

CAREER ACADEMIES: A CASE STUDY OF A SCHOOL REFORM
INITIATIVE AT ONE HIGH SCHOOL

by

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DEDICATION

I dedicate my dissertation work to:

- The most important men in my life, my husband David Gerardo, and my son David Rene, without whose daily encouragement and love completion of this study would not have been possible.
- My parents Ruben and Lillie, who instilled in me the importance of higher education, and who said to me, “There’s no excuse not to go to college . . . it’s in your backyard!”
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ABSTRACT

Parker High School embarked on a mission in the 2011-2012 school year to enable students to connect their present educational needs and desires with their future career and life goals. In support of this effort, the Parker School Board approved the implementation of *wall to wall* academies at the high school. The objective of an academy high school is to merge career and academic instruction with real world experiences so that graduates are well prepared to enter the workforce with 21st century skills.

This study explored the experiences of high school individuals and stakeholders in implementing a Career Academy model in a large high school. Issues addressed included the individuals' perception of their experiences and the impact on their effectiveness. Findings were used to develop recommendations to inform school leaders who are interested in the Career Academy model as a reform initiative.

Based on conversations with the Parker High School principal, a recommended list of administration staff and lead teachers were invited to participate in face-to-face interviews. Six of the participants were selected by the principal, and four were chosen by the researcher. In addition, two community/parent participants were chosen by the researcher.

Data revealed in the study that individuals had both positive and negative experiences with the implementation of the Career Academy model. Positive experiences

included increased collaboration with students and teachers, increased cross curricular activities, relationship building opportunities among staff and students, and the ability to support students more strategically. Negative experiences revealed the effects of communication issues, lack of buy-in and lack of professional development training.

I. PRELUDE

"The definition of insanity is doing the same thing over and over again and expecting different results."

Albert Einstein

Purpose of the Study

The purpose of this descriptive case study is to describe and evaluate the experiences of those in the Parker Consolidated School District (PCISD) as they transform their high school to a career academy. In this study, I endeavor to explore the experiences of community members, school administrators and teachers, as I investigate the processes by which a school implements a Career Academy model. This will include a description of the occurrences and a consideration of the perceptions of these community members during the transition process. Through the study, I hope to describe the processes by which the capacity of systems and educators is developed in a Career Academy model plan for expanded learning opportunities.

Introduction

I have spent my entire educational career of over thirty years with the PCISD. For the past ten years I have been a public school administrator. In those years, I have engaged in conversations about the performance of PCISD with countless community members. Over time, these conversations became increasingly distressing and difficult. Most conversations focused on the negative perceptions held by community members and other stakeholders, including those from institutions of higher education in the area and employers. The conversations centered on the perceived poor academic performance

of students in our school district. These negative perceptions typically had to do with: (a) pessimistic parental attitudes about schoolwork, (b) teachers not working hard enough, (c) parents not valuing their children's education and not supporting them appropriately, and (d) administrators at the local university not believing that the school district is of sufficient quality for their own children.

The atmosphere portrayed by this discourse affects the economic well-being of SPHS, its students and the school district as a whole to the extent that many employers hesitate to establish new plants in the area, citing an unreliable supply of skilled labor as the main reason. Scott (2004) defined "a fierce conversation as one in which we come out from behind ourselves into the conversation and make it real" (p. 1). She further characterized *fierce* by referencing its synonyms: *robust, intense, strong, powerful, passionate, eager, unbridled, uncurbed, and untamed*. Finally, she explained "conversations are the work of a leader and the workhorses of an organization" (p. 1). While no single conversation is guaranteed to change the trajectory of a career, a company, a relationship, or a life, any single conversation can precipitate some change. This insight helped me to realize that I needed to view the negative comments people made about PCISD as their attempts to confront what they perceived as weaknesses in the school district, with a hope to improving district outcomes. As a result, I now view the fierce conversations I have with local citizens in a different light: as the work of people who have the school district at heart and wish to see it succeed. Indeed, in going back and re-reading my journal notes of those conversations, I found that a majority of them had occurred with the same people, repeatedly, throughout those years. I realized that their criticisms were rooted in genuine concern for the welfare of PCISD. Another

observation of mine concerning those conversation notes was that a majority of the individuals I talked with were actively involved in collaborations with the school district. Perhaps, as a consequence, these individuals took a keen interest in improving student outcomes and our district's success. I further found that these passionate conversations were indeed concerned with issues the district needed to address. The following are excerpts from conversations noted in my journal:

- “There are a huge number of graduates from Parker High School that do not have the skills we need to fill job vacancies. We had over 100 positions last year and had to resort to busing skilled workers from San Agustin every day” (Tim Menard, personal communication, September 17, 2009).
- “We continue to have conversations with companies inquiring about relocating to Parker. When they review our demographics of drop-outs and a declining workforce, they move on” (Merry Mayson, personal communication, November 18, 2010).
- “We have not been successful in recruiting faculty or in recruiting staff to get involved in our local district's activities. Unfortunately, many of our faculty do not live in Parker. The school district here is not a reputable one” (Parker University professor, personal communication, December 1, 2010).
- “Hispanic students from Parker do not value a higher education, not even with a university in their own town” *Parker University professor, Earth Science Department* (Parker university professor, personal communication, December 8, 2010).

A well-educated and trained workforce is a pivotal factor in driving and sustaining a community's growth and prosperity (Ford, 2010). Developing a well-educated and prepared workforce depends, in part, on high schools that produce successful students. It is important then that more students successfully persist in school than is reported by The National Center for Educational Statistics (NCES). In a recent report, the NCES (2009) reported national dropout rates for Hispanic students at 17.6%, Black students at 9.3%, White students at 5.2%, Asian Pacific/Islander students at 3.4%, and American Indian/Alaskan students at 13.2%. Exploring dropout rates at the state level reveals similar rates. The Texas Education Agency (2010) reported the dropout rates in Texas for 2009 to be: 12.4% for Hispanics, 14.8% for Blacks, 4.5% for Whites, 3.0% for Asians/Pacific Islanders, and 9.3% for American Indians/Alaskans.

While these statistics paint a rather dismal picture, there are indications that dropout rates may actually be higher (Downey, 2010). Secretary of Education, Arne Duncan, has put the national dropout rate at 25%, with Black and Hispanic students tipping the scale at as much as 40% (Downey, 2010). In 2013, Arne Duncan famously sported a basketball jersey emblazoned with the number "26" during the 2012 NBA All-Star Celebrity Basketball Game to dramatize the fact that in the US, a young person drops out of high school every 26 seconds (Alliance for Education, 2012). Of course, drop-out rates that approach these levels cannot be the result of either a single factor, nor a simplification of a few factors. Instead, they are the result of cumulative influences that have evolved over a long period of time.

Influencing Factors

Parker is an historic community in the heart of central Texas. The City of Parker, home to Austin State University, has a population of 50,001 residents and lies within one of the fastest growing regions in the US. The PCISD serves over 7,500 youth in Mays County and portions of two neighboring counties. Austin State is now the 5th largest university in Texas with nationally renowned programs in geography, criminal justice and music. It is also the largest employer in the Parker community.

For the class of 2011, 84.6% graduated on time while 8.7% dropped out. At graduation, only 38% of the 2011 graduates were considered college ready in math and English, far lower than the state rate of 52%.

The continued negative perceptions of both the PCISD and SPHS prompted my interest in high school reform. First of all, the current drop-out rate and the low numbers of students who continue on to post-secondary education demonstrate that the school is not meeting its responsibilities toward students. Secondly, from the standpoint of a number of stakeholders, the school is not performing at the expected level (Merry Mayson, personal communication, November 18, 2010). Employers are dismayed at the lack of preparedness for work; parents are unhappy with grades and completion rates; and, teachers and administrators are frustrated with student outcomes (Tim Menard, personal communication, September 17, 2009). These impacts are measured in terms of high levels of dissatisfaction and low levels of commitment on the part of stakeholders, and the lack of preparation for either post-secondary education or vocations on the part of students (Parker university professor, personal communication, December 8, 2010.).

Research Questions

This study will speak to the following primary research questions:

1. How do select teachers, administrators, parents, and community members perceive the PCISD Career Academy model and its implementation?
2. What are some factors that participants felt inhibited and promoted the implementation of the Career Academy model in the PCISD?
3. What factors led to the decision to implement the Career Academy model?

Significance of the Study

Through this study I will examine the impact of the Career Academy model on the relationships between stakeholders and the local school district. The changes in these relationships will be explored in terms of participants' stated satisfaction and levels of commitment.

In a broader perspective that impacts the secondary education sector, this study will specifically contribute to our general understanding of the dynamics involved in the transition to a career academy, and more broadly to the knowledge base concerned with organizational change theory.

Since the inception of the Career Academy model over 40 years ago, it has proven to be an effective tool to improve graduation rates, and better prepare students for either post-secondary education, or pursuit of a career path immediately following high school graduation. It has also proven to strengthen the ties between community stakeholders and businesses and local employers. This makes it easier for students to transition to the workforce, or go on to college, both of which improve the economic viability of our society as a whole. Our ability to effectively prepare students for higher education or

careers is more crucial today than ever before, particularly in light of the rapid creation of new and different jobs that require skills and knowledge not even conceived as being important when present day high school graduates entered the school system. In short, the Career Academy model provides a number of benefits for students, communities, schools, institutions of higher learning, and potential employers. However, the effectiveness of the transition from a traditional high school to a Career Academy model school can affect how quickly and how effectively these benefits begin accruing to vested populations of interest.

It is the goal of this research to facilitate the transition to a Career Academy model for those schools planning to adopt this model. By exploring the personal experiences of the faculty, administrators, and select community members involved in making this transition, I hope to inform others about things that worked and things that could have worked better. In this way, perhaps our experiences will prove beneficial to those who follow in our footsteps, and we will leverage the positive outcomes of the Career Academy model across a broader spectrum of our society.

Why I Chose this Study

I chose this topic for a study because I believe that Career Academies provide the necessary preparation of students for either continuing post-secondary education, or a career.

I believe implementing the Career Academy model will motivate students to see the possibilities beyond high school, and most importantly, will equip students with the knowledge and skills to attain and sustain those possibilities. A high level of business engagement ensures continuity and sustainability and helps connect classroom lessons

with today's careers and postsecondary opportunities through internships, certifications, dual enrollment, and future employment. However, developing a strong ongoing level of commitment and engagement between schools and businesses requires continued and conscious efforts to maintain relationships on the part of administrators and business leaders (Hyslop, 2009).

As both an educator in the PCISD, and a lifelong community investor I hoped to be part of an initiative that increased graduation rates. I wanted to be part of an effort to increase partnerships between high school, career development, and work-based opportunities.

Other Limitations

At the beginning of this study I was working and, thus, daily engaged in the career academy transition process at SPHS. My position, early in the study was that of administrator in the school district and a colleague of the study participants. It required that I exercise caution in the study process. Although I have recently left the district, established relationships at the high school allowed me easy access to participants and information pertinent to this study and thus raised the possibility that I might overlook some important aspect of the research, such as ensuring participant informed consent.

Procedures

I gathered information using qualitative methods in order to examine the experiences and perceptions surrounding one high school's implementation of the Career Academy model. Interviews with select individuals provided insight into the experiences of administrators, teachers, parents, and community members as this high school implemented the Career Academy model. In addition to face-to-face interviews,

observations provided further insights into the implementation process. A case study format provided the structure to document the information that these activities provided.

Operational Definitions

For this purpose of this study the following definitions apply:

1. *21st Century Skills* refer to the set of skills, within the context of core knowledge; students must acquire to be successful in today's world. This set of skills includes as critical thinking, problem solving, communication and collaboration. The Partnership for 21st Century Skills has developed a framework of skills in four major categories. The first covers core subjects including mastery of English, reading or language arts, world language, arts, mathematics, economics, science, geography, history, government and civics. In addition to these subjects, we believe schools must move beyond a focus on basic competency in core subjects to promoting understanding of academic content at much higher levels by weaving 21st century interdisciplinary themes into core subjects:

Global awareness

Financial, economic, business and entrepreneurial literacy

Civic literacy

Health literacy

Environmental literacy

The second category includes learning and innovation skills; the third covers information, media and technology skills; and finally, the fourth addresses life and career skills.

2. *Academy Team Leader* is the lead teacher on an academy team, responsible for convening team meetings, taking minutes, and reporting on the progress of the academy (College and Career Academy Support Network, 2010).
3. *Career Pathway* is a coherent, articulated sequence of rigorous academic and career/technical courses, commencing in the ninth grade and leading to an associate degree, baccalaureate degree and beyond, an industry recognized certificate, and/or licensure. The Career Pathway is developed, implemented, and maintained in partnership among secondary and postsecondary education, business, and employers. Career Pathways are available to all students, including adult learners, and lead to rewarding careers (National Career Pathways Network, 2012).
4. *Community Partners* refer to the stakeholders in the local community who are involved in the high school reform process, but are not part of the public schools (American Youth Policy Forum, 2013).
5. *Graduation Rate* is the percentage of students from the same class who graduate by the anticipated graduation date (Texas Education Agency, 2011).
6. *National Career Academy Coalition (NCAC)* is a national network of existing and emerging career academies that defines and implements evaluation processes based on their National Standards of Practice, and which provides technical assistance and training to support existing and emerging Career Academies and develops support networks (National Career Academy Coalition, 2014).
7. *National Standards of Practice (NSoP)* (also known as the Ten Key Measures)

for career academies were developed by an informal consortium of national career academy organizations. Drawn from many years of research and experience, they are framed around ten key elements (see Appendix A) for successful, sustained implementation of academies (Remaking High School, n.d.).

