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University / K-12 Partnerships: How One University Impacted High School Career Decision-making Programs

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UNIVERSITY / K – 12 PARTNERSHIPS: HOW ONE UNIVERSITY IMPACTED
HIGH SCHOOL CAREER DECISION-MAKING PROGRAMS

A Dissertation

Submitted to the School of Graduate Studies and Research

In Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

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Local universities and their surrounding school districts have much to offer one another. How universities and school districts work together to create programmatic change in career decision-making for the high school adolescent is unclear. Utilizing a case study approach, this study examined the relationship that exists between a university and two high schools. This was studied through the lens of career development with regard to high school students.

This qualitative case study utilized personal interviews with high school guidance counselors and university career counselors as well as focus group interviews of high school teachers and university career counselors. Documents pertaining to all career related activities that existed between the two high schools and the university were evaluated to understand the partnership that existed when developing a career decision-making program for high school students.

The results from analysis of interviews, focus group transcripts as well as a review of all pertinent documents that pertained to program development showed that while the university conducted a national study on career decision-making, the results of this study had little effect on the development of a career decision-making program in the two participating high schools. The results also showed a need to involve all stakeholders

in the process of data analysis and program development. Finally, the study implied the importance of stability in high school and university leadership positions.

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CHAPTER ONE

BACKGROUND

Educational research has been a controversial phenomenon since about the turn of the 20th century. John Dewey, as early as the 1920's, expressed concern about the practice of educational research. Dewey felt that educational research should place a greater reliance on philosophy in educational study and lesser importance on the reliance of quantification. Dewey (1929) noted educational research was a relatively new science. In the early part of the 20th century he asked that educational scholars look to find ways to improve it.

Dewey (1929) pointed to problems that existed in the early part of the 19th century and indeed these same problems possibly exist today. First, Dewey noted the isolation of educational study from other branches of university scholarship. This may have been because of the poor reputation educational research had within the research field. Lagemann (2000) supported Dewey's statement that "since the earliest days of university research, educational research has been demeaned by scholars in other fields, ignored by practitioners and alternately spoofed and criticized by politicians, policy makers, and members of the public at large" (pg. 232). Secondly Dewey noted gender as another early cause for the lack of respect given to educational scholarship. Early teaching was seen as "woman's work" and educational research thus was seen in a demeaning way by the university leaders who tended to be males. In addition, the low social rank of educational research was further reinforced the issue of social class. Since teaching did not require a great deal of advanced training, teaching was a profession that was relatively accessible to people of the working class and immigrants. Since many teachers were from a lower socioeconomic background, public education was not generally presumed to have the

social construct attributed to lawyers and doctors. Dewey (1929) noted the fact that educational research was intended to be an applied science and this note also supported the lower research status of educational research. For the most part the lower status of educational research forced many to work in isolation thus weakening educational scholarship. The fact that much of the educational research completed is done in isolation allows for slow programmatic change, if any within educational institutions.

Educational institutions such as local school districts are privy to educational research from various sources. Much research today is conducted by graduate students who work with small groups of schools, teachers, or parents of a few particular schools or programs within particular schools thus, it is somewhat difficult for schools to generalize the results to their particular population. Also, the fact that specific building educational leaders today become responsible for the many facets of the educational program such as budgets, legal aspects, special education responsibilities, family and community issues. With all of these responsibilities, there is little time to deal with the unique phenomenon of educational change within programs and pedagogy.

For the reasons noted above, many schools that wish to make programmatic changes within their culture will try to establish relationships with higher education institutions. These institutions of higher learning work with members of the school leadership team who have been placed in charge of a particular initiative. The initiatives are research based but need to process through the school bureaucracy before any implementation can occur in the school. Higher education institutions may provide resources, consultants or data from research studies conducted on the initiative.

Universities have a long history of studying various topics that could be beneficial to local school districts. What procedures are involved when universities wish to share their information with local school districts to help create programmatic change that could benefit high school adolescents? Questions are quick to evolve such as: Who is responsible for the implementation of the initiatives? Who is responsible for the evaluation of the initiative and what happens to the initiative over time? Why do initiatives fail in one school district but show great promise in another? How do high schools and universities work together to create a collaborative relationship based upon research data obtained either locally or nationally? Understanding the school and university relationship as it relates to the programmatic change of career decision-making of high school students was the basis for the study.

In the remainder of this chapter, the reader should be able to identify the problem from which the study arises as well as the purpose of this study. Key factors, which influence career choices, will also be introduced. Next, the significance of the study will be explained as well as terms that relate to this study. Furthermore, the assumptions pertaining to this study as well as limitations of this study will be discussed. Finally, the summary will be an overview of chapter one as well as an introduction to chapter two.

Statement of the Problem

Local universities and their surrounding school districts have much to offer one another. How universities and school districts work together to create programmatic change in career decision-making for the high school adolescent is unclear. Utilizing a case study approach, this study was conducted to examine the relationship that exists

between two high schools and a local university. This was studied through the lens of career development with regard to high school students.

Much research on growth and development focused on the phase Erikson (1963) referred to as “Identity” vs. “Role Confusion” or as Super (1980) termed “exploration” in his “Life Span” theory. The traditional high-school student who is involved in making his or her first tentative career plans is in this stage of development. Since 1988, at least nine major studies were linked to career development or the career decision-making of adolescents. Young, Friesen and Pearson (1988), Young & Friesen (1992), Young et.al. (2001), Trusty, Watts and Erdman (1997) and Palmer & Cochran (1988) all studied career development in adolescence. Their studies evaluated specific family variables and how each specific variable influences adolescents. While the results of the studies are different due to the focus of the particular study the results generally concluded that families exerted some form of influence over the tentative career plans of adolescents. The research indicated that family variables such as attachment, family members, and direct parental involvement influenced various aspects of the career decision-making process for adolescents such as career certainty, indecision and self-efficacy. The previously mentioned studies included participants of age levels 10-18 who were of middle class white students from suburban districts.

In the specific area of career decision-making four major studies have been completed since 1989. Three of the studies, Kotrlik & Harrison (1989), O’Brien (1996) and Kush & Cochran (1993) utilized high school seniors as the focal point of the study. Penick & Jepsen (1992) only studied 11th grade students. Similar to the studies prior to 1989 families and family relationships were the elements studied. All researchers studied

a specific family variable and each study was only generalizable to the specific population and to the specific family variable studied. Again, as in the career development studies, the students being researched were predominantly white, middle class suburban adolescents. Programs have been developed by schools and universities to address the non-family issues related to adolescent career development. Palmer and Cochran (1988) studied a program developed by a school to help parents in aiding their children in career decision-making which showed to be an effective program. Moreover, the program, like other career development programs, only affected one influence on students' career development, the parental influence.

Educational research conducted by Dykeman et al. (2003) has, through consultation with career guidance practitioners and researchers from across the country, as well as through examination of research articles, grant reports, and program manuals, organized the Career Development Research Team that established a comprehensive list containing 44 career interventions. In addition, O'Hara's (2000) study of a career exploration class for high school seniors found that participants increased their scores on an inventory of career orientation, indicating that they engaged in increased career planning and career exploration. While there are many programs and studies related to career development in adolescents if the study results are not utilized by school personnel to exact change in their school what is the purpose?

While national research is conducted and programs are developed based on the results of educational research the question becomes, what happens to the programs over time? According to Hargreaves and Fink (2003), sustainable programmatic change is linked to significant leadership in education. Leaders for change recognize that the people

in the organization are its greatest resource. “To lead change, the leaders must believe without question that people are the most important asset of an organization” (Joiner, 1987, p. 2). Finally, to sustain the forces of a culture change in a school remains a daunting and questionable task for educational leaders (Moffett, 2000, pp. 35-38).

Purpose of the Study

Universities have often had an indirect impact on K-12 school districts. The university might conduct relevant educational research that impacts K-12 educational programs. National educational studies coordinated by universities may affect school curriculum. However, formal relationships between high schools and universities focusing on the development of specific curriculum are rare. The purpose of this study, therefore, was to examine the partnership between two high schools and a university as they developed a career decision-making program based on the National Study on Career Decision Making Survey conducted in the fall 2001.

Factors which Influence Career Choices

While there is no guarantee that a student’s career decision will be positive by exposing them to various careers, students may gain valuable information about careers by being exposed to the career in a shadow or work experience. Their parents, school personnel, peers and life experiences will all affect them in some way. In addition, seeing and participating in various careers, students begin to develop their own set of career goals based upon their experiences. For example, a work shadow program gives a student an opportunity to walk through a profession of interest to see if this might be a career goal for her/him.

The theories of Super (1980) regarding vocational career development supplemented Erickson's stages of adolescence. Super described vocational development as a compromise between personal and social factors, self-concept and reality, and newly learned and existing patterns of responses. The closer the chosen occupation is to one's personal identity, the more meaningful the choice will be. Vocational likes, desires and abilities are not static. Through the living and working environment, one's self-concepts will change with time and experience. These in turn make choice and adjustment a continuous process.

Super (1980), like Erikson (1963), believed that the developmental process can be divided into a series of life stages, defined as growth, exploration, establishment, maintenance and decline, each of which provides an opportunity for intervention by someone who is closely related to, or respected by the individual. An adolescent is in what Super described as the "exploration stage". This stage starts with a fantasy phase during which an individual realizes that an occupation will be part of one's life, even if the desired occupation is often unrealistic. During the next, tentative phase of occupation exploration, the individual chooses several possibilities. At this phase the individuals narrow their selections with the help of respected mentors. During the establishment phase the individual tries to discover whether or not choices and decisions made during the exploratory phase are realistic. At this phase the high school student is trying to make a tentative but well-informed career decision.

While the research noted various possible influences in the career decision-making process, little has been studied on how the influences noted by high school students have resulted in programmatic change at the high school or university level. This

qualitative case study sought to understand how data collected from a national survey was utilized to make programmatic change at two high schools and a university. Therefore, the purpose of this study was to examine the partnership that was created between two high schools and a university as they developed a career decision-making program based on the results of the National Study on Career Decision Making Survey conducted in the fall 2001.

Research Questions

The study will attempt to provide information on the following research question:

1. What are the perceived benefits of university research as it relates to programmatic change within a school?
2. How did the university evaluate the data from the National Career Study conducted in the fall of 2001?
3. What conclusions were reached by the university after evaluating the data from the National Career Study conducted in the fall of 2001?
4. How did the university and local school district interact while creating the career decision-making program?
5. How has the effectiveness of the changes relating to career decision-making been evaluated at the university and the two high schools?
6. Have the programmatic changes in career decision-making been sustained at the two high schools?

7. How has the relationship between the university and two high schools evolved?
8. What role did leadership play in implementing and sustaining the programmatic changes resulting from the data analysis of the National Career Study conducted in the fall of 2001?

Significance of the Study

Donald Super et al. (1957) noted that by the time children reach the age of 10, they are believed to have passed through the fantasy phase of career choice. Their actual preferences are determined to a great extent by their interests, which are shaped by their experiences of enjoyable activities. Vondracek, Reitzle & Silbereisen (1999) noted that individual differences in both the content and timing of their vocational preferences are likely due, in large part, to socialization processes, particularly those of family and peer groups. Indeed, because young adolescents are still quite dependent on their parents and families, parent-child interactions and family dynamics are important influences on early vocational preferences (Vondracek et al., 1999).

Numerous quantitative surveys of adolescent development and its relationship to career decision-making have been conducted. Kotrlik & Harrison (1989) created a checklist to survey 3,858 high school seniors in Louisiana. The checklist noted factors that were important when selecting a career with various family variables being most important. O'Brien (1996) surveyed 282 high school female seniors and found that early family separation and significant adults had the most influence on the career decision-making process. Finally, Kush & Cochran (1993) utilized the Career decision-making scale and the Career Self-Efficacy Scale to survey 64 high school seniors and their

parents. The purpose of their study was to determine the influence a career development program, which involved parents, had on the career decision-making process of Canadian adolescents. The findings confirmed that career related programs could influence an adolescent's career decision.

The previous studies of O'Brien (1996), Kush & Cochran (1993) concentrated on various career decision-making programs that involved parents or a specific variable of the family such as socio-economic status. The studies of Kotlik and Harrison (1989) also predominantly involved students participating in a vocational education program. The findings revealed parents as the most significant influence in students' career decision-making process. None of the previous studies explored other possible factors that could have influenced the career decision-making process of an adolescent. The studies did not take into account the other variables that have influenced career decision-making such as work experiences, school personnel, peer relationships and school programs. The combination of family influences and other external influences could result in a more accurate description of the phenomena of adolescent career development.

Consequently, the research results that support programs, suggest that programs do have an affect on adolescent career development. While many studies on programs that affect adolescent career development are available, the issue that comes to the forefront is how are programs developed and once they are created, what affects the ability to sustain the programs. Hill (1999), Wilsmore (1999) and Sergiovanni (1996) emphasized the development of staff and community members to ensure successful leadership with the adoption of any program. Raemer, (2000) noted that for innovations to last teachers must have current data and professional development for new skills

accompanying changed roles and teaching practice. According to Hargreaves and Fink (2003), sustainable programmatic change is linked to significant leadership in education.

Consequently, this study is a unique explanation of how data from a national study, conducted by a local university, can lead to programmatic change within two local school districts. Finally, the study attempted to understand how changes in these local school districts have been effected over time.

The relationship between university research and the use of this research by local school districts to make programmatic change was the main focus of this study. This study utilized the example of career development as a focal point to study the relationship between the university and the two local school districts.

Definition of Terms

1. Adolescent Development - The period of identity development usually taking place during grades 8-12.
2. Career Development – All counseling activities associated with career choices over a life span. All aspects of individual needs (including family, work & leisure) are recognized as integral parts of career decision making and planning (Gysbers & Henderson, 1994).
3. Cognitive Development - Those factors relevant to the mental process of knowing, including perception and reasoning.
4. Guidance Counselor – An individual who provides direct services to students, such as assessment information, consultation, counseling, referral, placement, follow-up, follow-through, as well as working in collaboration with other

members of the guidance team, the school staff, parents and members of the community (Zunker, 1994).

5. Human Development - The changes that occur in individuals, as they grow older.
6. School Personnel – Teachers, Guidance Counselors and administrators of a school.

Assumptions/Limitations

Limitations of this study include participants who may not recall discussions pertaining to the National Study fall 2001 data and subsequent programmatic changes. Further limitations include utilizing participating school district personnel who may not wish to give an honest evaluation of the programs that were developed as a result of the National Study fall 2001. It was assumed that the researcher visited the two schools and university to gain first-hand information and face-to-face interviews pertaining to this study. Finally, this study was limited to the specific schools that participated in the study.

Summary

In this chapter, the researcher noted the contributing factors that could influence the career decisions of an adolescent. These include parents, school personnel, work experiences and school programs. In fact, schools are beginning to expose students to experiences that will enable them to make a more informed career decision by the time they graduate from high school. This chapter reviewed background information on the role of educational research and how schools utilize university-sponsored research to make programmatic changes with the local school district as well as the effects of leadership in sustaining the changes.

The second chapter will review the literature as it relates to the various aspects of adolescent career decision-making. The second chapter will review studies conducted by university scholars, which results lead to changes of a programmatic nature within the high school setting. The chapter continues by reviewing programs created and designed to help students make informed career decisions. Next, the second chapter will review literature on programmatic change at the school district level and the leadership factors that helped sustain that change. Finally, the chapter concludes with a discussion of the strengths and limitations of the research reviewed as well as with a summary of the chapter and an introduction to chapter three of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Local universities and their surrounding school districts have much to offer one another. How universities and school districts work together to create programmatic change for the high school adolescent is unclear. Through the example of career development of high school students, this study examined the relationship that exists between two high schools and a university paying particular attention to programmatic change that occurred in the two high schools as it related to career development in high school students.

This chapter will begin with a discussion of the influences on high school students' career decision-making. The chapter continues by discussing how human development theory and career development theory are important factors when considering any career development program. The chapter continues reviewing literature based on specific career influences such as programs, school personnel and other factors resulting in an adolescent's career decision. The chapter follows with a review of literature related to specific programmatic changes made by states and local schools to help students make more informed career decisions. The review ends by discussing the role leadership plays in sustaining educational change. The chapter concludes by summarizing the strengths and weakness of the literature reviewed and an introduction to chapter three.

High School Students Career Plans

How do high-school students in the United States make their tentative career choices? Their tentative post-secondary plans are influenced by many factors, among

them parents, classmates, school personnel and their own career experiences. Eric Roberts (personal communication, November 7, 2004), Transitional Coordinator at Parkland High School in Allentown, Pennsylvania, provided significant examples of how tentative post-secondary plans are influenced by the various parties.

Roberts, in a private interview, noted one example of a student who struggled through high school and was entering his senior year undecided as to his post-secondary plans. This student asked him to help clear up his misconceptions about the process of choosing a college. Roberts noted that in reviewing the student's transcript, a 2.4 grade point average, he mentioned the fact that a 2-year community college or a 2-year trade school may be a great starting point for his future. The student subsequently worked on his own by answering questions on the computer based "Career Cruising" interest inventory. When both Roberts and the student reviewed the results all interests led this student toward a career in the field of writing and a 4-year bachelor's degree. Although the student argued that a 4-year college would be like high school and since he did not enjoy his high school years, college was not for him. Roberts still scheduled a tour with a post-graduate who gave the student a tour of a 4-year university comparing the major differences between high school and attending a 4-year college. The student chose to attend a 4-year university majored in writing and carried a 3.6 grade point average and admitted liking his experience.

Consequently, the only active involvement the parents had in this student's post-secondary plans was that of making an appointment with the transitional coordinator. It was the transitional coordinator who subsequently paired the student with a peer close to

his own age and thus helped influence the student's tentative career plan. The ability to experience college life with a peer was invaluable for this student.

Roberts also spoke of a female student who did extremely well on all standardized tests and had parents who wanted her to succeed at a 4-year university. This student wanted to attend the vocational school during her senior year. The parents asked the guidance counselor to review her records and speak to her about attending and planning for a 4-year university. Throughout the discussion with the student, the counselor focused on her strengths and argued that students who were that strong academically should go to a 4-year university. The student opted out of attending the vocational school in her senior year, went on to attend a 4-year university, and majored in business. After three semesters at the university, the student dropped out, citing her lack of interest in business. She then began attending a community college to earn an associates degree in business. Upon completing her associate's degree, she obtained a job in the business field. Nevertheless, after two years of working, she enrolled in beauty school to begin working on a degree in cosmetology. These examples shared how various parties, be it parents or school personnel, influence a student's post-secondary plans.

Human Development

Human development, which in this study refers to the changes that occur in an individual, as they grow older, is a key factor in how high school students make career choices. One developmental theorist, Erik Erikson (1963), outlined eight stages of human development from early infancy through late adulthood. Each of these primary life stages may produce a more or less favorable outcome, thereby forming the foundation for the next developmental stage. These adolescent stages are difficult for every child. This

could be caused by the varying amount of support they received from individuals or experiences. However, when children are pushed through these stages by often conflicting societal and family demands, or when there is not a proper balance during each stage, problems will arise. Erikson's theory described how this development's outcome would be dysfunctional. Adolescents are not immune to the effects of abuse, neglect, or distortion in their psychosocial development, personality development can move in a positive healthy direction or a negative direction, due to nurturing influences or abusive influences. Nevertheless, an unhealthy imbalance can occur on either pole of this stage. Consider some of the contradictions for students: they may be old enough to be entrusted with a two-ton hunk of speeding metal, yet not be allowed to vote; may be old enough to die for their country in war, yet not be permitted to order a beer; A college student, may be trusted with thousands of dollars of student loans, yet not be permitted to choose ones own classes. Whiston & Keller (2004) noted in traditional societies (even the American society only 50 or 100 years ago), a young man or woman looked up to his or her parents, relations, neighbors, and teachers. They were decent, hard-working people (most of them) and we wanted to be just like them. Unfortunately, most adolescents today look to the mass media, especially television, for role models. It is easy to understand why: The people on television are prettier, richer, smarter, wittier, healthier, and happier than anybody in their own neighborhoods! Unfortunately, they are not real. In fact, there are many new college students who are quickly disappointed to discover that their chosen field actually requires a lot of work and study. It does not on television. Later, many people are equally surprised that the jobs they worked so hard to get aren't as creative and glorious and fulfilling as they expected. Again, that is not how it is on television. It

should not surprise us that so many young people look to the short cuts that crime seems to offer, or the fantasy life that drugs promise.

