Career Academy):** At first I did not want to come to this school, but I was districted into this school. After I got here, I was so happy that this is where I ended up. Because of its size and for the strictness, I am happy that I am here. The rules and the structure make this place a wonderful place to go to school. The opportunities are amazing. I have not always been in the same Career Academy. I have been trying to experiment somewhat, because I am undecided on what I want to do.

I believe the Career Academy structure is helping make decisions and providing the information that is helpful for planning for the future.

**Parent:** There were meetings for people that would be attending this high school to inform the community about the school in the spring prior to opening. During these meetings, they talked about the different curricula and explained them and what the school and Career Academies had to offer. They really explained the programs really well. After that, we went to visit different Career Academies in other places and schools across the country and asked the different teachers and administrators questions.

**Employer:** This particular school approached me to provide job placements for some students. I absolutely agreed to work with the students. I had good experiences with the other high schools in placing students in positions in my place of business. Students are normally my best employees.

After analyzing the responses, the researcher concluded that the participants thought that involving everyone in the process was a critical piece to implementation of Career Academies. Professional learning for teachers, administrators, and students was accomplished as teams visited other high schools that implemented Career Academies. During the hiring process, the Career Academies structure was the guiding point for selecting staff members. Information sessions for the community were done to bring everyone on board and to educate all that wanted to participate.

*Interview Question 3: How was school different from the previous year before the first year of implementation of Career Academies in your school?*

**Principal:** Prior to implementing the Career Academy model, I saw a lot of students disengaged from their learning and maybe they were not that interested in going straight

to college. After the implementation of an Agriculture and Early Childhood Academy, we began to see students buying in and an increase of participation in school and class assignments. We saw an increase of student membership in Future Farmers of America (FFA) student organization due to the curriculum career focus in the Agriculture Academy. More positive evidence of implementation of Career Academies was that when students left high school from the Agriculture Academy and attended the university majoring in the area of agriculture. We began to see excitement and interest from students in the childcare and engineering academies as well. Attendance of students in the Career Academies was high. You could also see the excitement of teachers during planning times, with other teachers from different disciplines learning from each other. Other differences were the structure or layout of the instructional departments. No longer are departments all on the same hall. Teachers are next door to teachers from different content areas. The time between classes has shown to be positive collaboration time among teachers. Career days and assemblies are organized according to which topics match or support the appropriate Career Academy.

**Assistant Principal for Instruction:** Before, students never found their niche in high school and took classes with whatever flavor was popular. Students picked an elective that did not connect to any future plans. Also, students left high school not knowing what they wanted to do. Students did not have any experiences related to careers or the job market. The high school instructional programs did not provide the clear connection to postsecondary life. The way our Career Academies programs are set up now is that students select a Career Academy that is based on their interest and future educational plans. Our state legislation gives more support to the Career Academies by requiring the

students have majors and minors as part of their graduation requirements. Now students have direction and a plan with their electives choices. All students still get the core academics and the opportunity to take Advanced Placement (AP) courses. Also, our Career Academies allow students to take honor courses. Our Career Academy programs give students direction for their electives where skills are developed and industry certifications are achieved. Students are involved in dual enrollment and receive college credits from technical colleges from career courses. I feel there are strong guidance and direction for students in our Career Academies. Our career and technical vocational programs are strengthened because of the Career Academy structure. Students are given the opportunity to explore vocational interests that they have and start thinking about what it is that they really want to do. Also, students are allowed to switch Career Academies every year if they choose. This gives them a chance to explore many areas of interest and to develop skills and abilities. Students may participate in an internship, job shadowing, or job training opportunities. We have had students say, "I am going to be a doctor," and they go into a class and their stomach can not handle the dissecting or the sight of blood. They realize that before they pay lots of dollars in college. This experience in high school can redirect students thinking and maybe their selection of what they want to do when they finish high school. We feel we are providing additional opportunities beyond high school within the Career Academies and building technical skills of our students.

**Arts & Communications Career Academy Lead Teacher:** I attended private school my whole life and it was a very good private school. I never stepped into a public school. I started teaching in a public school that was a tough school in an urban community.

Gang problems and some serious other poverty issues infested that school. When we started implementing Career Academies, which was a hard job because we were trying to get the employers involved and parents. They were not involved in the education of their children. Here the contrast with trying to implement was tremendous because parents did buy into the activities of this school right away. At the previous high school, the implementation of Career Academies had many positive effects because now parents are involved and took time to participate in school activities. Here we got quick buy in with the community and still do. Business partners here are amazing. We have the largest cable company involved with us and we have Tropicana as one of our partners. Also, we have the National Security Agency coming to help with one of our projects this year. There is excitement from our students and teachers because of employer involvement in our Career Academies. Our Career Academies create a competitive spirit among the students and staff. It is not like our Career Academy is better than others, but it is how we can get better to prepare our students. The Career Academies help us to do that, because we have to be in touch with what is going on and that is a reflection of the real world.

**Business & Science Career Academy Lead Teacher:** I believe that the administrators are working closer with teachers than in the previous school prior to starting this school. The student discipline level is a big part of implementing the Career Academies. Here in the new school, student discipline has not been an issue. I believe the culture and discipline is due to the fact that students choose to attend and they are enrolled in courses of their interest. Another difference is that most teachers enjoy being able to collaborate with each other. You really do not have that opportunity at a traditional high school. I

was fortunate to have many of the same teachers and administrators joining us from the previous high school.

**Engineering & Leadership Career Academy Lead Teacher:** Well honestly, the Career Academy structure is quite a bit different. In the previous environment the instructional areas and teachers are working as a separate entity. Other disciplines working collaboratively with other different instructional areas incorporating what each other is doing is what we are doing here in Career Academies. All different subject areas are pulling in one virtual learning activity instead of teachers teaching in their own little kingdom. In this environment, teachers share with others and I combine their input in the projects and lessons in my courses. I do not think we are taking a back seat to any other school or instructional program by focusing on careers rather than on academic test scores.

**Student (Arts & Communication Career Academy):** I came from a senior high school with 2200 students. Here there is a much tighter niche with my peers, teachers, and administrators. My other school was so expansive and vast. You did not see the same person twice in a week. I really like this much smaller school and class setting. The administrators were different. The administrators at my previous school had a lack of interest in the students and here everything is very ridged and strict. I like this school because you get to see people from different communities because this is a school of choice. We have the lowest diversity in the district. The Career Academy structure sectionalizes the school. The idea was to group students in learning communities so that they will be able to help each other work through high school. That is the primary understanding I have concerning the implementation of Career Academies at this school.



I see that students get a chance to develop relationships with other students during that time together. It does give you someone to rely on when you need assistance in the classroom. I also think that the main goal is to provide support for students. When you first start high school, there is a lot of chaos and to be honest with you in normal high schools there is a lot of chaos. Many students are trying to find their way with their friends and people who are not their friends. This school seemed to have a program that would help integrate students into possible career choices and to aid and organize the teachers. When teachers get a chance to meet with other teachers around the school and integrate their lesson plans, this provides teachers a chance to interact with other teachers and this helps to see materials from different perspectives and maybe make modifications to their lesson plan. I think that was the school's goal in implementing Career Academies. I also think that this school encourages a clickish environment here. The structure safe guards everyone and provides additional preparation and linkage to the world of work, but I hear the word integration a lot but I do not see it. The whole idea of Career Academies to create separate learning communities is to sectionalize the student body, which is the total opposite of integration. Students in one Career Academy do not get a chance to interact with students from another Career Academy. The assemblies are done based on Career Academies. There are some Career Academies that do not have as many assemblies as other Career Academies. Some of the assemblies that our Career Academy had were topics that all students should have privilege to be exposed to. This shows that some Career Academies are doing more for their students than others. The goal in implementing the Career Academies is to provide ample amounts of opportunities in terms of learning and progressiveness to the majority of students. I feel that activities

for all Career Academies should be equalized in number of assemblies and programs for all students. I have noticed the collaboration between the teachers within the Career Academy is nice when it takes some of the work load off you. This type of activity is efficient as it can kill two birds with one stone such as history and English teachers are giving similar assignments.

**Student (Business & Science Career Academy):** I think the teachers are a lot better here. They really care for you and they make sure that you know everything that you need to know to help you prepare for your future.

**Student (Engineering & Leadership Career Academy):** The school I went to before had a freshman learning center, which is similar to what we have here, but we did not have anything else. I think there are many differences because here everybody is pretty much on the same page and they were not at my previous school. It seems that everyone did their own separate thing and there were no connections of activities or meaning. Here these groups of teachers are incorporating their lessons because they are in the same Career Academy. Math, science and other subjects are connected in collaborative projects. My old high school did not have that. There was not a lot of communications between the teachers or connection of subjects.

**Parent:** I have a daughter attending here and she is my only one and I do not have any other high school experiences to compare it to. From my basic understanding, students are a lot more focused on what they want to do when they get out of high school. The Career Academies help them to stay focused in those areas. They use the classes the students take to really enhance what they are moving towards in the future.

**Employer:** I have worked with other high schools and I do not see any difference in what I have done with this school and the previous schools in the district. The location is the major difference. The transportation challenges are eliminated, because students can walk to work from school. I now do not get students from any of the other high schools since I have partnered with this high school.

The Career Academy concept is a different way of educating high school students. The Career Academy structure allows for all subjects to connect and provide relevance for students. The administrators see the connection to postsecondary opportunities for students. Teachers enjoy the opportunities to learn from colleagues of different subject areas in the same Career Academy. Students had positive comments about teachers working together to connect subject areas with similar projects. The parent understands that Career Academies assist in keeping students focused on career goals. The employer does not see a difference in students from a traditional school and a school with Career Academies.

*Interview Question 4: How has your role changed as a principal, assistant principal, teacher, student, employer, or parent since the implementation of Career Academies?*

**Principal:** I see my role as a change agent. When you have a staff that is used to the old department type isolation, that mindset has to be changed to successfully implement Career Academies. Teachers still have to meet in the same content area, but they also have to plan and integrate across discipline areas as well. Now teachers have to adapt to both systems and I have to support that transition. I find myself empowering more teacher leaders to make decisions in the Career Academy structure. We conduct meetings with core leaders to keep them informed, collaborate, and give input towards

student academic improvements. I do not want to overwhelm teachers with too much change at once. I find myself as being more of a motivator and keeping everyone focused on the vision. Implementing Career Academies is an ever-evolving process and I have to be the motivator to help the staff through challenges of constant change.

**Assistant Principal for Instruction:** Because I am a curriculum assistant principal, my job has always been to construct the master schedule. When you are at a large comprehensive high school, I have been to one where there is arena scheduling and the students just select any elective-whatever they wanted and there were no priorities with electives. Students' priorities were core academic classes. For example, students' priorities were intensive reading classes because they were a level one reader. What has changed with the Career Academy model is now the students are placed first in their career major. Students' elective program comes first. We feel like the elective programs are the programs the students are passionate about; the programs that students want to come to school for. So when the master schedule is built, the career major elective is the course that is scheduled first and then the team of core academic teachers is structured around that. This does not mean that academic courses are second place, but that core elective class is as important as that Advance Placement (AP) class. That is the hook for students to bring them to school and in addition to that the students' reading level moves up because students will read more in areas of interest. We had to change we did scheduling in the past because now, all math courses are included in each of the different Career Academies. A separate master schedule needs to be done for each academy. This makes scheduling much more complicated but I feel that it is well worth it. We are

giving students what they want and now they want to come to school. We are also developing skills in addition to building students' academic performance.

**Arts & Communications Career Academy Lead Teacher:** I am sure you heard about teachers complaining about lack of planning time, but my role as a Career Academy Director is to be the instructional leader and overcome challenges. I help come up with the vision that we are going to implement with all of our students. I have a real unique perspective and I get a chance to have input to the direction of the school. I was that student who tested extremely well and performed all over the place. I would get the highest test score and the next day I would get a zero. A lot of the problem was two things, one was not being engaged at a young age and no one ever told me that I was responsible for educating myself. The second reason for my performance in high school was that no one gave me the purpose for what I was learning. I call it the light bulb moment and this is the focus of what I have as the director of this Career Academy. My roll as director is to provide the leadership the Arts & Communications Career Academy with staff to better reach students. We want to take unrelated subjects and for teachers to make sense of the education process for students. As a Career Academy team, our goal, regardless of what students are interested in life, is to make them excited about learning. That is the best way we can serve our students.