8. *Professional Learning Community* is a community of educators and administrators focused on learning rather than on teaching, who work collaboratively, and hold themselves accountable for results that fuel continual improvement (DuFour, DuFour, Eaker, & Karhanek, 2004).
9. *Smaller Learning Communities* are environments that include a core group of teachers and other adults who understand the needs, interest, and aspirations of the students well enough to closely monitor his or her progress, and provide the support they need to succeed (Benson, 2010).

Organization of the Record of Study

The Career Academy model is growing as a successful strategy for high school improvement. This study will provide a framework designed to give the reader examples of experiences of individuals involved in implementing career academies. This study is divided into five chapters.

Chapter I defines the problem and lays out the research design; Chapter II presents the review of the literature which provided the framework for the high school Career Academy model, and my conceptual framework; and Chapter III presents the methods I used in the research to explore the experiences and perceptions of individuals in the SPHS and Parker Community who were involved in the Academy Model Reform

Initiative. The data analyzed included transcribed and coded interviews as well as artifacts such as meeting agendas, brochures, and team meeting minutes. In Chapter IV, I report my analysis of the data; and in Chapter V I summarize the findings, conclusions, and make recommendations.

II. LITERATURE REVIEW

The World of Work Today

Beginning with Horace Mann’s educational reform efforts in the 1800s and continuing into the present, educators have struggled with the challenge of implementing curriculum that are not only academically rigorous, but also produce graduates who possess the skills sets and knowledge relevant to prevailing needs in the workforce. Countless reforms that address career and technical education—including vocational education funding and the School-to-Work Opportunities Act of 1994—have been implemented in an effort to equip students with not only college credit in high school, embracing the core elements of a liberal arts education, but with valuable work experiences as well (Smith, 2008).

As the pace of change associated with technological innovations continues to increase, and the complexities of competing in a global marketplace intensify, that challenge is even greater. It is no longer possible for recent graduates to enter the workforce with limited skills and knowledge and expect to attain financial success in a lifelong career. The complexities of the technologically advanced global market demand individuals with some kind of postsecondary education, whether from technical schools, community colleges, or online training. As a result, the ability for high school students to make a successful transition from school to the workplace is increasingly difficult. This situation places a greater burden than ever on educators to develop academic programs that address the ever widening divide between our school systems and the needs of the workplace (Smith, 2008).

One of the more successful strategies that has tackled these issues over the past 35 years has been the Career Academy model. As this study demonstrates, this model was developed specifically to provide an academically challenging curriculum that also equips students with practical training that is relevant to the needs of the workplace (Smith, 2008).

Human and Economic Cost of High School Drop-Outs and the Need for Reform

High school drop-outs represent a tremendous loss of human potential and productivity, and significantly reduce the nation's ability to compete in an increasingly global economy (Amos, 2013). As a result, according to Amos, preparing students for life after high school needs to be a priority for us. There is no one program that fits all. Recent estimates project that the future domestic workforce demands will require higher levels of education among U.S. workers (Carnevale, Smith & Strohl, 2010). Their research found the demands of the labor market require that significant improvements in the high school and post-secondary completion rates are essential. Faltering in this endeavor will result in our nation falling short by up to 3 million postsecondary degrees by 2018.

In 2009, according to the U.S. Census Bureau, adults ages 25 and older who had dropped out of school or had not acquired a General Educational Development (GED) certificate earned up to 41% less than those who had completed high school or had GEDs. The gap widened when comparing the incomes of high school dropouts with people with bachelor's degrees. In 2009, male and female college graduates earned \$57,714 and \$39,263 respectively, while male and female high school dropouts earned \$21,629 and \$13,943, respectively (U.S. Department of Education, 2011). The national

unemployment rate, as of January 2012, is 8.3 percent; for individuals without high school diploma it is 13.1 percent compared to 8.4 percent for high school and 4.2 percent for college graduates (U.S. Department of Labor, Bureau of Labor Statistics, 2012).

These statistics underscore the impact that high school dropouts have on a viable economy and educated workforce. According to Carnevale et al. (2010), today's high schools must address the high dropout rates as they have immediate economic and social consequences for our country. In his first speech to a joint session of Congress, President Obama addressed the crucial link between education, knowledge and the demands of the global economy. He stated “. . . dropping out of high school is no longer an option. It's not just quitting on yourself, it's quitting on your country—and this country needs and values the talents of every American” (Carnevale et al., 2010). U.S. Secretary of Education, Arnie Duncan, calls education “the civil rights issue of our generation” and notes that “if we are to emerge from this global recession and ensure the future prosperity of our nation, every school must provide every child with a quality education that offers the path out of poverty and toward equal opportunity” (U.S. Department of Education, 2009).

The Cardinal Principles

In the early 1900s, responding to significant increases in enrollment in secondary schools, the Commission on the Reorganization of Secondary Education implemented new standards for secondary schools that became known as the Cardinal Principles. The focus of this reform was to acknowledge differences in goals, attitudes, and abilities possessed by students while implementing a new segmented approach to subjects and subject matter. The principles of democracy were embraced as the guiding theory for

education as goals and objectives continued to evolve with the growth and development of the country. The commission began working on the Cardinal principles in 1915, and finished in 1918. Appendix B contains a detailed description of the seven Cardinal Principles of secondary education (Raubinger, Rowe, Piper, & West, 1969).

Origins of Career Academies

The Career Academy model is a high school reform initiative conceived about 40 years ago by Charles Bowser, to improve college and career readiness among high school graduates (Brand, 2009). The National Career Academy Coalition (NCAC) noted that the Career Academy model emerged from a troubled time in the U.S. (National Career Academy Coalition, 2014). Charles Bowser created the first known career academy in response to riots in 1968 which contributed to the school dropout and youth unemployment rates.

Philadelphia Vice-Mayor Charles W. Bowser believed the violence and protests were just symptoms of the disease and he decided to examine the disease itself. He found the problem was two-fold. First, there was not enough employment opportunity for everyone and Black males in particular were being shut out of jobs at a higher rate than any other population segment. Second, one of the reasons they could not get jobs was because local public schools were not meeting their specific needs.

Mr. Bowser felt the solution was in redesigning schools so students would be ready to be productive upon graduation. Not being an educator himself, he knew this would require a coalition of community leaders, businesses, and educators. That coalition developed an idea they called *High School Academies* (later to be called Career Academies) and opened the first one focusing on electrical engineering at Edison High

School in 1969. Academies were then replicated throughout Philadelphia's high schools (National Educator Program, n. d.).

The Philadelphia Urban Coalition collaborated with the Philadelphia Electric Company and Bell of Philadelphia to open Edison High school in 1969, as an academy of Applied Electrical Sciences. The numbers of career academies has grown to the current count of approximately 7,000 across the US (Stern, Dayton, & Raby, 2010).

Many students are perceived to leave high school unprepared for college or career. In response, President Obama recently called for a revamping of America's high schools. In his High School Redesign initiative educators are being asked to use existing federal, state and local funds to transform the high school experience for America's youth. These reforms are intended to facilitate a more personalized learning approach in career and college exploration and help ensure that all students graduate with college-level coursework or college credit, as well as with career-related experiences or competencies. (U.S. Department of Education, 2013).

Characteristics of Career Academies

As one type of school reform, the *career academy school reform model* is meant to address student career and college readiness (Kemple, 2008). A career academy is a personalized small learning community within a high school. The program may be for a two-, three-, or four-year span. Students enroll voluntarily, with parental knowledge and support.

Generally, each academy has from one-to-three sections of students at each grade level, or 100-300 students in all. Academy classes are usually blocked back-to-back in the daily schedule, and students attend them as a cohort. Most students complete

academy requirements within the regular school day, with the exception of work internships and college classes (Kemple, 2008).

A career academy usually involves teachers from different subjects working together as a team. This team manages the program, with one member usually serving as the coordinator. Teams participate in professional development, particularly in implementing the key features of the model and gaining exposure to the career field, through a mixture of career and academic classes. Team members (teachers) have shared planning time, usually a daily common planning period, and, often, shared release time. Putting teachers together with a group of students for several periods each day provides an opportunity for better, closer relationships to form, which has been shown to improve students' success following high school (Tekaas & Mittlesteadt, 2004). Another essential part of a successful academy is the opportunity for meaningful partnerships to develop with employers (Tekaas & Mittlesteadt, 2004). Teachers and employers are the primary leaders of Career Academies. This partnership between teachers, employers, and students enhances the competency of students to make decisions in areas of curriculum content, instruction, and work-based opportunities. Figure 1 summarizes the characteristics found in career academies.

An academy functions within the larger high school and requires administrator and counselor support (College and Career Academy Support Network, 2013). Academy students may also participate in required and elective classes outside the academy, as well as other activities such as clubs and sports (Remaking High School, n. d.).

Key Features of Career Academies

Small Learning Community	College-Prep Curriculum with a Career Theme	Partnerships with Employers, Community, and High Education
Several academy-only classes in grades 9-12, 10-12, or 11-12	Several academic courses per year that meet high school graduation and college entrance requirements	Locally selected career field with a cadre of employer partners
Self-selected cross-disciplinary team of teacher-managers, with a lead teacher/coordinator	One or more courses per year in a broadly defined career field that lets students explore a full range of career options	Steering Committee that governs program operation
Voluntary enrollment, cross-section of students; size limited to maintain personalization	Academic classes that illustrate applications in the career field	Parental involvement in students' decision to enroll, and in various program activities
A family-like atmosphere with a motivating, supportive, disciplined instructional tone	Common planning time for teachers to allow curricular integration	Business representatives who provide role models, show students career options and paths
When possible, academy classes blocked back-to-back in the daily schedule	Projects that bring together skills across academic and career classes, possibly a school-based enterprise	Field trips/job shadowing to illustrate work environments
Support from district and school administrators and counselors	Counseling to ensure post secondary plan which may include college, work, or both	Mentors, employee volunteers that serve as career-related "big brothers and sisters"
Students given opportunity to engage in full range of non-academy courses, electives, and other school activities	Articulation with postsecondary curriculum	Workplace experiences (paid or unpaid internships, community service) in the last year or two
		Postsecondary institution articulation, concurrent enrollment

Figure 1. Key Features of Career Academies. Contains detailed descriptions of the three primary characteristics of career academies.

Successful Academy Models

Kemple (2008), Studier (2008), and Maxwell (2001) suggested that career academy students are more likely to graduate from high school and are more likely to attend a post-secondary institution than high school students from general and vocational tracks. In a study focused on the effects of the Career Academy model on student achievement, Studier found that students attending California's state-funded Partnership Academies were more likely to pass the California High School Exit Exam as sophomores, to meet the entrance requirements needed for admission eligibility to California public universities, and to graduate from high school. Additionally, in a similar study conducted by Maxwell (2001), career academy graduates who enrolled at local California State University campuses were more apt to complete their bachelor's degree than non-academy graduates from the same area high schools. Brand (2009) touted the Career Academy Reform model as a strategy that works to improve student outcomes.

A comprehensive academy program is designed to provide instruction specific to a career or an area of study the student is interested in pursuing at the college level. These classes enhance students' future success one of two ways. First, students have the opportunity to leave high school with recognized technical learning that addresses not only academic ability such as being able to apply math, English, or other subjects, but also prepares students with knowledge of and familiarity with a field's terminology and technical concepts (National Standards of Practice for Career Academies, 2013).

Academies assist students in addressing 21st Century Skills, future workforce needs, and expectations of employers through student-based learning in small learning communities. Academies can further provide:

- small learning communities, comprised of students in smaller groups within the larger high school who take classes together and are taught by a team of teachers from different disciplines working as a team to integrate curriculum and personalize instruction;
- a well-rounded college preparatory curriculum with a career theme, enabling students to see relations among academic subjects and their application to a broad field of work; and
- partnerships among employees, the community, and local colleges, bringing resources from outside the high school to improve motivation and achievement (Partnership for 21st Century Skills, n.d.).

The Career Academy model enables students to learn through the lens of a career or academic theme by providing students the opportunity to gain direct knowledge and experience in professions in which they are interested, or through exposure to college preparatory classes (Kemple & Scott-Clayton, 2004). Students are more engaged in their studies through hands on learning, and feel more prepared after high school (Kemple & Scott-Clayton, 2004). In their research, Kemple and Scott-Clayton (2004) have shown that career academies improve the transitions from school to work without sacrificing academic standards while enhancing the long-term employment prospects of these students over the course of their careers. Figure 2 shows the linked components that demonstrate college and career academies.