The classic example of Erikson's theory can be seen in the life of a child in a single parent home. This child, without any outside or extended family help, learns or does not learn concepts, skills and ideas from a member of the opposite gender. Therefore, the child develops a skewed sense of reality. The Boys and Girls Clubs of America were started because of this theory. The goal of the organization is to help students have mentors who are positive influences and strong role models in their lives and to develop relationships with adults who nurture their confidence and their character. Erikson also noted that each stage of human development must build upon the others and are complimentary. Therefore, to develop a positive feeling about one's self, one needs to complete each stage successfully in order to develop proper and balanced aptitudes, producing character, strength and virtue.

Each stage of development has important implications, but Erikson's stage five, "Identity vs. Role Confusion" has significant impact on the decision-making processes of high-school students. Stage 5 coincides with the time that high-school students are making tentative career decisions. If the adolescent formulates a satisfactory plan of action about his or her future, then the outcome is positive, and one's identity is established. This positive identity derives in part from adolescents making appropriate career decisions based upon input from parents, significant adults, peers and experiences (Morris 1993). Adolescents who do not develop this sense of identity may develop role confusion and aimlessly move through life without any plan of action or sense of security

about their future. Role confusion occurs when parents, significant adults, and peers unintentionally influence the decision-making process in an adverse manner.

The agents of impact that have directly influenced individuals into arriving at their chosen career have been examined in studies dating back to earlier than the twentieth century. Whiston & Keller (2004) noted that research emanating from these early attempts is embedded in theoretical quantitative studies and adhered to a narrow focus centered on the agents of an individual's family, peers, and early work experience or observation of a work experience at an early age. Although these studies are narrow in scope, they contained certain limitations and strengths that researchers have revisited, reexamined and utilized as catalysts to unravel and identify all the possible influences on a significant group of adolescents in their high school years.

According to Webster's lexicon (1997), growing up involves attaining the normal peak of natural growth and development. Becoming an adult has always been difficult; even in the best of times, children today seem to be growing up faster, and maturing sooner, with the expectation that they act like adults (grownups). Among the reasons for this seemingly rapid maturing may be the expectations of their parents, the pressure from peers and the influences of the media and advertising.

In the researcher's opinion, the result is a generation of adolescents who want to take on all the roles and responsibilities of being an adult without the experiences necessary to prepare them for adulthood. In fact, many of today's children are growing up confused by double messages they receive from the adults in their lives. These messages include; high school teachers saying they are preparing students for college, and parents saying they must get a job so they understand the responsibilities of the real world. This,

combined with the problems arising from the normal physical and cognitive development taking place during this period, can lead to much confusion in the life of an adolescent.

To more fully appreciate the turbulence of adolescence, it is important to understand what adolescent development really involves. Adolescence is an often ill-defined period of physical, emotional and social growth and change after childhood. The age range of this developmental period varies from between 11-12 to 18-20. Since this process of maturing during adolescence is often gradual and varies among individuals, some professionals find that it is not practical to set chronological limits to the period. Erikson (1963) explained that while experiencing physiological changes, adolescents are faced with many psychosocial developmental tasks. These include, but are not limited to, achievement of independence, especially emotional, from their homes; establishment of identity as a person; acceptance of sexual roles and gender interests; acquisition of skills that will lead to self-support; and development of satisfactory relationships with age mates. Yet another major development during this turbulent time is career choice.

Erikson (1963) stated when a developmental task is not completed due to psychological or emotional conflict; this blockage can clearly have substantial negative impact on adolescents and continue into adulthood. Conflict that may interrupt normal adolescent development can include sexual or other physical abuse, conflicting peer group relationships (e.g. male students spending a majority of their time with female students), and use or abuse of chemical substances.

Career Development Theory

Donald Super, more than any other vocational psychologist, is associated with bringing a developmental perspective to the study of careers. He recounted the history

and development of vocational psychology, Super carefully differentiated vocational psychology from personal psychology, engineering or human factors psychology, and organizational psychology (Super, 1980). He stressed that vocational psychology focuses on people thinking about careers, preparing for occupations, entering the world of work, pursuing and changing occupations, and leaving the world of work. He further suggested that the term career psychology might be used in place of vocational psychology to make clear the focus on the developing person in search of and pursuing a vocation rather than on the static or technological changing occupations (Super, 1980).

Super's work culminated in the Life Career Rainbow (Super, 1980). The Life Career Rainbow model defined career as all the roles played by a person throughout a lifetime (child, student, citizen, worker, homemaker). In each role one passes through age-linked stages of growth, exploration, establishment, maintenance, and decline. A person's involvement in these roles depends on individual psychology and biology and the social/historical context (Super, 1980). His model focused on the salience of various roles in an individual's life cycle. The majority of Super's work was informed by the studies of early leaders in the study of adolescent development, particularly Charlotte Buehler (1933). Super (1980), argued that vocational development involves a compromise between personal and social factors, self-concept and reality, and newly learned and existing patterns of responses. He and other developmental psychologists called this concept life-span theory. Later life-span theorists relied heavily on Super's ideas while extending them. Currently, life-span-oriented vocational psychology views the individual as the producer of his or her own vocational development and occupational future (Vondracek, 2001).

In counseling psychology, there is a consensus that career choice is not a single event but the result of a series of developmental steps and that adolescence is a critical period in career development (Savickas, 2002). Savickas (2002) argued that during adolescence the individual's career choice and development is subject to various influences.

School Efforts to Develop Career Interests

According to "How Psychology Can Contribute to the School-to-Work Opportunities Movement": Report of the School-to-Work Task Force (1999), some students cite examples of parents taking them to their place of work thus allowing them to experience the parents' chosen vocation. Other students explained that their chosen career plans have been influenced by their friends' choices. Students mentioned that their identifying of a career pathway in high school was based upon what their best friend was planning to pursue in his or her freshman year. Some students based their tentative career choice on the suggestions made by their teachers or guidance counselors. The ability of a teacher or guidance counselor to influence a student's career choice by saying that a student has an aptitude for a certain career field demonstrates the influence school personnel have on some students. Finally, students mentioned that past work-related experiences had an influence on their career plans. Students who worked in daycare centers made plans to pursue careers in the fields of education particularly the area of early childhood education. These career influences demonstrate the variety of factors challenging students in their career choices.

School districts are trying to help students gain information concerning various career possibilities in the hope that by the time a student is in the late adolescent stage he

or she has enough information to tentatively make a career choice. School districts offer various programs related to career decision-making starting as early as elementary school. Many elementary programs provide information about careers that appeal to students. They do this through the form of career day, where professionals such as police officers, fire fighters and doctors come visit the students and make presentations about their occupation. Students are exposed to possible career choice simply by listening to adults discuss their profession.

In middle school, students are exposed to more formal programs, such as interest inventories. These inventories help students detect their interests and the many career possibilities related to those interests. By eighth grade, students are asked to focus on a career pathway related to a curricular field. The goal is that students will be more prepared to make an educated, informed decision about their future by twelfth grade.

Programs Designed to Affect Career Development

Palmer and Cochran (1988) explored specific parental influences on adolescents' career development by testing the effectiveness of the Partners Program, a self-administered program aimed at helping parents to aid their adolescent children in career planning. Forty participating 10th and 11th grade students utilized the career development inventory, and the results indicated that the self-administered program increased both cohesion and adoptability within the family and increased the career maturity of 10th and 11th grade students. Although this study indicated that training parents is an effective method of enhancing their children's career development, the credibility of the program would be strengthened if administered to a larger sample size, including individuals of diverse ages and racial backgrounds.

Moreover, according to Savickas, and Super (1996) career maturity has come to denote a readiness for accomplishing relevant vocational tasks at developmentally appropriate life stages. It has been noted that career maturity is a psychosocial construct and it is important to examine the influences of family; however, there were some concerns about the concept of career maturity and whether it is applicable from a cross-cultural perspective (Fouad & Brown, 2000; Leong & Brown, 1995). Dillard & Campbell (1981), in a study of 194 participants grades 9 through 12 (54% African American, 29% Caucasian and 16% Puerto Rican) utilized an attitude scale of Career Maturity, found neither parental career values nor parental aspirations were significantly related to career choice attitude maturity among high school students from racially diverse backgrounds.

Although there is debate about definitions of career development and whether career maturity has relevance in current society, what has been previously noted does provide insight into family influences on adolescents' career development. While Young and colleagues' qualitative studies indicate that parents attempt to influence their adolescent children's career development in various and complex ways, the results also suggested that psychological variables such as support and expectations may influence their career development to a greater degree than demographic variables. There are also indications that providing career development information to their parents increased adolescents' career maturity (Young et al., 2001)

Studies Focusing on Career Exploration and Career Decision-Making

Yet another way in which an adolescent could be influenced is through the exploration of career choices or work opportunities. While this would seem to be a

somewhat logical step in the career development process, surprisingly little research has been conducted specifically addressing how adolescents perceive the influence of such exploration. Kracke's (1997) study of 236 German students with a mean age of 15 looked at the importance of parenting styles and how they affect an adolescent's willingness to explore career fields. Kracke found that parental attitudes such as authoritativeness, openness to adolescents' issues, and concern with promoting career exploration correlated significantly positively with the career exploration of German ninth graders. Kracke's results also revealed that the degree of individualization in the adolescent-parent relationship related significantly positively to vocational exploration. These student participants demonstrated an eagerness to explore career options when parents supported this basic developmental need.

Similarly, Schmitt-Rodermund and Vondracek's (1999) study of 320, 14 to 17 year-old German students, all of whom were in 10th grade in two different tracks (college-bound; non-college bound), studied variables leading to occupational interests. The researchers found that adolescents who were more willing to expend effort and at the same time demonstrated more of an entrepreneurial orientation (i.e. high interest and entrepreneurial self-efficacy skills and traits), were more likely to show better entrepreneurial interests and were involved in programs designed to immerse students in a simulated business. The researchers also found that students involved in simulating their own businesses were also willing to expand their efforts (i.e. the willingness to learn new things, to be curious, and to work hard in order to achieve their career goals). These students also believed self-employment was an option for their future. They reported that they expected to be self-employed by age 40 and that they had made preliminary career

choices consistent with future self-employment. The authors noted that exploration of the world of business, particularly owning their own businesses, had great influence on the adolescents' career plans compared to those adolescents who were uninvolved in any career-related business program. It would seem that, given the results of this specific study, exploration is a key influence in the career development process for adolescents.

Another aspect of experiential learning leading to adolescent career development is part-time work. Skorikov and Vondracek (1997) noted that a likely contributor to how adolescents approach work and a subsequent career might be their early, usually part-time, work experience. The researchers presumed that progress in career development would lead adolescents to acquire more realistic (experientially validated) and perhaps more differentiated work values, and to increase their career decidedness. The researchers sampled 483 high school students (204 boys and 279 girls) in a longitudinal study. The study's participants ranged from grades 7 through 12, with 53% not working and 47% working part-time. The data used in the study was collected on two occasions, each time at the end of the academic year, with a one-year interval between the first and second assessment. Participants completed career development measures on both occasions; information on part-time work status during the academic year was collected at assessment two. Eliminating the graduating 12th grade students and new 7th grade students, 282 students' data was utilized. The researchers combined cross-sectional comparisons with comparisons of longitudinal change, contrasting employment status between assessments one and two, and the gender of the participants. The results confirmed an absence of significant pretest differences. The pre-employment career development studies did not contribute to the decisions made by a high school student to

take a part-time job. More clearly noted for this study is the fact that the study found little support of career work programs in regards to career planning by grade 12. While they found that programs could affect students prior to grade 12, there was little impact on those students making a tentative career choice. The study's results showed that work experiences contributed to the development of more self-awareness, realistic, performance oriented system of values, easing entry into the world of work during the transition to adulthood. However, the researchers noted that apparently adolescent work experience had little exploratory value that could facilitate the process of making a career choice, and thus career decision or the lack of it is not associated with part-time work. The researchers noted in their discussion that "what is suggested by these observations and findings is an urgent need to study the long-term effects of adolescent work experience, including its influence on career development and other developmental processes in adulthood" (Skorikov & Vondracek, 1997, p. 222).

Finally, another study by Schmitt-Rodermund and Vondracek (1999) evaluated the responses of 933 participants in a national survey of German youth. All participants were in 10th grade or below. The purpose of the study was to examine antecedents (technically correlates, as retrospective data were used) of exploratory behavior in adolescents and the role of exploration in career identity development. The data used was gathered in 1991. German unification had occurred just a year earlier, allowing the inclusion of adolescents from East Germany (N=325) as well as adolescents from West Germany (N=608). The survey used was the Shell survey given every four to five years to develop a broad picture of German youth. Exploration was assessed using adolescents'

reports of activities and likes in five different areas: leisure, school, technology, movies and music.

The results of regression analysis showed that adolescents who reported a strong interest in accomplishing career goals in their lives also reported more exploratory activities than adolescents who were not achievement oriented. Furthermore, the results showed that exploratory activities were indeed related to career identity status. Identity achievers reported a broad range of interests and exploratory activities. Adolescents confused about career identity had few interests and did not engage in extensive exploratory activities. Consequently, the level of exploration affected occupational choice. Independently of their age, adolescents who had already made up their minds about what occupation they wanted to pursue in the future had explored more than those adolescents who did not yet have an idea of what to do.

The results of the previous research studies are contradictory, with the studies conducted on German students seemingly hinting that exploration, whether work-related or leisure had some influence on the career development process of adolescents. On the other hand, the only study which looked at adolescents in the United States working part time, found little if any influence on adolescent career development. There may be many reasons for this contradiction, the most important being cultural differences.

Studies that Focus on School Personnel and Adolescent Career Decision-Making

In the literature on the influences of significant adults (other than parents) in the career decision-making process, the number studies of school personnel (teachers, guidance counselors or administrators) seems to surpass other significant adult studies.

However, as in the areas of peer and exploratory influences, school personnel influences are rarely directly addressed.

Gillies, McMahon & Carroll's (1998) study of 55 children in six classes over two years at a large private P-12 co-education, private school, in Brisbane, Australia, shed some light on the role of school programs and personnel on adolescent career development. Participants in the study received 10 career education lessons, one per week, in sessions ranging from 30 minutes to one hour. The participating teachers had control over when to administer these lessons. Once the series were completed, participants filled out a self-assessment questionnaire regarding the lessons and what they had learned. The results clearly showed that all participants were able to link learning derived from the career education classes with jobs they were interested, thus enhancing their knowledge of careers. The results also supported claims that integrating career activities into the curriculum allowed teachers to relate classroom activities to the world of work. However, for many participants information acquired about specific jobs was an unintended benefit. This was in the evidenced number of activities listed by students that noted their interest was a result of the career information obtained in their classes.

Therefore, it appears that the influence of schoolteachers on the students' learning about careers was largely random (Gillies, McMahon & Carroll, 1998). Although this study clearly demonstrated the value of career education in forging closer links between school learning and occupational understanding, it lacked a focus on the role and extent of influence of the educator. Nothing is mentioned about the various forms of delivery used by the teachers and thus the amount of emphasis each teacher placed on the

importance of the career lesson. Such information could shed light on why the students answered the survey questions as they did.

Mau, Hitchcock and Calvert's (1998) study of the influences of others' expectations of high-school students' career plans looked specifically at the role of the guidance counselor as an influential player in the adolescent career decision-making process. Mau, Hitchcock and Calvert's data is based upon the first and second follow-up studies to the National Educational Longitudinal Survey of 1988. The breakdown of the final sample included 10,713 males and 10,475 females, of which 1,406 were Asian Americans, 2,922 Hispanics, 2,260 African Americans, 266 Native Americans, 14,024 White Americans, with the remainder classified as other. The study used two survey questions about students' post-secondary plans and educational aspirations. The first question pertaining to post-secondary plans asked, "What do the following people think is the most important thing for you to do after high school?" with the people listed including fathers, mothers, friends, relatives, school counselors, teachers, and coaches. (Mau & Bikos (2000) p. 165. The second question alluded to educational aspirations and asked, "As it stands now, how far in school do you think you will go?" (Mau & Bikos (2000, p.165)

Chi-square analysis of students' perceptions of their guidance counselors' expectations for their post-secondary plans by race, gender and grade level found that over 50% of the 10th grade students thought their guidance counselors expected them to go to college. This perception was uniform across race and gender except for Native Americans. By 12th grade, this percentage increased significantly across race and gender

to 63%, with the highest increases reported by female students. In addition, only 10% of the students perceived their counselors as wanting them to choose non-college options.

The results of the first question also indicated that 10th graders perceived that their parents had far higher expectations that they would attend college than did their counselors or teachers. One exception was African American students were more likely perceived that their counselors expected them to attend college (59%) than did their fathers (52%). By 12th grade, however, students, regardless of gender or race, were less likely to feel that their counselors were optimistic that they would attend college than did family members (Mau & Bikos, 2000).

The results of this Mau & Bikos's (2000) study implied that counselors focused on advocating college attendance and gave less attention and encouragement to students attending trade school, entering the military, or moving directly into the work force prior to grade 12. Clearly, counselors must be aware of the fact that not all students need to attend college to attain their career goals, but by stressing college they sometimes adversely influence students' career plans. This seemed to be the case for adolescents prior to grade 12, but it was noteworthy to show that students in grade 12 felt school personnel had less of an impact on their career decisions even though educational aspirations increased in all groups by grade 12. This may or may not be due to maturity and needs to be explored in greater depth.

In addition to studying exploratory influences, Skorikov and Vondracek (1997) also studied the possible influences school personnel had on adolescents' career decision-making. The subjects (N=660) were in grades 7 through 12 in a rural school district in Pennsylvania. Approximately one-third of the school's population reported on the

extended objectives measures of their identity status on a survey. The researchers concluded that school personnel (i.e. counselors and teachers) had a major influence on the vocational interests of their students. However, the results also raised the possibility that their counselors and teachers regarding their vocational prospects may have misled high school students in this school. This finding is similar to those of Mau, Hitchcock and Calvert's (1998). Once again, it is apparent that school personnel influenced adolescents both positively and negatively.

Eccles and Roeser (2005) noted that children are most directly influenced by their immediate, fact-to-face, interactions with other human beings, particularly their parents, peers and teachers. Bornstein and Lamb (1999) argued that schools are elaborate multi-level institutions that influenced children's development in a variety of ways, ranging from teacher-students interaction patterns to the involvement, or lack of it, of parents.

Supporting the contention that schools and their personnel have the ability to influence adolescents, Krieshok (1998) noted that a review of 50 years of empirical literature on career decision-making documented the importance of counselors in assessing decidedness and career decision-making skills of their students. Krieshok argued that these factors are the principal items in any study of career decision-making. He also argued that interventions by school personnel and programs helped adolescents improve their career decisions.

As can be seen, studies supported the notion that school personnel have an impact on the career decision-making process of adolescents, but whether it is positive or negative have not been clearly determined.

Studies Focusing on Multiple Factors That Influence Career Decision-Making

In addition to the previously mentioned influences on adolescent career development, Ferry (2003) sought to understand the nature and nuances that operated in young adults' lives during their career choice decision-making process. Ferry's qualitative study included participants in twelve focus groups from an eleven county rural area in Central Pennsylvania. Of the groups, seven were conducted with 98 high school seniors and two were conducted with 22 employed young adults. The last three groups were 50 graduating college seniors. The researcher collected the input from 172 individuals who participated in the focus groups. The groups' interviews were conducted using open-ended structural protocols that lasted about an hour in length. Interviews were coded and emerging themes were identified and summarized. The themes reported included:

- Young adults, through the interaction with the context of family, school and community, learn about and explore careers that ultimately lead to career choice.
- Significant individuals who play key roles in the family or academic contexts mostly influence young adults' career choices.
- Young adults recognize that barriers do exist to implementing their future career choices and seek ways to overcome the obstacles.
- College-bound and work-bound young adults are influenced by vastly different social and economic contextual factors in their pursuit of markedly different occupational paths while transitioning from school to work.

- The career choice that young adults make is embedded in their academic efficacy, perceptions of the “ideal job”, their career maturity, and the context of family and community.
- A perception of an occupation either enhances or eliminates it for consideration as a potential career choice (pg.18).