**Business & Science Career Academy Lead Teacher:** I was not the lead teacher when implementing Career Academies in the previous school, but I was very involved. Now I really like being the instructional leader for the Engineering & Leadership Career Academy. I get to be on the front end of the program and helping the team to meet standards. I get to bring teachers together so that decisions can be made. Tomorrow we

have dedicated an entire day to plan activities together for the Business & Science Career Academy. We have a set agenda to guide our discussions (Appendix F). Career Academies are a lot of work, but it is worth it when you see the difference you make in the lives of students. This is our second year of implementing Career Academies at this school and it will be nice when we have seniors so that we can actually see the difference- when students go on to postsecondary and, hopefully, they are ready.

**Engineering & Leadership Career Academy Lead Teacher:** For years I have always had successful programs. It is really nice to have other teachers from different subject areas working together as a team. Pretty much at my other schools you were your own teacher in your own classroom. Here teachers have to be aware of what other teachers are doing and determine where you fit into the whole instructional program. This becomes a huge asset for me because I do not have to do everything. I do not have to teach the math if we are launching rockets and we want to know how high that rocket is going to go and we are going to check the trajectory to see where it is going to land. We use the pathagerium theory; it is nice to know that what I am teaching is being reinforced by math and science teachers. Everybody is doing their part. Before it was just me trying to teach the concept, theory, math and everything else behind it and I had to make sure that students had the academic foundation to finish projects.

**Student (Arts & Communication Career Academy):** I have been put in more of a leadership role here at this school. I was taken from a situation where I was not given a second look from the administrators or teachers. Now I am being seen as more of a father figure among the student population. I have an awesome close relationship with my teachers and with my administrators. They are continually asking me about how

things are going, is this working right and that may not have been something I would have been asked in my previous larger high school. I believe the leadership opportunities came about because of the new school and my class being the oldest class in school from sophomore and now junior year. That is how my role has changed.

**Student (Business & Science Career Academy):** I have to be more focused, because all subjects are connected. School and classes seem to matter more than it did before. In the Business & Science Academy I am focusing on what is happening in the business industry. Also, the involvement in the FBLA, Future Business Leaders of America, student organization helps me with leadership. I was president last year.

**Student (Engineering & Leadership Career Academy):** At my other school I was one fish in the sea, kind of lost. There was not a way for me to shine. Career Academies helps me do that, because I am the Technology Student Association (TSA) President which is the head of the Engineering & Leadership Career Academy. This gave me my way to be important. I also feel it does that for many students, because students are working their way to the top of the program. The learning is somewhat dependent upon student leadership in the Career Academy. For instance, if a student is good in art, the Arts & Communications Career Academy allows for students to excel in their area of interest. Students get noticed based on their talent. The Career Academies helps student to discover and display their talents and interests. Also, this helps students determine what they want to pursue after high school.

**Parent:** I think I am a lot more involved in the day to day operations, because the program is so focused at this school. One thing about my daughter is that she knows exactly what she wants to do. She wants to take over the family business. To me it is

very exciting to know that she is in the Business & Science Career Academy and she is really excited about it because she sees and understand what she is learning and why she is learning it.

**Employer:** When I had students from the other schools, I would have some that would move into management. Since I have just been getting students from here, I have not had any go into management. I find that strange because of the career focus of this school.

The responses from the participants indicated that leadership is everyone's responsibility. The administrators allow the decisions of the school to be based on input from many different individuals in the schools. Teachers are motivated with their new leadership roles. Students are finding themselves in situations that help them to develop their leadership skills and are given opportunities to have input in school decisions. Parents and employers are also more involved in the day to day operations of the Career Academies.

*Interview Questions 5: How has teaching and learning changed since the implementation of Career Academies?*

**Principal:** The biggest thing for the teachers is the integration, because many teachers historically have taught in isolation. For example, the math teacher taught calculus and they had nothing to do with the science teacher teaching physics. Here teachers are working together to enhance each other's discipline area. My math teacher told me from a meeting with her that she is so glad that the science teacher is doing analysis, functions and working on co-signs before she gets them. Now the math teacher does not have to repeat the same unit and just provide a refresher to ensure that students got it from the physics class. Our teachers are finding ways to work together and developing integrated



projects and students are buying in and seeing correlation of the two subject areas. Last year we did an academy project called Criminal Science Investigation (CSI) to reflect the popular television show. We had a huge assembly with all students from one of the Career Academies. All instructional content areas of math, science, English and social studies created assignments from that one project. Students were so excited about figuring out the murder scene that many did not realize that they were learning math, science, English, and social studies through the activities of the project.

**Assistant Principal for Instruction:** Teaching and learning has changed a lot. Teachers in the previous school taught primarily with a focus on their department and their own content area. They were fairly limited in the knowledge of just their subject area. They knew that well but they did not know necessarily how to make subject matter relevant to a student who was interested in business or who was interested in the medical field. So there has been a huge learning curve for our teachers and big enthusiasm on actually seeing how other teachers in the other subject areas have context that they share that is the same. Teachers are continuously learning from each other and finding matches in curriculum to integrate the pieces together. We have three levels of integration which is based on the amount of teacher collaboration. If a teacher is in their classroom and just mention another teacher's curriculum, which would be a level one integration. For example if they were in physical science and they were building slopes and ramps, the physical science teachers let the students know that this unit is also covered in your math class when they calculate slopes. Now if those two teachers got together and actually built a ramp and the physical science gave credit for the building of the ramp and the math teacher gave credit for solving the problem this would be an example of level two

integration. Teachers are changing how they teach and they are making the concept of how they teach relevant to another class. Level three is where the entire Career Academy team works on a project and finds pieces to integrate. We had a crime scene investigation (CSI) project going on where they are doing blood sampling where the murdered body was found by mapping out the whole room. They were having artificial bone specimens to measure to determine if the murder subject was male or female. The science class is finding all kinds of ways to integrate the whole team. The students benefit from that because they learn the skills from each of the subject areas that they bring to the table and it has changed education phenomenally. The students really buy into the education and may not even realize that they are learning some of the state's standards and performance benchmarks. Teachers are using project based learning strategies to promote student learning.

**Arts & Communications Career Academy Lead Teacher:** It is relevance. How can you argue with making education more relevant? The world keeps changing and our students must understand what is happening in their world and what they will face when it is time for them to start making a living for themselves. We have to get away from making the argument that you have to learn this because we say so. Teachers will lose that argument with students every time. Teachers need to say the reason is that it is relevant to this and that. You give students a purpose and you make them feel purposeful themselves. Not only about what they are learning, you are giving them something, a goal, to strive for. Not only what they are learning is valuable, but teachers are making them valuable by obtaining skills and abilities that will benefit them in life.

**Business & Science Career Academy Lead Teacher:** The integration of subjects is very exciting. I learn just as much as students when I meet with my colleagues to plan units. As the only agriculture teacher, I feel that I am not alone because of team planning. I also enjoy teaching other teachers the agriculture curriculum. Most teachers are pretty supportive of it, but everybody works well on it. So much is put on teachers to be there for students and parents. This is well worth it to see the students succeed. When teachers work together, it is easier to provide the additional support needed by students. We have to get people to open their eyes to the opportunities and do their part in helping students.

**Engineering & Leadership Career Academy Lead Teacher:** I have always had a philosophy that education is hands on, minds on. When your hands are on something, your mind is on what you are doing and your focus is on what you are doing. How has teaching and learning changed? I have always done pretty much what I am doing now, but now I am doing it with a team of people that want to do the same kind of concepts and processes. We can all get to the final destination quicker and know that the students have retention on what they are doing instead of giving them the formula and say you can apply it to something. I had a couple of students in class, not your typical American student, they would come to school with camouflage on and they would want to be themselves and not want to get involved in anything. If you give those students a survival test, they would out perform their peers because now the teaching is meeting their interest. Those students may not do well in math and science but if their lessons are in context with what they already know then they will understand. I relate more to those students because that was my story going through high school. As their teacher, I find

ways to let these students know that they have potential and down the road they could be whatever they want to be, but get their tools sharpened. Clean up your tools and that is their brain. Encourage them to get some skills now so that down the road they can use those skills to make some money. I believe that students can understand that concept and that is when the light is on. That is when I have met my goal to help someone, because I am a teacher.

**Student (Arts & Communication Career Academy):** You got really good teachers and really poor teachers just like in any school. You have teachers that will sit down with you after class and are very approachable. Then you have those that are totally opposites. The quality of the teaching and learning is dependent upon the quality of the teacher. Despite what program the teacher is the difference. Some activities are related towards particular Career Academies. There are sometimes months between Career Academy specific activities such as assemblies and integrated projects. Many students sometimes do not remember in which Career Academy they belong. The teacher in some classes has to remind students which Career Academy they belong.

**Student (Business & Science Career Academy):** I feel that there is more focus here and that they really want to help us towards our future.

**Student (Engineering & Leadership Career Academy):** I think learning is easier to me because of the communication between the teachers. When one teacher can understand a student, then others can apply the same strategies that work for them. Students can understand how all education is interlocked and to see how it is all applicable to life after high school. We are learning real world and not just high school.

**Parent:** Well there are a certain group of students that are in the Business & Science Career Academy and those students all attend class together and get to know each other. This is not like everybody is all mixed up. So, the business people can share ideas and work together on class projects. Teachers in the Business & Science Career Academy remain the same throughout the years of high school. My daughter's teachers are somewhat the same teachers she had last year. So, students are moving through their grades with the same teachers, which I think is great because the teachers get to know students and already have that relationship built. This makes it easier for both the teacher and parent. I see that as a great advantage.

**Employer:** I really do not see a difference in the students from Career Academies and those from a regular high school. I do a once a month meeting with the work-based learning coordinator at this school to discuss student progress and my business needs for current and future employment of students. During this time, grades and progress reports are discussed on each student assigned to my place of business. Other than that I do not have much to do with the instructional programs at the school. One thing I want to say is that I do have more contact with the work-based learning coordinator now since getting only students from the school of Career Academies. I did not have as much contact or involvement with the programs when I was providing job placements at the other schools. The work-based learning coordinator is much more involved in the placement of students on the job than other work-based learning coordinators were from other schools in the district.

Team teaching is the strategy that participants in this study have indicated is used in the Career Academies of this school. The administrators have provided support for

teachers across disciplinary integration. Assemblies and integration standards are in place for the Career Academies to use. Teachers are motivated with the opportunities to learn from each other and supporting each other. Students see the benefits of teachers working together as it relates to their educational preparation. The parent and employer also see the benefit of students staying with the same teachers. The relationships with students and teachers is an outcome that all participants believe is a benefit to educating high school students.

*Interview Question 6: Describe the difference in the structure of your school since the implementation of Career Academies.*

**Principal:** This large high school is divided into four smaller learning communities. We currently have a ninth grade center and three Career Academies. The ninth grade center is designed to support ninth graders to perform successfully in high school. Each Career Academy is lead by a teacher leader. These leaders collaborate with the assistant principal of instruction. Each Career Academy is a school within the whole high school with its own math, science, English, and social studies based on a career theme. Projects and assignments are integrated across curriculum areas. Room assignments are based on Career Academies instead of content instructional areas. This school was built with the Career Academy concept in mind. In other schools, science labs are built near each other. This can be a challenge for other schools that are trying to implement Career Academies from an existing building.

**Assistant Principal for Instruction:** Our school was built to accommodate the Career Academy model. Prior to building this school in the district, the whole science department classrooms were in one area. Our district is moving from building large

comprehensive high schools to building schools that can be divided into smaller learning communities. That is the major problem with trying to implement Career Academies with existing facilities that limits the instructional capabilities. This school was built looking at education reform and doing things differently. We have a science classroom in every hall way. Each of our three Career Academies is located on its own hallway. Each Career Academy has science, English, math, and social studies along with the career programs to connect instruction in all areas. Having these cross curriculum subjects next to each other provides more opportunities for collaboration. Also, the close arrangement of classrooms gives teachers the ability to move back and forth with different kinds of lab situations. So doing teaching and learning differently causes teachers to adjust with other teachers who are from other subject areas. Teachers are guided to share in a different way with reaching out and having to make all teaching and learning relevant. Our district is supportive of implementation of smaller learning communities. Another one of our high schools in our school system was also built with the same design as ours. We now have two out of six high schools that have now used the architectural pattern to be able to place students with career interests together. Each of our high schools has different Career Academies to attract different students. Some of our Career Academies have a medical design and some have law and some have business and others. Our system also provides school choice to students and parents. So we have a lot of school choice options where students can get the education that's most interesting to them to help keep them in school.