The Linked Components of College & Career Academies

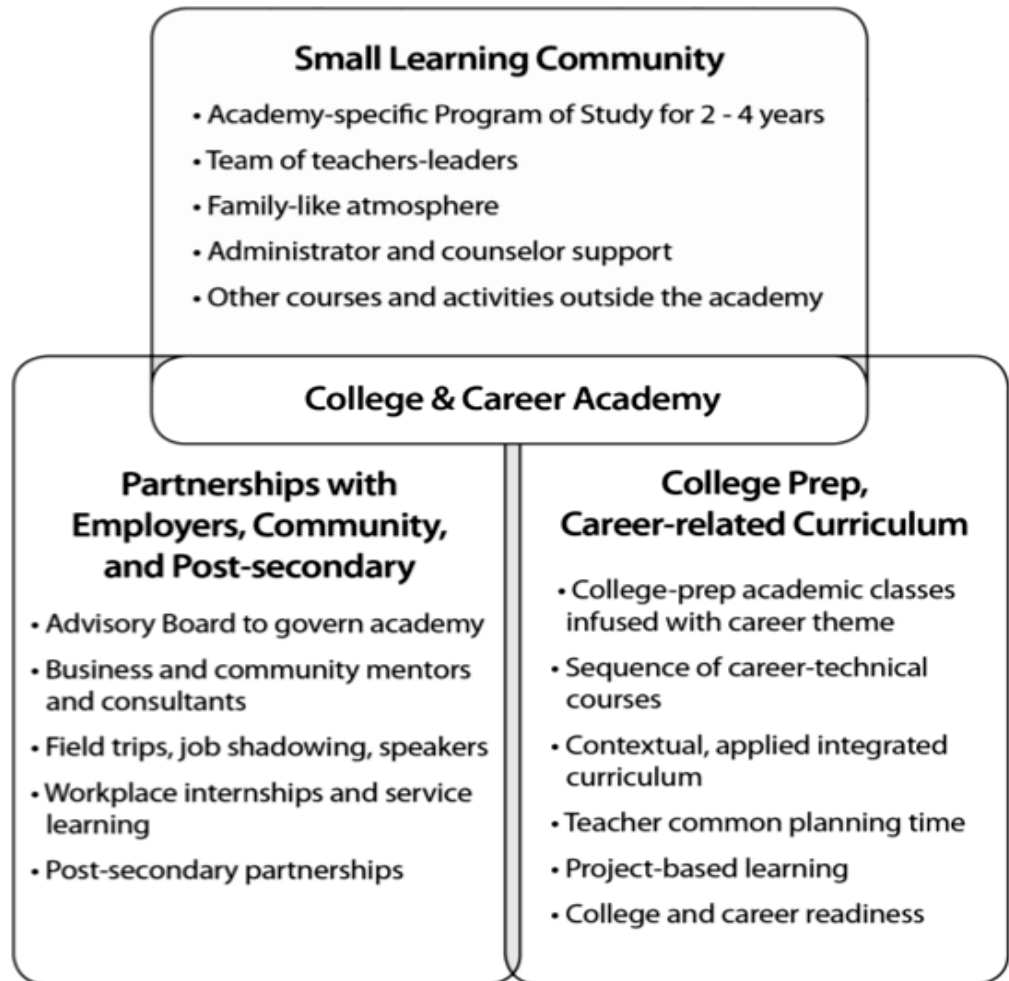


Figure 2. The Linked Components of College & Career Academies. Graphical Representation Of The Relationships Between The Three Primary Characteristics Of Career Academies.

Several studies have found that academy students performed better than their peers grades, absenteeism, and disciplinary problems (Elliott, Hanser, & Gilroy, 2002). An evaluation of the first two academies in California in the early 1980s found that academy students in grades 10-12 had better attendance earned more credits, obtained higher grades, and were more likely to graduate than the comparison groups (Stern, Dayton & Raby 2010). “Academies showed generally better results improving students attendance, credits, grades and likelihood of completing high school” (Hayward & Talmadge, 1995 as cited in Stern Dayton & Ruby, 2010, p. 10).

Managing Implementation and Change

One aspect of the career academy reform model worthy of further investigation is the process of implementing career academy programs in a high school. No doubt, tremendous organizational and cultural changes must take place when a high school adopts the Career Academy model. Because of the extent of such a change, leaders of the school transformation process may do well to invite the input of representative constituencies in the school district, so that they may work in concert to ensure the success of such new school programs. As a scholar whose expertise is in development and change in organizations, Senge (1990) described this process of inviting representatives of all levels of an organization’s hierarchy in large-scale transformational processes. He referred to this as “localized” decision making. He likened the various constituencies in an organization to parts of the human body, where changes in one part affect other parts. According to Senge, local levels in an organization are the lowest rungs in the hierarchy of an organization, where personnel implement directives from the organization’s managerial levels. The dimension that distinguishes learning from more

traditional organizations is the mastery of certain basic disciplines or ‘component technologies.’ The five that Peter Senge identifies are said to be converging to innovate learning organizations. They are: a) systems thinking, b) personal mastery, c) mental models, d) building shared vision, and e) team learning. He adds to this recognition that people are agents, able to act upon the structures and systems of which they are a part. All the disciplines are, in this way, “concerned with a shift of mind from seeing parts to seeing wholes, from seeing people as helpless reactors to seeing them as active participants in shaping their reality, from reaching to the present to creating the future” (Senge, 1990, p. 69). It is important that these stakeholders are invited to contribute to reform processes that affect them because, in this way, the processes stand a better chance of success, especially as the local arm of the organization is frequently charged with implementation.

The vision for all the Academies of SPHS is to effect transformation in these areas:

- Engaging students in learning by setting high academic standards and providing rigorous, meaningful instruction and support
- Giving students individual attention and building stronger relationships by moving them through their academy with a share team of teachers and fellow students
- Drawing on students’ real –world experiences and understanding to build new knowledge to strengthen the relevance between their work in school and the world of work

- Ensuring students are ready of college and carriers through awareness of opportunities and a plan for achieving their goals

Theoretical Framework

This study is informed by organizational change and action learning theory. Each of these bodies of work are briefly discussed below.

Organizational Change Theory

One of the early organizational change theorists, Kurt Lewin (1947), identified the need for and process of change in an organization, and proposed his *unfreezing* concept. According to Lewin, when organizations are static in their production, it is as if they are frozen, and need a force to *unfreeze* them so they can develop their production capacities. He conducted studies on the attitude change of people during the periods of World Wars I and II. During this time, when sizeable amounts of Western countries' resources were invested in the wars, citizens needed to subsist on scarce supplies. Lewin noted that when people understood and appreciated the importance of the change they were engaged in, they worked for its success. He applied the same thinking to organizational change, suggesting that a state of disequilibrium in an organization's systems spurred their development as they explored ways to resolve this. The people in the organization needed to understand the need for change in order to accept the change.

While discussing the importance of leadership in an educational organization, Marzano, Waters, and McNulty (2005) referred to the common failure of educational programs that would otherwise have been beneficial to users. Such programs and practices generally fail because of poor leadership. The authors stated that K-12 education is always in the process of change. This change often comes in the form of

newly-proposed programs and practices. Often, school reform initiatives emerge from a hopeful space: that they will improve the educational processes and positively affect the educational system. New initiatives in education involve both financial and human recourse expenditures.

Senge (1990) described organizations that constantly explore ways to improve their capacity as learning organizations. According to Senge, when these disciplines converge, new waves of experimentation and advancement are introduced into the organization, which may result in a learning organization. In such an organization, members are consistently improving. This underscored the importance of involving all the constituents of an organization in the change process. He noted that change processes that targeted particular sectors in an organization to the exclusion of the others often failed, because like a whole organism, the various arms must work in concert with each other.

Hargreaves and Fink (2006) discussed the need for sustainable leadership that, in turn, fosters sustainable change in organizations. They believed that for any change in an organization to be successful it must be desirable, do-able, and sustainable. In reference to schools, sustainable change would be that which is desired by and within the capacity of the stakeholders to accomplish and sustain.

Wheatley (2006) reiterated the importance of relationships as a main component of sustainable change in organizations. She perceived organizations as composed of people who are creative and able to learn and adapt as necessary. Schein (1985) referred to the complex relationships in the various constituencies in an organization as organizational culture. According to Schein, this culture is comprised of three levels: (a)

artifacts, (b) espoused values, and (c) basic assumptions. All these levels need to be supported by innovators in the organization in order to effectively implement change.

For this study in SPHS, I examined the data I collected by drawing on the organizational change and action learning literature. Organizational change theory helped me document and describe the process of change as SPHS becomes a *career academy*. Action learning theory includes aspects that allow me to describe how the personnel in SPHS might learn collaboratively in the change process.

Schmidt and Finnigan (1992) discussed the difficulties and dangers of systems-level transformative change. They identified six key areas that they believe leaders in an organization must espouse in developing a knowledge base before they begin a transformative change process. They need to:

1. understand the dynamics of organizational transformation;
2. assess the organization's readiness for change;
3. assess the management team;
4. review the leader's leadership style;
5. learn from other organizations' experiences; and to
6. get started.

Schmidt and Finnigan (1992) regard organizations as social systems. These social systems take input from their environment, process it, and deliver output. They proposed that these systems are made up of interdependent component parts that shift or adjust to accommodate the demands of the environment, but that do not necessarily coordinate these adjustments. The primary function of these adjustments is to maintain equilibrium, or the status quo. Changes in one part affect all others in unintended, uncontrolled ways.

Organizations maintain equilibrium only through the expenditure of great amounts of energy. It is essential to remember that all change requires energy. In times of rapid change, this balance between equilibrium and energy allows the organization to become inherently more adaptive, and manipulating the flow of energy so that it does not go primarily toward a return to equilibrium, but rather toward enabling the organization to become more adaptive serves as one of its integral features (Schmidt & Finnigan, 1992).

A Theory Of Organizational Readiness For Change

The concept of readiness for change has largely emerged from the fields of health psychology and medical studies. (e.g. Block & Keller, 1998). Readiness for change is a multidimensional construct rooted in four components: appropriateness (employees perceive that the change is appropriate to the organization, given its characteristics), managerial support (employees perceive that managers are supportive of the change), self-efficacy (employees perceive that they possess the skills and competencies to successfully cope with the change), and personal valence (employees believe the change will be personally beneficial) (Holt, Armenakis, Field, & Harris, 2007).

With respect to participation, employees who are invited to take part in the planning and implementation of a change are more likely to understand and accept the underlying reasons and proposed objectives (Holt et al., 2007). As an organization-level construct, readiness for change refers to organizational members' shared resolve to implement a change (change commitment and shared belief in their collective capability to do so (change efficacy).

Organizational readiness for change varies as a function of how much organizational members value the change and how favorably they appraise three key determinants of implementation capability: task demands, resource availability, and situational factors. When organizational readiness for change is high, organizational members are more likely to initiate change, exert greater effort, exhibit greater persistence, and display more cooperative behavior. The result is more effective implementation (Weiner, 2009).

Organizational change within high schools is inevitable due to federal, state, and local reform efforts. The success of reform efforts and change in high schools requires principal leaders who can influence students, teachers, staff and the school community. When leaders inspire trust and empathy, or lead through voice and action, the climate of the organization can be transformed and prepared to deal with change effectively (Bennis, 2009).

In essence, participation should facilitate a sense of ownership of the change process, where employees perceive that they are integral to the change process, clearly understand its strategic purpose, and benefits, and experience a sense of efficacy with respect to the new challenges posed by the change (Armenakis, & Harris, 2002). Employees who are change ready hold a sound understanding of the change and why it is important to the organization (Madsen, Miller, & John, 2005).

In order to lessen the resistance to change, Chreim (2006) suggests employees are likely to enthusiastically embrace change they view as consistent with “personal goals, provided the opportunity to experience variety and personal growth” or enhanced organizational performance and job satisfaction (p. 327). Further, employees embrace

change to the extent that they deem their skills and abilities match those needed to succeed in new roles (Chreim, 2006). Readiness for organizational change can be more or less present at the individual, group, unit, department, or organizational level. Readiness can be theorized, assessed and studied at any of these levels of analysis.

Readiness for Change –Individual Level

Readiness for change is conceptualized in terms of an individual's perception of a specific facet of his or her work environment—the extent to which the organization is perceived to be ready to take on large scale change. Readiness for organizational change reflects an individual's unique interpretive reality of the organization

Action Learning

Action learning is a form of learning in an organization that closely mirrors the processes inherent in learning organizations, but the concept is derived from the field of business and involves the workers in an organization drawing insight from their reflections, work experience, and critique from their colleagues to confront impediments in their work (Dilworth & Willis, 2003). The foundations of action learning include deep reflection and meaningful engagement among co-workers in an organization. Dilworth and Willis noted that action learning is suited to confronting multiple challenges that present themselves simultaneously. Due to the changes required of various departments within an organization such as a school, action learning theory is a suitable theory upon which to draw.

In adopting action learning, a commitment to large-scale change seems to be necessary (Dilworth & Willis, 2003). When collaborative learning and mutual support are accepted, participants are able to question each other freely. Participants will also

feel free to critique each other graciously. Pedler (1997) explained that action learning involves action, whereby participants in the learning environment are prepared to move beyond giving recommendations to acting on resolutions.

Sustaining Change through Business and Civic Leadership: Innovative Partnerships

In a presentation to the National Academy Foundation in the summer of 2012, U.S. Secretary of Education, Arne Duncan reiterated the importance of increasing support and funding for Career Academies. In his remarks, Secretary Duncan confirmed the President's commitment to school improvement through a \$1 billion competitive fund intended to increase the number of career academies to 3,000 nationwide, and to ensure these academies are of the highest caliber. He noted this expansion would augment support for an additional half a million students, representing a 50% increase (NAF, 2012).

Secretary Duncan went on to stress that career academies are part of the crucial infrastructure for our nation's economic well-being, by fostering partnerships between local employers and schools. A well-educated and well-trained workforce is a pivotal factor in driving and sustaining a community's growth and prosperity (Duncan, 2012). Developing a well-educated and well-prepared workforce depends, in part, on having high schools that are redesigned through career-themed programs and transformed teaching and learning (NAF, 2012). The success of career academies involves working in partnerships with post-secondary institutions, employers as well as other community organizations. However, the success of these relationships and efforts requires a high level of commitment of time, effort and financial support on the part of all participants (Brand, 2009).