The findings provide support for the prevalent role that context through family and community play in influencing adolescent career decision-making. Direct influences were evidenced in the key roles that family play in assisting adolescents in learning about career options, in the teaching of technical skills that lead to career choices, and in providing connections for employment. The study evaluated interest and aspirations through academic expectations, appropriateness of career options and exposure to employment opportunities. Finally, Ferry (2003) noted that the developmental task of career choice is pivotal in assisting youth in transition into adult roles that are productive and satisfying. Critical to the process, it was found that all of the key players within the context needed to be active participants. Ferry’s study confirms that all possible individuals who could influence students’ career decisions need to understand that an adolescent’s career decision-making could be influenced by that person’s actions or by words.

Gaunt (2005) noted high school senior’s perceptions of career and technical education and factors influenced their decision to attend an area career technical center. He also found that students who attended career and technical high schools tend to be influenced into the career path by various agents. Gaunt’s analysis of a 29-question survey administered to 425 high school seniors indicated that friends were the most

influential factor in choosing a career and technical education. Mothers and fathers were noted as second and third factors, 61.9% and 57.7% respectively. Less than half of the respondents noted guidance counselors as an influence (49.2%) as well as high school teachers (29.4%) and principals (18.2%). Gaunt also concluded that students' statements of school programs that offered students knowledge of the local technical school had a more significant impact on their decision to pursue a career through the local career and technical institute. Another outcome of Gaunt's study was the importance for educators and stakeholders to prioritize the addressing of parents of high school students. If the invitation to attend an open house filtered home to parents, then the influence of parents was significant and was addressed in some way.

National Study 2001

Moreover, with a goal of helping adolescents make career decisions, a university in Michigan, commissioned a study in 2001. In 2001, this university conducted a national survey of 11th and 12th grade students assessing their career choices and decisions leading to them. This quantitative study was conducted in conjunction with The Career Institute for Education and Workforce Development, the National Association of Manufacturers, the Precision Metal Forming Association, and Associated Equipment Distributors (Ferris State University, 2001). The survey was developed by the EPIC-MRA cooperation and created by the company's Senior Vice President.

As a result of their efforts the 91 item Career Institute for Education and Workforce Development Attitude on Career and Career Decision-making National Study fall 2001 (National Study fall 2001) was created. The survey solicited responses from young people as to their opinions about future education, future employment, and career

planning activities. Items contained in the survey varied from demographic information, post-secondary plans, career pursuits, educational needs and influences on career decisions. The study obtained 809 responses with a sample error of $\pm 3.5\%$.

EPIC-MRA a Lansing, Michigan based research consultant administered the phone interviews with then currently enrolled high-school juniors and seniors from across the United States in October and November 2001. They also selected respondents using random sampling. They also stratified the sample so every area of the country would be represented in the sample according to its contribution to the general population. Young people responded to this survey and were divided nearly perfectly between males $n=405$ and females $n=404$, and nearly evenly divided between high-school juniors (47 percent) and seniors (53 percent). Consequently, with this survey being stratified to reflect the population distribution by state the participants were aggregated by state by regions (West 18.5%, South 35.5%, Northeast 19.6%, and Midwest 26.4%).

Additionally, all surveys were subject to error; that is the reason the results may differed from those that have been obtained if the entire population were interviewed. The size of the sampling error depended on the total number of respondents to the particular question. For example, on question 10 which asked, "Would you say that one or both of your parents have been primarily responsible for helping you plan for a career or job, or would you say that a counselor or teacher in high school has been primarily responsible for providing career-and-job-planning assistance?", 54 percent of the 809 respondents said both their parents have been primarily for helping them plan for a career job. This percentage had a sampling error of plus or minus 3.5 percent. This means that with repeated sampling, it is very likely (95 times out of every 100), and that the

percentage for the entire population would fall between 50.5 percent and 57.5 percent, hence 54 percent \pm 3.5 percent.

The data analysis produced three broad conclusions. First, students perceived lack of career guidance; most young people are receiving little to no career guidance outside the home and not enough from their parents. Only 10 percent said school personnel had played the primary role in their career guidance with the vast majority (78 percent) crediting their parents as primary adult influence. More concerning, is the number of students who did not perceive they received any substantial career guidance in their high schools, and among the influences at school, teachers edged out counselors. Twenty percent of the students surveyed could think of nothing their high school was doing to help with their career decision-making.

In addition to the results noted, a high percentage of students (46 percent) did not identify anyone outside of their parents or schools who played a significant role in career consulting. To make matters worse, even though most young people viewed their parents as the biggest adult influence when it comes to careers, more than two-thirds (70 percent) claimed to have spent three hours or less in the past few months discussing careers with their parents (Ferris State University, 2001).

This lack of guidance on which to base a life decision produced high-school graduates who are either undecided as to what career to pursue or who may make poorly informed decisions that they may regret or abandon altogether. As a result, success in the workplace or in post secondary education is less likely, workers' skills and aspirations are not aligned with employers needs and both of these factors lead to a diminished pool of qualified workers.

Even so, 72 percent of those surveyed said they picked a career to pursue. This trend crossed all groups with some exceptions. However, Hispanic young people were much less likely than others to have made a career decision; fewer than three out of five (57 percent) said they have. In addition, young people in the West were less likely than others to decide on a career. That Hispanics are a greater percentage of the population in the western United States correlated these findings.

A second broad conclusion of the study was a pervasive bias in favor of four-year college attendance. In the 2001 study, more than two-thirds (68 percent) said they were headed to a four-year college or university, with another 26 percent planning to attend a community college or technical trade school. Only a small percent (6) planned no further schooling. While men were more likely than women to choose to go straight to work after high school, the percentages of university bound men and women were nearly identical.

The general trend was toward post secondary education, and this held true for all racial and ethnic groups. Some differences manifested themselves. Hispanics, for example, were much less likely to favor a four-year post secondary school than white or blacks, and were much more likely to favor a two-year school.

Consequently, this high percentage of young people planning to go to college sounded positive, but in fact a far smaller percentage of high-school graduates actually entered college than these numbers indicated, and only a fraction of them emerged with a bachelor's degree (Ferris State University, 2001). This bias towards enrolling in a four-year college resulted in students failing to explore other career preparation options while in high school. The results of the study showed that 68 percent said that the best jobs required at least a four-year college education, 41 percent considered vocational training

programs to be embarrassing as a preparation for careers and 45 percent said that pursuing technical training might limit their career options (Ferris State University, 2001).

The third broad conclusion of this study was that the vast majority of the respondents offered emotionally based, personal rather than pragmatic reasons for their choices of careers. Only 2.5 percent of the participants cited job availability (“good field for a job”) as the main reason they chose a particular field. The disconnect created between the availability of jobs and the careers that young people chose was illustrated most clearly in computer-intensive fields. In this study 47.6 percent of students noted computer-related areas as presenting the greatest career opportunities for young people, but only 6.8 percent plan had to pursue a career in the field. Also noteworthy is the field of veterinary medication, where students felt that little opportunity existed, and few chose to enter the field.

This study led to the adoption of new approaches to career counseling in several Michigan high schools. The university, which commissioned the survey, invited high school representatives throughout the state to hear an explanation of the conclusions reached on this study. Those attending were asked to participate in a study council that evaluated their high school’s current career guidance approach. The follow-up meetings were held at the university and facilitated by university officials. High schools agreed to participate in various degrees, with some schools more actively involved over time than others. As a result, the programmatic changes that occurred were not universally experienced throughout the state of Michigan.

Additionally, policymakers, career and workforce development professionals, parents and employers were also invited to attend the meetings. Their input was solicited to provide more information that high schools and the university would use to help meet the needs of high school students in their career decision-making process.

As a result, the schools participating in the thorough review of the survey conclusions and the follow-up meetings recommended the creation of a quality career guidance system (Ferris State University, 2001). The participating university personnel developed a number of proposed programmatic changes to the way their schools addressed student career decision-making. Some of the recommendations that these schools planned to implement included funding and empowering K-12 career counselors with the training and resources needed to assist students in the career decision-making process; better use of summer vacation months by creating summer career-related opportunities; increased partnerships between educators and industry; realignment of career recruitment/image campaigns; and the promotion of a career pathways concept. All changes were developed with the student career decision-making process as the main focus.

Studies Focusing on Change in Institutions

Every year millions of public and private dollars are spent on career development interventions for America's teenagers. However, no comprehensive listing of these interventions exists in the professional literature. The lack of such a listing hampers both practitioners and researchers in the area of career guidance (Dykeman, C., Wood, C., Ingram, Gitelman, Mandsager, Chen and Herr 2003). Therefore, Dykeman et al. (2003) through consultation with career guidance practitioners and researchers from across the

country, as well as through examination of research articles, grant reports, and program manuals, the Career Development Research Team established a comprehensive list containing 44 interventions. This was the first published effort to standardize career guidance language and focus primarily on advising and curriculum-based interventions. The advising included those designed to provide direction and planning skills to students; the latter are interventions, such as career courses, designed to promote student knowledge and skills relevant to the world of work (Dykeman et al. 2003). These 44 interventions then were rated on five variables (i.e., Time, Mode, Control, Place, & Size) by a random sample of the membership of the Guidance Division of the Association for Career and Technical Education. These ratings were then cluster analyzed. This analysis produced a four-taxon solution. The taxa were (1) Work Based Interventions, (2) Advising Interventions, (3) Introductory Interventions, and (4) Curriculum Based Interventions. The researchers divided the 44 interventions into four-cluster taxonomy, and then regressed the data against academic motivation and self-efficacy variables developed from the opinion survey. The only influence found was for the Advising taxa, which included interventions that provided students with direction for planning.

Participation in advising interventions increased students' mathematics motivation. The problem with not having career development intervention taxonomy became especially evident when one examines major research articles on the relationship between career development and important outcome variables such as academic achievement. Lapan et. al. (1997) found that the level of comprehensive school guidance program implementation was related to student achievement, as measured by self-reported grades. However, the question as to which specific career development

interventions made the difference went unanswered. This methodological problem mirrored the methodological problems of the same research conducted in the 1970s and early 1980s as part of the career education movement. Namely, that treatment in this area of research lacked specificity. Therefore, the lack of a comprehensive listing of career development interventions for teenagers hampers both practitioners and researchers in the area of career guidance was solved by Dykeman et al. (2003).

Since the No Child Left Behind Act of 2001, The National Career Development Guidelines, The National Standards for School Counseling Programs and The School-to-Work Opportunities Act, a variety of such interventions came into existence (Maddy-Bernstein, 2000). In terms of comprehensive guidance intervention programs, Lapan, Gysbers, and Sun (1997) used data from 236 Missouri high schools to explore the relationships between counselors' ratings of the implementation of comprehensive guidance programs in their schools and students' ratings of their own academic achievement, career development, liking for school and school climate. Controlling for school-level differences in size, socioeconomic status and percentage of minority students, the researchers found that students in schools with more fully implemented guidance programs reported:

- having higher grades;
- being better-prepared for their futures;
- having more college and career information; and
- believing their school has a more positive climate.

The study analyzed MSIP student and guidance counselor data collected from 1992 to 1995. For each of these years, a statewide, stratified random sampling procedure was

used by MSIP to select schools to be accredited. MSIP selected school districts to represent the diversity in geography, district sizes, ethnicity, and socioeconomic status across the state. For the purposes of the study, approximately 100 students were randomly selected from every high school included in the MSIP files during this 4-year period. The final sample included 22,964 students from 236 Missouri high schools. Equal numbers of boys and girls participated in this study. Approximately 24% of the students were receiving free or reduced lunch. Approximately 11% of the sample was minority students. MSIP data were collected from 434 school counselors who were currently working in these 236 high schools. Most of these counselors were Caucasian (7% were African American, 0.2% were Hispanic American) and female (60% female, 40% male). Most of the counselors had master's degrees (86%), and cumulatively 95% of the total sample of counselors had earned a specialist, master's, or doctoral degree. Their mean years of work experience was 18.53 (SD = 8.10 years). Mean salary was \$34,188 per year (SD = \$9,647).

When discussing career course intervention change O'Hara's (2000) study of a career exploration class for high school seniors found that participants increased their scores on an inventory of career orientation, indicating that they engaged in increased career planning and career exploration (O'Hara, 2000). The career exploration class was called Senior Bridge and was scheduled after the students' English class. The English teacher and the career exploration teacher integrated several projects and attempted to create a supportive and nurturing environment for all students. This two-class combination was called Senior Bridge. Five or six times throughout the year both teachers worked with the students during the same class period. The experimental group

consisted of 25 students who remained enrolled throughout the year and completed the pretest and posttest. The control group also consisted of 25 students who remained enrolled in the same class throughout the year and completed the pretest and the posttest. Due to the reality of student choice in selecting which electives to take, it was not possible to have a true experimental random selection of subjects, and so any generalization of the study reveals to a larger population than the original groups is not valid. The research study results may be helpful in planning career interventions in secondary school settings.

Career Courses

Another career course intervention study was developed by Savickas (1990) revealed that high school students who took a career-decision making course had less career-related indecision at the end of the course than did a comparison group. Participants also improved their long-term perspective as compared to the comparison group. This means that the career course helped them understand the relationship between the present and the future, and to plan for and be motivated to achieve long-term goals. Ten classes of 10th graders, totaling 209 students and 10 teachers, at a Midwestern, urban high school participated in this field test of the course. Unfortunately, the 10 classes could not be randomly assigned to treatment and control conditions because the teachers were recruited as volunteers to present the course. The six 10th-grade teachers who volunteered were involved in a demonstration career education program in this school. The other four 10th-grade teachers were not involved in the program nor were they invited to teach the course. Instead, they were asked to participate in the study by

having their classes serve as a control group. Their classes were unaware of the study and spent the time in study hall.

Methods intervention was studied by Peterson, Long, and Billups (1999) who compared different levels of assistance given to three groups of eighth graders with planning their high school course taking. The group receiving the highest level of information, a four-day classroom intervention, was better able to understand the importance of their choice of courses. In general, the study also noted the appalling lack of knowledge eighth graders have of the high school math and science curriculum, again emphasizing the importance of academic advising and planning. The entire eighth grade ($n = 72$) of a developmental research school in a large southeastern public university participated in the study. The elementary school, middle school and the high school were located on the same premises. The student body of the research school was stratified according to race and SES to reflect the demographic characteristics of the state. Complete data were secured from 68 of the participants (94%). Of those, 71% were Caucasian, 22% African American, and 7% were Native American or Asian American. Fifty-three (53%) were male while 47% were female. The order of preference of their first choice of occupational field on the pretest according to Guide for Occupational Exploration (GOE; U.S. Department of Labor, 1979) field were Physical Performing (22%), Social/Business (18%), Artistic (16%), Science (10%), Authority (9%), Mechanical (9%), Humanitarian (8%), and the others less than 4% in any of the five remaining GOE categories. Eighty-one percent (81%) indicated a professional or technical level of aspiration regarding their first choice of career field.

Career Guidance Programs

Recently, researchers in Utah and Missouri studied the impact of comprehensive guidance programs in their states. Their findings were a strong endorsement for these initiatives and had significant meaning for career development programs in schools.

The Utah initiative to implement the state model for guidance and counseling had been very successful. The statewide program was based on the NOICC Guidelines' student competencies and indicators. The heart of the Utah comprehensive model was student and parent involvement in development of the Student Education Occupation Plan (SEOP).

A study by Kimball, Gardner, and Ellison (1995) to assess the impact of Utah's comprehensive guidance program, especially the career-related services and resources, found that 74% of all Utah high schools reported parents and students were involved in the SEOP and 100% of schools reported that students complete or review their SEOP plans in 10th grade. Nelson, Fox, and Gardner (1998) examined the level of implementation of Utah's comprehensive guidance programs based on important student outcomes and characteristics. A sample of nearly 100 low and high implementation schools were closely matched based on school location, percentage of students receiving free lunches, and the size of their junior class. Teachers, administrators, and counselors were surveyed to determine key items to use in an implementation scale to judge student outcomes and high and low implementation schools. The researchers were able to access information about high school seniors from the American College Testing (ACT) Program and Utah State Office of Education databases. Nelson, Fox, and Gardner's (1998) findings that pertained to the researcher's study include the following:

- 79% of students in high implementation schools felt they were adequately or better prepared for a job compared to 75% in lower implementation schools.
- 88% of students in high implementation schools compared to 75% in lower implementation schools felt the school prepared them for continuing their education.
- 44% compared to 37% described their high school program as college prep.
- 48% compared to 55% described their program as general.
- Students in high implementation schools rated their guidance program and career planning services higher than those in low implementation schools.
- A Utah State Office of Education report reflects a number of positive effects as a result of the comprehensive program:
 - 93% of teachers reported supporting the school's Student Education Occupation Plan.
 - 85% of teachers infuse career education into their regular curriculum.
 - 49% of teachers devote more class time to guidance activities as a result of the comprehensive guidance program.
 - 100% of counselors indicated they had been involved in professional development on performing more effectively in schools and conducting SEOP conferences; they viewed improved student planning as a very significant success of the comprehensive program.
- Career exploration resources and career centers are more available and accessible (pg. 12).

As one can see from the previous research study outcomes when all these factors are put into effect at a local school level, they showed to have positive effects on students' career decision-making. These studies came as a result of an assessment of school programs. This was a local study that benefited students at the local level.

In Missouri, Dr. Norm Gysbers, worked with colleagues in the State Department of Education, had been instrumental in training school counselors across the state to provide the Missouri Comprehensive Guidance Program (MCGP). The MCGP was a K-12 approach that contains three broad content areas: career planning and exploration, knowledge of self and others, and education and vocational development (Gysbers, Lapan, and Blair, 1999). Like Utah's model (which is adapted from Gysbers' work), the Missouri model yielded a number of positive findings. The assessment sought to determine the following: (1) how are the structural and program components of the MCGP being implemented? (2) What is the impact of more fully implemented programs and early training on accomplishing preferred guidance tasks? and (3) Are there differences at the school level (e.g., middle, high) in the counselor's position and the ability to carry out preferred guidance tasks? Some 922 school counselors in Missouri who had participated in a MCGP training program were mailed surveys and 430 were returned. The study showed the following positive changes in guidance programs in Missouri (Gysbers, Lapan and Blair, 1999):

- Written programs are in place.
- Local school boards have adopted the programs.
- Most structural components are in place.
- Although nonguidance tasks were reduced, they are still a barrier.

- Counselors are more visible (e.g., in classes, time with students).
- Counselors have more time for preferred tasks.
- Guidance programs are being more fully implemented.
- Counselors at all levels reported improvements but high school and middle school counselors are more visible than elementary counselors, and high school counselors are more likely to perform fill-in roles (pg. 359).

Sustaining Change and Leadership

Educational change is made by many institutions, yet it is difficult for many people to make educational changes, because they are sometimes difficult to justify and difficult to sustain. According to Hargreaves and Fink (2003), sustainability is more than a temporal matter; it is how initiatives can be developed without compromising the development of others now and in the future.

One of the prominent leaders in the field of educational leadership in the United States is Tom Sergiovanni. According to Sergiovanni (1996) theories of management, motivation and control used in corporations do not make sense for schools. He also suggests that in order to change schools, communities must begin by creating new theories that better fit the context of schools and fit better what schools are trying to accomplish.

Drawing attention to the work of Michael Fullan, another authority on education change, Sergiovanni emphasizes the importance of allowing those who are trying to implement change to work out their own meaning. Change makers must recognize that disagreement is not only inevitable, but also fundamental to successful change. Leaders

of change must acknowledge that while people need pressure to change they also need technical assistance and interaction with others who are attempting change. Finally, these people need to understand that cultural change is the real agenda, not implementing single innovations. In summary, his theory is that educational change is community and ideas-based leadership.

There appears to be a growing realization of the need for change in the educational system among researchers such as Fullan (1993) and Sergiovanni (1994). Numerous calls from society for increased school effectiveness and advanced student achievement implies that a cooperating management team within schools is a fundamental ingredient for school improvement. Site-based management, in which principal, teachers, parents, community members and students are given autonomy to effect educational change is accentuated as a credible change mechanism that has the capacity to revitalize today's educational system (Hill, Bonan and Warner, 1992). In fact, educators and researchers are calling for the development of a process for systematic change that a school community can use to transform their educational system. To this end, much of the school change literature has focused on the product and not on the process of change. (Joseph, 2003).