**Arts & Communications Career Academy Lead Teacher:** It was a nightmare at the previous school. One of the biggest problems is registration and getting the right

students to the right teachers. Here, we hold our own weight. We are broken up into three sections. The Arts & Communications Career Academy is the most spread out just because of the nature of this program. The communication is critical so it is good because our classrooms are near each other. The teachers know one another because we are so close to one another. That support comes out of being close to each other. Teachers can help a student when they are having a bad day.

**Business & Science Career Academy Lead Teacher:** Every student is in a Career Academy here at this school. In our current school, students have a place where they belong. It is more like a second family for students and teachers. In the school prior to the implementation of Career Academies, the culture of school was not one that relationships can be built with students to students and students to teachers or employers.

**Engineering & Leadership Career Academy Lead Teacher:** Honestly, I would always try to integrate. I would pull teachers in whether it was a health occupation teacher, math teacher, or science teacher to enhance lessons and projects in my Engineering Technology program. There is nothing more rewarding to me as a teacher than when another teacher walks up to me and tells me what you are doing with rockets or robots is relevant to an academic subject area. Many times the science teacher would ask me about the physics behind a project in my Engineering Program.

**Student (Arts & Communication Career Academy):** The structure seems to have the same structure as my previous school experience. All my classes are located near the same area. This makes my day convenient. Some classes are mixed with students from all Career Academies. On each hallway there seems to be a science lab.



**Student (Business & Science Career Academy):** We have smaller class sizes here than at my previous school. There were more students in my class in the previous school, and here there are about 20 to 25 students per class. We also have really cool technology here at this school. We have our smart boards and other technology that allows teachers to help us to use same types of technology that is used in the industry.

**Student (Engineering & Leadership Career Academy):** My previous school was one building and everyone was in that building. We were on block scheduling with four classes first semester and four classes second semester. As oppose to here, we have separate buildings that are divided based on Career Academies. Each Career Academy has its own department. This organization has helped because everything I needed was in the same area.

**Parent:** The Business & Science Career Academy has certain sections of the building that is devoted to them. This structure is nice because students do not have to walk so far to get to classes, as opposed to where my daughter was before where classes were all mixed up.

**Employer:** I do not see a difference in the structure of school. Before Career Academies were built I got students throughout the day and I still get students throughout the day.

District support is a great benefit to design and build the school to accommodate the structure of Career Academies. The building allows the Career Academies to place teachers and programs in the same area. The structure of the building allows each Career Academy to have all subject areas on the same hall. The administrators allow teachers to be instructional leaders of their Career Academy. All students are placed in a Career

Academy. There are four smaller learning communities in this high school. One freshman center and three Career Academies is the instructional structure of the school.

*Interview Questions 7: What challenges did your school face and how did you address them during implementation and sustaining of Career Academies?*

**Principal:** Our Career Academies are a lot of work. They require constant and substantial changes from the way traditional large high schools operate internally. One challenge we faced is changing the mind set or philosophy and vision of Career Academies and smaller learning communities. Communicating the vision and motivating the staff to continue to collaborate and integrate instructional strategies and curriculum is something that must be done all the time. Our state has a graduation requirement of students graduating with majors and minors. We have to ensure that new teachers to our staff understand that Career Academies go a step further. My administrative staff constantly provides research on Career Academies. We continue to give strategies to maintain our school's culture with teachers, students, parents, and community. For example, the assistant principal for instruction gave a workshop about the registration process for the next school year. Registration is a whole different ballgame that traditionally is not done in schools before implementation of Career Academies. Career Academies are an evolution that changes all the time. We have to keep the staff, students, and parents well informed about improvements and procedures. Also, I have to listen and hear their concerns because we are still going in uncharted waters. As we continue to meet the national standards of practice for Career Academies, we must undergo changes due to changes in local industry, student demographics, and teaching staff. Another challenge was whole Career Academy planning. A day of planning is

provided for each Career Academy. All teachers from a particular Career Academy spend the day together preparing instructional materials for their students. All instructional units from all content areas are using the career theme of their Career Academy. At the beginning, when we conducted these days, teachers had no idea on how to plan lessons with other subject areas. We have learned that administrative staff was needed to provide guidance and structure during these planning days. Now teachers understand how to integrate different subjects. Planning days are now productive and students' projects are used in several classes. Students can learn different subjects from one project.

**Assistant Principal for Instruction:** Our challenges have been minimized because of the preplanning prior to opening this school. As part of the leadership team of my previous school, we had many challenges because it was an existing school. I would recommend that if any school is being built from here on out it would definitely be beneficial to build them with Career Academies in mind, especially science labs. Even though it is probably cheaper to build science labs in one area, the advantage of making instruction relevant for students will benefit in the long run. This is the way our district is going to build schools with small learning communities and especially with Career Academies.

**Arts & Communications Career Academy Lead Teacher:** Funding is the biggest problem, because each Career Academy must have a select group of teachers in particular area which will cost the district. Each of the different Career Academies will need a certain amount of teachers from all of the different content areas. You are talking about teachers, and then you are talking about paying for those teachers. Resources for those

teachers are also needed. We have had to go out to get grants to assist us with funding. We worked hard to get those grants. Meeting time is also difficult, but because of the grants we can afford planning time where we can meet once a month. That made a huge difference. To sit down and actually meet with my team is a great thing.

**Business & Communications Career Academy Lead Teacher:** Most teachers were told the expectations and some teachers were resistant to Career Academies. Proper implementation of Career Academies is a lot of work. You should not expect to get 100%, but as long as you have a strong team with the majority of teachers working towards the same goal, then it works out. Some people believe in it more and over time the people that believe in it more will be here.

**Engineering & Leadership Career Academy Lead Teacher:** When we first came together to implement Career Academies, it was the first time teachers all came together and our biggest challenge was getting buy in from teachers of different subject areas to work together. If you do not have buy in then you do not have the commitment and follow through. During the first part of implementation, we were just keeping our heads above water and we found out a couple of teachers that really did not need to be on the team. Once the year was over, some teachers move to other Career Academies. I hope they are doing well with their other team. That is one of the growing pains at the beginning of implementation of Career Academies. Everyone has to find their place. The other challenge was that there was no real common planning time. Common planning is important, however, if we still did not have common planning there was a grant written and we could use those funds for our academy instructional planning days.

**Student (Arts & Communication Career Academy):** To provide more direction for parents and students. I still am not clear on the goals and objectives of Career Academies.

**Student (Business & Science Career Academy):** I really did have a problem in choosing my Career Academy like some of the other students, because I know what I want to do when I get older, unlike most students my same age. The challenge for my peers would be to decide on a Career Academy, because they are not as focused and may not know what they want to be when they grow up. The reason why I am focus is because my parents own a business and my plan is to take over that business. I am a working student with a 4.3 grade point average. All of my educational experiences have a purpose. Others may not know what they want to be so they are still experimenting.

**Student (Engineering & Leadership Career Academy):** Getting used to something new and a different program. The new way of doing school was something I had to adjust to. It was not as hard as I thought it was going to be. It was easier for me as a student, because I have an idea of what I want to do. Students first choose the Career Academy, which narrows the choices to a more manageable list. I like the fact that the Career Academies make the list shorter instead of 100 things to choose from we may have 30.

**Parent:** One of the challenges would be to serve students that are not really motivated. You will find that in any school. Students may be in the Business & Science Career Academy and they are in because they just had to pick one. Also, it would be difficult for teachers to motivate those students to keep up with rest. How you can resolve that

problem would be to provide more education to the parents and students about what each Career Academy has to offer before programs are chosen.

**Employer:** I was not involved in the day to day operations of starting this school. I would not know of the challenges that the school people faced.

The administrators believe that changing the mind set of teachers is a major challenge in implementing Career Academies. Providing professional learning and research are the strategies the administrators are using to improve the implementation of Career Academies. Teachers believe that funding and providing common planning time is a challenge of implementation of Career Academies. Additional information and guidance will assist students in deciding which Career Academy will meet their educational goals. The parent believes the biggest challenge would be to place unmotivated students in a Career Academy.

*Interview Question 8: What would you do differently if you had to start from the beginning and implement a Career Academies in another high school?*

**Principal:** This school was planned and built with Career Academy concept in mind. I cannot say I would do anything differently than what we have done to implement Career Academies. Honestly, because of the core leadership staff, implementation of Career Academies in this new school was not as challenging as the implementation of the previous school in which I was the assistant principal. In the first school, we had more veteran staff. This veteran staff appeared not to like change. So during that first implementation of Career Academies, we should have conducted more professional learning workshops that dealt with change. “Who Moved My Cheese” type of ideas with staff that would have helped them adjust to the new way of structuring school. There is

continuous improvement that must be done for any Career Academy. Teachers and Career Academy teams started to gel together after the first year. Each year teachers are more excited about the team approach and having a focus on a group of students.

**Assistant Principal for Instruction:** I believe that we transitioned into this school with all the preplanning activities done, that I would not do much differently. We had some challenges, but that is all part of the learning process to get us to where we are today. We provided lots of professional learning, but more can also be used. I would want to get more employers involved during the preplanning of this school.

**Arts & Communications Career Academy Lead Teacher:** Not much. I mean, we got started out with the assistant principal for instruction to design and plan our Career Academy. I think we have a strong instructional team and we are continually learning and improving. Initially, when we started some people did not know what they were on board for when the school first opened. Most teachers realized that Career Academies take more work than anticipated. Now we have to plan with other teachers and that takes more time at the beginning. We now have people who are dedicated. If I were to compare with what we had at the previous school and this one with Career Academies, it would be registration. Since we were opening up as a brand new school, we could register with the right teachers and right classes to begin with. Starting a new school with Career Academies is much better than transitioning from an existing school.

**Business & Science Career Academy Lead Teacher:** The model where you have the ninth grade center works well and if there was the opportunity to open a new one and maybe start with ninth, tenth, and eleventh grade. Also, if there were more time, more

training and time to plan to allow teachers to develop contextual learning project to make learning relevant.

**Engineering & Leadership Career Academy Lead Teacher:** To hold teachers accountable to the implementation of the Career Academy they belong. Also, I would include technology in every Career Academy. I think technology is the heart and soul of everything. If you think about it, everything that you do is surrounded by technology. So, why not use the area of technology for every single thematic instructional lesson plan unit.

**Student (Arts & Communication Career Academy):** I would not run the program in silence. I have been critical during this interview because I am not sure what we are trying to accomplish with Career Academies. I hear vague reference to integration and I see the same students in my classes. I hear irritation from teachers because of the amount of work required of them beyond the school hours. Our school is going through the national certification process and it seems to be very strenuous. More opportunities to spell things out to people are really needed. Explain to people upfront the goals and objectives of the Career Academies. The terminology needs to be clear for everyone to understand. We need to be upfront with the price people have to pay to implement the program. Letting teachers know about the extended time beyond school hours are needed to have a successful program. There should really be a cause and effect explanation of what is needed to fully implement Career Academies.

**Student (Business & Science Career Academy):** I think the school should do a test to help the students discover their interests. This will help them choose the Career Academy that is best for their students.



**Student (Engineering & Leadership Career Academy):** I would find out more about my interest and research careers in my area of interest. The Business & Science Career Academy is a better match for me and I would have started out in that Career Academy if I had the knowledge I have now. An interest survey would be helpful especially for undecided students.

**Parent:** Better coordination between the teachers in the Career Academies, if that is possible. There always seems like my daughter would not have homework for a couple of nights or things would be really light for a while and all of sudden every teacher piles on tons of assignments and it is all due that week. It is difficult for my daughter to keep her high grade point average and to be involved in other activities.

**Employer:** I would not do anything differently. I am getting quality students to work with and I enjoy mentoring and helping that young person plan and prepare for their future.

The administrators indicated that implementation of Career Academies is a process and the school incorporated lots of planning to prepare for opening the school. Teachers would like additional time for planning for integration. Students would like some type of interest survey to assist them in deciding on a Career Academy. The parent wanted more coordination with assignments within Career Academies.

*Interview Question 9: Do you have any comments, suggestions or recommendations that you want to make to other high schools who want to implement Career Academies?*

**Principal:** Get staff buy in. Decisions cannot be top down. We have the philosophy of eating the elephant one bite at a time. Focus on parts of the Career Academy initiative and do not look to fully implement the program all in one year. Build the Career

Academy to fit your school and community. A critical piece to implementing Career Academies is ensuring that staff is knowledgeable and understand their roles in the total picture. It may be one teacher, one parent, one community member, or one employer at a time and those individuals should have some success until others will see the positive results and come aboard. During the interview process, we express to new hires the expectations to work in this non-traditional environment. Interdisciplinary curriculum is another important issue that makes teaching and learning real to students. This particular area is what makes Career Academy instruction student friendly. Students now understand why they need to learn and use academic knowledge. This provides relevance to the lessons and life long learning takes place.