Success in transforming and sustaining new forms of teaching and learning and in redesigning schools depends on strong community leadership and ongoing support (Brand, 2009). Innovative business-community-education partnerships connect local high schools with colleges and universities, community organizations, and employers, and provide learning opportunities that are an essential component of the curricula and programs of study. These partnerships help sustain reforms during periodic storms that unhinge most education reform initiatives (Brand, 2009). Only through sustained effort can these reforms succeed in institutionalizing transformative approaches to teaching and learning and school redesign, and ultimately changing deeply held beliefs and school cultures.

Summary

Our economy can't succeed unless our young people have the skills that they need to succeed.

President Barak Obama, May 20, 2013, Manor High School

The literature cited here highlighted the need for high school reform, the historical progression of career academies, the characteristics of career academies, and linked components of career academies and successful Career Academy models. The literature indicates that in order for high school reform to be successful, a clear vision of desired results and a strong leadership team to shepherd the change process must be in place.

For this study, I explored perceptions from practicing educators who are instructional leaders, lead teachers, parents and community members. The district's vision (one of the board goals set by the school board) is to make PCISD a number one school choice for families. What that will entail is significant change in the district, including changes in programs, instructional techniques, and the overall quality of

education our students receive.

The Career Academy model enables students to learn through the lens of a career or academic theme. Students ought to be more engaged in their studies through hands on learning, and feel more prepared for either career or college, after high school.

Public education should be a top priority, but to ensure that our students succeed, we need the support of key leaders in our community, particularly business leaders. Involvement of the business community is absolutely critical to the success of our school district. Our business and industry leaders can provide life changing experiences for our students.

Comprehensive school reform is not just about the campus—it is about equipping students with the skills they need for long time success, and about changing the face of the community so that the entire community connects to learning in an exponential way. For an educator, there is no greater gift (Brand, 2009). Success in transforming and sustaining new forms of teaching and learning and redesigning schools depend on strong community leadership and ongoing support. School leaders must convince community stakeholders of the valuable support they provide and continually cultivate community involvement (Brand, 2009).

III. METHOD

This chapter reviews the purpose and focus of this study. I describe the population used in the study, the procedures used in the study, the method of data collection, and method of data analysis.

This is a descriptive embedded case study of the career academy reform initiative at SPHS. A case study design approach is appropriate for this study for several reasons. First, as a complex strategy, case study allowed me to employ a variety of methods to collect data. These data collection tools included: a) participant observation; b) in-depth interviews; c) focus groups; and d) analysis of artifacts, in the form of archival documents (Marshall & Rossman, 2006).

Second, the use of a case study also allowed me to immerse myself in the process of implementing the Career Academy model, and enabled me to explore the rich detail involved in complex organizational relationships. The Parker business community strongly supports the Career Academy model as a method for improving the quality of the local workforce. The business community was invited to a kick-off luncheon and feedback from these local business and post-secondary institutions confirms that within the context of core knowledge instruction, students must learn essential skills for success in today's world. As a participant observer, I investigated, first-hand, the interactions among stakeholders. I observed how they engaged obstacles, and worked toward solutions (Marshall & Rossman, 2006).

Third, these observations and interactions resulted in more vivid descriptions of the transformation, greater detail relative to problem solving, and deeper insights into

how various stakeholders wrestled with the implementation of change in a particular organization (Marshall & Rossman, 2006).

Using qualitative methods, I gathered information to understand how the participants' experienced the implementation of the Career Academy model. I conducted interviews with individuals from the high school who have been involved in the implementation of the model. Individual face-to-face interviews with participants were used to collect data to examine the experiences of the Career Academy model. In addition, meetings with grade-specific advisories, academy planning meetings, and integrated team meetings were observed to gain additional insights into team dynamics, collaboration, and buy-in. As a member of the presiding administration during the initial planning, I also participated in a college and career camp for teachers to learn more about the new college and career academy themes, and attended a community and business luncheon which introduced the Career Academy model to the local community. Finally, I also examined supporting artifacts in order to establish validity, identify the implantation timeline, and evaluate supporting administrative resource materials. Artifacts included brochures, agendas, meeting minutes, attendance sign-in sheets, posters, and chart tablets from brain-storming sessions.

Table 1

Types and Numbers of Participant Interviews

Individual Title or Role	Number of Participants	Type of Interviews
Principal	1	Semi-structured
Assistant Principal	1	Semi-structured
Academy Administrators (each responsible for 2 academies)	2	Semi-structured
Academy Lead Teachers (1 from each of 4 academies)	4	Semi-structured
Parents/Community	1	Semi-structured
Employers	1	Semi-structured

Population and Sample

The population of this study was the larger Parker area in which PCISD is situated. Participants for this study were drawn from SPHS. This single high school serves the Parker area and the surrounding community in the consolidated school district. The Parker business community strongly supports the Career Academy model as a method for improving the quality of the local workforce. The business community was invited to a kick-off luncheon and feedback from these local business and post-secondary institutions confirms that within the context of core knowledge instruction, students must learn essential skills for success in today's world. As they embarked on the implementation of a career academy structure, this school provided a unique opportunity to examine the process of change and change readiness, and also served as the source for a convenience sample.

Data Collection Instruments

Participant observation was the main data collection method I used to collect information pertinent to this study. Dewalt and Dewalt (2002) defined participant observation as a method of data collection in which the researcher immerses him/herself in the daily lives of the study participants with the objective of learning about their lives and culture. They note that participant observation has two important parts: participation in and observation of the phenomenon at hand. I strived to achieve distance in the study by reporting participants' views in their own words as much as possible. Agar (1996) included, as part of the participant observation data collection method, both formal and informal interviews that are the hallmark of anthropological fieldwork. I utilized participant observation as my major method of collecting data in SPHS because I was a participant in the transitional process in the school, thus also a participant in the study during its planning stages. As a favored method of ethnography, which explores the multiple dimensions of life within a society, participant observation employs many of the same tools as ethnography, such as reflection, observation, examination of documents, and interviews. However, participant observation has applications other than ethnography. Ethnography aims for a holistic description, examining a broad spectrum of characteristics, activities, value systems, language, and overall milieu of a culture, participant observation may focus on one aspect of daily life (Charmaz, 2006). As both researcher and participant, I embraced a dualistic approach to my research, variously employing both an objective and a subjective lens in the project. My unique combination of responsibilities and involvements provided the potential to explore myriad complex

personal, institutional, community, and political dimensions involved in the sensitive process of organizational change (Tedlock, 2003). In addition, as a participant observer, I was able to understand the context of statements, thereby ensuring a more accurate interpretation of terms, definitions, or subtleties without unnecessarily increasing the level of discomfort for participants (Marshall & Rossman, 1995).

By using participant observation, I was able to gather valuable information from candid conversations and interactions that occurred during the normal course of activities. This information, in addition to the data that came from informal and formal interviews provided wholesome data for my analysis. Patton (2002), commenting about semi-structured open-ended interviews, suggested that they allow the researcher to probe for more information from participants. Use of such interviews allowed me to triangulate the information I collected from participating and observing phenomenon relevant to the study. Corbin and Straus (2008) explained that data triangulation allows for cross data validation through the use of various instruments.

I carried out open-ended, individual interviews with the school principal, and an assistant principal, to get their perspectives on the transition. I also analyzed documents that detailed the transformation of the school into a career academy. Table 1 provides a summary of the individuals who were interviewed, and the type of interviews that were conducted.

Document analysis is a social science research tool, helpful in triangulating information collected using other tools (Alexander, 2001). Careful triangulation can confirm information provided through interviews and observations through the

convergence of perspectives from multiple sources and points of view (Alexander, 2001). Systematic examination of documents pertinent to the study assists the process of identifying and analyzing themes common to the information uncovered through the study (Bryman, 2001).

Limitations/Delimitations

I relied on the honesty of the participants in providing full and accurate responses to the open ended interview questions. However, one limitation of concern is that six of the ten participants for this study were selected by the principal of the participating high school. The principal may have selected individuals that were in favor of the Career Academy model or had some other bias I was not aware of.

Face-to-face interviews of teachers in the academies, employers, parents, school and district administrators, and school building visits were conducted.

Data Analysis

For this study, I borrowed my analytic method from inductive analysis (Corbin & Strauss, 2008) which allowed for the observation, description and analysis of phenomena as they unfolded. Since I was not in a position to predict what the participants would experience during the transition period when SPHS initiated a career academy, I approached this study with an open mind, setting aside my own preconceived ideas. Inductive analysis assisted me in approaching an unbiased vision that allowed the study to proceed in such a way as to naturally uncover the experiences of the participants as I collected the data. Instead of developing hypotheses in advance, inductive analysis lets the themes emerge from the research as the analysis and data gathering proceed in

tangent. Initial data were reviewed, analyzed and coded before additional data was acquired. In this manner, the meaning embedded in the data continuously informed and shaped the ongoing exploration and research. This concurrent process facilitated the extraction of deeper meaning from the data and produced more profound insights and understanding. This inductive analysis approach allowed me to construct a provisional coding scheme early in the process (Creswell, 2009). This provisional scheme helped me identify both key concepts as well as gaps in the data early enough that modifications in the data gathering plan could be made to ensure vital information was not overlooked (Charmaz, 2006). As such, using the inductive analysis method, I engaged in a process of comparative data analysis that was pragmatic, adaptable, and particularly well-suited to a small-scale research project such as this (Creswell, 2008; Denscombe, 2010).

I started analyzing the data as soon as I started collecting it as suggested by scholars such as Merriam (1998). Immediate processing of data allowed me to cross-check the information I collected with the participants and ensured a higher level of accuracy. Using a comparative approach, I compared each incident with others for similarities and differences, as the data analysis unfolded. Similar incidents were then grouped together under a higher-level descriptive concept. In this way, I was able to distinguish different categories of themes and to identify the little details that made up the themes (Corbin & Straus, 2008).

I think it was important for me to draw insight from both my experiences in the field and the literature I have reviewed in preparation for the study. Inductive analysis allowed me to make these inferences. I used the insight gained from these two sources to

compose my study. Theoretical comparison also let me consider the data both holistically and to think more precisely about its properties (Corbin & Strauss, 2008).

Ethical Considerations

At the beginning of this study, I was working and thus daily engaged in the career academy transition process at SPHS. My position early in the study context, that of administrator in the school district and a colleague of the study participants, required that I exercise caution in the study process. Presently, I serve as the coordinator of the Early Childhood Program in the PCISD. Nonetheless, established relationships at the high school allowed me easy access to participants and information pertinent to this study and thus raised the possibility that I might overlook some important aspect of the research, such as ensuring participant informed consent. As a result, I obtained IRB approval before I initiated the study's fieldwork. I also obtained written informed consent from the participants (drawn from among the PCISD community) and let them know that they were free to opt out of the study whenever they chose. I used pseudonyms for participants to protect their identity and confidentiality as much as possible and encourage the participants to freely contribute any and all information that might further the purposes of my research.

IV. FINDINGS

Report of Data and Data Analysis

This study was designed to gather data to be used in examining the experiences of individuals involved in implementing the Career Academy model at one central Texas high school. The high school I chose to study had completed the first year of the Career Academy model.

I used a qualitative approach in this study. I conducted interviews in 2013. Each interview was conducted at a location selected by the participant. I conducted each interview using the same core questions from an open-ended interview guide (see Appendix C) in an effort to ensure consistency among all interviews. All interviews were recorded and transcribed. I took field notes during the interviews.

Research Questions

I used these questions to guide this study:

1. How do select teachers, administrators, parents, and community members perceive the PCISD Career Academy model and its implementation?
2. What are some factors that participant felt inhibited and promoted the implementation of the Career Academy model in the PCISD?
3. What factors led to the decision to implement the Career Academy model?

Research Design

I conducted each interview using the same set of ten questions from an open-ended interview guide (see Appendix C). All interviews were recorded and transcribed. In addition to the recordings, I took field notes during and after each interview. The data

from the ten interview transcripts were analyzed with open coding. Another document analysis tool I used for this study included my reflective journal. I recorded notes, comments and conversations with school and community leaders over the past two years as part of my data collection process. Janesick (1991) explained “the art of journal writing may be incorporated into the research process to provide a data set of the researcher’s reflections on the research act” (p. 505). Additional communication took place via face-to-face meetings and phone calls.

Portrait of the School

The new SPHS opened in 2006, and the Career Academy model was implemented in the 2011-2012 academic year. Tables 2 and 3 provide summary information on the student population during the 2010-2011 school year by grade level, and graduation rates by ethnicity (Texas Education Agency, 2011).

Table 2

Student Population by Grade, Previous Five Academic Years

	Academic Year				
	2008-09	2009-10	1010-11	2011-12	2012-13
Grade 9	689	608	630	599	548
Grade 10	493	581	560	565	572
Grade 11	405	436	515	517	522
Grade 12	378	393	402	452	467
Total	1,965	2,018	2,107	2,133	2,109

Table 3

Numbers of Graduates by Ethnicity, Previous Five Academic Years

	Academic Year				
	2008-09	2009-10	1010-11	2011-12	2012-13
African					
American	19	22	25	16	25
Hispanic	199	198	284	316	332
White	114	126	126	113	128
Other	4	4	7	12	15
Total	336	350	442	457	500

Table 4

Percentages of Graduates by Ethnicity, Previous Five Academic Years

	Academic Year				
	2008-09	2009-10	1010-11	2011-12	2012-13
African					
American	5.7%	6.3%	5.7%	3.5%	5.0%
Hispanic	59.2%	56.6%	64.3%	69.1%	66.4%
White	33.9%	36.0%	28.5%	24.7%	25.6%
Other	.12%	.12%	.16%	2.6%	3.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

The New Parker High School Academies

District leaders at SPHS sought to allow students to connect their present educational needs and desires with their future career and life goals. In support of this effort, the PCISD school board approved the implementation of “wall to wall” academies at the high school. The objective was to merge career and academic instruction with real world experience so that graduates would be well-prepared to enter the workforce with 21st Century Skills (M. Jordan, personal communication, April 22, 2013).