According to Hargreaves and Fink (2003), sustainable change is linked to significant leadership in education. Leaders develop sustainability by how they approach commit to and protect deep learning in their schools and by how they sustain others to promote and support that learning. In addition, leaders develop sustainability by how they sustain themselves so that they can persist with their vision and avoid burning out; and by how they try to ensure the improvements they bring about lasts over time, especially after they themselves have gone.

Some characteristics common to successful leaders of educational change are being visionary, believing that schools are for learning, valuing human resources and staff development, communicating and listening effectively, being proactive, taking risks, and developing broad stake ownership from the community. Leaders of educational change illustrate this with their vision and belief that the purpose of schools is students' learning. Leaders of educational change respond to the human as well as the task aspects of their schools and districts. "Effective change requires skilled leadership that can integrate the soft human elements with hard business actions" (Joiner, 1987, p. 1)

Leaders for change recognize that the people in the organization are its greatest resource. "To lead change, the leaders must believe without question that people are the most important asset of an organization" (Joiner, 1987, p. 2). The emphasis of a leader is on building a shared fellowship, not on whom to follow, but on what to follow. The vision is shared, not a command. There is a reciprocal process of leaders and followers influencing each other's actions. There is a clear enunciation of roles and responsibilities. There are shared purposes directed to connecting teachers, parents and students. There are shared visions, changes in organizations and modes of operation to attaining goals. The key tasks of a leader are modeling, maintaining harmony, institutionalizing values, motivating, managing, explaining, enabling and supervising. Collaborative leadership with continuing professional development is the norm. Sharing an articulated vision is part of educational leadership.

Leaders of change are proactive. Leaders take the initiative, anticipate and recognize changes in their organizational environment that will affect their schools and

districts. Leaders challenge the status quo and the established ways of operating that interfere with the realization of their organization's vision.

Leaders of educational change are risk takers. "Organizational change must be initiated by leaders who are willing to risk their reputations for the future benefit of their companies" (Joiner, 1987, p. 4).

Leadership also requires vision. It is a force that provides meaning and purposes to the work of an organization. Leaders of change are visionary leaders, and vision is the basis of their work. "To actively change an organization, leaders must make decisions about the nature of the desired state" (Manasse, 1986, p. 151). They begin with a personal vision to forge a shared vision with their co-workers. Their communication of the vision is such that it empowers people to act. As indicated in most of the current literature on leadership, the task of the principal is to provide the direction and vision for the organization and to ensure that all who wish to participate in decision-making have the opportunity to do so.

School leaders have not only a vision but also the skills to communicate that vision to others, to develop a shared vision, a "shared covenant" (Sergiovanni, 1990, p. 216). Sergiovanni (1990) has described this aspect of leadership as "bonding"; leader and followers have a shared set of values and commitment "that bond them together in a common cause" in order to meet a vision, there is a "commitment to change" (p.23-39). The shared vision becomes a "shared covenant that bonds together leader and follower in a moral commitment" (Sergiovanni, 1990, p. 24).

Communication in Leadership

Communication and dialogue are the vehicles for bringing a diverse group of stakeholders together for a journey toward appreciating diverse stakeholders' values, beliefs and opinions (Jenlink, 2001). Creating the mutually shared vision cannot be done without sharing some of the power that was traditionally closely held by those in the hierarchy and creating an environment that facilitates the development of trust and open communication that is essential to the collaboration of group efforts.

In like manner, Hill (1999), Wilsmore (1999) and Sergiovanni (1996) also emphasize the development of staff and community members to ensure successful leadership with the adoption of any innovation. Successful professional development, defined as a comprehensive program that fosters personal and professional growth in teachers' attitudes and practice and that endure for at least three to five years, does not begin with structural matters but instead with a shared vision about schooling and shared leadership within the school that translates the shared vision into changes in instruction, curriculum, and student learning. A shared vision along with shared leadership provides the solid foundation upon which instructional leaders can work to foster a culture that is capable of sustaining change. While many instructional leaders have been trained to attend to the important structural matters that influence success, more recent research suggests that successful professional development begins first not with the teachers but with the instructional leader, whose character sets the tone for change and motivates teachers to serve as the primary agents of change in schools. According to Harrison and Macintosh (1989) "change is more likely to be positive and to be successful where it

occurs amongst a body of colleagues who as far as possible share a perception of the need for change and agree, broadly, on directions for change” (p. 15).

Broad stakeholder ownership is the fundamental bedrock upon which all other aspects of the conceptual framework of systematic change process are built (Joseph, 2003). Educational stakeholders are the people in a school community that have a vested interest in the school system in their neighborhood. A major reason for the vested interest of diverse members of a society is that ideally, a stakeholder in a democracy should be interested in ensuring that every child be provided with the best educational opportunities in order to continue the progression of society (Clinton, 1996; Goodlad, 2002). Educational stakeholders need to develop a systemic view of educational systems and an understanding of the activity of systems in order to undergo serious system change efforts in education. According to Capra (1982), “the activity of systems involves a process known as transaction – the simultaneous and mutually interdependent interaction between multiple components” (p. 267). Reforms that come strictly from within the school community die hardest for those who believe in them. Hargreaves and Fink (2003) advise reformers that they must capture the public imagination and help create a broad social movement if the reforms are to live on after the originator’s tenure.

How Schools Sustain Change

Schools that sustain deep learning experiences for all students should address the breadth of school leadership in supporting and promoting the learning of present and future leaders themselves. School districts should address the length and sustainability of school leadership over time helping leaders to plan for their own exit from the district and to think about the school’s needs for continuity as well as change.

Leaders who effect change are those who understand instructional strategies, are values-led, and are people centered. Researchers Andy Hargreaves and Dean Fink (2003) document case studies that show that leadership is a key to getting reforms off the ground. Sustainable improvement is enduring. It contributes to the growth and good of everyone, instead of fostering the fortunes of the few at the expense of the rest. It does not promote model schools, or magnet schools, that raid scarce resources from the rest Hargreaves and Fink (2003). The authors also maintain that sustainable improvement develops and draws on resources and support at a rate than can match the pace of change. (Hargreaves and Fink, 2003).

Raemer, (2000) noted that for innovations to last teachers must have current data and professional development for new skills accompanying changed roles and teaching practice. Second, the principal must persistently practice the vision and beliefs of the innovation. Third, innovations must not be overly complex or too broad in scope. Fourth, school innovations need to be congruent with the goals of the larger system and receive top-down as well as bottom-up support. Lastly, collaborative teaching has potential for teacher assistance and job-embedded professional development that blends the roles of special and regular education staff.

Instructional leaders must continue to direct their focus in developing a school culture that supports change and strengthens communication, builds relationships, and enhances long-term professional development programs. Additionally, the school culture must provide administrative support during implementation, seek program coherence, stabilize turnover, and restructure the use of teacher time to balance pressure with support. (Moffett, 2000). To sustain the forces of a culture change in a school remains a

daunting and questionable task for educational leaders (Moffett, 2000, pp. 35-38). At a minimum, Fullan (2000) argues that it will take six years in secondary schools for change efforts to “go to scale,” that is, to endure long enough to evidence substantive change in instruction, curriculum, and learning (pg. 582).

Strengths of Previous Research

Vondracek and his associates studied the effects of work experiences on German adolescents’ career plans. Apparently, German students value work experiences in making career choices, while other studies conducted in the United States did not confirm these results.

Additionally, many studies of the effect of schools and school personnel on adolescent development have been undertaken. Guidance counselors and teachers do influence an adolescent’s development, but the research only touches on their influences on adolescent career development. Schools where a career development program is offered seem to have an influence on students prior to grade 12, but students in grade 12 listed parents as more influential than school personnel.

In regards to studies involving institutions utilizing interventions in developing students’ career awareness, each focused on one intervention in relation to students. It can be generalized that the interventions resulted in a positive effect on students. In fact, students who receive intervention are less undecided when making career choices (Savickas, 1990).

Finally, since the No Child Left Behind Act of 2001, The National Career Development Guidelines, The National Standards for School Counseling Programs and The School-to-Work Opportunities Act, a variety of such interventions came into

existence (Maddy-Bernstein, 2000). As Fullan (1998) argues, the education leaders of tomorrow will need a reservoir of skills and characteristics that differ significantly from those successful school leaders possessed just 10 years ago. Developing high-quality, skilled, and sustainable leadership is a critical link in realizing the kind of long-lasting changes in education that are the mark of true transformation.

Limitations of the Research

The study of career development over the past 50 years has several limitations. Research conducted prior to 1985 suggested that certain family variables (i.e. socioeconomic status) influence career development in adolescents; however, there was a need for more current literature in the area of influences on adolescent career development for many reasons. Most importantly, the research prior to 1985 contained significant gaps regarding populations, career constructs, and family variables and these gaps prevent counselors from fully understanding the family's influences on career development across the lifespan.

The post-1985 studies attempted to fill the gaps. While much work was completed, particularly in attempting to show how parents seek to positively influence their adolescent children's career development, the findings in the studies do not reveal the outcome of these attempts. Studies found in countries outside the United States may be problematic in cross-culture findings.

Another obvious limitation in the post-1985 studies is the lack of minority populations studied. The vast majority of the research on parental influences came from studies completed on Caucasian middle-class adolescents. These studies also lack a

defined specific grade level as they vary from studying a middle/junior high school student populations or high school students.

Other limitations in the studies reviewed include an absence of focus on a single possible influence such as peers, work experiences or school personnel. Most studies mention these possible influences as side issues and thus do not provide the data or analysis necessary from which to draw relevant conclusions. Studies that were found on career interventions focused on single interventions. Similarly, there was also a lack of a defined specific grade level as the studies varied from middle/junior high school student populations or high school students. There were no studies found that formulated a quantitative study on high school career decision-making and consequentially made institutional changes to assist secondary schools in recognizing their role in assisting parents and students in making decisions about careers and education.

The major limitations of the literature include the lack of studies relating to career development programs. Specifically, career programs developed because of national study data. The foregoing limitations leave fertile but unsowed ground for studies to harvest useful information regarding the significance of national studies on career decision-making programs in high school

Contributions of this Study

According to Hughes and Karp (2004), it is important to examine the research to determine the value of programmatic changes in school programs. Mau and Bikos (2000) noted that programmatic changes did not include guidance and counseling professionals, they focus on teacher-driven partnerships with businesses. Finally, there is also no

follow-up research conducted to see the lasting nature of any career-decision making program.

This qualitative case study sought to understand how data collected from a national survey was utilized to make programmatic change at the two high schools and one university. It also sought to understand the subsequent success of these programs and possible future needs. Therefore, the purpose of this study was to examine the partnership between two high schools and a university as they developed a career decision-making program based on the National Study on Career Decision Making Survey conducted in the fall 2001.

Summary

This chapter provided a review of the literature based on multiple factors influencing career decision making such as vocational identity, peers, career exploration and school personnel. The chapter also reviews programs related to career decision-making as well as the leadership that is necessary to sustain programs.

Since the No Child Left Behind Act of 2001, programs were developed and utilized by schools to help adolescents make career decisions. The conclusion one can make about these programs or interventions is they help students make more informed career decisions. More specifically, in 2001, a university in Michigan conducted a national survey of 11th and 12th grade students assessing their career choices and decisions leading to them. As a result, the 2001 study led to the adoption of new approaches to career counseling in several Michigan high schools. Yet, there have been no other institutions to date that have formulated a change based on the results of a study. This researcher provided a unique explanation of how data from a national study

conducted by a university can lead to programmatic change within two high schools. This researcher attempted to understand how changes in these two high schools have been effected over time. This research study was examined through the example of career decision making which was the focus of the National Study fall 2001.

Chapter 3 will introduce the methodology that was associated with this study. The chapter has included a background on case study methodology then proceeds to discuss the procedure followed to conduct this research project. Finally, the chapter concludes with a discussion of how data was collected and how the data was stored for the purpose of evaluation.

CHAPTER THREE

METHODOLOGY

This research study explored programmatic change in two high schools and one university as a result of analyzing data obtained from 11th and 12th grade students' responses to specific career decision-making questions they answered in 2001.

Additionally, this study reviewed the conclusions drawn from the 2001 data. Therefore, the purpose of this study was to examine the partnership between a university and high school as they developed a career decision-making program based on the National Study on Career Decision Making Survey conducted in the fall 2001.

This chapter discusses the rationale for using case study methodology followed by a description of the setting and the participants of this study. Next, a review of procedures used in this case study including the use of interviews, focus groups and document review is discussed. Finally, sections noting data warehousing for each of the methods of data collection are defined. The chapter ends with a summary of chapter three.

Methodology Rationale

In The Art of Case Study Research (Stake, 1995), the author noted that cases of interest in education and social service are people and programs. "We are interested in them for both their uniqueness and commonality. We seek to understand them. We would like to hear their stories" (p. 1). Stake (1995) also notes that cases of interest in education and social services are people and programs. Yin (2003) writes that case study method is the method of choice when the phenomenon under study is not readily distinguishable from its context. "Such a phenomenon may be a project or a program in an evaluation study" (p. 4). Hamel (1993) defines a case as the research aimed at describing,

understanding, or explaining, it is the focus of one character or program that sets case study apart as a method. Cresswell (1998) notes that a case study is an exploration of a bounded system or case (or multiple cases) over time through detailed in-depth data collection involving multiple sources of information. Stake (1995) further explains this definition by stating that a case study is often bounded by time and space. Thus, the purpose of this case study is a unique explanation of how national study data on a student's career decision-making process can effect change in programs in the two high schools and university.

The concept of triangulation is essential to a multidimensional research approach. It entails inspection of different kinds of data, different methods, and a variety of research tools (Van lier, 1988) in a single investigation. Denzin (1978) identified different varieties of triangulation: theoretical triangulation uses different perspectives to analyze the same set of data. Data triangulation uses multiple data sources and data sets different data sets may be obtained through different methods and/or the same method at different times or with different sources (Brannen, 1992). Investigator triangulation uses multiple observers, researchers, or evaluators; methodological triangulation uses multiple measures of a given concept (Isaac & Michael, 1981).

Triangulation has an important advantage: it allows corroboration, elaboration, and illumination of the issue in question (Marshall & Rossman, 1995). Studies relying on a single method are more vulnerable to errors linked to that particular method (Patton, 1990). Triangulation of measurement is particularly crucial in educational research because "there are serious risks in making recommendations based on a single criterion

which fails to consider the whole educational outcome of an educational process" (Isaac & Michael, 1981 pg. 25).

This study employed a case study qualitative method in an effort to comprehensively address the research questions that were developed and guided this study. The qualitative data collection approach provided the researcher the opportunity to collect deeper information on how the two high schools and a university utilized the data to make programmatic changes. Merriam (1988) maintained, "Qualitative researchers are interested in understanding the meaning people have constructed, that is how they make sense of their world and experiences they have in the world" (p.6). Data collected from interviews, focus groups and various documents pertaining to the development of career related programs between two high schools and a university were triangulated and analyzed looking for patterns or themes and are reported in chapter 4 of this study.

A focus group is a group of individuals gathered to discuss a topic that is the subject of research exploration (Powell, 1996). Focus groups rely on interaction within the group based on topics that are supplied by the researcher (Morgan, 1997). The key distinguishing characteristic of focus groups is the insight and data produced by the interaction between participants. The main purpose of focus group research is to draw upon respondents' attitudes, feelings, beliefs, experiences and reactions in a way that is unique versus other research methods such as observation, one-on-one interviewing, or surveys. The participants' attitudes, feelings and beliefs may be partially independent of a group or its social setting, but are more likely to be revealed via the social gathering and the interaction of a focus group. Compared to individual interviews, which aim to obtain individual attitudes, beliefs and feelings, focus groups elicit a multiple views and

emotional processes within a group context. Focus groups also enable the researcher to gain a larger amount of information in a shorter period. Focus group participants for this study included a social studies, language arts and science teacher from each of the two participating high schools as well as three members of the University Career Counseling Department

An interview is a research tool in which the interviewer prepares questions to address a specific topic. The interviewer guides the questions and focuses the study, attempting to elicit responses from participants in their own terms. The researcher must determine what is important, ethical, and the completeness and accuracy of the results (Rubin and Rubin, 1995). Interviews enable researchers to ask questions and collect data on a variety of topics. Additionally, the researcher can collect rich detailed data from each participant. One disadvantage of the interview method of data collection is the lack of generalizability and reliability. In addition, interviewers must be careful not to introduce bias to the research interview. The interviews in this study were conducted in the offices of the participants. Two guidance counselors from each participating high school were interviewed as well as two members of the University Career Counseling Department one currently in the position and one who works for the Michigan Department of Education.

Finally, documents were reviewed that could provide data pertaining to the development of career related programs created by university and high school personnel. These documents included meeting minutes, high school programs of studies books, Career Day agendas and post Career day surveys.

Additionally, data results obtained from the National Study fall 2001 from 11th and 12th grade participants were published and the research findings carried some suggestion for changes programmatically. The programmatic changes could be beneficial to the two participating high schools and university's career decision-making career guidance programs. While this study was qualitative in nature, this researcher has referenced previously collected quantitative data from The Career Institute for Education and Workforce Development Attitudes on Careers and Career Decision-making National Study fall 2001 (National Study fall 2001).

In the year 2000, the state of Michigan and one of the state universities conducted a few statewide studies of post high school plans of the state's young people. In 2001, a Michigan University commissioned EPIC-MRA, a research consulting firm, with support from the National Association of Manufacturer's, the Precision Metal Forming Association, and the Associated Equipment Distributors to poll high school juniors and seniors nationwide regarding their post-secondary career plans and what influenced those plans. The result was the creation of a National Study aimed at finding how and why students make their career decisions. EPIC-MRA's vice president created this survey. This study examined the phenomena of what 11th and 12th grade students feel are the major influences on their tentative post high school career plans. The influences included; parents, teachers, guidance counselors peers, and work experiences.

Setting and Participants

The two school districts chosen to participate in this study are located within a single county (Ingham) in Michigan, with one district considered rural and the other considered urban. Additionally, the sites were chosen based upon the researcher's

inquiries into school districts that had worked in cooperation with the university that commissioned the original National Study fall 2001. Utilizing data from two distinctively different socio-economic school systems will contribute to the literature previously gained mainly from suburban schools. These sites were chosen based on this researcher's ability to gain access to them for research purposes.

The process the researcher used to gain access to the programs was achieved by telephone and email correspondence. The researcher first contacted the participating university's Career Institute for Education and Workforce Development department chair. The department chair, who was not employed in her current role at the university at the time of the data analysis of the results from the National Study fall 2001, explained that another member of the department, who was employed at the university during the time of the analysis, would be more knowledgeable concerning the schools involved in the program development with the university. The researcher contacted this individual who was able to provide the names of the schools who played a major leadership role in the subsequent meetings designed to develop a "more comprehensive career guidance approach at the high school level". (Cox, July 2005).

Next, the researcher telephoned the principals of the participating schools. The three principals returned the telephone calls. The researcher learned that the guidance counseling departments of two schools were familiar with the data from the National Study fall 2001. The researcher also learned that the guidance staff of the third school had changed and thus none of the guidance counselors had participated in the National Study fall 2001. Therefore, the researcher asked the two school superintendents to grant verbal permission to be included in the researcher's study. The superintendents granted verbal

permission to communicate with the counselors of each school that had originally participated in the university program. Next, the researcher communicated via telephone with the guidance counselors to obtain a verbal commitment to participate in the study. The researcher wrote and mailed a formal letter of consent inviting each guidance counselor to participate in this study. (Appendix B)

The researcher chose two guidance counselors from each of the Ingham County, Michigan schools to participate in this study due to their involvement in the National Study fall 2001. All four counselors were in their respective positions when the university conducted the National Study fall 2001. Counselors' years of experience in the school system ranged from 9-27 years.

The university participating in this study is a career-oriented public university located in the south-central region of the state of Michigan. This university commissioned the National Study 2001 by The Career Institute for Workforce Development, a university sponsored department that works with students' career planning. The institute works closely with local school districts to provide as much possible support in the schools career education program. One faculty member participating in this study is currently working at the university and was an active participant in the data analysis of the National Study 2001 data. Another participant has since changed position and is currently working with the Michigan State Department of Education. This participant was chosen to be interviewed due to his vast knowledge of the study data analysis and subsequent programmatic changes made at the two high schools and the university.