**Assistant Principal for Instruction:** Career Academies are a lot of work if you are transforming an existing school. If you are building a new school, it is not bad because you can select staff appropriate for Career Academies right off the bat. The structure can be designed from the beginning. In my previous school, where we had to take the existing school, we had to go through the change process. Change is difficult particularly with high school students and teachers. They are used to teaching their subject area with no connection or relevance for students as it related to the real world. A tremendous amount of staff development is critical to maintain the continuous adjustments needed in teaching and learning each year. Teachers need to understand that is not all about math or it is not all about science and it is not all about teaching but it is all about students and about learning. The process is difficult and it has to be done slow. Communication is a huge emphasis on getting everyone involved and to understand their new roles. The trust factor of why we are making these changes and sharing the research behind Career

Academies is critical. We have to continue to inform our staff on the developments of Career Academies. The Career Academies have been in existence since the 60s and there is just now been legislation that can back it up. The documentation and data shows that small learning communities do benefit students, so it is definitely worth the efforts of the administration and guidance team. The vision, mission, and philosophy have to be communicated and sold to the entire school. Support and resources must be provided for successful implementation of Career Academies. Planning time is critical for teachers and that is why grants are a wonderful resource because it pays teachers for the additional time to make Career Academies activities happen. Leadership must explain the philosophy of the initiative and why change is needed. Because of the extra work it takes to implement a successful Career Academy, teachers and other stakeholders must understand the benefits of what students receive. We have found that even some teachers that have been burned out are revived with the renewed interest in education because they become a part of the learning process. Schools that implement Career Academies in their school should not expect everything to be perfect the first year. We opened with every student assigned in a Career Academy and our school's state rating scale is a B. We continue to grow and adjust our educational programs to meet the needs of our students and community. Staff development is a constant activity we provide for teachers, parents, administrators, and community leaders as we evolve into the school that will serve our students best. Everyone has to know that they are a piece of the puzzle rather than an island. Our veteran teachers learn something new everyday and I think that is a great thing to share that and the building of trust in the culture of a school. There has to

be buy in from everybody from the top down and then you work with your teachers in the change process.

**Arts & Communications Career Academy Lead Teacher:** Teaching in a Career Academy is fun. Here is the fun part. It is the part that most teachers are most afraid of but I have had the most fun with. You hear the buzz word of integration and I tend to thrive with that concept. Last year one of the math teachers came to me and they wanted to do a combined project with painting Da Vinci and we talked about numbers. The security agency came down and we talked about code breaking. Teachers got excited about it because of the real world application. Curriculum integration takes work, but the students will remember because they see and understand the relevance in what they are learning. The students used division to crack the code. I am so proud of our students that they broke a real life code that the professionals were working on. The teachers and students had fun doing the project. These were real things that have real world implications and the activities supported the curriculum. Career Academies allows us to bring in real world business partners that can back up what we are saying and how it has relevance. It is exciting. It is like taking the best of the vocational world and the academic world to educate our students. What good is a mechanic if he cannot read the instruction book? It is a combination and that is the real world.

**Business & Science Career Academy Lead Teacher:** The staff must be willing to do it and understand it. If teachers do not understand it then you do not see the opportunities. Make sure teachers, administrators, and community are willing to work to implement the program.

**Engineering & Leadership Career Academy Lead Teacher:** I have gone to a couple of small learning communities of other schools and workshops. Other schools that are interested in implementing Career Academies need to see the program in action. Go look at a model program and see how they do it and do not be afraid to ask questions. I can show people better than I could tell you. There are Career Academy workshops scheduled across the country. We conducted a five day training in which we had schools from all across the country attend. We had sessions on how to write technology learning activities and how to integrate what we are doing. I think it is better to sit down and show how to do what we do in our Career Academies.

**Student (Arts & Communication Career Academy):** Once the school opened, it seemed different from what we were told in all the meetings prior to the school opening. When we got here and we were presented with how the Career Academies would be set up, it seems on the outside that it is a really nice idea. I know we are just starting and when the Career Academy is better developed it would be an awesome program as it relates to career, but I would differ to the integration piece. I like the concept of Career Academies but the organization of the program needs to be improved. The assemblies should be structured to be available to students that have an interest, not to the ones in a particular Career Academy. Also, there needs to be some type of follow-up from the assemblies. I think teachers need to ask us what we got from the assemblies. I would like to see more organization as it relate to the assemblies. I would like those to consider the integration across Career Academies and to provide opportunities for students to collaborate with students from other Career Academies. This will promote integration across industry areas. I believe this will prevent cliques that develop when physical

separation occurs. All Career Academies should have the same high level projects. The CSI project was done in one Career Academy and the others did not have cross curricular projects like that one. I believe there needs to be someone that will equalize the standards for all programs. More communication for the public is needed to gain outside support. I feel the teachers are knowledgeable, but the community, students, and parents need more to understand the concept.

**Student (Business & Science Career Academy):** I really think that the Career Academies are awesome for a school. It really helped students focus on preparing themselves for careers and other things they want to be when they get older and go to college. The Career Academies bring the different projects and assignments together and we understand how class activities are meaningful to what we want to do in our future. The different teachers all communicate to make this happen and I think it is awesome.

**Student (Engineering & Leadership Career Academy):** Schools need to get a feel of what students are interested in. It was difficult for me on the first day I came to register to the school and I was told that I had to pick a Career Academy. The Freshman Academy is great because it allows students to learn about the Career Academies before it is time for them to choose. Students will get an idea of what educational program will help them towards their future.

**Parent:** I think that Career Academies are a great program. I think it really focuses the students from a younger age. They might decide after they get into a certain Career Academy that they want to do something else. This is much better than waiting until you get to college and making that change. This structure helps students to focus on what their interests are and to get them focused on what they excel in.

**Employer:** I would like for schools to match students with the job placements. As an employer, I would like to train a young person on the aspects of the business. We do get some students that come because they just want a pay check. And we need those people, but I am more interested in working with young people that has an interest in the field I have to offer. What I have to offer does not have to be their career, but I would like a more well rounded young person and help them no matter if they turn into a long term employee or not. I want to spend my time with young people that are interested and motivated and moving somewhere.

The last comment to the participants gave them an opportunity to share anything they wanted to say concerning the implementation of Career Academies at this high school. There was a consensus among the participants that Career Academies does provide direction and focus of instruction to make education relevant to students. Many of the participants indicated that it brings the entire community together to prepare students for the real world.

#### Response to Research Questions

One overarching question and three research questions guided this study. The overarching questions sought to describe the experiences of high school personnel to transform a large traditional comprehensive high school as it changes to accommodate Career Academies. The first research question asked, “What are the factors that have led one high school to implement Career Academies as their high school improvement model?” The second research question asked, “How have administrators, teachers, students, employers and parents viewed the decision, transition and sustenance of Career Academies? The third research question asked, “What are the major challenges in

implementing and sustaining Career Academies?” The overarching question and three research questions were answered with an analysis of the findings by the researcher for each specific question.

- Describe the experiences of high school personnel to implement exemplary Career Academies into a large high school. *In response to the overarching question, the administrators and lead teachers had experience in working with another high school to implement Career Academies. This experience proved to be valuable in implementing Career Academies in this new school. Due to this experience, many school personnel were involved in the implementation of Career Academies in this new high school. Professional learning was one of the critical activities credited for the smooth transition to open this type of school. The transformation was more with preparing teachers, parents, students, and the community with this new concept of Career Academy implementation in high schools than with changing the structure of large traditional comprehensive high schools. District support is a great asset to the implementation of Career Academies.*

Specific research questions are as follows:

- What are the factors that have led one high school to implement Career Academies as their high school improvement model? *Overall, principals and teachers realize that the traditional structure of high schools have not prepared students for life after high school. The participants believe that Career Academies will address that issue. There was some success from the implementation of Career Academies from other high schools in the district and*



*this high school was built to accommodate the program. Students and parents indicated that the Career Academy structure does provide focus and direction of the high school subjects. Also, more emphasis is placed on student interest and employer needs.*

- How have administrators, teachers, students, employers, and parents viewed the decision and transition of Career Academies? *The transition was much easier for this school, because this was a new school and many activities were done prior to the opening. The district built the school for Career Academies. Administrators and teachers were selected for the purpose of implementing Career Academies. Hiring was done with candidates understanding that they must integrate across curriculum areas. Teachers are expected to plan with other teachers from different subjects. There are teacher leaders within each Career Academy. Continuous professional learning is done for ongoing program improvement. Students felt well informed about the process of implementation of Career Academies. The employer did not know much about the difference in students from CHS as compared to students from traditional high schools. The employer was not involved in the decision making. The reason for this maybe because there has not been a graduating class from this school. As older students go through Career Academies and graduate, the employer may see an increase of students moving into management.*
- What are the major challenges in implementing Career Academies? *The school was built with Career Academies in mind. Many of the challenges for this high school to implement Career Academies were eliminated with preplanning prior to*

*opening the school. The administrators felt that changing the mind set of teachers is the major challenge for implementation. The teachers see that common planning time is a challenge in the Career Academy structure. Students understand that the Career Academy structure forces them to make early decisions concerning educational plans.*

Table 2 shows the interview schedule for the two days in which the interviews were conducted.

*Table 2: Schedule of Interviews*

<b>Participant</b>	<b>Day</b>	<b>Time</b>
Principal	3/8/07	7:30am – 8:30am
Assistant Principal	3/8/07	8:30am – 9:30am
Arts & Communications Lead Teacher	3/8/07	9:45am – 10:45am
Business & Science Lead Teacher	3/8/07	11:00am – 12:00noon
Engineering & Leadership Lead Teacher	3/8/07	12:30pm – 1:30pm
Arts & Communications Student	3/9/07	8:30am – 9:30am
Business & Science Student	3/9/07	10:00am – 11:00am
Engineering & Leadership Student	3/9/07	11:30am – 12:30pm
Parent	3/9/07	1:00pm – 2:00pm
Employer	3/9/07	2:00pm – 3:00pm

### Summary

The method of discovery used in this research project was to describe the experiences of high school personnel who helped to implement exemplary Career Academies in a large high school. The qualitative data were collected through the use of in-depth open ended interviews with ten individuals involved with implementing Career Academies in one large high school.

After receiving clearance from the IRB at Georgia Southern University to conduct the research, the researcher started to collect data on the experiences of high school personnel who helped to implement Career Academies in a large high school. All of the

participants were located at a large high school in a metro community in Florida. The interviews were scheduled at a time that best suited the participants. The researcher ensured that the participants would remain comfortable by interviewing them at their school - a familiar environment. The participants were each asked nine interview questions. The researcher had to provide more details to the questions when asked of students and parents. The researcher's role in the study was to schedule the interviews, interview the participants, tape record, and analyze responses to the interview questions. The analysis of the interview questions was referenced to the literature to show correlation. The study was guided by one overarching question and three research questions that the researcher answered using the data that were collected and analyzed from interview responses.

CHAPTER V  
SUMMARY, FINDINGS, CONCLUSION, IMPLICATIONS, AND  
RECOMMENDATIONS

This study was designed to gather data to be used to examine the experiences of individuals involved in the process of implementing exemplary Career Academies into a large high school. The study was conducted using qualitative research techniques. The data were derived from open ended questions posed to ten individuals who were involved in implementing Career Academies in a large high school. Are high schools preparing students for the next step in life? The researcher believes that the proper implementation of Career Academies does prepare students for life beyond high school. Launched more than 30 years ago in many communities, Career Academies have been adopted in approximately 3,000 high schools across the nation. The design varies from school to school and the National Standards of Practice (NSOP) is used to bring stability in design that provides clarification for this study. Typically, a Career Academy is organized to combine an academic and technical curriculum focused on a career theme. The curriculum is developed in conjunction with a team of teachers and employers to provide relevancy to lessons and activities. The Career Academy initiative provides active learning experiences to assist students in making future decisions as they prepare for life after high school. A discussion of the significance and implications of the findings of this study are presented in this chapter.

Summary

This chapter is a summary of the research findings, discussions, conclusions, and recommendations based on the analysis of the data in the study. This study discussed the

implementation of Career Academies from one large comprehensive high school. There were three findings that emerged from the study: (1) All participants felt that the traditional large comprehensive high school is not preparing students for post-secondary education or employment. Also, there has to be a change in teaching philosophy among educators about the business of educating high school students; (2) the structure of the facilities plays a critical role in the implementation that supports instruction; (3) Career Academies require the active collaboration of administrators, teachers, students, parents, and employers. Time is needed for this to happen. Common planning allows for continuous engagement for relevant education and resources are needed to implement Career Academies.