Academies are small learning communities within a school, taught by teams of teachers from different disciplines. Considering that jobs and careers exist today that were not even in existence when current high school students were in kindergarten, education must be relevant and provide students the skills to chart their career direction and modify it in response to the dynamic global market (M. Jordan, personal communication, April 22, 2013).

In preparation for academies, SPHS provided the students opportunity to explore career opportunities through online interest surveys and assessments and small group discussions. Michelle Jordan, SPHS principal, presented the academy format to all incoming ninth graders, as well as current ninth, tenth, and eleventh grade students. Students were encouraged to evaluate their existing skills and interests to see where their future may lead. The academy presentation was also made available to parents in order to introduce the Career Academy model.

For the 2011-12 school year, all incoming ninth graders were to be enrolled in the Ninth Grade Academy with classes taught by academic teams of teachers that focused on student needs. The Ninth Grade Academy was meant to provide a solid academic foundation for the whirlwind of experiences that come with high school. Students were encouraged to broaden their horizons by attending interest groups and clubs during the block lunch period. Tutoring was available during block lunch to support academic courses and to help students stay on track for their sophomore year.

Students in grades 9-11 will select from four academies based on their main elective area of interest. The academy choices:

- Academy of Applied Sciences
- Academy of Arts and Communication
- Academy of Hospitality, Business and Law
- Academy of Health and Human Services.

Each academy has a curriculum built around a career theme. Students' schedules will be built around their interests and will allow experiential learning as the students' progress through their selected academies. Connections will be made between academic subjects and real world experiences. For example, a student interested in the health profession would select the Academy of Health and Human Services, and progress through the various health-related electives. Core academic teachers will plan with the health profession elective teachers to provide meaningful instruction that is relevant to the health profession. Therefore, by the student's senior year, practical experience will be available via job shadowing or an internship. Real world applications are vital in the successful transition to a career, college/university studies, or technical school beyond high school.

Key components to long-term student success in any educational model are partnerships with parents, community, higher education, and employers. It is critical that students advance through high school on a path that will allow them to live the life they desire as a productive member of society. That choice is different for all students and is unique to their interests and skills. Business and community partnerships are critical to the success of this endeavor by working with SPHS to create student internship positions,

as well as teacher externships which will give teachers “real world” experiences to make learning more relevant for all students.

SPHS is implementing the Career Academy model to motivate students to see the possibilities beyond high school...and most importantly, to equip students with knowledge, skill, and character to attain those possibilities. We invite you to be a part of our future! (Parker High School Brochure 2011-2012)

Themes Identified

Five major themes and two sub-themes emerged from the analysis of the data, and are discussed in the following sections. The major themes included:

The Push for High School Reform

Internal Push

External Push

Planning and Implementation of the Academy Career

Changing Roles and Responsibilities

Teaching and Learning Expectations

Community and Business Partnerships

The Push for High School Reform

Internal Push

There was an overwhelming consensus from all participants that change was needed at SPHS. When asked why the school decided to use the academies as the school improvement model, the principal said, “Internally, there were a number of teachers that

felt like our students didn't know what they needed after high school in terms of career and weren't prepared or exposed to career pathways.”

An academy administrator credited the principal with being a “visionary” and “progressive”. She said that:

Our principal is very progressive, and she knew that this is the direction a lot of successful schools were going to. Schools that was successful in having high graduation rates, high attendance rates, and high certification rates for beyond high school (M. Velasquez, personal communication. April 18, 2013)

One lead teacher stated

“Academies were seen as the best opportunity for students to have access to looking at careers as what college life is going to be like.” She concluded that in college, all of your courses are related to each other in some way. The Career Academy model tries to mimic that a little bit so that your courses are infused with a primary theme from your academy. (C. Moore, personal communication, April 18, 2013)

Parent and community members believe that the dropout rate and finding a reason for kids to stay in school needed to be addressed. (H. Porter, personal communication, April 3, 2013)

One academy administrator believed that the Career Academy model “was a better way to individualize instruction for all and to group students in a fashion where they have similar interests and can make connections to their high school education to

what they want to do after high school (C. Orleans, personal communication, April 11, 2013).”

One lead teacher stated that she preferred the smaller schools, so that the students would be gathered under academies rather than one big blanket school, would add relevance to the curriculum where students would be able to work skills, content relevant areas, so that they could be inspired is her understanding of the Career Academy model. (M. Jess, personal communication, April 24, 2013)

Another lead teacher shared that I love the idea of career academies. I love the fact that we can help kids prepare for life after high school. College is not the answer for everybody and if we can do something to help them while they’re still teenagers and not wait until they are eighteen and ask them to be productive members of society at eighteen with no skills, they can’t do that. (J. Wagner, personal communication, April 18, 2013)

Another lead teacher said that “I think that we were looking at what was among other things looking for ways to make connections for learning for the students to combat that age old problem of why am I having to learn this?” (M. Myers, personal communication, April 4, 2013).

Another lead teacher said that So just the idea that students would see in their classes that there is a direct correlation to what they are learning and what they can get out of it and where they are headed. The idea that not only do you get the high school education, but

you might get some college hours, certification in your field, and some experience as you head out our doors with more than just a high school diploma. (M. Myers, personal communication, April 4, 2013)

An academy administrator stated “I think the way our principal puts it ‘we want our kids to graduate with a career or career option.’” (D. Perez, personal communication, April 7, 2013)

One school administrator commented that

I think that the realization of the sheer size of our school, it was too many students and too many teachers and it is kind of impersonal. I think this was kind of a good way to personalize it and get everyone to know everybody else.

This perception of the high school Career Academy model was shared by all participants, many of whom made comments indicating the high school needs to prepare “kids better beyond a diploma.”

External Push

Externally, there was a current school board member who visited with the principal and the superintendent about restructuring the high school to be part of the community’s preparation of a skilled workforce. The principal shared that this particular school board member had been on the board years ago, when the high school had considered academies as a reform change, however, due to leadership changes in the district those plans never came to fruition.

One lead teacher stated

We don't live in a neighborhood in a school district where over ninety-percent of the kids go to college. You know, when you live in one of those neighborhoods, one of those affluent neighborhoods, then I think every class should be college prep. I don't think they need career academies. That's not what we have here. So I think the idea of academies is great. (J. Wagner, personal communication, April 18, 2013)

One community member stated in response to the need for high school reform at SPHS

My understanding through some of the teachers and parents that we had talked to was rescue of a few reasons. One was drop-out, as far as a lot of kids in the different classes, not going all the way through from freshman through seniors. (C. Rodriguez, personal communication, April 3, 2013)

Another community member responded "Many [students] will go to college or many will go to trade school, but aligning the product of the high school with the workforce demands or requirements of the community is what I think is important." She expressed her belief that the school was hearing from businesses about the need for certain types of skills and trades that students need to be learning if they are not going to college. She further stated that she believed that the model the district was using was not preparing students for career or post-secondary education "adequately" (H. Porter, personal communication, April 3, 2013).

Academy Career Model Planning

I asked each of the participants about activities leading to the implementation of the Career Academy model. Having experience with an academy high school in the Houston area, the principal stated “There were staff members on campus who had been on the campus ten years ago when they had attempted an academy concept” (M. Jordan, personal communication, April 22, 2013). She reported that there was a handful of staff members still on campus with prior knowledge of the Career Academy model, “building a little bit of infrastructure through conversation and presentation and taking the large group to the National Career Academy that helped me get the dialog going and the questions” (M. Jordan, personal communication, April 22, 2013).

The principal identified the following activities that took place in preparation to implement the Career Academy model.

- 1) Attended the National Academy Coalition Conference with thirty of the staff members.
- 2) Provided a staff development day for all staff members that included presentations from 3 High School Academy Campuses.
- 3) Sent a team of teachers to visit Career Academy models in Florida, Nashville, and California.
- 4) Held a “volunteer” College & Career Academy Camp during the summer that resulted in attendance by 90% of the staff.

One of the academy administrators expanded on the camp.

It wasn't mandatory. It was your day off and (staff) came to this camp and spread out into four different academy themes and each group sat with their team and just talked and within their academy created their own vision. (D. Perez, personal communication, April 7, 2013)

Both the assistant principal and the academy administrator were among the staff chosen to visit different schools following an Academy Career model. One of the lead teachers stated that "I think it was really wise to not have just only administration go to conferences." She added "They were just everyday average classroom teachers going to these conferences and seeing the success of these schools in Florida and Nashville."

The academy administrator shared that "a number of people from our campus went to the conference and just got first-hand, hands-on training from schools that are implementing academies both newly and those who have been doing academies for a while" (C. Orleans, personal communication, April 11, 2013).

Another academy administrator shared that she spent three days in Nashville, and "I got information about what they did and the activities that they had to do to lead up to where they are now" (D. Perez, personal communication, April 7, 2013).

The campus held weekly trainings on campus, "That is what is called a PLC- Professional Learning Communities. It's not truly what Dufour calls a PLC; it's more of an information sharing session than is really learning by teachers" (M. Jess, personal communication, April 24, 2013).

One of the community members recalled

I believe that the school and the district and also the parents were involved in looking at indicators of outcomes of student achievement, and I'm also aware of the district doing a lot of research on the Career Academy model nationwide. (C. Rodriguez, personal communication, April 3, 2013)

Implementation of the Career Academy Model

When I asked the participants about how the school was different from the previous year of implementation, four themes emerged from the data: (a) the structure and master schedule, (b) teaming of teachers, (c) grouping of students, and (d) the smaller learning communities' model.

In the words of one of the academy administrators, "There's just more structure, and it seems like it feels more organized, because you've broken down into smaller schools" (D. Perez, personal communication, April 7, 2013).

There seemed to be a consensus among the *participants* that one thing that was different was the master schedule.

Structure and Master Schedule

The principal stated that "having the students grouped by academies is a more meaningful arrangement than just an alphabetic type arrangement or a grade level type arrangement. It begins to speak to what a high school education means to your future" (M. Jordan, personal communication, April 22, 2013).

One of the academy administrators said "the campus is certainly more organized and structured and college and career. There are ongoing conversations between the

teachers and administration, teachers and students, counselors and parents. I mean it's just part of our culture now" (D. Perez, personal communication, April 7, 2013).

A community member stated that

It's been great now because when I need to talk to my daughter's counselor within her academy area, it's not just a counselor that has A-L or L-Z. I am able to request meetings with teachers and they all have similar schedules, similar time off periods, so it's much more convenient for parents to visit with teachers as a group. (H. Porter, personal communication, April 3, 2013).

One of the lead teachers expressed the significance of the students "actually going to classes and being in classes with peers who have similar interests as them."

Another one of the lead teachers discussed how easy it is to communicate with the students. "The students don't have to go very far to their next class, so they no roaming around this large campus of ours" (J. Wagner, personal communication, April 18, 2013).

Daily Schedule Changes

All participants agreed that the "block schedule" made a huge impact. Block schedule is a 90 minute classroom time. One of the lead teachers believed that "the block schedule implemented the year before was planned to make sure that the ninety minute block for our teachers moving forward. One of the academy administrators stated that the block schedule was implemented because "we wanted to maximize the experiences that our kids have, experiences that are aligned to whatever it is that want to do in life and aligned to their interests" (D. Perez, personal communication, April 7, 2013).

Another lead teacher agrees that “the one hour lunch schedule enables us to talk with our students” (M. Jess, personal communication, April 25, 2013).

One of the school administrators stated

I felt like we had a good connection with each student and also with the teachers on my team and my students did better knowing that I knew. I would ask them “Hey are you going to class? Because Miss so-and-so said you were absent from your “B” days” or “Be sure and ask Miss Paul for your missing work, because I see that you are missing some stuff” (M. Velasquez, personal communication, April 18, 2013).

Another academy administrator emphasized that “scheduling has been a critical piece of the Career Academy model and trying to group the students with other students who have the same interest” (M. Velasquez, personal communication, April 18, 2013).

A community member stated “When talking and meeting with counselors about scheduling, they work with us on how to work in her academy elected courses within her extracurricular and other required courses” (H. Porter, personal communication, April 3, 2013).

Another lead teacher shared that

We used to be grouped, location-wise, by department, which I thought was fantastic. I loved the math department here. I think they are just fantastic, and when we were all on the same hallway, it was great. We had that support, because regardless of the students, we were all teaching Algebra II, we were all teaching Algebra I, and we would have informal meetings pretty much every

single day. It was great. It made our department even stronger. Now we are put in location by academies and it's not very cohesive. (J. Wagner, personal communication, April 18, 2013)

Teaming of Teachers

The principal explained that

In the past, teachers had been grouped just by content areas. There was an English team, a math team, a science team and so on. Teachers continued to belong to those content teams, and additionally they belong to an academy team.

She further explained that those academy teams were interdisciplinary. Each academy team had a couple of English teachers, a couple of math, a couple of science, and a couple of social studies, as well as the career themed electives. The participants were in agreement that grouping the students by careers is a more meaningful arrangement than just an alphabetic type arrangement or grade level type arrangement (M. Jordan, personal communication, April 22, 2013).