The first school is a rural high school because it is not located near a major city and students are from small towns. Eighty-eight percent of the 2003 graduates were enrolled in some form of post-secondary education. The school offers advanced placement curricula in the subject areas of language arts, science, mathematics and art. The North Central Association accredits the school. The high school student population is 67 percent white, 29 percent black, two percent Hispanic, and 4 percent listed as other.

The second participating school is an urban school district and is located within a large city in the state of Michigan. Seventy-four percent of the 2004 graduates were enrolled in some form of post-secondary education. The school offers advanced placement curricula in the subject areas of language arts, science and mathematics. The North Central Association accredits the school. The high school student population is 59 percent white, 36 percent black, three percent Hispanic and two percent listed other

Case Study Procedures

The researcher utilized qualitative case study methodology. This section will outline the steps associated with data collection that will provide clarity about the actual research process.

Typically, in qualitative studies, the research questions orient the cases or phenomena seeking patterns of unanticipated and anticipated relationships (Stake, 1995). With qualitative inquiry, the collected data gathered garnered a thick description to provide a deeper understanding of how national survey data affected programmatic change in two high schools and a university based on responses provided by the different participants. This study utilized interviews in a semi-structured interview process, an interview guide and a focus group script based on this study's research questions. This

study also utilized a multiple case study approach, as the interviews took place at three different sites. The interviews allowed the participants to answer questions as to how the national study data was utilized and what programmatic changes may have occurred because of this data.

The data was used to develop questions for the research study and was obtained from the previously collected data from the National Study fall 2001. Respondents for the National Study fall 2001 were selected using a method of randomly sampling from the United States census. The sample was stratified so that every area of the country was represented in the sample according to the contribution to the general population. Fifty-three percent of the 809 respondents were high school seniors and 47% were juniors in high school. Approximately half of the respondents were male and half were female. Regional distribution of the overall sample was as follows: West – 18.5% - Northeast – 19.6% - South – 35.5% - and Midwest – 26.4%.

This study began by reviewing the executive summary from the results of the National Study fall 2001 as a starting point to develop interview questions and an interview guide. Furthermore, the researcher concentrated on the entire study because it specifically dealt with career decision-making. The researcher scheduled a meeting with the individual who was commissioned to develop the survey. The researcher contacted the president of the university who commissioned the study to obtain permission to contact the firm who collected the data (Appendix A). Once permission was granted, the researcher accessed the data and attempted to uncover patterns from the responses obtained from the 11th and 12th grade students.

Interview Guide

The researcher developed an interview guide based on the research questions that guide this study. According to Stewart and Shamdasani (1990), it should grow directly from the research questions that were the impetus for the research. When formulating questions for the interview guide, Stewart and Shamdasani (1990) suggest two principles that should be considered:

1. that questions be ordered from the more general to the more specific;
2. questions of greater importance should be placed early, near the top of the guide, while those of a lesser significance should be placed near the end (pg. 61).

As these two principles appear to conflict, the researcher can start with general questions, move to specific questions and then back to a set of more general questions. The funnel approach (from general to specific) is one way of engaging the interest of participants quickly. Very specific questions about the topic towards the beginning may set the discussion on a track that is too focused and narrow. As these two principals appear to be conflicting, the guide can start with general questions, moving to specific questions and then back to a series of more general questions. This process should engage participants more quickly.

In addition to following the format for the development of an interview guide, the researcher utilized the expertise of two individuals who were involved in the original study and subsequent follow-up study groups. The researcher developed interview questions and through e-mail and telephone correspondence and discussed the research questions and further interview questions with the Vice President of EPIC-MRA, who developed the university survey in 2001. The vice president of EPIC-MRA analyzed the

data of the National Study fall 2001, and presented an executive summary of results to the department chair of the university's Career Institute for Workforce Development. Both individuals provided feedback on all questions, and helped the researcher narrow down the interview guide questions to those pertinent to this study. The researcher and the two previously mentioned experts reviewed the final guide to ensure the guide questions were pertinent to the study.

Interviews

The researcher used a semi-structured format that enabled participants to incorporate their ideas regarding the topic and provide any spontaneous response as well. The interview included both closed and open-ended questions. The interviews enabled the researcher to understand the development of career decision-making programs at two high schools and a university, and how these programmatic changes have been sustained over time.

The researcher contacted and gained permission at each site in which data would be collected for this study. The researcher had conversations with multiple individuals at each site in order to gain permission to conduct this study within the respective settings. Denzin & Lincoln (2000) stated that researchers need to develop rapport, trust and authentic communication patterns with participants (p. 384). The researcher obtained letters of approval from the university president, and the superintendents of each of the two schools. (Appendix A)

The researcher interviewed two guidance counselors from each school. The interviews took place at each high school after school hours at a convenient time and in each counselor's personal office. The researcher privately interviewed university officials

at two separate sites and the researcher interviewed the university participants in their offices at a mutually agreeable time. The researcher interviewed one participant in his current job location with the State Department of Education. This individual was the head of the university evaluation team and most responsible for the programmatic changes that occurred because of the National Study fall 2001. The researcher taped the interviews that were conducted in a semi-structured format and asked each participant the same questions. (Appendix D) The interviewer took time to provide a comfortable setting for the participants, thus the researcher allowed participants to answer questions in their personal office. Prior to the start of the interview, the researcher emphasized the purpose of the interview and assured the participants that the researcher and transcriber would be the only people to listen to the tape recording. The researcher added that he would destroy the tapes after they were transcribed. The researcher went to great length to establish rapport and trust with the participant.

Stake (1995) noted the purpose was not to get yes or no answers but a description of an episode, a linkage, or explanation. Additionally, as stated by Stake, during the actual exchange, the interviewer needs most to listen, maybe take a few or as many notes as fits the occasion, but stays in control of the data collection, thinking about what form the account will take in writing. Upon conclusion of the interviews, the researcher developed a summary of the interviews, capturing key ideas and other aspects deemed important and relevant to this research study. All interviewees had an opportunity to validate their responses.

Focus Groups

The researcher developed a focus group script (Appendix C) to complement the interview and document review. Prior to the focus group sessions, a letter was sent describing the study and invitation to participate in the focus group sessions. The researcher assured participants that their identities would not be revealed in the study report. The researcher collected the data from the focus groups and reviewed the data to see if any patterns or themes emerged from the responses. These findings served as a basis for further qualitative questioning.

The researcher interviewed two focus groups of teachers (one group at each participating school), consisting of three teachers in each focus group. The teachers were interviewed after school hours in a room that was made available by the school administrator.

The researcher interviewed one focus group of four members from the University Career Counseling Department. The University Career Counseling Department employees were interviewed after normal work hours in a room that was made available by the University Career Counseling Department Chair. The researcher conducted interviews in an open-ended format. The researcher taped all interviews. At the beginning of each interview, the researcher restated the purpose of the interviews, assured anonymity of participants and confirm that tape recordings would only be reviewed by the researcher and the transcriber and the tape recordings would be destroyed after transcription.

Document Review

In a research situation, documents may provide the researcher with the ability to witness events that have already taken place. Document review may enable the researcher to corroborate evidence from other methods of data collection such as interviews. In this study, this researcher took field notes throughout the entire research process, as well as attempted to utilize other documentation (i.e.: meeting minutes, executive summaries, school programs of studies, etc.) in order to best describe the research setting, the subjects, and the career decision-making programs currently employed in the schools. In addition, the researcher used parent course registration meeting agendas, school newsletters, formal letters and other documents.

The various forms of data collected attempted to provide information on the following research questions:

1. What are the perceived benefits of university research as it relates to programmatic change within a school?
2. How did the university evaluate the data from the National Career Study conducted in the fall of 2001?
3. What conclusions were reached by the university after evaluating the data from the National Career Study conducted in the fall of 2001?
4. How did the university and local school district interact while creating the career decision-making program?

5. How has the effectiveness of the changes relating to career decision-making been evaluated at the university and the two high schools?
6. Have the programmatic changes in career decision-making been sustained at the two high schools?
7. How has the relationship between the university and two high schools evolved?
8. What role did leadership play in implementing and sustaining the programmatic changes resulting from the data analysis of the National Career Study conducted in the fall of 2001?

Data Analysis Management

This study was conducted at three different sites, two high schools and one university. As previously mentioned, the participating locations were chosen due to their involvement in the Career Institute for Education and Workforce Development Attitudes on Careers and Career Decision-Making National Study fall 2001's data analysis and program review. In addition, the willingness of school district officials and school personnel to participate as well as the support of past and present university officials' made for a positive experience for the participants as well as the researcher. Once final approval for the research project was granted, each of the participating high schools superintendents and the president of the university were invited to participate. Preliminary conversations with all participants in the fall of 2005 helped create an understanding of the scope of the project. During the discussions, the researcher noted

estimated timetables for the project and explained the need for each participant's consent in writing.

Upon receiving approval to conduct research at the sites, the researcher established through the school district superintendent and university president, a contact person who was utilized throughout the project. Once the contact person was established, the researcher made personal contact establishing specific timelines and procedures associated with this study. After the researcher established and explained all dates and procedural guidelines a general letter of consent providing information about the study was sent to all participants explaining the reasons for the research study and the specific timelines and procedures associated with this project. The researcher collected data from the participants and analyzed the data utilizing the following process:

Data Preparation

The researcher conducted analysis of data from focus groups and interviews and reviewed the data for any errors.

Data Accuracy

The researcher utilized member checking to ensure accuracy of the transcribed interviews and focus group discussions. Member-checking allowed individuals involved in the study to clarify any information obtained by the primary researcher.

Developing a Data Structure

The database structure is a method in which the data will be stored for the study, thus enabling the researcher to easy access the data for subsequent analysis. The researcher generated a codebook that described the data and indicated where and how it would be accessed. This codebook included the following: location where data was collected [(high

school site one (e.l.), high school site two (w.), university (u)], method of collection, [(interview (i.), or focus group (f.)), initials of participant [example: (s.c)] and date of data collection (example: 12-13-07). This comprehensive documentation enabled other researchers to utilize the data without any additional information.

Data Entry

The researcher logged data into the computerized database program, Microsoft Access. The researcher stored original data records in a data archive, as this information could have been important to the two schools and the university participating in the study.

The researcher spot-checked the data for accuracy in the Microsoft Access databases. Once data was entered, databases were used to summarize and queries were run so to study emerging themes and patterns.

Document Review

The researcher housed the information obtained via the document review process in a database. Data was in text and graphical format. This enabled the researcher to provide extensive descriptions of data over an extended period to determine if any patterns existed; the researcher used the software to confirm any recurring themes.

Interviews and Focus Groups

The researcher employed categorical aggregation for the data obtained via interviews and focus groups. The researcher attempted to determine patterns and arranged the data in tabular format. The researcher reviewed audiotapes from the interviews and focus groups to confirm transcribed responses.

Summary

This chapter provided a framework necessary for the reader to understand or replicate this study. Additionally, this chapter sought to provide a clear understanding of the methodology utilized in this study including data collection, evaluation and reporting. The data obtained for this project included information on the settings in which the interviews had taken place. Furthermore, the researcher identified specific individuals for participation due to their longevity in the district and knowledge of the process since they were part of the team of evaluators at the time the original data was analyzed. An outcome of this study is the possible sharing of the findings presented in chapter four with participating districts as well as the president of the university. This could help to assess current programs as well as defunct programs as they relate to the research questions proposed.

CHAPTER FOUR

DATA AND ANALYSIS

This study examined a partnership between two high schools and a university as they developed a career decision-making program based on the National Career Decision-Making Survey conducted in the fall of 2001. The researcher focused on the relationships between university personnel, high school teachers, and guidance counselors during the development phase of the career decision-making program. In addition, the study investigated the longevity of the programs and the reasons for their successes and failures. The results indicated areas that participants in school and university partnerships should review when developing any programs beneficial to students.

Chapter four presents the results of qualitative data collected from teachers, guidance counselors, university personnel, and records from career decision-making programs. The researcher developed an interview guide and from this study's research questions to obtain information from two members of the university who were involved in the implementation of the career development program. Using this interview guide, the researcher also collected rich data from two guidance counselors from each of the two participating high schools.

In addition, the researcher developed a focus group script based on the research questions that guide this study. Three members of the university Career Counseling Department who work with high school students to help them make career decisions participated in the focus group. A focus group of three teachers (science, language arts

and social studies) from each participating high school also responded to the same questions, which assessed their understanding of the career development programs.

The researcher also examined all documents produced because of the process between the university and the two high school study participants. Documents included meeting minutes, university and high school career information material, and high school programs of study.

A stenographer transcribed interviews from the audiotapes. Each participant then checked his or her transcript for accuracy. Upon the return of the corrected data script, the researcher categorized answers by research questions, and triangulated data; results appear in this chapter.

Participants

The participants in the study included teachers, guidance counselors, and staff members from the university Career Counseling Department. The two high schools and the university are located in rural areas of western and northwestern Michigan. All participants had knowledge of the career decision-making programs created in coordination with the university and the two local high schools. The programs discussed resulted from the National Career Study in 2001, commissioned by the participating university. All participation in the study was voluntary. In addition, the university president and the two school-district superintendents supported the study.

Results in this chapter are reported by research question. The researcher identified and reported a theme for each of the research questions. The research questions utilized for this study were:

1. What are the perceived benefits of university research as it relates to programmatic change within a school?
2. How did the university evaluate the data from the National Career Study conducted in the fall of 2001?
3. What conclusions were reached by the university after evaluating the data from the National Career Study conducted in the fall of 2001?
4. How did the university and local school district interact while creating the career decision-making program?
5. How has the effectiveness of the changes relating to career decision-making been evaluated at the university and the two high schools?
6. Have the programmatic changes in career decision-making been sustained at the two high schools?
7. How has the relationship between the university and two high schools evolved?
8. What role did leadership play in implementing and sustaining the programmatic changes resulting from the data analysis of the National Career Study conducted in the fall of 2001?

For each research question and theme reported, a discussion follows. Specific participants' responses enriched the patterned theme that resulted from the data collection for this qualitative study. The format that follows lists the research question studied and

the theme that developed as a result of data collection and triangulation. The parenthetical citations were location where data was collected [(high school site one (e.l.), high school site two (w.), university (u)], method of collection, [(interview (i.), or focus group (f.)], initials of participant [example: (s.c)] and date of data collection (example: 12-13-07).

Research Question #1

What are the benefits of university research as it relates to programmatic change within a school?

The research used as a basis for this researcher's study was the National Study of 2001 sponsored by the comprehensive career-oriented university that participated in this study. A private research corporation in Michigan completed the research tool, data collection, and data analysis. After completion of the study, the university officials and corporation leaders reviewed the results and created an executive summary, listing three major findings. The major findings were:

1. Students perceive a lack of career guidance.
2. The four-year college bias is pervasive.
3. Career choice is based on interest over opportunity.

During the interview process, it was clear that the university president's designee responsible for the executive summary made little comparison to the demographics of the students who attended the university. The university researcher stated:

It was my responsibility to collect information from a cross section of the country for the university president. I was not asked to compare the National Study participants' demographics to that of our university. This was done to develop a big picture for the

president. Looking back, we probably should have paid particular attention to the data from National Study participants whose demographics exemplify those of the students attending our university. (u.i.d.h. 12/12/07)

When members of the university Career Counseling Department studied the executive summary, they decided to pursue programs based on minimal or limited knowledge regarding how the demographics of participants from the National Study in 2001 compared to the demographics of the students who attended their university. Subsequently, the vast majority of the students who attended the university were, as one participant noted, “commuter students”, or students who did not reside full-time on campus. The data collected from the National Study in 2001 was from the heavily populated Southwest and Northwest United States and the students surveyed may not have represented similar needs and backgrounds as students attending the university authorizing the National Study.

Regardless of the comparative value of the information, the university president needed to show how the money spent by the university in the commissioning of this study led to the design of programs related to high school juniors and seniors. The programs developed did not rely on any specific findings except that students frequently came to the university unprepared for their futures and lacked a thorough understanding of careers. As another university interviewee noted, “We were told of the need, read the executive summary of the National Study 2001, and began to develop career programs for high school juniors and seniors.”

The university officials charged with summarizing the results of the National Study in 2001 worked with a committee to develop programs based on one major finding in the executive summary. However, the committee failed to analyze the data or discuss the findings prior to the development of the university-sponsored Career Day, which included students in grades 11 and 12 from over 25 public high schools, technical schools and charter schools. In retrospect, the researcher asked what change the committee could have made if the members had analyzed all the data and compared like–student demographic responses. One participant stated:

In hindsight, I guess we would have seen that participants of the National Study showed by their junior year that they had already made firm career choices and regardless of any high school career development program, their decision was firm. It was not until they had attended the “Career Day” program at the university that the students realized there were other options for them. We had to reevaluate the effectiveness of our program. Through student evaluations of “Career Day,” it was overwhelming that students wished they had the opportunity to be involved in this “Career Day” program as a freshman or a sophomore, when they were making their career decisions. (u.f.w.d. 12/13/07)

Consequently, three years after the university participants initiated the career program for high school juniors and seniors, they revised it for use with the local school districts for freshman and sophomore classes. If the committee had analyzed the data from the

National Study 2001, the program may have been created for students in grades 9 and 10. This is consistent with the research noted in Chapter 2 of this study.

Research Question #2

When inquiring as to the research question “How did the university evaluate the data from the National Career Study conducted in 2001”, this researcher heard from multiple parties that program development did not depend on data analysis and evaluation. Participants quickly noted that the first time they saw data from the National Study in 2001 was when they viewed the executive summary. Only one member of the university team, the member who was responsible for presenting the findings to the university president, saw any data prior to the creation of the executive summary that influenced program development. The individual in charge expressed the need for data and his role in presenting the information to the university president when he stated:

My responsibility was to commission the study. I only had so much money and the company I chose had a long history of doing research with the university. My task was to obtain the data from the research company and work with the researcher in charge of the study to analyze the data and present the findings to the president. I worked with cooperating researchers and we decided to develop a report of the findings as an executive summary. It was my belief that as I analyzed the data, my original hunch was going to be true; students were not prepared for careers as they leave high school. I felt this was what the president was expecting to hear as well so I guided the researcher from the company to focus on this

as a major finding from the study. I believed the president would use the finding as proof that the university needed to work with high school students in their career decision-making process. This is exactly what we did as a university and the result can be seen in the creation of our “Career Day” program. (u.i.d.h. 12/12/07)

Even though the Career Day program resulted from the analysis of the National Study in 2001 data, the individual who developed the executive summary essentially guided the Career Day program. One of the study’s university participants, also the current head of the Career Counseling Department, stated, “I never saw any of the original data until after we met as a committee to try to develop a program that would help students make more informed career decisions.” All persons interviewed or involved in focus groups claimed that the Career Day program came about without all committee members, except for the person responsible for the executive summary, reviewing all of the data gathered from the National Study in 2001. The person in charge of the summary stated, “Of course I saw all the data sets from the study participants. That is how the executive summary was created.”

It was clear to the researcher that specific university personnel utilized information found in the executive summary rather than data to create the Career Day program. This placed a great deal of importance on the person who developed the executive summary and presented the findings to the president and the committee. However, this person believed that having many people study the results of the data was impractical. He argued:

It would have taken too much time and there was a pressing need for this information by the president to make decisions as to how and if he was going to find a committee of university and local school officials to develop programs determined to be needed based upon the information obtained from the study. (u.i.d.h. 12/12/07)

Utilizing data from a national population gives one a perspective of participants across the nation. Since the National Study in 2001 utilized the population demographics of the United States, the northeastern and southwestern United States had the most participants and the Midwest had the least. The results indicated a bias towards the more heavily populated sections of the country and therefore did not reflect students from the upper Midwestern United States, the location of the university. The financial investors of the university raised questions about the lack of involvement of the university and why many university personnel did not take a more active role in data analysis and program development. The Career Day program could have been developed from a local sampling of students, making it more generalized to the population attending the university. The fact that few university officials studied the data until after the Career Day program was almost complete corroborates the fact that the university officials did not depend on data obtained from the National Study in 2001.

Research Question #3

What conclusions were reached by the university after evaluating the data from the National Career Study conducted in the fall of 2001?