CHS have been able to smoothly implement Career Academies because of all the preplanning from district and school levels. The experience of the administrators and teachers has been of tremendous benefit and has helped to lessen the challenges. Lessons learned from the previous Career Academy implementation were used to open CHS.

The participants of the study consisted of ten individuals from one high school in a metro community in Florida. This study used the National Standards of Practice (NSOP), designed by National Career Academy Coalition, to provide clarity to the level of implementation. CHS is a member of this organization and has been evaluated based on the NSOP guidelines. Each participant was asked nine interview questions and the completion rate for the audio and video recordings was 100%. Data were collected by the researcher in March of 2007 at the participants' high school so they would feel comfortable during interview sessions. Visiting the school and personally interviewing the participants enabled the researcher to view the physical layout of the Career

Academies and observe and note other non-verbal communications related to the gathering of data. The open-ended interview questions allowed the researcher to capture more complete qualitative data to connect related responses from participants. Because the researcher enters the setting and collects observational and other qualitative data, qualitative researchers rely on themselves as the main collectors of data. The audio and video taped interviews were kept in a secure location and transcribed by the researcher. Names of individuals were not attached to the transcribed data to protect the identity of the participants and the school. After the tapes were transcribed the researcher destroyed them. The data were analyzed by the researcher before reporting the findings.

There are several findings from the study that correlated with the review of literature. This information is important to federal, state, and local officials who make educational policies. Also, school boards, administrators, teachers, parents, and community stakeholders should benefit from this study. As a member of state and national Career Academy related organizations, the researcher will communicate the findings through conference presentations, publications, books, and articles.

#### Analysis of Research Findings

The overarching focus for this study is to describe the experiences of individuals involved in the process of implementing exemplary Career Academies into a large high school. Additional questions that were considered were the following questions:

1. What are the factors that have led one high school to implement Career Academies as their high school improvement model?
2. How have administrators, teachers, students, employers, and parents viewed the decision and transition of implementing Career Academies?

### 3. What are the major challenges in implementing Career Academies?

The findings derived from these research questions were used to draw conclusions and to consider implications of this study.

#### Discussions of Research Findings

The qualitative data derived from the interviews provided first-hand perspectives of participants as they described their experiences in implementing Career Academies in their high school.

*RESEARCH SUBQUESTION 1: What are the factors that have led one high school to implement Career Academies as their high school improvement model?*

#### *Discussion*

As the researcher interviewed the participants, it was discovered that they felt that the traditional large comprehensive high school setting was not the best method of preparing students for postsecondary settings. The principal stated that he had been at a school for 17 years and had seen many students disengaged in their learning and not interested in going to college. The district had implemented Career Academies in other high schools in the system and saw positive results. The support from the district allowed the facilities of CHS to be built to accommodate Career Academies. Also, administrators and teaching staff were selected based on past experience in working with the initiative. The principal indicated that the state department of education has made it a graduation requirement to have a major and a minor. The design of Career Academies supports that framework.

The teachers felt that the previous implementation of Career Academies at the other school made an impact on student performance. During the interview one of the



teachers described the reason for change as, “high schools are broken and we are not providing the children with the necessary skills to be successful.” The same teacher stated, “There is a crisis and part of that crisis is that the educational system is out of touch with the professional world” (Chapter IV, p. 55). The teachers felt that instruction should have a career focus to make academic standards relevant to get students focused. There is a direct correlation to the literature review in Chapter II as it relates to traditional high school preparation for postsecondary education.

Students, parents, and employers see that the district is moving towards student centered learning and the implementation of Career Academies does that. They also thought that the district wants to provide smaller learning communities to focus on career areas and future goals of students. One student stated how great it was to have new technology in the Career Academies and how it is a wonderful tool to help promote learning.

*RESEARCH SUBQUESTION 2. How have administrators, teachers, students, employers, and parents viewed the decision and transition of implementing Career Academies?*

*Discussion*

The general consensus among all participants is that they are pleased with the decision of implementing Career Academies. The core group of administrators and teacher leaders coming from another school that implemented Career Academies has proven to be the reason for a smooth transition in the new high school. Providing professional development and current research on Career Academies has been beneficial to all stakeholders. The parent indicated that she was included in a school site visit to another school that implemented Career Academies.

The principal indicated that he wanted to start the planning process for this school by including a core group of teacher leaders. He stated that collaboration and buy-in were critical as they moved forward to make decisions concerning the school. As referenced in the literature review, Career Academies are a different way of constructing high schools, a factor realized by the principal of CHS. He expects teachers to integrate lessons across content areas and he had to make sure that teachers are willing to participate in that kind of collaboration before they were hired. The assistant principal felt there is a critical need to support teachers by providing continuous professional learning for project based and integrated lessons. She also felt fortunate to have teachers that already know the philosophy of Career Academy implementation. The principal stated that the Career Academy initiative supports the state of Florida's graduation requirements that students must graduate with majors and minors.

In addition, all three teachers agreed on the following for making the decision to transition to Career Academies: (a) focuses on student interests which motivates them to perform at high levels, (b) requires collaboration and learning among teachers from other content areas during the common planning time, (c) allows everyone to have a clear direction and structure to follow, (d) promotes involvement of local business partners, (e) encourages input from all teachers, (f) provides relevant and up-to-date lessons with real world concepts, (g) focuses instruction on students, (h) builds relationships with students because we have them for more than one year.

The students viewed the decision and transition as something that is beneficial towards future goals and planning. Students liked being involved in the planning of the school and Career Academies. The information sessions conducted prior to the

implementation were helpful to students in deciding to attend this school. Two of the three students interviewed stated that the expectations were clear and strict. All students interviewed said they like the discipline and structure of the CHS. One student felt that during information sessions more details should have been provided. He felt that he did not have a clear picture of the goals and outcomes of the school and Career Academies. All students interviewed liked the small setting and new technology in the classrooms. The opportunities for leadership in student organizations such as Future Business Leaders of America (FBLA), Technology Student Association (TSA), and others also excited the students. Dividing the school by Career Academies seemed to provide opportunities for students to shine and excel in their area of interest. One student thought that the separation was negative because it promotes cliques.

The parent interviewed was totally in favor from the beginning because of her involvement. She felt that community meetings held prior to the implementation provided clear understanding of the initiative. She also was included in a trip with school staff to visit other high schools across the country that implemented Career Academies. She believes that students are more focused toward future goals. She felt that the Career Academy structure is relevant to what her daughter wants to do after high school. She believes that students are developing sustained relationships with teachers, which also promotes high student performance in school. The parent indicated that having classes close together keeps students focused and they do not have walk so far to classes.

*RESEARCH SUBQUESTION 3. What are the major challenges in implementing Career Academies?*

*Discussion*

The administrators and teachers were involved in implementing Career Academies at their previous schools. For this reason, many of the challenges were avoided, which provided for a smooth transition. The district's funding support to build a school that accommodates Career Academies also eliminated challenges other schools will face during implementation of the program. The principal indicated that Career Academies are a lot of work. He felt that the greatest challenge was to change the mind set and philosophy of teachers, parents, and students. There must be a constant communication of the vision and motivating teachers for continuous collaboration for proper integration of curriculum to occur. The assistant principal and principal stated that registration and scheduling is a huge challenge but the result of having the right students in the right classes is worth it. Student schedules are created around the core career courses. This is a different focus than in the past where core academic courses are scheduled first. Providing common planning for teachers in Career Academies is another challenge when creating students' schedules. However, the teachers felt that the challenges were minimal because of the experiences from the previous implementation of Career Academies. Hiring and selecting the right administrators and teachers made the transition to implementation smooth. Students felt that choosing a Career Academy and getting familiar with the new way of conducting school were the greatest challenges. The parent stated that the Career Academies structure would be difficult for unmotivated and unfocused students.

*OVERARCHING FOCUS. Describe the experiences of individuals involved in the process of implementing exemplary Career Academies into a large high school.*

A deliberate process was used to involve every teacher in planning for the implementation of Career Academies in this school. By building one grade level at a time over a four-year period, stakeholders had an opportunity to provide input into the process and make deliberate choices for themselves. Currently, the school has a junior class. Teachers were selected to work at this school based on their willingness to implement the program. Giving the teachers, parents, students, and community full information, opportunity for discussion, and a feeling that everyone was part of the decision making process were reasons for a smooth transition to opening this school.

It became very evident to the researcher that the participants interviewed were knowledgeable about the Career Academy model and realized some of the benefits to students in preparing them for life after high school. They all stated, in some manner, the benefit of integrated projects and teachers collaborating to make all learning relevant. The information meetings provided clear expectations to parents and students concerning the structure of the school. Large high schools do not provide the individual attention students need. Also, this large school situation does not allow for student-teacher relationships, which foster a sense of community. The Career Academy structure for this school addressed that issue and students have a sense of belonging and developed relationships with teachers, administrators, and employers. The teachers and administrators indicated that students from the previous school did not have a consistent group of teachers who were accountable for students' success. In large schools, students

see few of their classmates from course to course and throughout the school during the week.

Another common problem that was mentioned from the previous high school was that students and teachers are isolated from other institutions in the community, particularly employers. Such isolation separates students from the world of work. The Career Academies at CHS have partnerships with employers that provide exposure to career development and work-based learning opportunities. The assistant principal for instruction provided an employer partnership list that is connected to each Career Academy.

The principal allows for leadership to be dispersed throughout the school. The teachers of the Career Academy enjoy the opportunities to work in teams. Each team manages the Career Academy with one member serving as director or lead teacher. The Career Academy teams participate in professional development to implement key features of the career field. Team members share planning time, usually a daily planning period, and often release time. Each Career Academy also has an administrator and counselor assigned to them. Students are in a cohort group for several years with the same teachers, who they come to know well, which provides a family-like atmosphere.

Table 3 shows how activities at CHS are matched against the ten standards of the National Career Academy Standards of Practice.

*Table 3: National Standards of Practice Applied to Community High School*

<b>Career Academy National Standard of Practice Criteria</b>	<b>Community High School</b>
1. Define Mission and Goals	Each Career Academy has an established Career Academy mission and goals.
	Class assignments provide exposure to career themes.
	Learning for all Career Academy students is personalized based on interests.
2. Academy Structure	The master schedule is done that allows teams the opportunity to integrate academic and career instruction.
	Orientation of the program to students, parents, and community was done prior to school opening.
3. Host District and High School	Funding to support the construction of the facility to accommodate Career Academies was done for CHS.
4. Faculty and Staff	Each Career Academy has its own leadership and teaching staff.
5. Professional Development	Teachers are allowed to plan lessons together during common planning and release time.
6. Governance and Leadership	Well established advisory board for each Career Academy provides guidance.
7. Curriculum and Instruction	State curriculum is integrated in the Career Academies to allow students to attain success on state mandated exams.
	Integration rubrics guide across content area projects.
8. Employer, Higher Education, and Community Involvement	Each Career Academy has a list of business partners who serve on advisory committees and provide work-based learning opportunities for students.
9. Student Assessment	Students are preparing for industry recognized certifications.
10. Cycle of Improvement	Career Academy teams are organized to evaluate student performance data.
	Input from all stakeholders, including students, is gathered by surveys and questionnaires.

## Conclusion

Three conclusions can be drawn from the results of the study. First, high school leaders must have a clear reason for implementing Career Academies. One reason for the growing number of states, districts, and schools deciding to start Career Academies is that they have the potential of support in improving students performance. This suburban community realizes that many support structures are needed to help students in their community to make the connection of academic learning to the real world. The administrators and teachers in the study are focused on educating all students by providing a challenge-integrated curriculum and establishing relationships that prepare them for life beyond high school. The literature review in this study provided evidence that Career Academies are making a difference in graduation, dropout rates, discipline, and attendance. The term “Career Academy” was being utilized in many ways to define all types of schools and programs. The NSOP was used to stabilize the meaning of Career Academies for this study.

Secondly, there must be buy-in to the implementation of Career Academies. CHS was able to get buy-in from the start. The district was supportive to implementing Career Academies by building a facility to accommodate Career Academies. This also shows that the Board of Education is in support of the initiative. During the hiring and selection process for staff, the administrators were able to use the Career Academy framework as a guide prior to opening the school. Including teachers, parents, students, and the community in planning activities promoted support from all stakeholders. Professional development needs to be continuous and ongoing as improvements and adjustments are



made to steady implementation. As industry and technology changes, so should the Career Academies to maintain relevance in what students are learning in high school.