One of the community members stated that “I think it’s been great because now when I need to talk to my daughter’s counselor, it’s a counselor that’s within her academy.” She added that “having one assistant principal and a counselor assigned to each academy is truly a school within a school” (H. Porter, April 3, 2013).

One of the lead teachers stated that “The academy model is where you really have a bit more of a village effect” (M. Jess, personal communication, April 25, 2013).

One lead teacher stated “I have sat down and worked with teachers that I had known nothing more than their name previously and we’ve worked on some important

things” (M. Myers, personal communication, April 4, 2013). He went on to echo the same sentiment about working with other teachers: “I feel like I’m a better teacher by spending my time around other good teachers” (M. Myers, personal communication, April 4, 2013).

Collaboration with the staff was noted by the two academy administrators. One of the newer school administrators, who served as a teacher during the first year of the academy implementation stated that, “as a teacher, the new grouping of teachers helped me to find resources that I didn’t know I had before. I was able to ask my colleagues ‘What’s working for you with this student?’ or ‘What isn’t working?’” (M. Velasquez, personal communication, April 18, 2013).

Another lead teacher said

The career academy process seemed to work better than the other academy because they teamed the teachers in a way that was more intervention-structured rather than requiring every single student to follow a certain path, which is what previous academies or ninth grade schools have done. (M. Jess, personal communication, April 25, 2013)

Grouping of Students

One of the academy administrators that stated “We gave our students an opportunity to do some career interest inventories, and some career interest surveys” (M. Velasquez, personal communication, April 18, 2013).

A lead teacher recalled that the students were placed into advisories by groups which included an adult, as a support system (J. Wagner, personal communication, April 18, 2013).

One of the academy administrators explained that

One thing that is different is the way our students are grouped or teamed. They are teamed by academies for their content area classes, and they choose electives both within their academy and outside their academies, so it's not limiting for students. (M. Velasquez, personal communication, April 18, 2013)

Another school administrator emphasized that the structure is very different, "you have a lot of the kids going to their same team of teachers and so you can have a lot more conversations, that again about the whole child, the attendance, the discipline."

A majority of the participants agreed that the structure of the academies feels more organized.

One lead teacher stated that "These last couple of years, the biggest change has been in the structure for the actually going to classes and being in classes with peers who have similar interests" (C. Orleans, personal communication, April 11, 2013).

Another lead teachers shared with me that

We have the same students. It's very easy to communicate with them about those students. Also, they don't have to go far to go to their next class, so they're not roaming around this large campus of ours. But, then you do have those classes, and unfortunately it happens, you know, with group dynamics being what they are, you get those few groups where one or two people, students will ruin the

whole group, and then they are with that group for every class or the majority of their classes, and then that negative behavior tends to spread a little bit more.

That's, the Number One negative thing I see happening with the academies, specifically Applied Science, because we do have that population of students who are interested in careers that, oh, a lot of them could leave high school and go do.

(J. Wagner, personal communication, April 18, 2013)

Smaller Learning Communities

Parker has an enrollment of over 2100 students. One of the academy administrators explained that before implementing the Academy Career model, students were divided by alpha and each of the assistant principals and counselors were responsible for as many as 700 students. “So creating these small learning communities, five of them, and now we have about 350- 400 in number,” he said.

The community participant stated that she believed that “the Parker administration [administrators] recognized that having smaller learning communities where teachers and students can have closer relationships based on course work is more effective than just a large high school” (H. Porter, personal communication, April 3, 2013).

Changing Roles and Responsibilities

I questioned each one of the participants on whether their roles had changed with the implementation of the Career Academy model. The *participants* agreed that their roles had changed. The principal said that

I don't have quite as much daily interaction with students and teachers as I did previously with the organization being more complex, I find more of my dealings

are with the academy administrators and academy team leaders, helping them plan activities. (M. Jordan, personal communication, April 22, 2013)

The academy administrators agreed that their roles had shifted from “what we used to call or still call an assistant principal to an academy administrator. The primary focus was discipline and now the focus is more curriculum oriented and providing professional development for teachers” (C. Orleans, personal communication, April 11, 2013).

One of the academy administrators added that “my role is more coordinator, advisor, liaison for two academies, and I just try to communicate effectively and seek out the best support for students and teachers.”

The lead teachers say that they have taken on more responsibility. *One* expressed concern that her role is not well defined. She said

My main responsibility is on the non-advisory Mondays, those seven times this semester when, instead of having Advisory on Monday, we had workshops to set up something to engage our students. So it has changed and the other members of the academy no longer come looking for me for answers because they know I don't have them. (J. Wagner, personal communication, April 22, 2013)

Another lead teacher stated that

This year, my role is a little less clear because I'm bridging two academies. As a teacher, my role hasn't changed a lot because I'm already in a specialized classroom where I teach students who are already interested in healthcare, so my role as a teacher hasn't changed. But, as an academy lead teacher, my role has

changed in that I'm working with the other teachers in my academy to help them find those connections to those careers and colleges and opportunities for the students to really investigate what else is out there. So I have my 150-160 students that I am directly responsible for, but I'm also now tied and in many ways responsible for an entire academy worth of students. (M. Myers, personal communication, April 4, 2013)

Individual & Organizational Change Readiness

When I asked the participants about the changes each experienced, three themes emerged. These are: team building, buy-in, and communication.

Team Building

One of the lead teachers shared that

I guess the word is team-building for the teachers, because I think our slowest snowball was getting the teachers on board. I think that if the teachers really felt like they could rely on each other in the beginning that maybe they would have had an easier transition. But I think our beginning was a little rocky, because we heard a lot about the teachers not trusting that other teachers were really doing what they said they were doing in their classroom, and it took a while for the students to start talking about what teachers were doing in their classroom, and then the other teachers started believing it. So, I think if we had created a better, a stronger community among just the teachers that it may have been a stronger start for our change. (C. Orleans, personal communication, April 11, 2013)

Another lead teacher shared that

I think I would be more inclusive and more communicative with the developments, with what's happening, with what needs to happen, more transparent, if you will. Okay? I would take in less training and make the training or not, you can't make, facilitate the systemic habituation of the training, rather than hit a new training every year, and then hope something sticks. I think that those things would be better than some of what we've done. Right now, there's a feeling of a lack of communication and communication is one of the biggest things and transparency, and it's, not sure why, but there's less communication. (M. Jess, personal communication, April 25, 2013)

Buy-In

The importance of buy-in was prevalent among all lead teachers and academy administrators. One lead teacher expressed her experience in regards to getting the teachers to buy-in to the academy.

One of the lead teachers was very vocal about buy-in, saying I felt as though teachers at my level and teachers older than me that had been here longer were probably at an 'okay, what's the next thing we're going to do here.' We've had some many things just thrown at us, 'Here's the next thing that going to change the world'" (M. Myers, personal communication, April 4, 2013).

One of the community members shared they need to open the academies maybe to a few more areas that they haven't looked at, you know, it's like that maybe some of the other kids are interested in. Maybe they need to help some of the kids with purchasing certain things, certain

items, that in some of the fields that the kids might not be able to afford, whether it's like maybe cameras or laptops or computers or whatever that they would need in their field and kids can't afford them, you know. Maybe they have to budget more and/or look for scholarships or something like that to get monies for some of the things they need - the kids need. (C. Rodriguez, personal communication, April 3, 2013)

Another community member stated

I would do more parent engagement because the parent is the child's first teacher, has the largest influence over the child, and I think if more parents were aware and understood the purpose of the academies, it would be, it would have, the implementation would have been much smoother and they would have been much further along in sustainability and setting up their advisory group, advisory committees and getting experts. I mean, there are 2,000 students there. All those guardians and parents have jobs in fields that relate to the academies and so I think had there been more outreach to parents then that would have created a lot more support in general, as well as brought in additional resources for the schools to use to further children's exploration of careers. (H. Porter, personal communication, April 3, 2013)

A lead teacher said

We've got two English teachers, two math teachers, and then you have two freshman teachers. The special education room, the deaf education room and then the rest of our social studies is across the hall, maybe thirty, forty yards away and then science is downstairs and the Career Technology another building it's hard to bond with the other teachers in the academy when your location is so spread apart. (J. Wagner, personal communication, April 18, 2013)

One of the school administrators expressed that the Career Academy model is worth the challenge, although

It has not been easy. It was challenging to get the faculty and staff to buy in. It's also challenging to get people to get certifications in other areas so that we can have a larger pool of elective classes that we could each. It takes a lot of flexibility and change is always uncomfortable and for those teachers what has been here for a long time it was very disconcerting for them. So I think that, you need to make sure your faculty and staff are ready for it, because if there are not ready then the school is not ready.

One of the academy administrators stated "If your teacher leaders are not on board or you don't have a group of teacher leaders that are on board with the structure, I don't see how it can stand."

Another academy administrator added the importance of buy-in from stakeholders "Your community, your parents, your business leaders are a critical piece of the transition to academies and you can't do it without their support".

Another lead teacher stated “we don’t have a campus improvement team . . . so an oversight team as like an advisory board is needed??? . . . you could call it a campus improvement advisory board.

Communication was also addressed, one of the lead teachers said

We just need to learn to communicate. I feel as if we’re all kind of a little guarded, and were trying to all have to say the right things, but you know what? When you sit down with somebody who you’re on a more intimate and personal level with, you just start talking.

A lead teacher expressed the importance of not having the principal select the academy team leaders. “I would have it be more of a process that involved teacher involvement. I would be more inclusive and more communicative with development, with what’s happening, with what needs to happen, more transparent.”

One lead teacher strongly suggested that one thing she would do differently is work on building relationships, don’t force them.

I think it's worth the challenge, because it hasn't been easy. And, you know, it hasn't been a smooth road at all. It's been bumpy, it's been a challenge. The, just the faculty and staff, it was challenging to get them to buy into it. To get people to get certifications in other areas so that we can have a larger pool of elective classes that we could teach, you know. It takes a lot of flexibility and change is always uncomfortable and for those teachers that had been here for a long time it was very disconcerting for them. So, I think that, you need to make sure that your

faculty and your staff are ready for it, because if they're not ready then the school's not ready.

Teaching & Learning Expectations

One of the lead teachers shared her feelings about the teaching and learning component.

I feel, we've come to learn, to know each other more professionally than we have in the past and so I feel that there has been more cross curricular activities happening and also more ideas for cross curricular activities and projects. See how the art department works with the CT department or how health and human services or the health science works with the culinary arts. I like whatever, you see more partnerships, a lot more collegiality and a lot more collaboration students because I have a vested interest in the success of the arts and communication academy, not just the individual faces that sit in the seats in my room.

Another lead teacher expanded on the teaching and learning changes I think the very first thing is that there's just simply been more discussion of teaching and learning. I think that in, again that part of increased collaboration now, just the simple fact that we are discussing and seeking best practices and looking for ways to improve and looking for ways to intervene on behalf of a student that needs our help, whereas in the past, at most any school, it's just been what do I need in my room for my kids. And it's very, it's been very self-centered, whereas now because of my academy I've been able to broaden my

horizon, I've been able to meet with more people, learn more things, and I think that's kind of helped.

A community member stated

Well, in addition to the recommended plan, I've seen elective courses, like I said, the law enforcement course, and then I also know of other kids, who my child is friends with who are taking courses in early childhood, in education, in a lot of other areas that were not offered before that help high school kids start exploring what careers and they learn the pathway that they need to go to achieve their career goals.

One of the academy administrators was vocal about the teaching and learning program

I am going to be honest and say that my position with advanced academics and as an administrator, my focus has always been academic and the athletics piece and extracurricular is important. My husband teaches theatre. I know it is important. It's an avenue for students to explore and build on talents and passions that they have and that's part of becoming a healthy human being. However, I don't know that I would double block as many programs as we have in a Career Academy model. I just quite frankly feel like those programs have time after school with students anyway and that time during the school day could be used a little bit more effectively in a Career Academy model if coaches taught as many sections as other classroom teachers if programs that were large weren't double blocked.

Community & Business Partnerships

A school administrator shared

I've lived here longer now, and I've taught here for seven years. I've never seen as much community and business involvement as I have this year. And that's not only to say because this year my role was activity coordinator, not having to do with anything at all on that end, but I have seen more businesses come in here than I have ever seen before - local businesses, business owners. They come in to give presentations. They come in to give information to our students, to extend invitations to apply for positions that they have available that are coming up.

The principal shared

We had our first experience a couple of weeks ago. It was a half-day onsite combination field trip slash performance interview. Five students went from the applied science academy, took a tour of the plant, had lunch with the staff, and then they rotated through stations where they were just dialoged with a local manufacturer, and then one station was an official interview with the human resources. And from that, the company went into this project intending to offer two paid summer internships. After that experience, they said this was so much harder than they expected, they offered three.

An academy administrator said

We've had five advisories where we don't have class and that's where we bring in different, different speakers and people like that from different that are aligned, so here is, they're aligned through our academies because our lead teachers are the

ones that invite them in, so we, this semester we've had someone from Microsoft bring in the new P90X, so the kids are all excited about that. We've had a professor come in and give an agriculture workshop. We had a dietitian from the local hospital.

Another academy administrator added

We have people coming to our campus that are not, it's not just a general career fair where you float around the cafeteria and pick up flyers about whatever. You know they're in the PAC, our students in that academy rotate through sessions, and each industry from that particular association does a presentation for the students. The students can ask them about the skills they need and the training they need to get a job there.