The theme that surfaced because of a review of the data collection from the National Study in 2001 was that the data collected had very little impact on program development. The research of the National Study in 2001 concluded with an executive summary requested by the university president. The president wanted to determine why some students did not attend a comprehensive university and why those students who did choose to attend the university entered with an undeclared major. The university representative who was in charge of overseeing the study noted:

When I was approached by the president and asked to lead a committee to do national research, I asked the questions, what are we looking to find? Will the national data be useful to the university? Can results of a national study be generalized to the population we have at our university? All questions were answered by the university president when he said, “Any good university does national research studies to add credibility to any and all programs created by the university.” I do believe we had to answer the president’s questions before we commissioned the study. The data did affirm our hunches but the data collected did not seem to be able to be generalized to our population. What the findings did show is that some of the hunches we were having were not isolated issues and that, throughout the country, universities were grappling with the same issues. (u.i.d.h. 12/12/07)

Once again, other university interviewees stated that they had not seen any of the data until after the Career Counseling Department developed a majority of the career program.

As stated earlier, the only guiding force for the career program was the use of the executive summary of the data analysis of the National Study in 2001.

The researcher asked interviewees from the university if they believed the results reflected the current school population in 2001. It was not surprising to discover that all participants from the university, except for the man responsible for the study, said that they operated under the assumption that the results of this study and the subsequent executive summary reflected the type of students attending this rural, comprehensive university.

When discussing the issue with high school guidance counselors and high school focus group teachers, the researcher learned that participants did not view any relevant data. According to one high school guidance counselor:

Being part of the initial group, I can honestly say we had very little input into the program. The university members came up with a program which they claimed was based on data from a national study, so the high school people thought, well, they spent all the money and viewed all the information surrounding the study, so this must be a good proposal they are presenting. We did not question what was presented. After all, they were college professionals and who would know more about this stuff than we do as high school counselors. Our job was to find out what we need to do from a school's standpoint to make this program happen. More logistics and coordination of time date, and day of the week to run the program was our major contribution. I never

saw anything, except we were given an executive summary that I really did not look over very much. It was clear to the high school members that our schools sent us to the meeting and wanted us to make this program work. Therefore, I think that this was what we were thinking about at the meeting. How can we make this work for our high school? (w.g.i.s.c. 12/13/07)

The minutes from the very first university high school counselor meeting do not reflect any discussion of data other than a 15-minute review of the executive summary. Data transcription shows that only one individual worked specifically with the national data sets and all others believed that this study mirrored the population of the university in 2001 as well as the students at the local high school who participated in the Career Day program. Members from both the university and the two high schools trusted each other when they discussed various career development programs. While the career development programs may have been very successful, data analysis played a minor role in the creation of the career day programs, other than to confirm hunches.

Research Question #4

How did the university and local school district interact while creating the career decision-making program?

The theme that developed from the data collected for this research question was that the university-led process allowed for little high school input into program development. It was assumed that any program created for a high school would be completed in coordination with those who would be responsible for implementing the program in the schools. On the contrary, this researcher interviewed frustrated high

school participants, guidance counselors and teachers, who felt that the university participants developed the career programs on their own, and that the high school participants' roles were to make them work in their respective schools. When asked how the university and local school district interacted while creating the career decision-making program, the focus group participants from both high school studies shared similar sentiments. The most commonly shared belief was that the teachers were responsible for the implementation of the program and that they had very little or no contact with the committee who developed the program. One very vocal focus group participant from the urban school stated:

We had no idea this was even coming. We were told at a faculty in-service, the program was explained to the staff by the guidance counselor and we were told that the program had the support of the superintendent and building principal. So, what were we to do? We sat down and worked on how we could make this work in our curriculum, as well as our own classroom. The biggest problem was we were given the days for our visit to the college and they were scheduled during the last few days of the third rating period. We told the counselors this but they said these were the days we were assigned. Right away, most teachers were thinking, "how are we going to finish our grades for the third making period when we will be physically out of the building the last few days?" (Two groups, two days each, and we were all to attend while substitutes covered our classes) We were all frustrated at the timing of the

program. It is not that we didn't agree. It was just the timing and the fact that we had no say in the decision. (e.l.f.ss.c.l. 12/14/07)

Other focus group participants expressed similar feelings of frustration and wished they could have, at the very least, had some input into scheduling for career day. Interestingly, one teacher from the rural school district stated:

We all felt like it was a waste of time (having students in grades 11 and 12 involved in career day) because the students by then already have career plans. What, do you think a senior is going to change their mind on their major in April of their senior year? I asked why students in the lower grades couldn't attend. I was told that this came from the results from a national study. I felt we had no say in anything and two years later we are changing the program and having freshmen and sophomores attend. This is what I was trying to tell them from the beginning but I guess I'm just a teacher and the university people know much more than us teachers. (w.f.sci.p.b. 12/13/07)

The frustration and hostility towards the university people was visible. The statement above, like many other similar statements made by the focus group participants regarding the appropriate student age group, was in agreement with the research concluded in chapter three.

Consequently, guidance counselors took the brunt of the frustration from the teachers in their respective schools. They repeatedly mentioned the teachers' frustration, and agreed that the high school administrators had very little opportunity to ask for date

changes for career days. When interviewed separately, all counselors said that they were given the dates for the schools to attend the university-sponsored career days and, since so many schools were attending, they had little flexibility in their schedule. A counselor from the small rural school with 34 years of experience quickly pointed out:

When we inquired about the date changes because it was near the end of the rating period, we were told it was the only time we have for you because we have classes to run and don't want the high school students interfering with the university classes; and the professors who would be working with career day only could do this at certain times over their spring break. I thought to myself, I guess the university and professors' time is more important than the time of the high school teachers and counselors. (w.g.i.s.c. 12/13/07)

The counselors seemed frustrated that university officials did not take their opinions seriously, and they kept hearing that the program had the support of the university, the superintendent and the principal. The counselors, therefore, often heard the complaining from the teachers.

The high school counselors universally agreed that the theory supporting the program was good and the program itself was excellent, but it targeted the wrong grade level. The counselors argued that the program would better serve younger students, as most high school juniors and seniors have already made career-related commitments. They were told that the program mirrored the participants chosen for the National Study in 2001.

These counselors felt vindicated, however, in 2004 when the Career Day program changed to accommodate students in their sophomore year. University participants agreed with the counselors that this program was more beneficial for students in the 9th and 10th grades. This mirrors the conclusions reached in the literature review of the paper.

Overall, the high school participants in the study claimed to have very little input into development of the Career Day programs that they had to implement. Frustration was evident when high school participants discussed the relationship between the university and the high schools during the program development, and all felt that the university members drove all decisions regarding the programs. One counselor summarized the high school participants' feelings best when she said, "We were expected to utilize a program that we had no say in and make it work. We had little training, but believed if this didn't work, it would be our fault. It was very frustrating."

Research Question #5

How has the effectiveness of the changes relating to career decision-making been evaluated at the university and the two high schools?

The theme that developed for this research question was that discontinuation of career programs occurred because of the lack of data supporting their effect on students. When discussing programmatic change in the area of career decision-making that emerged because of the National Study in 2001, the researcher found that the rationale for discontinuing programs was the lack of hard data to support their effectiveness. While participants discussed multiple reasons as to why programs ended, the main reason was "we have nothing in terms of data that promotes the continuing of the program."

Often, programs that promote career awareness may take a few years to show any progress. Programs created to address career information, such as a unit developed by staff members at the rural school district for their social studies curriculum taught prior to junior and senior Career Day trip to the university had little chance for success. Focus group teachers in the rural school and, in particular, the social studies representative who helped develop the career unit, were upset at having to “drop” the unit. The social studies teacher stated:

We spent a lot of in-service time developing this unit with a representative from the university. The unit taught students about the various career clusters supported by the Michigan State Career pathways initiatives. Students gained an understanding of the various careers that could be attained by attending the local university. When we were writing the curriculum for this unit, we (the teachers and university participant) agreed it would be best served being taught in grades nine or ten rather than grades eleven and twelve since they had already made career plans, but this was not our decision. The program was good for the kids, they knew what to expect when they went to the university for their visit.

(w.f.ss.t.d. 12/13/07)

The focus group participants noted that students at the university mentioned how much they learned at Career Day and filled out a program evaluation for the university. However, when the “No Child Left Behind” Act pressured the staff in all departments, the principal, with the support of the superintendent, decided that the program should end

and a prep unit should be developed to prepare juniors for state proficiency tests. When focus group participants asked for the official reason for dropping the unit, administrators told them, “In the day of data driven decision-making we have no data to support the need for the unit. The state test results for the building showed a greater need for a test prep course.”

This high school did not have an assessment tool and only received one answer from the university as to what students wrote in their first Career Day exit survey. While this data may have been helpful, the overwhelming belief was that, since there was no assessment tool for this unit other than a culminating project and there was no way to see if the timeline of the program was met, the program would not have a chance against the powers of “No Child Left Behind” legislation.

When the researcher asked the same questions of interview participants and focus group participants at the urban high school, it was clear that they did not want to start a program that could not be evaluated. They believed that the only reason Career Day lasted as long as it did was that all superintendents supported it, and their district did not want to be the only one not involved. Career Day ended in this district as soon as it changed from grades 11 and 12 to grades 9 and 10. Central office administrators believed that students needed more class time to focus on mathematics and reading, and that students could not afford the time out of class to attend an all-day program.

The current Career Counseling department head confirmed that both the high schools and the university participants shared similar ideas and opinions. When questioned about whom was instrumental in ending the Career Day program as designed, she noted:

We had the program functioning well, and after two years of exit survey data from the students who participated in the program, we realized students were saying they wished they had this information prior to their junior year because they had already made decisions and commitments for post-secondary education. We then moved the program to ninth or tenth grades depending on the schools choice. This worked well until we changed presidents at the college. He wanted to see quantitative data from our admissions office relating to the effects “Career Day” was having on students enrolling at the university. Specifically, he was interested in declared freshman versus undeclared freshman enrolling into the university from local schools. The university had not collected data specific to students who were involved in “Career Day” and, since overall the number of undeclared students was relatively the same over a five-year period, there was no reason to continue supporting this program. The president made the decision to place more emphasis on helping current university students who were undeclared choose a major, and thus the “Career Day” program was to be scaled down and shifted to the office of admissions while the counseling department handled the career decision needs of the undeclared university student. (u.i.d.c. 12/13/07)

This seemed to be more of a shift due to the philosophy of the university president, but the interviewee also cited the lack of any type of quantitative evaluation of the program, which would assess its effectiveness. University administrators did not eliminate the program, but shifted its focus. Participants noted that the relationship between the university and the high schools changed, and counselors no longer worked with members of the university's Career Counseling Department. Guidance counselors and teachers no longer gained valuable information on the changing world of careers and instead relied on their limited prior knowledge of careers.

Research Question #6

Have the programmatic changes in career decision-making been sustained at the two high schools since 2001?

The theme that developed from this question was initially a yes and no answer. Simply stated, some programs continued in various forms since their inception, while others ceased altogether. This led the researcher to ask more probing questions to determine the reason for continuing or terminating the career development programs.

After discussing this with counselors at the two high schools, this researcher received similar and different responses. Counselors interviewed at both schools agreed that the Career Day program created in 2002 still existed, but suffered major revisions. As stated earlier, the program originally started with the involvement of high school juniors and seniors, because the program shadowed the grade level of the students participating in the National Study in 2001.

The major program revision resulted from exit survey information from students who participated in the Career Day program. Students expressed a desire to participate in

the Career Day program earlier in their high school careers, and this prompted the university and school counselors to change the program to students in grades 9 and 10. This change occurred after three years of students in grades 11 and 12 participating in the program. The counselors from the schools also noted that the program for the upcoming spring was downsized and run solely by an employee in the Office of Admissions.

While the counselors from the rural school discussed the current program, as it exists today, the urban counselors had very little knowledge of the program as it evolved. The most experienced counselor from the urban high school stated:

We were involved in the original program for three years, but then a new superintendent was hired who was concerned with test scores and the number of days students were out of the building for various extra and co-curricular activities. He made it clear that, because many students were not achieving a passing level on the state tests, and that there also was a large amount of money being spent transporting students to these activities and the district was no longer going to support the “Career Day” program. He informed the principal that students needed to be physically in the classroom and we (counselors) were to help students with their career related decisions. We were seen as career counselors and when students with other concerns we had a difficult time seeing them once spring course registration began. In addition, we were working on counseling 11th grade students about careers more than any other grade and still do this today. (el.g.i.e.p. 12/14/07)

This counselor was the only one who had been in the same employment position since 2001. The researcher asked the counselor if she believed that the program would still exist if the administration had not changed, and the employee did think that the change in administrators had an effect on the program. The counselor also explained that the program was not self-sustaining because of staff turnover. The employee reminded the researcher that she was the only staff person remaining from 2001, and added that some of the original counseling positions changed personnel several times since 2001. Being an inner-city school, change occurred frequently in counseling, administration, and the teaching positions and those changes naturally affected the continuity of programs.

Conversely, in the rural school district, leadership did not change, which created stability within the district. Participants interviewed also noted that most things did not change much and programs seemed to continue. One focus group participant (a social studies teacher) stated, “We just go with the flow.” When asked why this occurred, the participant pointed to the leadership at the central office level and building level. The teacher noted that there was no change in any of the positions, and programs such as Career Day still existed, but there were some revisions.

For example, high school administrators eliminated the career unit due to the need for a test prep course. When asked whether they agreed with the change to a prep course, all focus group teachers were in favor of the prep course. They added that the prep course helped students perform on the state test at their highest possible levels. Similarly, the focus group participants agreed that the Career Day program met the students’ career development needs, especially when Career Day targeted first and second year high school students who were only beginning to develop ideas about future career paths.

Finally, at the university level, the current head of the Career Counseling Department noted that, up until they had a change in presidents, counselors adjusted the program to meet the needs of individual schools. In addition, university participants studied exit surveys, which led to changes in the program in terms of grade levels involved. Overall, the Career Counseling Department determined that the program was self-sustaining. Yet, the department head noted that a lot had changed over the course of the three years.

First, the original member who worked with the National Study in 2001 data, and who was instrumental in lobbying for the continuation of the program, left the university for a position at the state level. This same individual commanded great respect throughout the university community, and, after his departure, the program seemed to lose support from the office of the president of the university. The current department head for Career Counseling noted,

When the past department chair left for the state position, we lost our voice to the president. The president supported the program for one more year but now he has made it clear he wants the program downsized and transferred to the office of admissions. He told me directly that we needed a refocus on the current university students to help them declare a major. I understand his reasoning, but still believe in the program. The president also made it clear that he no longer supported the program by removing all funds that were directed toward the program and transferring some of the funds to the office of admissions. The program changed from two days to

one half day per grade level. I believed this may or may not meet the needs of the high schools in attendance. (u.i.d.c. 12/13/07)

When asked by the researcher where she felt the future of the program was, she said:

When money and focus at the university is removed from a program, the program will not sustain itself. I think the “Career Day” program will end in a few years, if not sooner. I am already getting calls from high schools asking if the program has changed and whether or not it is worth the school attending. I have continued to support the program because I think it is a good program for the local schools but I also know, with my changing role, and after the years helping to revise the program, I will not have the time to be involved in the program in any capacity.

Without any vested interest by anyone, and knowing I am the last person who was part of the original inception of the program, I think it will die soon. (u.i.d.c. 12/13/07)

Interestingly, money seemed to be a major focus at the university level. While the program still exists, this researcher wonders if the lack of funding and perceived lack of support will end a once successful program that benefited both the local high school as well as the university.

Research Question #7

How has the relationship between the university and two high schools evolved?

The theme resulting from this question was that the relationship between the university and local schools participating in this study flourished, but not necessarily as a result of career decision-making programs.

The universities and two high schools have had a history of positive relations. While the focus of this study was on career decision-making, this researcher learned from the participants that no one particular program developed the positive relationship that exists between this university and the local high schools.

When discussing the evolution of the relationship with the participants from the university, it was clear that regardless of who was in charge of the university, there was an unwritten rule that the responsibility of each department was to foster a positive relationship with the local school communities.

The current head of the Career Counseling Department was quick to point out that her particular university needed to foster good relations with the local schools. She stated,

As a community, we serve the local community and, most importantly, since we are in a rural section of the county, we believe many students from the local school districts will attend our school and because of that we need to have a positive relationship with our local schools. The university has many events that attract students to our campus and it is through our relationship with the local schools that these activities are advertised and promoted. We need and rely on high schools to help promote our university, and, since we are a comprehensive university that issues degrees from associate to doctorate degrees,

the more students that come to our campus, the more they see what we have to offer. (u.i.d.c. 12/13/07)

It was evident from the discussion with all university participants that they created programs involving local high school students in order to invite high school students on campus. All participants explained that it was important to create a positive relationship with high schools because the area is rural and many family members did not attend college. University administrators believed that educating parents and rural students about the need for post-secondary education and about the many qualities of this university brought more students to the campus.

Similarly, the university participants believed that they needed to reach out to the nearby inner city population. All participants agreed that many times inner-city students are not privy to all the offerings at this university, especially since the high school is located closer to a major four-year university. By visiting the campus, students could gain a better understanding of all career possibilities not offered by a large four-year university. The interview with the past head of the Career Counseling Department confirmed the above when he said:

We know where one's bread is buttered, no students, no job. The job of the university counseling department is not only to help those students on campus, but also to help potential college students understand all our university has to offer. Having a comprehensive university as if we do allowed us to offer career pathways in about every area for all students: rural, urban or suburban. (u.i.d.h. 12/12/07)

Subsequently, when discussing the high school and university relationships that existed and how these relationships evolved, the researcher hoped to confirm what one university person stated:

Not surprising, the local school participants sang praises for the cooperation that existed between the schools and the university.

Both schools' participants agreed that the university is a valuable asset to their school. The university provides tutors for the rural school in close proximity to their school. They also allow students to be dually enrolled in courses that the small rural school cannot offer for the so few students that qualify. (u.f.cc.m.b. 9/13/07)

The counselors from the local rural school felt that many of their students attended the university to gain associates degrees because they felt comfortable on campus and could afford the courses necessary to gain their associates degree. The university's record of accomplishment of placing students into the workforce also helped students see that post-secondary education is necessary in the current job market.

While the urban school did not have as close a bond to the university, it was not because of anything the university did or did not do. The proximity of the high school to the university caused a problem. High school administrators could not expect tutors to take the one-plus hour trip to tutor at their school. This inner-city school had a good relationship with the university that was closer to it; the university provided tutors and piloted research programs. Again, all urban school participants noted that the distance from the participating university in the study was the only problem. The urban high school staff appreciated all that the university from the study did, and wished they were

little closer so they could do more with the university. The focus group's language arts participant noted:

I think if we were closer, our students would be able to see how college could benefit themselves. "Career Day" opened many students' eyes to this university, but with little content other than that program, students got back into their usual routines of seeing students from the local university and feeling they are not as capable as these students. Again, it is not against the local university, they just do not offer what the comprehensive university could offer our students. While our relationship with everyone from the comprehensive university was good, it is hindered by distance, not by want. (el.f.la.m.j. 12/14/07)

The relationships between high schools and universities have existed for many years, but, in this case, distance was the only hindering factor in the relationship between the urban school and the university.

Research Question #8

What role did leadership play in implementing and sustaining the programmatic changes because of the data analysis of the National Career Study conducted in the fall of 2001?

The theme that developed was that leadership, particularly at the university level, prevented sustained programmatic change. The presidential office change that occurred at the participating university had a direct effect on the programs that developed between the university and local school districts. It was the university president in 2001 who

commissioned the study, through the university's Workforce Development department. His interest in researching a hunch related to high school student career decision-making was the catalyst for the commissioning of the study in 2001. When results confirmed the university president's hunch, the president procured money for programs to be developed between the university and local school districts. University administrators funneled money into the Career Counseling Department, placing an emphasis on working with local school districts. The intent was to develop career programs that would bring 11th and 12th grade students to the college campus, allowing them to experience the many career offerings at the university.