Lastly, the structure and support of Career Academies must be a priority for effectiveness of the initiative. Career Academies do require additional work and therefore, entail additional expense. The biggest expense comes from the time needed to coordinate the various elements of the program. Teachers must meet on a regular basis as a team to develop integrated curriculum, coordinate employer involvement, and organize links to college and other postsecondary options for students. Grants and other existing funding can assist in the support of the activities needed for program implementation. The district has applied for federal funds to enhance Career Academies in the future.

#### Implications

The implications of this study relate directly to the proper implementation of Career Academies. This study used the NSOP as developed by the National Career Academy Coalition (NCAC) as the standard of implementation. The results of this study suggest that a great deal of time should be spent on collaboration, with all stakeholders, about the decision to implement Career Academies. Student and community needs should guide the decision on how to implement the program. CHS was very proactive in allowing all stakeholders the opportunity to be involved during the planning process prior to opening the school. All participants interviewed for this study had a firm understanding of the Career Academy initiative and what elements were going to be implemented at CHS. This school was a school of choice, which provided the option for students to attend this school that places all students in a Career Academy. This indicates that students are in programs because they chose them. In traditional high

schools, students are placed in programs based on availability of space. The students and parents have a choice in which programs to participate that empowers them to have more input into their education. This option also allows students to determine which program meets their needs. Consequently, students can see the relevance in what they are learning in high school. The education within each Career Academy is linked to academic and industry standards to show students how their subjects relate to each other and the career field.

Teachers must be willing to work closely with colleagues from other subject areas to provide meaningful and relevant lessons and projects. Integration of subjects is a new concept to most teachers. Professional development opportunities assist teachers in mastering this new skill and must be offered regularly. The schedule should provide common planning time for teachers to meet regularly. If schedules cannot be done for common planning, then other methods must be put into place for teachers to have time to plan together. Employers should have some input to the curriculum and projects to connect learning to the real world.

The short-term implication of the findings is that successful implementation steps for Career Academies exist for high school personnel to use. The administrators and teachers have seen a much smoother transition from the first to the second time of starting Career Academies in a high school. Long-term implications are that strategies must continue to be developed and used by high school personnel. The connections and experiences in high school educational programs are important for options and opportunities for students' lives beyond high school.

### Recommendations

The researcher recommends that future researchers take the findings of this study to further expand and conduct a longitudinal study to determine the effects on students at least one year or more beyond high school to determine the effects of relevant curriculum and employer involvement.

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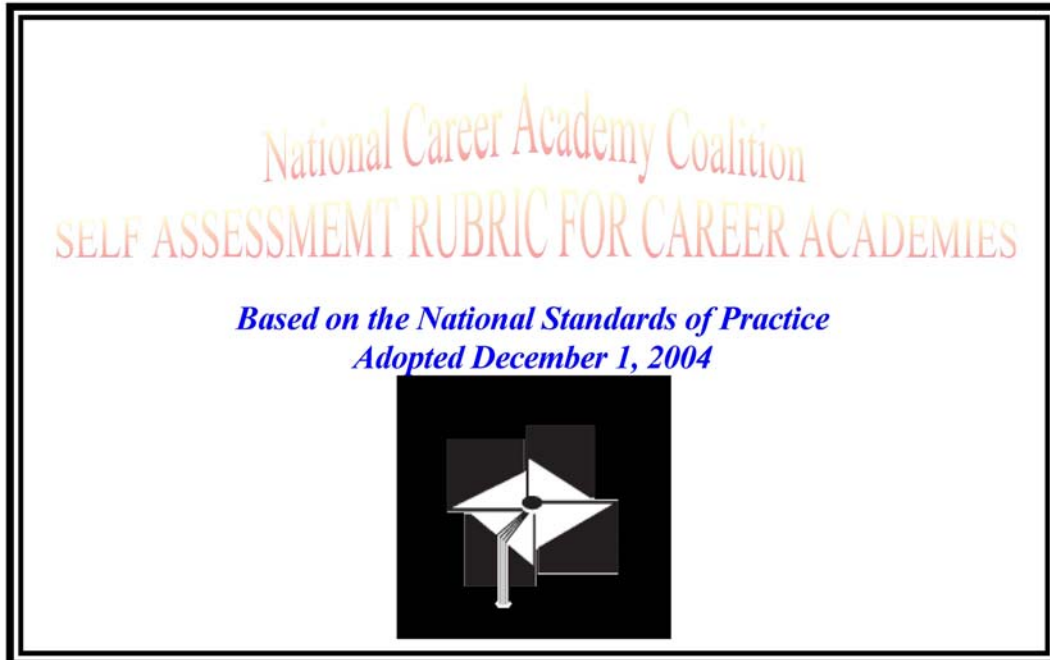


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APPENDICES

APPENDIX A  
SELF ASSESSMENT

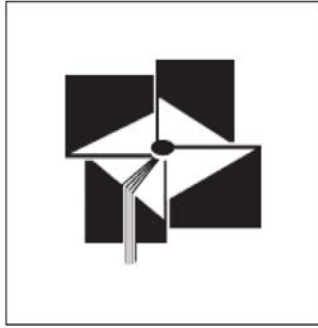


**Purpose:** To assess how well the academy model is being implemented. This self-assessment tool is intended as an analysis to provide the most thorough and accurate picture of the academy. You may use the sample documentation provided to meet each component of the National Standards or you may use any other suitable documentation.

**Overall ratings:**

- Model Academy: Exceeds the criteria for the standards and can be nationally replicated
- Certified Academy: Meets the criteria for the standards
- In Progress Academy: Meets the criteria for some of the standards and, with work, can move to the certified level





**The National Standards of Practice for Career Academies were developed through the joint efforts of the following organizations:**

- **Career Academy Support Network (CASN)**
- **National Academy Foundation (NAF)**
- **National Career Academy Coalition (NCAC)**
- **National Center for Education and the Economy/America's Choice (NCEE)**
- **Southern Regional Education Board (SREB)**
  - **High Schools That Work (HSTW)**
- **Talent Development High Schools**
  - **Center for Research on Education of Students Placed at Risk (CRESPAR)**

**For Additional Information Contact:  
 National Career Academy Coalition (NCAC)  
 P.O. Box 600490  
 North Miami Beach, Florida 33160  
 800.986.3223 x 5082  
 954.262.3988 fax  
 www.ncacinc.org**



<b>I. Defined Mission &amp; Goals</b> <b>The career academy has a written definition of its mission and goals. These are available to the administrators, teachers, students, parents, advisory board, and others involved in the academy.</b>	
Criteria	Sample Documentation
<i>a. To focus on college and career</i>	
A career academy's aim is to prepare students for college and careers. Academies enable students to complete college entrance academic requirements while exposing them to a vertical segment of the occupations within a career field, encouraging them to aim as high as they wish.	<ul style="list-style-type: none"> <li>◇ Copies of the current mission statement and academy goals</li> <li>◇ Evidence of exposure to all aspects of a given industry</li> <li>◇ Evidence of ways in which the academy mission and goals are implemented</li> <li>◇ Class assignments are presented that provide a means of exposure to career themes</li> <li>◇ Publications including school newsletters, local newspapers, brochures, highlighting career academy mission and activities</li> </ul>
	•
	•
Criteria	Sample Documentation
<i>b. To raise student aspirations and commitment</i>	
Academy seeks to increase the level of students' motivation while in high school with special emphasis on encouraging students to set their sights high.	<ul style="list-style-type: none"> <li>◇ All academy academic classes are college-preparatory classes</li> <li>◇ Integrated curriculum units are available that demonstrate emphasis on mastery of content</li> <li>◇ Student assessment and attendance data</li> <li>◇ Students have opportunities to be mentored by post-secondary, community, and/or industry partners</li> <li>◇ Evidence of guidance and personal development</li> <li>◇ Evidence of student leadership development</li> <li>◇ Evidence of student participation in extra curricular activities and/or clubs</li> </ul>
	•
	•
Criteria	Sample Documentation
<i>c. To increase student achievement</i>	



<p>Academy provides support to its students to increase their achievement in high school by developing close relationships with teachers and fellow students, by mastering rigorous and relevant curriculum, and by being exposed to career and educational options outside the high school.</p>	<ul style="list-style-type: none"> <li>◇ Learning for all academy students is personalized and takes into account learning styles/multiple intelligences</li> <li>◇ Integrated curriculum units are available that demonstrate emphasis on mastery of content</li> <li>◇ Portfolios of student accomplishments</li> <li>◇ Guest speakers, field experiences, service learning projects, mentoring, job-shadowing, internships or On-the-Job assignments</li> <li>◇ Academic support classes</li> <li>◇ Remediation and/or credit recovery</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>

<p align="center"><b>II. Academy Structure</b>                      An academy needs to have a well defined structure within the high school, reflecting its status as a small learning community.</p>	
<p align="center"><b>Criteria</b></p>	<p align="center"><b>Sample Documentation</b></p>
<p align="center"><i>a. Cross-grade articulation</i></p>	
<p>The academy incorporates at least two grade levels, ending in the senior year, with strong articulation in its teacher team, curriculum, and instruction across grade levels.</p>	<ul style="list-style-type: none"> <li>◇ An academy pamphlet</li> <li>◇ The Master Schedule</li> <li>◇ Integrated curriculum across academy classes and/or grade levels reflecting integration of academic and theme classes</li> <li>◇ Curriculum mapping</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>

<p align="center"><b>Criteria</b></p>	<p align="center"><b>Sample Documentation</b></p>
<p align="center"><i>b. Student selection</i></p>	





<p>Entry into the academy is voluntary with a written and widely available recruitment/selection process, orientation for new students, parent participation, and academy enrollment reflecting the general high school population.</p>	<ul style="list-style-type: none"> <li>◇ School/student data that flags or cross references students</li> <li>◇ Evidence of student selection and recruitment process</li> <li>◇ Academy orientation student and parent materials</li> <li>◇</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>

<p style="text-align: center;"><b>Criteria</b></p>	<p style="text-align: center;"><b>Sample Documentation</b></p>
<p style="text-align: center;"><i>c. Cohort scheduling</i></p> <p>Academy classes are limited to academy students who take a series of classes together each year.</p>	<ul style="list-style-type: none"> <li>◇ Academy teachers and class lists are cross referenced with the list of identified academy students</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>

<p style="text-align: center;"><b>Criteria</b></p>	<p style="text-align: center;"><b>Sample Documentation</b></p>
<p style="text-align: center;"><i>d. Physical space</i></p> <p>Academy classrooms are near each other in the high school building and the academy coordinator has access to communication outside the high school.</p>	<ul style="list-style-type: none"> <li>◇ Blueprints/map of the school with academy classes marked</li> <li>◇ A written statement by the academy coordinator/lead teacher describes the communication methods for the academy team</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>

<p style="text-align: center;"><b>Criteria</b></p>	<p style="text-align: center;"><b>Sample Documentation</b></p>
<p style="text-align: center;"><i>e. Small size, supportive atmosphere</i></p> <p>The academy maintains personalization through limited size, teacher teamwork, and a supportive atmosphere.</p>	<ul style="list-style-type: none"> <li>◇ A roster of academy students and academy staff</li> <li>◇ Documentation of a supportive atmosphere is maintained in the academy</li> <li>◇ Rationale for the academy size</li> </ul>



<b>III. Host District and High School</b> <b>Career academies exist in a district and high school context.</b> <b>These contexts are important determinants of an academy's success.</b>	
<b>Criteria</b>	<b>Sample Documentation</b>
<i>a. Support from the Board of Education and Superintendent</i>	
The district Board of Education is aware of the academy and its mission and goals, and is on public record in support. Likewise the superintendent publicly endorses the academy and offers active support. Both serve as academy liaisons to the broader community.	<ul style="list-style-type: none"> <li>◇ Board minutes approving the academy, along with any other presentation about the academy</li> <li>◇ Written proof of the superintendent's support</li> <li>◇ Public endorsement, either in letters, newspaper articles, TV clips, etc.</li> <li>◇ Evidence that the academy is a component of broader district high school reform</li> </ul>
	•
	•

<b>Criteria</b>	<b>Sample Documentation</b>
<i>b. Support from the principal and high school administration</i>	
The high school principal and other administrators are knowledgeable about the academy, publicly advocate for it, and are actively involved in its funding, staffing and support. They ensure the academy has a high profile in the school.	<ul style="list-style-type: none"> <li>◇ Evidence of how the principal and other school administrators support the academy. (ex. written materials, presentations, letters, posters, banners, etc.)</li> </ul>
	•
	•

<b>Criteria</b>	<b>Sample Documentation</b>
<i>c. Adequate funding, facilities, equipment, and materials</i>	