A lead teacher added

I'm a teacher and my role was to be in the classroom, but absolutely this year I just have heard so much about different businesses coming to school giving presentations, guest speakers coming on campus talking to students, students having opportunities to go off campus to different facilities, and it's just amazing to me that it's just almost been overnight. It was like last year, maybe one or two things, and this year it's almost like every week there is something new that the students are learning or getting to have access to and I think that's amazing.

Another lead teacher elaborated on the Community Partnerships in his academy I myself have had one of our community members who is a representative from Microsoft, and he's very involved with the schools, and he came. We've had

gentlemen from [a local construction] corporate office come. We've had professors from the University come and speak to the students. We've had local business owners come in and talk. We've had and are having a dietitian from the local hospital come in next Monday. We've had [a federal credit union], come in and talk about business classes and help the kids know how to start understanding a little bit about their credit. Lots of people have expressed interest in helping. We just have to find the right niche for them. So, I do see that. Not only that, we've, Parker Manufacturing Association, we had their, a career job fair and this is the second year where it was pretty well organized.

Another lead teacher expanded on the limited partnerships

We had summer internships or externships, and I was part of that this last summer where I went to the chamber of commerce, but without the leadership there there's nothing, there's nothing happening with my trip that I spent those few days with our chamber of commerce president. They're anxious to be involved. It's there. We're not at the point where we're taking advantage.

One of the community partners commented

I haven't seen a whole lot in the sense of or heard a whole lot in the sense of businesses saying, you know, what the high school is doing is great. But, I have seen maybe a little bit more support for the school as far as donations, helping out the school because they see what the kids are trying to accomplish and what they are trying to do.

Another community partner shared

I have noticed a significant increase in *interest* among businesses, and I do know the [Parker] Manufacturing Association has had a couple of, you know, career fairs, but I have seen significant interest. I don't think that that interest has transitioned into guest speakers, field trips, mentoring, internships, quite yet, and so, but there is definitely more interest. I see that from the Chamber of Commerce's Education Committee, the Manufacturers Association, the Home Builders Association, a lot of different businesses and groups, everyone recognizes that having a successful high school equals prosperity and economic development in [Parker]. And so while there's a lot of people on board and understand the value and the importance of a successful academy system, it hasn't really made its way yet into one-on-ones with business people and students. Like I said, internships and field trips and these experiences where our kids can have hands on experiences, face to face with actual business people and learn, explore careers so that they know what they want to do.

Summary

The method of discovery used in this research project was to describe and evaluate the experiences of high school personnel and community members as they implemented the Career Academy model in a large high school.

The qualitative data were obtained through the use of in-depth, open-ended, semi-structured interviews with ten individuals involved in the implementation of the Career Academy model. Interviews were scheduled at the convenience of the participants, and

were recorded and transcribed for analysis. Using the literature as a point of reference, analysis of the interview questions uncovered correlations with theories of organizational and individual readiness for change. Participant responses underscore the importance of preparing for change in order to align organizational and individual purpose to achieve desired results.

V. DISCUSSION

"Preparing all students for life beyond high school" was the topic of discussion at a business/community leader's luncheon hosted by SPHS principal, Mary Jordan. She announced that during the upcoming school year, 2011-2012 all incoming ninth graders at SPHS would be enrolled in the Ninth Grade Academies with classes taught by an academic team of teachers to focus on student needs. The objective of the Ninth Grade Academy would be to provide a solid academic foundation for the whirlwind of experiences that come with high school. She further explained that students currently enrolled in grades 9-11 would select from four academies based on their main elective area of interest. The academy choices included: (a) the Academy of Applied Sciences, (b) the Academy of Arts & Communication, (c) the Academy of Hospitality, Business and Law, and (d) the Academy of Health and Human Services. (Principal M. Jordan, February 2011)

This was the first presentation to the Parker community of business leaders and volunteers unveiling the SPHS Academies. Principal Jordan announced that the PCISD Board of Trustees had approved the implementation of academies at the high school. She further explained that "the objective of an academy high school is to merge career and academic instruction with real world experiences, so that our students will be well prepared to enter the workforce with 21st Century Skills."

As a graduate of SPHS, an educator in the PCISD for over 30 years and a supporter of the High School Academy Career model, it was then that I decided to be part of recording the planning and implementation of the Career Academy model for my

research study. My enthusiasm and interest grew even stronger after having the opportunity to attend a National Career Academy Conference for two days with 30 of SPHS's administrators and teachers. Additionally a year later, I attended my second National Academy Conference representing SPHS along with a community member and parent.

According to the National Center for Education Statistics more students are turning to career academies. About 4,800 high schools nationwide reported having at least one career academy. National Career Academy Coalition reports that there are between 6, 000 to 7,000 high school academies nationwide. Federal and state governments are working to increase those numbers. President Obama has proposed \$1 billion in his administration's fiscal-year 2013 budget to expand the number of career academies and increase opportunities for students to participate in college-preparatory and career and technical curricula in their schools (USA Today, May 27, 2013).

Summary

This study was designed to gather data to be used to examine the experiences of individuals involved in the process of implementing a Career Academy model at a large high school. This chapter is a summary of the research findings, discussion, conclusion and recommendations based on the analysis of the data in this study. There were three findings that emerged from this study: 1) The participants felt that change was needed at SPHS to improve the graduation rate, attendance rate, and lower the number of drop-outs. The participants were supportive of the Career Academy model and felt the Career Academy model added relevance to the curriculum, 2) Implementation of the Career

Academy model requires additional planning time, staff development and funding. 3) The structure of the Career Academy model both physically and academically is very different.

Discussion of Research Findings

The focus of this study was to describe the experiences of ten individuals involved in the process of implementing a Career Academy model at one large high school. The findings were used to draw conclusions and to consider implications of this study.

Conclusions

Several conclusions can be drawn from this study. Each of these are discussed in detail below.

Strong Organizational Structure Supports Successful Transition

The literature on organizational change, foundational to this study, informs us that employees are much more likely to embrace change, and work more energetically toward its success when they understand the forces underlying the necessity for the change, and have had the opportunity to voice their concerns and be proactively involved in planning for and adapting to the changes (Armenakis & Harris, 2002; Lewin, 1947; and Senge, 1990). Nonetheless, successfully transforming an organization requires more than understanding, enthusiasm and involvement. Structure, direction, support and guidance are all crucial components that determine the effectiveness of any transformation. In this particular study, the following two factors provide insights on some of the lessons learned by this institution.

Roles and responsibilities need definition. First, many of the academy administrators and academy lead teachers reported that their roles were not clear or well defined. High school leaders must fully understand the structure of the Career Academy model

Implementing a career high school Career Academy model takes work. The model has proven to be successful. If career academies are to be expanded, efforts must be undertaken to heighten public awareness of their value, and several policy issues need to be addressed:

Brand (2009) fosters recognition of Career Academies as a key reform strategy for college and career readiness which also works on building the capacity of the system and of educators. In order for educators and community partners to implement effective career academies, they first must have a shared understanding of the key components of the model and know how to plan and implement a high quality program. This will require professional development for all the partners involved: teachers, administrators, counselors, employers, as well as college and community representatives. Education and policy leaders also need to build public support for such models and engage a broader group of community members, especially parents, employers, and college leaders, in the planning and implementation of the academy (Brand, 2009).

Buy-in contributes to success. A second conclusion that derived from the study was that there must be buy-in to the implementation of Career Academies. A majority of the participants expressed concern that their colleagues were not entirely in support of the Career Academy model. Several reasons were given as to why so many of the staff

members were reluctant to support the model. Among the most frequent reasons given were concerns of "the reform model being another new initiative to try" not getting" support from administration in areas of staff development" and the amount of time needed to plan with academy team members.

Curriculum needs to be integrated. The integration of curriculum among the academies has not been done due to lack of common planning time, limited resources and training. An interdisciplinary curriculum that meets both academic and academy specialty needs are essential in the Career Academy model. The lead teachers shared that while they have experienced an increase of collaboration among team members in areas of sharing core subject content and skills, there is not a cohesive plan where teachers have planning time to coordinate course content and instructional strategies.

Like most other education reform efforts, curriculum integration requires a series of supports and enabling conditions to be successful. These include resources, such as well-designed curriculum materials, and other forms of support and policies supporting integration and the commitment of school staff are important component of the Career Academy model. State, local, district and institutional policies and regulations can facilitate or impede curriculum integration. States can support curriculum integration by providing technical assistance and guidance to districts and schools in developing models, training teachers to develop and use integrated instruction and sharing curricula through clearinghouses (Brand, 2009).

The overarching goal of curriculum integration is to expand students' options for the future, something equally important to high school graduates and to adults seeking to

improve their economic prospects. Although many students want and need to go to work right away, an integrated curriculum keeps open the possibility of additional education and training. It enables them to prepare not just for their next job, but also for further education that can help them advance in a career (Brand, 2009).

Mission Statement Defines Organization and Purpose

Mission statement provides guidance. Another conclusion that emerged was that none of the academies at SPHS have established a mission statement or goals or has adopted the National Standards of Practice. The National Standards of Practice for Career Academics recommends that every career academy has a written definition of its mission and goals. These should be available to the administrators, teachers, students, parent, and all individuals involved in the academy. The mission and goals should include the following:

- a. A focus on college and career. Academies enable student to complete college entrance academic requirements while exposing them to occupations with a career field.
- b. Raise student aspirations and commitment. An academy aims to increase student's motivation to a higher level.
- c. Increase student achievement. An academy provides support for students to increase their academe achievement in high school.

National Standards of Practices (NSOP) Provide Structure

While staff members and administrators attended a national career academy conference, made site visits to other high schools implementing career academies and

attended staff development training from career academies who were members of the National and Career Academy Coalition, Parker has not joined the NCAC. The National Career Academy Coalition was founded in 1996 with a mission to provide collaborative support and resources for existing and emerging career academies. This broad group of organizations (see Appendix D) whose mission is to be supportive of career academies came together to develop a set of ten standards, first issued in 2004. After receiving continued feedback from the career academy field, it was determined that it was appropriate to refine and reaffirm these standards (National Career Academy Coalition, 2014).

Professional and staff development. Professional staff development is needed for new and current staff members.

The Principal shared that the teaching and learning aspect of the Career Academy model has changed significantly yet, "It's just in year two and we are still toddling."

The Academy lead teachers and academy administrators concurred that some teaching strategies and best practices among interdisciplinary teams is spreading, however there is a need for ongoing staff development for current and new teachers. One academy administrator stated that the Career Academy model was an educated research based idea and not something that was on a whim. The participants shared experiences with team members who have expressed the importance of providing teacher training in order to maintain and sustain the small learning community model effectively. A lead teacher expressed concern that she has not seen retraining or extended training. Both parent and community participants expressed concern about not having the "right"

teachers for the academies that will best benefit and help students. The lack of funding is a factor that has resulted in not providing the time needed for teachers to meet regularly to develop integrated curriculum.

In order for educators and community partners to implement effective career academies, they first must have a shared understanding of the key components of the model and know how to plan and implement a high quality program. This will require professional development for all the partners involved: teachers, administrators, counselors, and employers, as well as college and community representatives. Education and policy leaders also need to build public support for such models and engage a broader group of community members, especially parents, employers, and college leaders, in the planning and implementation of the academy (Brand, 2009). Rigorous evidence is beginning to emerge that suggests that integrating academic content with applied learning activities can improve student achievement.

Career Academies can provide a unique platform for such integration, but high-quality integration is likely to require intensive professional development for teachers and careful coordination of shared planning time and student scheduling (Kemple, 2008).

Community partnerships need nurturing. Career Academies embody partnerships with employers and business owners. They provide successful school-to-work transitions without compromising academic goals and preparation for college. Evidence also suggests that investments in career-related experiences during high school can produce substantial and sustained improvements in the employment prospects of students during their postsecondary years (Kemple & Scott-Clayton, 2004).

The Parker community understands that many support structures are needed to help students make the connection between academic learning and the real world. Strong employer partnerships have resulted in providing career awareness activities and work internships for students. SPHS has been successful in recruiting business partners to help support the academies in areas such as providing guest speakers, field trips and active participation at the annual career fair. SPHS did not provide evidence that clear expectations for partnership initiatives or a comprehensive structure of support for partners is in place. Work based opportunities including compensated internships can be an integral part of influential motivators. Innovative business-community-education partnerships connect local high schools with colleges and universities, community organizations, and employers, and provide real-world learning opportunities that are an essential component of the curricula and programs of study. Appendix E provides examples of these types of activities.

Lessons Learned and Pitfalls to Avoid

The implications of this study revealed that the Career Academy model is a welcome reform initiative at SPHS. All participants interviewed for this study felt the model would help students in their classes see a direct correlation between what they learn in the classroom and the skills and knowledge they will need after high school. The participants also agreed the Career Academy model provided the best opportunity to prepare students to succeed after they receive a high school diploma.

At the same time it is evident there are systemic problems that need to be addressed to better support the implementation of the Career Academy model.

The SPHS Career Academy model is still in its infancy as a high school reform initiative. My research experience in studying the implementation of the SPHS model indicates three short term implications: a) efforts must be undertaken to heighten public awareness of the model, b) funding and resources must be increased, and c) the need to adopt the National Standards of Practice Model.

First, although public acceptance for the Career Academy model was initially high, enthusiasm has to be consistently nurtured in order to grow into mature partnerships between school, parents and business community members. This requires sustained efforts and thoughtfully intentional planning. Communication with the community, as a means of keeping them abreast of developments, is crucial to advancing a healthy, long-term working relationship with community stakeholders.