The head of the career workforce development department, responsible for data analysis and the development of an executive summary of the results from the 2001 National Survey, said:

The President strongly believed that the number of undeclared students attending the university was a direct result of a lack of career knowledge and that an equal number of students were not attending any post-secondary education due to the lack of knowledge of the changing workforce. The president understood that many students living in the rural areas of the state of Michigan only had knowledge of careers from the experiences of their parents, teachers and guidance counselors. What the president and I believed was confirmed through discussions with guidance counselors and students, alike, were that students had minimal, at best, knowledge of the changing workforce. We knew from

discussions with school staff members that many always wanted to be teachers and thus never explored careers. This minimal knowledge of careers is what is guiding college students, parents who never attended college, and school staff members who always wanted to work in education and did little career exploration. The leadership of the president was instrumental in allowing us to work with local school counselors to develop our Career Day Program.

(u.i.d.h. 12/12/07)

As stated earlier, the university originally developed the Career Day program for high school juniors and seniors. The leaders in program development did not realize that most students had already made decisions by grades 11 and 12, and that they should have been targeting younger students. This was one of the major shortcomings of the development of the Career Day program.

Subsequently, while the university president's leadership was instrumental in initially investing money into the development of the career decision-making programs, it was the change in the presidency that almost eliminated the Career Day program. The current head of the Career Counseling Department, who assisted in the development of Career Day and led the change in focus from grades 11 and 12 to grades 9 and 10, agreed. She believed that university leadership was the main reason Career Day was both a success and almost failure. This staff member explained:

The President that commissioned the study still focused on the original mission statement of the college, which is to be a national leader in providing opportunities for innovating teaching and

learning in a career-oriented technological and professional education. The President in 2001 was committed to fulfilling the mission of the university and the avenue the president chose was through high school students' career planning. The President provided the funding necessary to allow us to develop programs with poorer school districts that did not have the finances necessary to develop such programs. It was through his leadership we were allowed to create great programs like "Career Day."

(u.i.d.c. 12/13/07)

While the program continued with adjustments being made along the way, it was again leadership that changed the way programs between the university and the local school districts functioned. University presidential changes brought about differing philosophies when it came to career development. The new president offered a different view of career decision-making than the university president who commissioned the Study in 2001. The new and current beliefs about career decision-making were to offer more career counseling to the freshmen at the university, and not as much to the local high school students. The philosophy changed from allocating money to programs that offered career awareness to high school students to keeping the available dollars within the university. The interviewee believed that it was the obligation of the university to spend as much time as possible working with the student body attending the school. The current head of the Career Counseling Department stated:

It was made clear that the programs be seriously scaled down. In fact, the Career Day program went from two full days to one-half

day and was to be transferred from the career-counseling department to the office of admissions. The program would again be shifted to 12th grade students. The president withdrew his support of the program; not officially, but by his transferring of money to other departments or other focused goal areas. One of his goals is to develop career decision-making skills with our current students. (u.i.d.c. 12/13/07)

Consequently, the original programs that relied on financial support offered by the university ended. The revised program, while operating under the office of admissions, focused solely on students who wished to attend the university. The idea of helping poor rural and inner city students understand the many available careers changed to working only with students who have an interest in attending the university. Subsequently, the original intent of the program changed when the leadership within the university changed. When the leadership changed, the financial contributions to the program were eliminated or moved to another department.

Conversely, while much can be said about the leadership at the university, leadership at the local high schools affected the program as well. The small, rural high school administrators approved of the programs offered by the university and believed that there was a good partnership between the education institutions. Both teachers in the focus group as well as counselors from the school agreed that the programs offered by the university positively affected their students. The superintendent continually supported the programs, especially Career Day. One high school counselor stated:

The Career Day program was very helpful to our sophomores. This is the time when students are really making career plans, attending “Career Day” allowed students who never thought they could go to college to believe they could attend for at least two years. While only one group of sophomores have graduated since the program changed to grades 9 and 10, this is the highest number of students we have had attend post-secondary schools. In addition, local schools found that more students than ever applied and were accepted at the participating university. (w.f.l.a.t.d. 12/13/07)

While the data suggested that the Career Day program paid dividends, it was not appropriate to attribute this only to Career Day.

Conversely, while leadership stability within the rural school allowed for continual support of programs, the urban school did not see the same results. Although the urban high school had two superintendents, participants in this study did not believe that it was solely a problem with the leadership. The group of participants agreed that other changes within the school had as much to do with the ending of the programs with the university as with the change in leadership.

The frequent change of school personnel that often happens in an inner-city setting is one reason that the program between the inner city school and participating university ended. The most experienced counselor from the urban school stated:

I was part of the original group that was involved in creating “Career Day.” It was a good program for our students, but as we grew in numbers, combined with the number of transient teaching

and counseling positions, I felt like all I did was an in-service person every year about their role in “Career Day.” Finally, after three years and numerous training sessions, a new superintendent took over and told the principal he could use a site-based management approach to do what is best for the students. He felt that the time out of class was difficult to justify and saw how much work it was year after year for me that he allowed the program to end. The program ended when it changed from grades 11 and 12 to grades 9 and 10. (el.g.i.d.t. 12/14/07)

While leadership changes did not directly end the program for the students, the amount of teacher/counselor turnover was a factor. The change in the superintendent position also resulted in a change in philosophy for running the district, which, in time, resulted in the disruption of the programs with the participating university.

Conclusion

The information presented in this chapter represented the findings that resulted from triangulating the data collected and analyzing the conditions that resulted in the development of themes or patterns for each research question that guided this study.

These research questions are:

1. What are the perceived benefits of university research as it relates to programmatic change within a school?
2. How did the university evaluate the data from the National Career Study conducted in the fall of 2001?

3. What conclusions were reached by the university after evaluating the data from the National Career Study conducted in the fall of 2001?
4. How did the university and two local school districts interact while creating the career decision-making program?
5. How has the effectiveness of the changes relating to career decision-making been evaluated at the university and the two high schools?
6. Have the programmatic changes in career decision-making been sustained at the two high schools?
7. How has the relationship between the university and two high schools evolved?
8. What role did leadership play in implementing and sustaining the programmatic changes because of the data analysis of the National Career Study conducted in the fall of 2001?

The findings for research question one indicated that university officials utilized research superficially when developing the career-related programs for high school students. The results, when triangulated, revealed that, while universities sponsor research that may be beneficial to high schools, they usually have a slant toward making any program beneficial to the university. University officials sometimes create programs and pass them on to local school districts, which then tweak the programs to meet their students' needs.

The results for research question two found that program development was not dependent on data analysis and evaluation. The university commissioned the study to be

completed by a local research company, but only one person from the university actually developed the executive summary, which influenced the career decision-making programs. The lack of practically researched data was evident in the fact that the program involved 11th and 12th grade students and utilized national results that were not necessarily representative of the local demographics. While national studies are important, it is essential to understand how the demographics used in a study can be generalized to the population involved in the comparison.

In relation to research question three, the study played a dubious role in the program development. When analyzed, a theme developed that data collected from the National Study of 2001 had very little impact on program development. While most observers would assume that university officials commissioned the National Study 2001 to find trends in career decision-making, the reality is that officials instead used the study data to prove a university president's "hunch" correct or incorrect. The "hunch" was that high school students entering the university as undeclared had little career guidance before applying to the university. The data proved this "hunch" to be correct, so this drove the programs, and officials did not fully utilize the other data.

A significant part of this study was to understand the interaction between the university and high school personnel when developing career related programs. Most believed that programs developed mutually, but, in the eyes of the high school staff members, the university staff drove the programs. This meant that the university personnel already knew what they wanted to accomplish and the high school staff just tweaked the programs for their schools.

In both participating high schools, data is now of major importance and is necessary to carry out programs. Officials use this data to adjust or refine programs. One theme from this study was that officials did not utilize an evaluative tool to justify the continuation of career related programs. When a change in leadership prompts a request for data to justify a program and none exists, it is easy to ask the question, ‘why do we do this?’ If, as in the case of this university, their philosophy does not include current programs, it is easy to say that there is no data to support the continuation of the programs and, thus, the money originally earmarked for this program could be moved to different areas. Consequently, the money once used to run the Career Day program ceased and thus the program, as originally designed, ended.

In addition, this study analyzed the relationship between the two local high school and the university revealed that, although the career decision-making programs changed or ended, the relationship between the participating schools is still favorable. The university must to continue to maintain positive relations with its local school community, as other departmental programs need the cooperation of the local schools to allow the programs to function. An example of such a need would be in the area of student teaching. College students need to work with master teachers to finish earning their degree. For this reason, it is important for the university to cultivate a positive relationship with the local school community. The ending of one program should not be seen as the university lacking in support for their local schools.

Finally, this study found that changing leaders within any educational organization affects program development and/or the continuation of existing programs. Leadership changes at the university level can result in philosophical changes and money

once used to run programs can be shifted to other areas that the leader deems important. This can, and often does, have an effect on existing programs that need the funds to continue. While leaders understand the importance of programs, they will often revise the amount of money allocated to them, therefore revising the program itself, as was the case of the Career Day program.

Additionally, a change in superintendents can also affect programs that exist between schools and universities. At times, programs can be affected by outside forces, which can cause a superintendent to make programmatic decisions. One such example from this study was the federally mandated “No Child Left Behind” regulations that required school district leaders to study data and make programmatic decisions based on data. It was data driven decision-making that forced one school district to eliminate the Career Day program to allow for the creation of test preparation courses designed to help students gain the proficiency required by the “No Child Left Behind” legislation.

The following chapter will summarize information presented in this study. Following the summary, the chapter will outline the conclusions drawn from data collection and analysis of participant responses to interview questions as well as focus group responses and all other written materials derived from data from the National Study in 2001. Chapter 5 will conclude with recommendations for further study. As a result of data analysis, unanswered questions remain that could result in future studies. This will be contained in the final section of the study.

CHAPTER FIVE

DISCUSSION AND RECOMMENDATIONS

The purpose of this study was to examine the partnership between two local high schools and a university as they developed a career decision-making program based on the National Career Decision-Making Survey conducted in the fall of 2001. The study was designed to explore the relationships between high school teachers, guidance counselors, and university personnel during the development phase of the career decision-making program. The longevity of the programs and the perceived reasons for the success and failure of the program were also studied. The results identified areas that schools and university partnerships should review when attempting to develop programs beneficial to students.

This study presented the results of the analysis of qualitative data collected from teachers, guidance counselors, university personnel, and records that pertained to the development of career decision-making programs. An interview guide relative to this study's research questions was developed to collect information from two members of the university who were involved in the career development program from its inception. This same guide was used to collect rich data from two guidance counselors from each of the two participating high schools. Additionally, a focus group script was developed based on the research questions that guide this study. Three members of the university Career Counseling Department who help university students make career decisions were chosen to participate in the focus group. Another focus group of three teachers (science (s), language arts (l) and social studies (s.s.) from each participating high school were also

asked the same questions to assess their understanding of the career development programs in which their respective schools took part.

Finally, all documents produced in relation to the programs were examined at the participating two high schools and at the university. The reviewed documents included meeting minutes, university and high school career information material, and high school programs of study.

This chapter elaborates on the findings of this study, followed by the researcher's recommendations for further studies. The chapter continues with a discussion of possible implications of this study and conclusion summarizing this chapter. The chapter findings are organized by the research questions that have guided this study which are:

1. What are the perceived benefits of university research as it relates to programmatic change within a school?
2. How did the university evaluate the data from the National Career Study conducted in the fall of 2001?
3. What conclusions were reached by the university after evaluating the data from the National Career Study conducted in the fall of 2001?
4. How did the university and local school district interact while creating the career decision-making program?
5. How has the effectiveness of changes related to career decision-making been evaluated at the university and the two high schools?

6. Have the programmatic changes in career decision-making been sustained at the two high schools?
7. How has the relationship between the university and two high schools evolved?
8. What role did leadership play in implementing and sustaining the programmatic changes because of the data analysis of the National Career Study conducted in the fall of 2001?

In the context of this study, it is important to understand that programs developed involving universities and local school districts affect the relationship between parties. This study attempts to uncover the relationships that developed through the process of developing a career decision-making program between two high schools and a university. The programs were created to help high school students develop career decision-making skills.

The discussion that follows will be organized by the data collected from the research questions that guide this study.

Discussion of Results for Research Question # 1

The investigation into the benefits of university research and programmatic changes at two local high schools yielded important results. The university performed the study to prove a hunch that declared that students lacked career guidance and that high school counselors showed a bias towards four-year universities. The results of the National Study confirmed this hunch to be true. The university president subsequently authorized university personnel to work with local school districts to develop programs to

address the National Study's findings. By authorizing the Career Counseling Department to address the needs obtained from the study the university research became the catalyst for future program development between the participating groups in this study. Thus, the results of the research conducted by the university were used to create programs that were beneficial to the two local high schools' student as well as the university Career Counseling Department.

The results of the National Study 2001 supported the findings of Mau and Bikos (2000), Krieshok (1998) and Nelson, Fox and Gardner (1998) which suggested that high school counselors' focus on or advocacy of attendance in a four-year college resulted in less encouragement of students to attend trade schools, enter the military, or enter the workforce directly. The findings in this study suggest that high school counselors were previously teachers for a large portion of their lives and that most educators had wanted to work in the field of education from childhood. This desire to work in the education field resulted in high school guidance counselors' lack of a practical understanding of 21st century careers. In fact, most counselors never worked in any other field except those that require a 4-year college degree; thus their knowledge of careers other than those related to the education field is limited. The results obtained from data analysis suggested that the university should work with local high schools to develop career awareness program that would benefit students as well as their counselors by exposing both parties to 21st century careers.

As a result of the National Study 2001 research, the university decided that students needed to participate in their own career decision-making process by being exposed to careers that their counselors never discussed, explained, or even knew existed.

The National Study results and the subsequent program development between the two high schools and the university confirmed the findings of Skorikov and Vondracek (1997), who concluded that school personnel (i.e. counselors and teachers) had a major influence on the vocational interests of their students. The results also implied that students have been misled in their career choices due to school personnel's lack of career knowledge.

Furthermore, the development of programs that were beneficial to both the students and staff addressed a concern noted by Gillies, McMahon and Carroll (1998) that school personnel influence student career decision-making. Specifically, the results of data analysis confirmed the findings of Mau, Hitchcock and Calvert (1998) which stated that the role of the guidance counselor had a profound impact on the career decision-making of their students.

For this reason, the participating two high schools and the university benefited from university sponsored research by developing the Career Day program. The hope for the program was to help students make more informed career decisions. In addition, by exposing teachers and guidance counselors to the various opportunities available for high school students in the 21st century teachers and guidance counselors may make informed suggestions to future students about careers. The Career Day program became a model of teaching and learning about careers for both students and high school staff members.

In summary, the perceived benefits of university research as it relates to programmatic change within a school in this study, is that guidance counselors will receive staff development in understanding 21st century careers. As a result, students

making career decisions will reap the benefits from the guidance counselors' increased knowledge.

Discussion of Results for Research Question # 2

The original programs were developed because of data analysis from the results obtained from the National Study 2001. It has been found, however, that few individuals in this study were privy to any data other than that contained in the executive summary, which was developed from the results of the National Study 2001. Consequently, after reviewing exit surveys, the career development committee decided the original Career Day program was developed incorrectly for students in grades 11 and 12, and changed the target grades to grades 9 and 10. Furthermore, high school counselors were not consulted when the Career Day program was changed to accommodate students in grades 9 and 10. The impetus for this change reinforced the work of Schmitt-Rodermund and Vondracek (1999), which found that the most influential time for career decision-making was in grades 9 and 10. This is when students are exploring careers options.

Consequently, this study revealed that, while the participating university commissioned the study and the data analysis suggested that the hunches of the university president were correct, little educational research was done and no attempt was made to contextualize the findings more locally. Doing so may have allowed the original Career Day program to focus on students in grades 9 and 10, which would have been consistent with the findings of Kimball, Fox and Gardner (1995) and Gysbers, Lapan and Blair (1999). The previous studies suggested that when schools develop career exploration, they should be designed for grades 9 or 10. Thus, what can be said in answer to the second question is that the university was not basing its decisions exclusively on the data

obtained from the National Study 2001. It would have behooved the university to study career development in adolescents, the decision-making process adolescents follow, and at what age adolescents make career related decisions. This would have aided in the successful incorporation of the program into the curriculum of the two participating high schools. Therefore the outcome of the program supported Hill's (1999) work, that noted if the program is subject to change and does not maintain a period of three to five years of stability, research has shown it is unlikely to become a part of the school's curricular process (Hill, 1999).

This study implied that the university personnel had little involvement in the evaluation of the data from the National Career Study conducted in the fall of 2001. In fact, a third party research company collected, evaluated the data, and provided the results to the university in the form of an executive summary.

Discussion of Results for Research Question # 3

This study found that few university members participated in the data analysis of the National Study 2001 and that most had little exposure to the data. In addition, this study found that the results of the National Study might not be able to be generalized to the population entering the participating university. With such a small number of university participants involved in the data analysis, assumptions had to be made by university members. The first assumption was that the population studied in the National Study 2001 could be generalized to the current university population. This did not prove to be entirely accurate. The participants in the National Study 2001 were from various geographic sections of the country, but the population of each section determined its percentage of the participants. Thus, the Northeast and Southwest portions of the United

Stated were more heavily represented in the National Study 2001. Yet, the students enrolled in the participating university were products of the rural Midwest, and the information from the National Study 2001 may not apply to them.

The conclusions drawn from the National Study and the potential inability of the results to be generalized to the participating university's population revealed a need to have cross-section of university department members involved in the data analysis portion of the study. This would appear to support the research of Fullan (1993) and Sergiovanni (1994) in that educational change will be completed only when school wide management teams have a stake in the process. If there had been a cross-section of university department members and if they had the opportunity to ask whether they were able to generalize the results to the population currently enrolled in the university, it may have changed the outcome of the programs developed. It would also have allowed all members of the university involved in program development to operate under the same assumptions.

In summary, this study suggested that few members were exposed to the national study data and therefore not all stakeholders were operating under the same assumptions. Also, the reality is the data may or may not have been generalizable to the population.

Discussion of Results for Research Question # 4

When the researcher studied responses to questions on how local high schools and university officials interacted in the creation of the career decision-making program, the results revealed that the university controlled more of the process. The university-controlled process in this study refers to the process by which the university members developed career decision-making programs and introduced these programs to the

schools through the relationships between the participating university president and the two school district superintendents. Consequently, the programs developed by the university personnel were presented to a committee of high school staff members who were operating under the assumption that the school district superintendents endorsed the programs.

The high school guidance counselors and teachers within the school districts felt compelled to make these programs successful in their respective districts. The teachers also were of the opinion that they had little or no ownership in the program but were held accountable for the program's success. The fact that the teachers felt they had no ownership in the programs contrasted the studies of Joseph (2003), Hill (1999), Wilsmore (1999), Sergiovanni (1996) and Harrison and Macintosh (1989) who all conclude that involving all stakeholders in the development of a program will bring about ownership for the success of the program by all. The participants from both high schools felt similarly excluded from the development of the career decision-making programs yet, the teachers also perceived that the success of the university-developed program became their responsibility. All high school focus group participants said they felt their knowledge of career development was underappreciated by the university officials. The fact that the Career Day program was successful for a time seemed to contradict the findings of Hill, Bonan and Warner (1992) who found that without some form of site-based management at the local school, educational change would not be transformed in that school.

The university officials continually referred school district participants to the results of the National Study 2001. These officials also presented the executive summary

that outlined the weaknesses of the current career decision-making programs. Local school district officials did not refute the executive summary and thus followed the lead of the university, resulting in the creation and implementation of the program in its original form.

In conclusion, the results of research question number four infer the need to involve all stakeholders in program development. Stakeholders not involved in program development may lack the desire to work towards the success of a particular program because of their lack of input in the development of the program.

Discussion of Results for Research Question # 5

Examination showed that little or no thought was given to methods for evaluating the effectiveness of the program. This caused some schools to ultimately reduce or eliminate the career decision-making program. The superintendent of the urban school district in this study used this reason to remove the program completely when he discovered there was no evaluation tool with the exception of a voluntary Career Day program exit survey. He then replaced the Career Day program with a data driven program that helped improve state test scores, suggesting that a program corroborated by evaluation may have been more successful.

The need for an evaluative tool used to drive programs is an important aspect of program development. The fact that the program, developed by a university and supported by two local high schools, did not have any evaluative tool except for an optional post-Career Day survey for the students is a shortcoming. That a participating school removed itself from the program because it lacked any formal evaluation process demonstrates the programmatic value of an evaluative tool.