<p>District and high school administrative support results in adequate academy funding, facilities, equipment, and learning materials. These reflect a serious commitment from the district and high school to the success of the academy.</p>	<ul style="list-style-type: none"> <li>◇ A list of funding amounts and sources</li> <li>◇ An inventory of academy facilities, equipment, and learning materials</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>

<p><b>IV. Faculty &amp; Staff</b>  <b>Appropriate teacher selection, leadership, credentialing, and cooperation are critical to an academy's success.</b></p>	
<p><b>Criteria</b>  <i>a. Teacher Leader(s)/Coordinator(s)</i></p>	<p><b>Sample Documentation</b></p>



<p>One teacher (sometimes two) agrees to take the lead, serving as the academy coordinator(s)/lead teacher(s). This includes attending advisory board meetings, interacting with administrators and board members, managing the budget, helping to coordinate teacher professional development, and helping to coordinate employer, higher education, and parental involvement. Release time is provided for this role.</p>	<ul style="list-style-type: none"> <li>◇ Name(s) of the academy coordinator(s)/lead teacher(s)</li> <li>◇ Documentation how academy coordinator(s)/lead teacher(s) provide guidance through:             <ul style="list-style-type: none"> <li>○ Advisory board meeting agendas and/or minutes</li> <li>○ Agendas and/or minutes of interactions with administrators or board members</li> <li>○ Copies of the budget matrix</li> <li>○ List of professional development opportunities provided along with list of participants</li> <li>○ Employer involvement via membership on the academy advisory council</li> <li>○ Post-secondary education involvement via membership on the academy advisory council and/or articulation agreements</li> <li>○ Parental involvement via membership on the academy advisory council</li> </ul> </li> <li>◇ The school's master schedule shows release time for this person(s) and/or proof of compensation for leadership role exists</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>

<b>Criteria</b>	<b>Sample Documentation</b>
<p><i>b. Teachers are credentialed in their field, volunteer in the academy, and are committed to its mission and goals</i></p> <p>Since a career academy's success rests on good teaching and good teamwork among a cross disciplinary group of teachers, they must be well qualified and willingly involved in this role. They understand and support the philosophy and purpose of the academy, and cooperatively share the duties of operating an academy.</p>	<ul style="list-style-type: none"> <li>◇ A roster and credentials of the academy team of teachers</li> <li>◇ Master school schedule</li> <li>◇ A description by each academy staff member discussing the teamwork of the staff, his or her involvement in the academy, the philosophy and purpose of the academy, and his or her specific duties</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>

<b>Criteria</b>	<b>Sample Documentation</b>
<p><i>c. Counselors, non-academy teachers, and certificated staff are supportive</i></p>	



<p>Non-academy staff is also important to its operation. Counselors understand the need for cohort scheduling and provide this for academy students. Non-academy teachers understand the value of the academy and help in recruiting students for it and providing departmental support. Classified staff helps support the academy facilities, equipment, and learning materials.</p>	<ul style="list-style-type: none"> <li>◇ List of non-academy staff and their academy role</li> <li>◇ A written description of how classified staff help</li> <li>◇ Evidence of counselor and data processor/scheduler support for the academy</li> <li>◇ Written reports or minutes of counselor contact with academy staff and students</li> <li>◇ Names of counselors and student participants</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>
	<ul style="list-style-type: none"> <li>•</li> </ul>

<b>V. Professional Development</b> <b>Since an academy places teachers and other adults into roles not normally included in their previous training, providing adequate professional development time, leadership, and support is critical.</b>	
Criteria	Sample Documentation
<i>a. Common planning time</i>	
<p>Academy teachers are provided common planning time within the regular high school schedule for purposes of program coordination, curricular integration, and resolution of student problems</p>	<ul style="list-style-type: none"> <li>◇ A review of the Master Schedule shows that all teachers identified as being part of the academy team have common planning time. These meetings can occur before, during or after the school day, or during scheduled staff development time</li> </ul>

Criteria	Sample Documentation
<i>b. Teacher professional development</i>	
<p>Academy teachers are provided with training in the academy structure, curricular integration, student support and employer involvement.</p>	<p>Professional development as evidenced by:</p> <ul style="list-style-type: none"> <li>◇ Sign-in sheets</li> <li>◇ Agendas, reports, etc.</li> <li>◇ College transcripts</li> <li>◇ Proof of emersion into learning about the academy theme through shadowing or externship</li> </ul>



<b>Criteria</b>	<b>Sample Documentation</b>
<i>c. Employer &amp; parent orientation</i> Employer volunteers are adequately prepared for their roles as speakers, field trip hosts, mentors, and internship supervisors. Parents are adequately prepared for their involvement (if any) as classroom aides, field trip chaperones, and social event organizers.	<ul style="list-style-type: none"> <li>◇ Orientation or handbook for employer volunteers</li> <li>◇ Orientation or handbook for parental volunteers</li> <li>◇ A list of employer volunteers, their duties, and documentation demonstrating their volunteer activities</li> <li>◇ A list of parents, their volunteer roles, and documentation demonstrating their volunteer activities</li> </ul>
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<b>VI. Governance &amp; Leadership</b> <b>The academy has a governing structure that incorporates the views of all stakeholders.</b>	
<b>Criteria</b>	<b>Sample Documentation</b>
<i>a. Advisory board with broad representation</i> The advisory board has members from the district, high school administration, academy teaching staff, supporting employers, and institutions of higher education. It may also include community representatives and academy parents and students. The board incorporates viewpoints from all its members.	<ul style="list-style-type: none"> <li>◇ The advisory board/steering committee membership list is available and identifies at least one member from each of the following groups: district administration, high school administration, academy teacher, employers, post secondary education, parent, and student</li> <li>◇ By-laws identify board composition</li> </ul>

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Criteria		Sample Documentation
<i>b. Regular meetings</i>		
Meetings of the advisory board are held at least quarterly, with defined agendas and outcomes. The board helps to set policies for the academy. It also serves as a center of resource development.		<ul style="list-style-type: none"> <li>◇ Advisory committee meeting minutes, agendas and sign-in sheets</li> <li>◇ Evidence of a budget, resource development and policies</li> </ul>
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Criteria		Sample Documentation
<i>c. A healthy partnership</i>		
Both through the advisory board and other interactions there is evidence of a partnership between the academy/high school and its host community.		<p>There is documentation that demonstrates interaction between the advisory board and the academy as evidenced by:</p> <ul style="list-style-type: none"> <li>◇ Board member participation in academy activities</li> <li>◇ Academy students participation in corporate sponsored events</li> <li>◇ Creative solutions to issues</li> </ul>

Criteria		Sample Documentation
<i>d. A student voice</i>		
Students have avenues through which they can provide input to the academy policies and practices.		<p>There is documentation that demonstrates student input into academy policies and practices as evidenced by:</p> <ul style="list-style-type: none"> <li>◇ Advisory board member list</li> <li>◇ Advisory board minutes</li> <li>◇ Creative solutions to issues</li> </ul>



<b>VII. Curriculum &amp; Instruction</b> <b>The curriculum and instruction within an academy meet external standards and college entrance requirements, while differing from a regular high school by focusing learning around a theme.</b>	
Criteria	Sample Documentation
<i>a. Meets external standards</i>	
The academic curriculum is framed around state or national standards and the career curriculum around industry and SCANS standards.	<ul style="list-style-type: none"> <li>◇ U.S. Department of Education (DOE) or state standards are integrated into the curriculum</li> <li>◇ A list of national and local industry standards related to the academy content</li> <li>◇ National (and local) industry standards are evident in the lesson plans/integrated units created by academy teachers</li> <li>◇ Students have the opportunity to earn a vocational/technical <i>Certificate of Mastery</i> (if one is available) for achieving the skills included in the national industry standards</li> <li>◇ A curriculum framework connected to post-secondary requirements</li> </ul>
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Criteria	Sample Documentation
<i>b. Meets college entrance requirements</i>	
Coursework reaches high levels of English and math, generally four years of each, in addition to substantial coursework in science and social studies. Graduates are qualified to attend four-year colleges/universities and encouraged to do so.	<ul style="list-style-type: none"> <li>◇ A rigorous Program of Study is defined and is published in academy marketing materials outlining in detail the courses available</li> <li>◇ A list of students completing dual enrollment, advanced placement, International Baccalaureate, Cambridge, Advancement Via Individual Determination (AVID) or articulations</li> <li>◇ Documentation shows that academy graduates qualify for college</li> <li>◇ Information that demonstrates students are encouraged to attend post-secondary</li> </ul>
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Criteria	Sample Documentation
<i>c. Curriculum is sequenced, integrated, rigorous, and relevant</i>	





Curriculum articulates from the beginning of an academy through the senior year, with a defined course sequence and at least two core academic classes and one career/theme class each year. Curriculum is integrated among the academic classes and between these and the career class. Learning illustrates applications of academic subjects outside the classroom, incorporates current technology, and includes authentic project based learning.	<ul style="list-style-type: none"> <li>◇ Academy courses and the course sequence</li> <li>◇ Classroom lessons/units emphasize English and math literacy</li> <li>◇ Lessons/units are available for review and they reflect integration between academic classes and career/theme classes</li> <li>◇ Evidence of the use of technology in project-based learning</li> <li>◇ Evidence of students taking more rigorous courses</li> </ul>
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<b>Criteria</b>	<b>Sample Documentation</b>
<p style="text-align: center;"><i>d. Post-graduate planning</i></p> <p>Students have access to career and college information, are provided counseling in these respects, and develop a written post-graduate plan by the end of their junior year.</p>	<ul style="list-style-type: none"> <li>◇ The post-secondary application process is clearly defined</li> <li>◇ Evidence is presented indicating the following:               <ul style="list-style-type: none"> <li>○ Classroom presentations by post-secondary speakers (letter, photos, etc.)</li> <li>○ Field trips to local post-secondary sites</li> <li>○ Printouts from career assessment computer program or classroom assignments indicating research of local and national post-secondary institutions</li> <li>○ Financial aid presentation and workshops (class schedules, memos, flyers, and sign-in sheets)</li> </ul> </li> </ul>
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<b>Criteria</b>	<b>Sample Documentation</b>
<p style="text-align: center;"><i>e. Dual credit options</i></p> <p>The academy has articulation agreements with local two- and four-year colleges, offers dual credit courses for upper classmen, and articulates its upper level curriculum with relevant college programs.</p>	<ul style="list-style-type: none"> <li>◇ Evidence of dual credit, articulation agreements, advanced placement courses and other specialized post-secondary enrollments (ex. curriculum handbook, copies of agreements)</li> <li>◇ Students and parents awareness of the application process (ex. flyers, agendas for parent information sessions)</li> <li>◇ Copies of scholarship information disseminated</li> </ul>



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<b>VIII. Employer, Higher Education, &amp; Community Involvement</b> <b>A career academy links high school to its host community and involves members of the employer, higher education and civic community in certain aspects of its operation.</b>	
<b>Criteria</b>	<b>Sample Documentation</b>
<i>a. Career theme fits the local economy</i>	
The academy career field is selected to fit with the community industries and employer base to allow for adequate involvement of volunteer.	<ul style="list-style-type: none"> <li>◇ Evidence that the academy career field was selected to fit with the community industries and employer base and supports local economic and workforce development</li> <li>◇ Evidence that the community has enough employees in this field for adequate involvement in the academy</li> </ul>
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<b>Criteria</b>	<b>Sample Documentation</b>
<i>b. Community involvement</i>	
Representatives of employers, higher education, and the community help to guide the academy's curriculum, and provide speakers, field trip sites, job shadowing opportunities, mentors, student internships, community service opportunities, college tours, and teacher externships.	<ul style="list-style-type: none"> <li>◇ A list of employers, post-secondary education staff, and the community with categories that show how they guide the academy curriculum such as speakers, field trip sites, job shadowing opportunities, mentors, student internships, community service opportunities, college tours and teacher externships</li> </ul>
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<b>Criteria</b>	<b>Sample Documentation</b>
<i>c. Incorporates citizenship</i>	
The academy fosters a culture of respect for others and encourages student contributions as citizens.	<ul style="list-style-type: none"> <li>◇ Evidence of academy students participation in a variety of community service projects</li> <li>◇ Classroom presentations by community civic groups on citizenship and employability skills, expectations and rules</li> <li>◇ Academy membership fosters respect for diversity</li> <li>◇ Leadership training in classroom or through student organizations</li> </ul>

<b>Criteria</b>	<b>Sample Documentation</b>
<i>d. Work-/community-based learning</i>	



The academy offers work and/or community based learning opportunities for all interested students, following their junior year, either through paid internships or community service.	◇ Evidence of work-based learning such as shadowing, internships, On the Job training, service learning
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APPENDIX B  
NATIONAL STANDARDS OF PRACTICE

## NATIONAL STANDARDS OF PRACTICE (NSOP)

The Standards are defined below.