Secondly, this initiative was supported by the school board, however, increased funding to support the Career Academy model has not materialized. This leaves faculty and administrators scrambling for critical materials and supplies that affect the success of the model. For instance, no additional professional development training has been provided since the initial planning stages. New personnel are not being given training as they are hired, nor are long-term faculty and administrators able to keep up with new developments in the Career Academy model.

Finally, although a team attended a national conference to become familiar with the National Standards of Practice during the planning stages, once again, follow-through on complete adoption and adherence to the NSOPs has not happened. Following the guidelines provided by the national advisory board increases the likelihood of success by

helping an institution focus their resources on the factors that are key to success.

Recommendations

In this section I make recommendations for the implementation of a high school Career Academy model. I also provide recommendations for future research.

Recommendations for Implementing a High School Career Academy Model

1. Visit high schools with successful Career Academy models. The participants shared that once teachers and staff had the opportunity to watch the operation of a career academy and to speak with the students, they become totally supportive and aware of the benefits being in a career academy has on student achievement and outcomes.
2. Provide teams of teachers with a common planning time during the school day to spend professional development time in designing interdisciplinary projects and curriculum.
3. The career academies should be physically close to each other, such as one academy upstairs and one downstairs or one per hallway. SPHS was not designed for the Career Academy model and challenges for grouping some of the academies has been challenging.
4. Professional development is essential to assure that all teachers, students, administrators, counselors and parents are aware of the value of career academies for student success. A plan of action for new personnel to receive professional development should be in place.
5. Each Career Academy should have an advisory board made of up local

business and industry representatives. These members can provide job shadow and field trip sites, help with curriculum issues, guest instructors, and provide mentorship and internship sites.

6. Junior high and high school counselors must be on board with the career academy concept, because they are key to placing students in the appropriate majors and elective classes.
7. Each career academy should have an administrator, a counselor and a director or lead teacher assigned to each academy.

Recommendations for Future Research

In this section I offer recommendations for future research, one recommendation for replicating this research would be for the researcher to:

1. Conduct interviews with students involved in the Career Academy model to gain their perspective.
2. Conduct a longitudinal study to study the effects of students enrolled in a career academy for two or more years.

Postlude

The literature discussed in this study demonstrates that career academies have thrived because of their dual objectives of career and college preparation, the broad cross section of students they serve, the evidence of their success, and the deep relationship between research and practice. The academies are designed to prepare students for whatever life may bring them after high School, either college or career. My final thoughts about this study begin with the my first thoughts two years ago as I began to

explore SPHS's implementation of the high school Career Academy model. My first thoughts centered on how I can contribute to my community in my beliefs that a well-educated and well-trained workforce is a pivotal factor in driving and sustaining a community's growth and prosperity. Those "fierce" conversations I discussed in Chapter 2 were influential in my decision to study this high school redesign approach that I support as an effort to raise the level of expectation for all students and show them the relevance of what they are learning today to their future.

As an educator in the school district, a former at-risk coordinator, and former director of community partnerships, I have witnessed firsthand some great partnerships with the local university, business and community members. While, I am seeing a community that is on the verge of transforming the high school with a supportive school board and a high school dedicated to providing the best education for all students, I believe that only through a sustained effort can these reforms succeed in institutionalizing transformative approaches to teaching and learning and school redesign, and ultimately changing deeply held beliefs and school cultures.

APPENDIX A

TEN KEY MEASURES

I. Defined Mission & 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. (Download pdf, Career Academy National Standards of Practice<http://casn.berkeley.edu/resource_files/national_standards.pdf>, from this website.) These include at least the following elements:

- a. To focus on college and career. 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.
- b. To raise student aspirations and commitment. An academy seeks to increase the level of students' motivation while in high school. The biggest limiting factor in many youths' future plans is not their ability, but where they set their sights.
- c. To increase student achievement. An academy provides support to its students to increase their achievement in high school. This comes through close relationships with teachers and fellow students; rigorous and relevant curriculum; and exposure to career and educational options outside the high school.

II. Academy Structure

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

- a. Cross-grade articulation. The academy incorporates at least two grade levels, ending in the senior year, with articulation in its teacher team, curriculum and instruction across grade levels.
- b. Student selection. Entry to the academy is voluntary. The recruitment/selection process is written and widely available. New students are provided an orientation to the academy. Parents participate in this process and approve of their son or daughter's choice. Academy enrollment reflects the general high school population.
- c. Cohort scheduling. Academy classes are limited to academy students, who take a series of classes together each year.

- d. Physical space. Where possible, academy classrooms are near each other in the high school building. The academy Coordinator has access to communication outside the high school.
- e. Small size, supportive atmosphere. The academy maintains personalization through limited size, teacher teamwork, and a 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.

- a. Support from the Board of Education and Superintendent. 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.
- b. Support from the principal and high school administration. The high school principal and other administrators are knowledgeable of the academy, public advocates for it, and are actively involved in its funding, staffing and support. They contribute to a positive academy profile within the high school.
- c. Adequate funding, facilities, equipment and materials. 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.

IV. Faculty & Staff

Appropriate teacher selection, leadership, credentialing, and cooperation are critical to an academy's success.

- a. Teacher Leader(s)/ Coordinator(s). One teacher (sometimes two) agrees to take the lead, serving as the academy Coordinator(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 and/or a stipend is provided for this role.
- b. Teachers are credentialed in their field, volunteers in the academy, and committed to its mission and goals. 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, work together as a team, teach a majority of their classes in the academy, and cooperatively share the duties of operating an academy.

- c. Counselors, non-academy teachers, and classified staff are supportive. 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.

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 critical.

- a. Common planning time. Academy teachers are provided regular common planning time within the regular high school schedule for purposes of program coordination, curricular integration, and resolution of student problems.
- b. Teacher professional development. Academy teachers are provided with training in the academy structure, curricular integration, student support, and employer involvement, where necessary by experts from outside the high school.
- c. Employee & parent orientation. Employee 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.

VI. Governance & Leadership

The academy has a governing structure that incorporates the views of all stakeholders.

- a. Advisory board with broad representation. The advisory board has members from the district and 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 members.
- b. Regular meetings. Meetings of the 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.

- c. A healthy partnership. Both through the advisory board and other interactions, there is evidence of a partnership between the academy/ high school and its host community.
- d. A student voice. Students have avenues through which they can provide input to the academy policies and practices.

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.

- a. Meets external standards. The academic curriculum is framed around state or national standards, and the career curriculum around industry and SCANS standards.
- b. Learning is rigorous and meets college entrance requirements. 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 and encouraged to do so.
- c. Curriculum is sequenced, integrated and relevant. 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.
- d. Post-graduate planning. 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.
- e. Dual credit options. The academy has articulation agreements with local two-and four-year colleges, offers dual credit courses and/or college credit for upperclassmen, and articulates its upper level curriculum with relevant college programs.

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 in certain aspects of its operation.

- a. Career theme fits the local economy. The academy career field is selected to fit with the community industries and employer base, to allow for adequate involvement of volunteer employees in certain of its activities.
- b. Community involvement. 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.
- c. Incorporates citizenship. The academy fosters a culture of respect for others and encourages student contributions as citizens.
- d. Work/community based service learning. The academy offers work and/or community based service learning opportunities for all interested students either through paid internships or community service.

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.

- a. Student data are collected. These data include those necessary to describe the student body within the academy (e.g., grade level, gender, race/ethnicity) and its relationship to the high school in general, as well as student performance on a variety of outcome measures.
- b. Multiple academic measures are included. Measures include a variety of accepted indicators of performance (e.g., attendance, retention, credits, grade point averages, state test scores, graduation rates, college going rates).
- c. Technical learning is assessed. Measures include knowledge of the field's terminology, technical concepts, and ability to apply English, math, and other academic skills to authentic real world projects. Where appropriate, industry certification is incorporated.
- d. Accurate reporting. Analyses of these data are reported accurately and fairly, regardless of the results.
- e. Evidence of impact. These measures show whether, and how much, the academy improves student performance.

X. Cycle of Improvement

No new academy functions perfectly. Even well established and operated academies benefit from self-examination and refinement. Ensuring and improving the quality of a career academy requires engaging in a regular cycle of improvement.

- a. Academy implementation is examined. Program leaders regularly assess

the academy's functioning, studying its strengths and weaknesses. This involves gathering feedback from key stakeholders, including students.

- b. Academy refinements are planned. These reviews lead to plans to address any problems. Such plans include timetables and benchmarks for improvement.
- c. Changes reflect the academy's mission and goals. The refinements refer back to the academy's underlying mission and goals

From the Academy National Standards of Practice.

APPENDIX B

THE CARDINAL PRINCIPLES OF SECONDARY EDUCATION

The Cardinal Principles of Secondary Education were issued in 1918 by the Commission on the Reorganization of Secondary Education. The focus of this commission was to form objectives for secondary education. It was decided that segmented subjects and their subject matter were a way to achieve the decided goals but that they were not the one and only way. The commission was also instrumental in starting a standard of forming goals before reforming schools. Changes were needed because of increased enrollment in secondary schools. A new focus that would take into account individual differences, goals, attitudes, and abilities was adopted. The concept of democracy was decided on as the guide of education in America. Work on the Cardinal Principles was started in 1915 and finished in 1918. The seven Cardinal Principles of Secondary Education are as follows:

1. Health

A secondary school should encourage good health habits, give health instruction, and provide physical activities. Good health should be taken into account when schools and communities are planning activities for youth. The general public should be educated on the importance of good health. Teachers should be examples for good health and schools should furnish good equipment and safe buildings.

2. Command Of Fundamental Processes

Fundamental Processes are writing, reading, oral and written expression, and math. It was decided that these basics should be applied to newer material instead of

using the older ways of doing things.

3. Worthy Home Membership

This principle "calls for the development of those qualities that make the individual a worthy member of a family, both contributing to and deriving benefit from that membership" (Raubinger, Rowe, Piper, West, 108). This principle should be taught through literature, music, social studies, and art. Co-ed schools should show good relationships between males and females. When trying to instill this principle in children the future as well as the present should be taken into account.

4. Vocation

The objective of this principle is that the student gets to know him or herself and a variety of careers so that the student can choose the most suitable career. The student should then develop an understanding of the relationship between the vocation and the community in which one lives and works. Those who are successful in a vocation should be the ones to teach the students in either the school or workplace.

5. Civic Education

The goal of civic education is to develop an awareness and concern for one's own community. A student should gain knowledge of social organizations and a commitment to civic morality. Diversity and cooperation should be paramount. Democratic organization of the school and classroom as well as group problem solving are the methods that this principle should be taught through.

6. Worthy Use Of Leisure

The idea behind this principle is that education should give the student the skills

to enrich his/her body, mind, spirit and personality in his/her leisure. The school should also provide appropriate recreation. This principle should be taught in all subjects but primarily in music, art, literature, drama, social issues, and science.

7. Ethical Character

This principle involves instilling in the student the notion of personal responsibility and initiative. Appropriate teaching methods and school organization are the primary examples that should be used.

Naming these seven objectives does not "imply that the process of education can be divided into separated fields" (Raubinger, Rowe, Piper, West, 106). Therefore all of the seven principles are interrelated. In order for these principles to be successful the student must have a willingness to follow these and an ethical character that will allow this learning to take place.

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APPENDIX C

INTERVIEW GUIDE

1. Why did your school decide to use the 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 years before the first year of implementation of the career academies in your school?
4. How has your role changed as a principal since the implementation of career academies?
5. How has the teaching and learning changed since the implementation of the 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?
8. What would you do differently if you had to start from the beginning in implementing a career academy in another high school?
9. Do you have any comments, suggestions, or recommendations that you want to make to other high schools who want to implement career academies?
10. Have you noticed additional business and community involvement since the implementation of the academy model?

APPENDIX D

NATIONAL ACADEMY COALITION ORGANIZATIONS

Association for Career and Technical Education (ACTE), Alexandria, VA

* The Center for Secondary School Redesign (CSSR), West Warwick, RI

* The College and Career Academy Support Network (CCASN), UC
Berkeley and UC Irvine, CA

* ConnectEd: The California Center for College and Career, Berkeley, CA

* The Southern Regional Education Board (SREB), High Schools That Work
(HSTW), Atlanta, GA

* The National Academy Foundation (NAF), New York City,

* The National Association of State Directors of Career Technical Education
Consortium (NASDCTEc), Washington, DC

* The National Career Academy Coalition (NCAC), Nashville, TN

* The Talent Development High Schools, Johns Hopkins University,
Baltimore, MD

APPENDIX E

BUSINESS ENGAGEMENT OPPORTUNITIES FOR HIGH SCHOOL

ACADEMIES

- * Guest Speakers
 - * Career Mentors
 - * Curriculum Advice
 - * Field Trips
 - * Teacher Externships
 - * Loaned Classroom Instructor
 - * Job Shadowing
 - * Student Internships
 - * Academy Advisory Board
-
- * Academic fair of career club or judging or sponsorships
 - * Career exploration fair
 - * Club/Competition judging or sponsorship
 - * College planning assistance
 - * Donate classroom and learning materials
 - * Email mentoring
 - * Employability skills training
 - * Event participation
 - * Job search skills (résumé writing, cover letter, interviewing)
 - * Provide equipment or supplies/materials
 - * Teach Exploratory/enrichment class
 - * Incentives for student performance
 - * Life skills training
 - * Marketing assistance
 - * Mock Interviews
 - * Part-time jobs for students
 - * Provide professional service to school
 - * Purchase books for library or classroom
 - * Scholarships
 - * Serve on School committees
 - * Share your facility for meetings, training session
 - * Student project facilitation
 - * Technical training

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