The course of events undertaken by the participating groups suggested a flaw in the planning for the program. The university commissioned a National Study to develop an understanding of why students were enrolling in the university with undecided majors. The data collected from the National Study 2001 proved the hunch of the university president, and programs were developed to address the shortcomings that emerged because of the National Study. Yet, after developing the programs, no evaluative tool or longitudinal data was collected to prove the program's effectiveness. The only evaluation the university developed was a short student survey administered after the student completed the Career Day program. The data collected from the survey was not used to evaluate the effectiveness of the program but to adjust the program based on popular choices of students.

The findings make it appear as though the two local high schools and the university did not understand the importance of program evaluation. Some form of evaluation may have helped in the improvement of the program and may have resulted in the program being sustained over time.

Discussion of Results for Research Question # 6

The career decision-making programs had been maintained in the two local high schools from 2001 to the date of this study. The findings noted that some decision-making programs existed in some districts but were eliminated in others. The responses from all participants showed that the university spent significant monies on the Career Day program and the funding was one of the main reasons for the Career Day success.

The university president responsible for initiating the development of the career decision-making programs with local school districts earmarked university financing for the Career Day program. The monies helped districts offset the cost of purchasing lunch for all students in the university cafeteria, thus enabling all students to experience “college food”. The university also paid professors for the time they devoted to Career Day. While the university president’s funding was available, the programs changed and modifications resulted in a potentially better experience for high school students.

In late 2005, a change in the university leadership occurred and the new president introduced new ideas on career development programs. The plan replaced helping local high school students make informed career decisions before they enrolled in a university with a plan designated to help currently enrolled university students with an undecided major. The new process would assist university students select a major with the help of the University Career Development Department. Therefore, the university money that was previously allocated for Career Day was reallocated to other departments. Yet, the newly appointed university president did not totally abandon Career Day, he restructured the program and transferred it from the Career Counseling Department to the Office of Admissions.

This shift forced schools to reevaluate their involvement in the Career Day program. The urban school elected to totally withdraw from the program, opting for more classroom time. The rural school opted to stay in the program due to its geographic proximity to the university, but was still concerned about whether it was going to be cost effective to send the high school seniors to the university to participate in the program.

The findings point to finances as a source of programmatic success. A change in university philosophy emerging from the office of the university president caused a change in monies earmarked for specific university programs. This change led to programmatic change within the university and affected the local high schools involved in the program. Monies historically allocated to the original Career Day were moved to other departments within the university and, as a result, high schools withdrew from the program.

Discussion of Results for Research Question # 7

This study's results emphasized that relationships are important when developing programs between high schools and a university. In this study, the participating university and the two local school districts had a history of positive relations. The researcher found that the Career Day program established direct ties between the staff and students of the university and high schools and that the relationship continued to be positive.

The university needs to foster positive relationships with the local school districts. As the university participants noted, they need to have a positive relationship with the local school districts because the local school districts were a source of future university students. There was an understanding among all members of the university that it was their collective responsibility to foster and maintain good relationships with the local school districts. This was not only imperative for student enrollment but also provided the various university departments with the opportunity to perform action research in the schools. Similarly, local school districts needed to maintain positive relationships with the university. The local school districts relied on the participating university to help provide programs that aided in their students' success. Whether it was after school

tutoring of students or the school being used as an action research site, the university helped in the development of programs beneficial to the high schools' students. Local school districts realized the importance of having educational experts operating in their school.

Teachers from the focus groups asserted the importance of utilizing the university to give their students more opportunities to succeed. Having a positive relationship with the university served the needs of the participating schools. This study found that while both the university and the local school districts benefited from the career decision-making programs, it was not the main reason for the positive relationship. This relationship developed out of a mutual need and not as a result of a single program.

Discussion of Results for Research Question # 8

In the process of interviewing participants individually as well as in focus groups, the researcher found it more difficult to obtain responses from participants from the university. Participants from the university involved in the focus group were less likely to speak negatively about anything related to the university. While some of the individual interviewees from the university perspective spoke freely, it is important to note that one of the interviewees was no longer employed by the university at the time of the interview.

The researcher heard similar responses in the interviews at the two high schools. The participants from the urban school district that had recently changed superintendents were more reluctant to speak. The longest-tenured guidance counselor was the most outspoken and was planning to retire in two years. The teacher focus group participants had little to say about the university partnership, except that they were "told what to do" and "were not consulted" as to whether the programs created between the university and

their high school should continue. The lack of program ownership supported the research from Joseph (2003), Hill (1999), Wilsmore (1999), Sergiovanni (1996) and Harrison and Macintosh (1989). This continued to be a major finding in this study.

Conversely, participants from the rural school, which had had the same superintendent since the National Study 2001 was conducted, contributed more to the interview but in no way criticized the school district leadership or the leadership of the university. Teachers involved in the focus group from the rural school were more willing to discuss programs, but were also part of the programmatic changes that developed in the years following the National Study 2001.

These responses added credence to the work of Hill (1999) and Sergiovanni (1996). The findings of Hill and Sergiovanni emphasized that attitude and practice that endure for at least 3 to 5 years do not begin with structural concerns. Instead, attitude and practice that endure for at least 3 to 5 years begin with shared leadership and a shared vision about schooling, which can only develop with stable leadership from the top of the organization. The shared vision translates into changes in the institution, curriculum and student learning styles. In this researcher's study, the superintendent at the rural high school created a sense of shared leadership and stability within the school district and thus a level of comfort among the staff members that participated in this study.

Meanwhile, leadership changes in the university as well as leadership changes in the local urban school district brought conflict into the environment. The staff members participating in this study often mentioned that the "change in leadership" brought changes in direction and changes in programs. The repetitive changes in leadership that had occurred in the urban school over a 10-year span caused teachers to question the

direction the district would take each time a new leader emerged. Consequently, this affirmed Hill's (1999) conclusions that stability in the leadership role is the most important factor in implementing programmatic change. In the local urban school district, the programs never really became established as one incoming superintendent reversed decisions by the previous superintendent and changing the focus of the district. These findings showed that stable leadership is paramount to local high schools and universities when developing programmatic change.

In summary, results for question number eight infer that stability within the leadership positions is an important factor in sustaining long-term programmatic change. Stable leadership allows a vision to be ingrained in the culture of the organization and may allow programs to continue without being subjected to continual changes in the leadership positions.

Recommendations for Future Studies

The findings related to this study still leave many questions unanswered in relation to partnerships between universities and high schools. In specific, how National Study data is used in the creation of programmatic change, and the implementation of career decision-making programs is unanswered. The researcher realized there were a multitude of dynamics at work between the university and the two local school districts. This study was limited by the number of participants involved in the study as well as the length of time that had elapsed since the original National Study 2001 was conducted. This lapse of time could have caused problems when participants tried to recall events that took place in the distant past. This study was also limited by the turnover of personnel at the participating two school districts and the university,

specifically personnel who were involved in the development of programs with the two local high schools in 2001 through 2002. Teacher turnover in each of the two local high schools due to resignation, retirement and subsequent employment in a different school district limited the researcher to accessing first hand information from the remaining individuals involved in program development from 2001 through 2002.

The following list of considerations should be used by readers for future investigation into school and university partnerships as they relate to career development. This list will allow researchers to elaborate on the findings of this study, enabling the addition of possible research to this field. Considerations for future research are:

- The focus of this study was limited to one university and two local high schools in northwestern Michigan. This study should be replicated in other regions throughout the United States to assess the use of National Study data as a mechanism to develop university and high school partnerships. It would be interesting to see how other universities and local school districts interact with each other and use data to develop programs mutually beneficial to both organizations.
- A study could be developed to assess high school guidance counselors' knowledge of careers in the 21st century and the guidance school counselors' understanding of the market for the careers that students may select.

- A comparison study on the effects of stability of educational leadership on programmatic change within school districts would be valuable. This study would demonstrate the effects of stable educational leadership on sustaining programmatic change.
- A study of programs that exist between universities and local school districts and the subsequent effects on student achievement could help in future attempts to create successful university and school partnerships.
- A study should be conducted to find evaluative tools to help program participants assess the success of Career Day programs.
- A study should be conducted to find evaluative tools that assess students' beliefs about the effects of the Career Day program. This could be longitudinal in nature.

Implications of this Study

When discussing high school and university relationships, the implications of this study are many. University research can be beneficial to the development of high school and university programs. The result of the National Study fall 2001 suggested that high school guidance counselors lack 21st century career knowledge that is necessary in guiding high school students' career choices. This study implied the importance of high school guidance counselors' becoming aware of the many career choices that exist today and in the near future.

High school leaders may wish to create staff development opportunities for their counselors as the results of this study suggested.

While university research is crucial it is also important that data obtained from university sponsored studies are analyzed by multiple stakeholders who may be involved in the creation of programs resulting from data analysis. By involving the various stakeholders, everyone will operate under the same assumptions and thus create a feeling that input from all stakeholders is valued. The research findings of Joseph (2003), Jenlink (2001), Macintosh (1989) and Joiner (1987) detailed the need for stakeholders to be involved in all phases of program development. The research studies noted when stakeholders are involved they take ownership for the success of the program. This study implied the need for all stakeholders to be involved in the process of data analysis through program creation. This study implied that the importance of creating positive relationships in the process of developing programs between local high schools and universities. These positive relationships cannot be underestimated. The most important way to foster this need is to involve both university and high school personnel in any decision-making process that could involve the students from the school they represent.

Another implication of this study is that programs developed by universities and local schools lack a method of evaluation. It is important that program developers evaluate the program's effectiveness on student development or achievement. Since the "No Child Left Behind" legislation was developed creating accountability for school districts, all programs need to be evaluated for their effectiveness in regards to student growth and achievement. The need for evaluation is necessary for all programs if they are to survive the accountability systems necessary in schools today. It is important for all

stakeholders involved in program development to understand the need for program evaluation.

Supporting the studies of Hargreaves and Fink (2003), Sergiovanni (1996) and Fullan (1993), this study suggests that leadership stability is important in sustaining programmatic change. This study implies that not only does leadership play a role in programmatic change but also the stability of the leader is crucial to the long-term success of the program. This finding was true for both the school districts as well as the university involved in this study. This study confirms that the lack of sustainable leadership affected the success of the Career Development program. This study may add credence to the findings of Hill (1999) who noted that programs need 3 to 5 years to become ingrained in the culture of the organization. This study infers that a constant turnover of personnel in leadership roles causes continual change in the vision of the organization. It also suggests that each leader has a vision for the program and when new leadership evolves, the result is program goals are changed or programs are ended. The implication of this study suggests the need for stable leadership of more than three years if programs are to survive.

Next, this study implied there are many factors that could possibly affect the success of career development programs that help prepare student for multiple careers. First, leadership is initially important. Next, in order to ingrain the program in the culture of the school, extensive staff development may keep the staff actively involved in the success of the program. By helping those who are ultimately responsible for the implementation of a program and by developing their understanding and skills necessary for program success is one possible way program may be sustained over time. Finally,

utilizing a form evaluation could also help sustain programs that are developed by schools and universities when they encounter leadership change. Evaluation of any program is completed for the purpose of program improvement. If the participants of the study had developed an evaluation of Career Day and adjusted the program to meet the needs suggested from analysis of the collected data, the Career Day program may have been successful and may have endured the changes that took place in the leadership of the urban high school and the university. This study suggested the need to evaluate programs for the purpose of adjusting the programs to meet the needs of both the high schools and the university.

Summary

In summary, the results of this study may have far-reaching implications for high schools and universities who desire to develop partnerships for the purpose of developing programs beneficial to students. All committee members need to be involved in all aspects of program development including data analysis, program development, program implementation and program evaluation. By doing so, all members of the committee will be functioning under the same assumptions and will know whether data analysis results can be generalized to the population they represent. In addition, by involving all stakeholders in every phase of program development, ownership can be created that may lead to future success of the program. Furthermore, all committee members charged with program development need to realize the important role program evaluation plays in the long-term success of the program. .

In conclusion, this study implied the need for all stakeholders to be involved in every aspect of program development, including data and document review, discussions,

decisions, program implementation, and program evaluation. This study implied, when high schools and universities create partnerships for the purpose of program development, leadership stability is a factor in the long-term success of the program. University and school districts would be well advised to review the findings of this study prior to developing committees to design programs that could be beneficial to both high school and university students.

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APPENDICES

Appendix A

Superintendent/University President Letter of Approval

University/K-12 Partnership: How One University Impacted High School Career
Decision-Making Program

An East Stroudsburg University of Pennsylvania and Indiana University of Pennsylvania
Doctoral Dissertation

Rod Troutman, Principal Orefield Middle School, Parkland School District

Dear Superintendent:

As you are aware, I am currently serving as the Principal of Orefield Middle School in the Parkland School District. Educationally, I have been working to obtain my doctoral degree at East Stroudsburg University of Pennsylvania and Indiana University of Pennsylvania. I am currently seeking permission to gather data in reference to my study and would greatly appreciate if you could set aside a few minutes of your valuable time to review this document. I am hoping that you will support my research by approving the request to have your school district's staff members participate in this study. If so, please sign the attached approval form and return it to my attention in the self-addressed, stamped envelope.

Sincerely,

Rodney Troutman
Principal, Orefield Middle School
Parkland School District
Educational Leadership Doctoral Student
East Stroudsburg University of Pennsylvania
Indiana University of Pennsylvania

This project has been submitted and approved by the East Stroudsburg University of Pennsylvania and Indiana University of Pennsylvania Institutional Review Boards for the Protection of Human Subjects

Dr. Shala B. Davis, IRB Administrator, (570) 422-3536 x3336

Appendix B

Consent to Participate in a Research Study

- **Title:** University / K – 12 Partnerships: How One University Impacted High School Career Decision-Making Programs
- **Investigator:** Rodney Troutman (610)-799-4904
TROUTMANR@PARKLANDSD.ORG
- **Source of Support:** The East Stroudsburg University of Pennsylvania Institutional Review Board for the protection of Human Subjects has approved this project.
- **Purpose:** You are being asked to participate in a research project that will examine partnerships between a university and high schools as they developed a career decision-making program based on the National Study on Career Decision-Making conducted in the fall 2001. This investigation will be conducted after the enactment of Michigan's Career Cluster Law Section 1278 (Curriculum) established by the Michigan State Department of Education in 2004. An interview guide and a focus group script as well as document review will be utilized to obtain data used to draw conclusions about the relationship between a university and two local high schools who worked together using data from the National Study in the fall of 2001. This study will also evaluate the role of leadership in the development of programmatic change used to meet the requirements of the 2004 law.
- **Risks and Benefits:** The information on the survey that you complete will remain confidential. Given this guarantee there is no risk to participate. The benefit of participation is that the study will add to the research base about partnerships between a university and high schools as they developed a career decision-making program.
- **Compensation:** There will be no compensation provided to study participants.
- **Confidentiality:** At no time during this study will participants be asked to identify themselves. Your name will never appear on any completed interview or research document. Additionally, your interview or focus group transcript will not be identifiable to any principal, superintendent or school board member or university leadership member
- **Right to Withdraw:** Please understand that you are under no obligation to participate in this research study. You are free to withdraw your consent to participate at any time.

- **Summary of Results:** A summary of the results of this project will be available to you, at no cost, at your request.
- **Voluntary Consent:** I have read the above and fully understand what I will be asked do in this study. Additionally, I understand that my involvement is voluntary and that I am free to withdraw my consent at any time. On these terms, I certify that I am willing to participate. I also understand that should I have any questions about my participation in this study, I may call Dr. Shala Davis, Chair of the East Stroudsburg University Institutional Review Board (570- 422- 3336)

Signature_____ Date_____

Witness_____ Date_____

Appendix C

Focus Group Script

Thank you for volunteering to participate in this Focus Group interview with questions related to the use of the 2001 National Study, The Career Institute for Education and Workforce Development, Attitudes on Careers and Career Decision-Making. This interview will be taped and transcribed by the researcher. Please note that follow-up questions may be necessary to clarify any answers. All tapes will be destroyed upon transcription. Until the tapes are destroyed, the tape will be locked in a file cabinet in which the researcher is the only one with the key. Below are the research questions that guide this study in hope that you will remember them as you answer the questions that follow.

The study will attempt to gain information about the following research questions:

1. What are the perceived benefits of university research as it relates to programmatic change within a school?
2. How did the university evaluate the data from the National Career Study conducted in the fall of 2001?
3. What conclusions were reached by the university after evaluating the data from the National Career Study conducted in the fall of 2001?
4. How did the university and local school district interact while creating the career decision-making program?
5. How has the effectiveness of the changes relating to career decision-making been evaluated at the university and the two high schools?
6. Have the programmatic changes in career decision-making been sustained at the two high schools?
7. How has the relationship between the university and two high schools evolved?
8. What role did leadership play in implementing and sustaining the programmatic changes resulting from the data analysis of the National Career Study conducted in the fall of 2001?

***Please note the number after each question corresponds to the number assigned to the research questions guiding this study.**

Focus Group Script
Project: University/K-12 Partnerships

Time of Focus Group Interview:

Date:

Place:

Interviewer:

Position of Interviewees:

- What career-related information and materials are available for use by your high school and the university students? (3,4,5)
- In what ways did personnel receive information on any changes? What changed because of the data collected in 2001? (4,8)
- Please explain any initiatives that may be targeted at students' career development. (3,6)
- Describe any of the programmatic changes at the high school and university resulting from the 2001 study. (3,4,5,6)
- Explain the procedures you and the staff followed to inform and provide students with career planning information? (6,8)
- In what ways have the high school and or the university inundates students with the programmatic changes in the area of career development? (1,2,4,5)
- What do you believe are the staff perceptions of how students utilize career information? (5)
- What do you believe are the staff's perceptions of students career planning and what influences those decisions? (5,6,7,8)
- How has the programmatic change at the high school and the university provided students with the necessary tools to set career goals? (5,6)

Thank you for your time and your responses will remain Confidential.

Appendix D

Interview Guide (Matrix)

Thank you for volunteering to participate in this interview with questions related to K12/university partnerships. The on questions are based the Career Institute for Education and Workforce Development, Attitudes on Careers and Career Decision-Making National Study fall 2001. This interview will be taped and transcribed by the researcher. Please note that follow-up questions may be necessary to clarify any answers. All tapes will be destroyed upon transcription. Until the tapes are destroyed, the tape will be locked in a file cabinet in which the researcher is the only one with the key. Below are the research questions that guide this study in hope that you will remember them as you answer the questions that follow.

The study will attempt to inform the following research questions:

1. What are the perceived benefits of university research as it relates to programmatic change within a school?
2. How did the university evaluate the data from the National Career Study conducted in the fall of 2001?
3. What conclusions were reached by the university after evaluating the data from the National Career Study conducted in the fall of 2001?
4. How did the university and local school district interact while creating the career decision-making program?
5. How has the effectiveness of the changes relating to career decision-making been evaluated at the university and the two high schools?
6. Have the programmatic changes in career decision-making been sustained at the two high schools?
7. How has the relationship between the university and two high schools evolved?
8. What role did leadership play in implementing and sustaining the programmatic changes resulting from the data analysis of the National Career Study conducted in the fall of 2001?

***Please note the number after each question corresponds to the number assigned to the research questions guiding this study.**

Interview Protocol

Project: University/K-12 Partnerships

Time of Interview:

Date:

Place:

Interviewer:

Position of Interviewee:

- What process was used to analyze the data from the National Study Fall 2001? Please explain. (1)
- Were provisions made to discuss the 11th and 12th grade students' different responses to the National Study Fall 2001? (1,3)
- What programmatic changes were made at the University and/or the high schools because of the National Study Fall 2001 data analysis? (7,8)
- Has any programmatic change between the university and the local schools shown significant gains for students? How has the change been evaluated? (4,5,8)
- What programmatic changes related to career decision-making have been sustained since their inception and why do you believe this has occurred? (5,6,8)
- What has prompted the ending of any career decision-making programs? (2,4,5,6)
- Why do you feel some changes have survived while others have not? (4,5)
- What can be said about the role of leadership when handling programmatic change? (4,6,8)
- What relationship existed prior to the National Study 2001 and subsequently the analyses between the University and your school? (2,3,7)
- How has working with the National Study 2001 survey data proved to be beneficial to your university or your school districts? (1,3)

Thank you for your time and your responses will remain Confidential.