- I. DEFINED MISSION AND GOALS: The career academy has a written definition of its mission and goals. These are available to the administrators, teachers, students, parents, advisory board and others involved in the academy.**

Criteria include: A well-defined mission and goals, focusing on careers and college, raising student aspirations and increasing student achievement.

- II. ACADEMY STRUCTURE: An academy needs to have a well-defined structure within the high school, reflecting its status as a small learning community.**

Criteria include: Cross-age articulation, a student recruitment and selection process, cohort scheduling, physical space for the career academy, a career or industry theme and a small supportive atmosphere.

- III. HOST DISTRICT AND HIGH SCHOOL: Career academies exist in a variety of district and high school contexts which are important determinants of an academy's success.**

Criteria include: Support from the Board of Education and the superintendent, support from the principal and high school administration, adequate funding, facilities, equipment and materials.

- IV. FACULTY AND STAFF: Appropriate teacher selection, leadership, credentialing and cooperation are critical to an academy's success.**

Criteria include: A leader (teacher leader, team leader, coordinator, 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.

- V. PROFESSIONAL DEVELOPMENT: Since an academy places teachers and other adults into roles not normally included in their previous training, providing adequate professional development time, leadership and support is important.**

Criteria include: Common planning time for academy staff, professional development for teachers and an orientation for parents and other district employees.

**VI. GOVERNANCE & LEADERSHIP: The academy has a governing structure that incorporates the views of all stakeholders.**

Criteria include: 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.

**VII. CURRICULUM & INSTRUCTION: The curriculum and instruction within an academy meets or exceeds external standards and college entrance requirements, while differing from a regular high school by focusing learning around a theme.**

Criteria include: 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.

**VIII. EMPLOYER, HIGHER EDUCATION & COMMUNITY INVOLVEMENT: A career academy links high school to its host community and involves members of the employer, higher education and civic community.**

Criteria include: 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.

**IX. STUDENT ASSESSMENT: Improvements in student performance are central to an academy's mission. It is important to gather data that reflects whether students are showing improvement and to report these accurately and fairly to maintain the academy's integrity.**

Criteria include: The collection of student data, multiple measurements which include items such as students 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.

**X. CYCLE OF IMPROVEMENT: No academies function perfectly all the time. Ensuring that an academy remains high quality requires engaging in a regular, well-defined, objective self examination.**

Criteria include: The examination of an academy's mission, design and implementation, planned refinements for the academy which include timetables and measurable outcomes.

Distributed by the: National Career Academy Coalition (NCAC)

[www.ncacinc.org](http://www.ncacinc.org)

APPENDIX C

PARTICIPANT INFORMED CONSENT (3 FORMS)



Dear Participant,

My name is Delmas Watkins, and I am currently enrolled in the doctoral program at Georgia Southern University. I am currently the Director of Career and Technical Education in DeKalb County School System in Atlanta, Georgia. To complete my dissertation, I am conducting interviews with individuals involved in implementing and sustaining Career Academies from large comprehensive high school. This information can be used by high schools and districts across the country who is considering using Career Academies as their school improvement model.

This letter is to request your assistance in gathering data from experiences individuals involved in implementing and sustaining Career Academies. If you agree to participate, the researcher will audio and video record and transcribe the responses from interview questions of the following individuals: principal, assistant principal for instruction, one lead teacher and one student from each of your school's Career Academies, one parent and one employer. Completion and participation in the interview will indicate permission to use the information you provide in the study. Please be assured that your responses will be held confidential. The data from this section will be reported in a summary form and will not be reported to individually by the school or school system. Although studies have some degree of risk there is no potential of risk in this study beyond those experienced in everyday life. You can ask questions about the research. The study will be most useful if you respond to each item in the interview, however if you choose not to respond to every question, your answers can be used in the study. The data gathered from this study will be included in my dissertation which will be on public file.

If you have questions or concerns about the interview questions, you can contact me at (678) 898-9719. My e-mail address is [Delmas.L.Watkins@fc.dekalb.k12.ga.us](mailto:Delmas.L.Watkins@fc.dekalb.k12.ga.us). My academic advisor is Dr. Charles Reavis. You can contact him at (912) 681-5719 or [careavis@georgiasouthern.edu](mailto:careavis@georgiasouthern.edu). Your rights and concerns as a research participant are available at the Office of Research Services and Sponsored Programs at (912) 681-5365.

Thank you for your participation in this study. I realize that your busy schedule may make it difficult to set aside time to participate. Your participation will take approximately 1 hour. The results from this study should provide information to high school across the country concerning Career Academies.

\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

I, the undersigned, verify that the above informed consent procedure has been followed.

\_\_\_\_\_  
Investigator Signature

\_\_\_\_\_  
Date

## PARENTAL INFORMED CONSENT

Dear Parent or Guardian:

A study will be conducted at your child's school in the next few weeks. The purpose of this study is to examine the experiences individuals involved in transforming large comprehensive high schools into Career Academies. We will be conducting structure interview with eight questions.

If you give permission, your child will have the opportunity to participate in this national study to examine Career Academies. Your child will be asked questions that will give information concerning the implementation and effectiveness of Career Academies in your child's school. The questioning will take approximately 1 hour for your child to participate. I would like to assure you that the information that your child provides in the interview will be used in a most professional manner. With your approval, the interview will be audio-taped so that I will be able to record your child's comments accurately for my data. Your child will also be asked to participate in a follow-up interview, if it is necessary, to clarify answers that he/she provides in the initial interview. All audio-tapes will be destroyed after one calendar year.

Your child's participation in this study is completely voluntary. The risks from participating in this study are no more than would be encountered in everyday life; however, your child will be told that he or she may stop participating at any time without any penalty. Your child may choose not to answer any question(s) he/she does not wish to for any reason. Your child may refuse to participate even if you agree to her/his participation.

In order to protect the confidentiality of the child, your child's name will not appear on all of the information recorded during the interview. All information pertaining to the study will be kept in a locked filing cabinet in an office at Georgia Southern University. No one at your child's school will see the information recorded about your child.

If you have any questions or concerns regarding this study at any time, please feel free to contact Delmas Watkins, at (678) 898-9719, or Dr. Charles Reavis, advisor, at (912) 681-5719.

If you are giving permission for your child to participate in this study, please sign the form below and return it to your child's teacher as soon as possible. Thank you very much for your time.

Investigator's Signature \_\_\_\_\_

Child's Name: \_\_\_\_\_

*Parent or Guardian's Signature:* \_\_\_\_\_

Date: \_\_\_\_\_

## MINOR'S ASSENT

Hello,

I am Delmas Watkins a graduate student at Georgia Southern University and I am conducting a study on Implementing and Sustaining Career Academies in Large Comprehensive High Schools.

You are being asked to participate in a project that will help me learn about the experiences of individuals involved in the implementation of Career Academies. If you agree to participate, you will answer eight questions. It will take 1 hour for you to help me. The interview will be audio-taped so that I will be able to record your comments accurately for my data. You will also be asked to participate in a follow-up interview, if it is necessary, to clarify answers that you provided from the initial interview. All audio-tapes will be destroyed after one calendar year.

You do not have to help me with this project. You can stop helping me whenever you want to. If you do not want to answer some or any of the questions, it is ok, and you can go back to your classroom, and nothing bad will happen. You can refuse to participate in this study even if your parents have said yes.

None of the teachers or other people at your school will see the answers to the questions that I ask you. All of the answers that you give me will be kept in a locked cabinet in a room at Georgia Southern University, and only I or people helping me will see your answers. We are not going to put your name on the answers that you give us, so no one will be able to know which answers were yours.

If you or your parents/guardian have any questions about this form or the project, please call me at (678) 898-9719 or my advisor, Dr. Charles Reavis, at (912) 681-5719. Thank you!

If you understand the information above and want to help in the project, please sign your name on the line below:

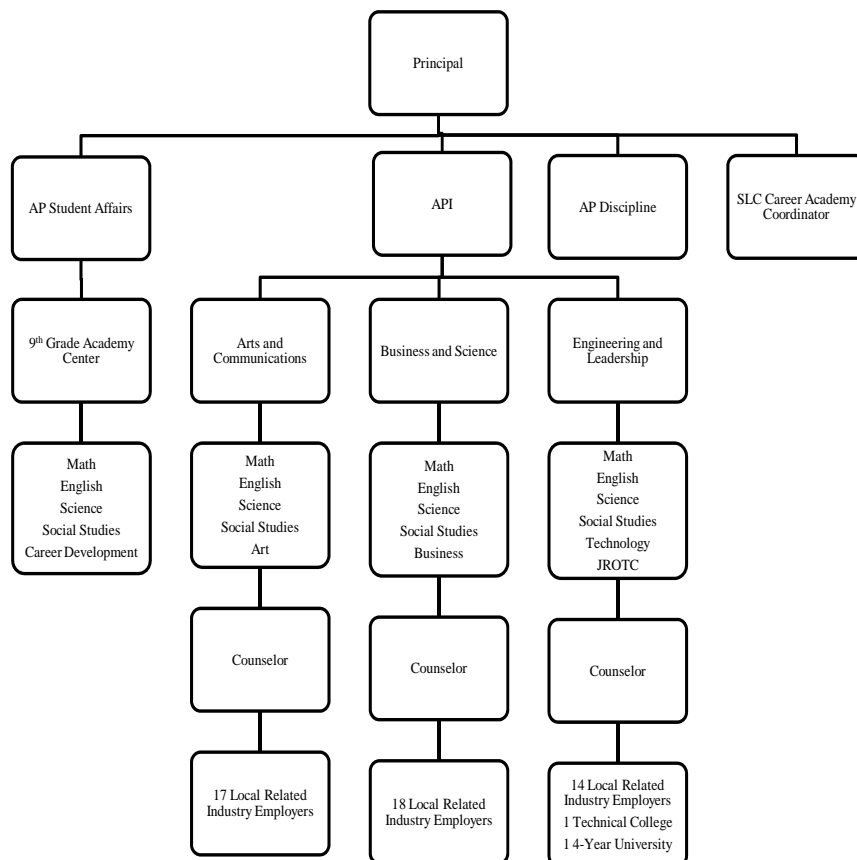
**Yes, I want to help in the project:** \_\_\_\_\_

Child's Name: \_\_\_\_\_

Investigator's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

APPENDIX D  
ORGANIZATION CHART



APPENDIX E  
INTERVIEW QUESTIONS

1. During the (specific year) your school implemented the Career Academy structure. Why did your school decide to use Career Academies as your school improvement model?
2. Describe the activities of your school leading to the implementation of Career Academies.
3. How was school different from the previous year before the first year of implementation of Career Academies in your school?
4. How has your roll changed as principal, assistant principal, teacher, student, employer, or parent since the implementation of Career Academies?
5. How has teaching and learning changed since the implementation of Career Academies?
6. Describe the difference in the structure of your school since the implementation of Career Academies.
7. What challenges did your school face and how did you address them during implementation and sustaining Career Academies?
8. What would you do differently if you had to start from the beginning and implement a Career Academy in another high school?
9. Do you have any comments, suggestions or recommendations that you would make to other high schools who want to implement Career Academies?

APPENDIX F

CAREER ACADEMY PLANNING DAY AGENDA



## Business & Science Academy

### Planning Day Agenda

March 9, 2007

8:00 am

Media Center

Long Term Purpose: Our mission is to encourage the growth of innovative competitive leaders who will utilize effective communication skills and scientific inquiry to make a positive difference in our community.

#### OUTCOMES:

- \*Discuss Notebook/Review
- \*Finalize Fourth Quarter Project
- \*Develop Projects/Planning for next year
- \*Class-set Books for next year

#### Important Dates:

- \*Academy Evaluation: April 5<sup>th</sup>

#### Agenda Outline

SLC Career Academy Coordinator  
 Go Over Notebook/Review Contents  
 Develop/Finalize 4<sup>th</sup> Quarter Projects  
 Lunch – Off-Campus  
 Class-sets of Textbooks  
 Evaluation—Questions?

#### Timeline

8:10 – 8:20  
 8:20 – 9:15  
 9:15 – 11:00  
 11:00 – 12:30  
 12:30 – 1:30  
 1:30 – 2:05

Next Steps: Action Plan

What

Who

Timeline