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#### The University of Southern Mississippi

# FACTORS THAT CONTRIBUTE TO A SUCCESSFUL SECONDARY VOCATIONAL EDUCATION PROGRAM IN THE STATE OF MISSISSIPPI

by

Erin Leigh Parker

Abstract of a Dissertation Submitted to the Graduate Studies Office of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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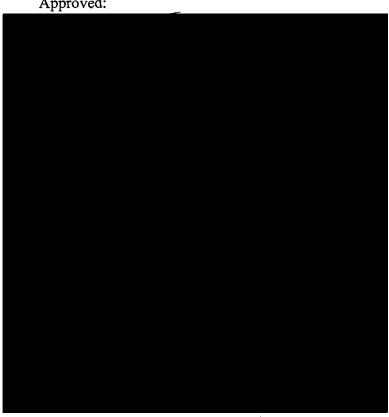
# FACTORS THAT CONTRIBUTE TO A SUCCESSFUL SECONDARY VOCATIONAL EDUCATION PROGRAM IN THE STATE OF MISSISSIPPI

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A Dissertation Submitted to the Graduate Studies Office of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Approved:



#### ABSTRACT

# FACTORS THAT CONTRIBUTE TO A SUCCESSFUL SECONDARY VOCATIONAL EDUCATION PROGRAM IN THE STATE OF MISSISSIPPI by Erin Leigh Parker

#### December 2008

This study was designed to assess and identify factors that make a vocational program successful. Using qualitative methods for collection and analysis of data, vocational instructors and students in programs identified to be successful were interviewed to better depict the classroom setting, teachers, methods, etc. of these successful programs. Participants included instructors of and students enrolled in secondary vocational programs in the state of Mississippi identified to be most successful according to C-PAS test scores in each of the following training areas: Building Trades (carpentry), Business and Computer Technology, Marketing Management Technology, and Allied Health. MS-CPAS test scores were analyzed to identify the highest performing schools in four vocational disciplines.

Several methods were used to gather information for an analysis to determine what factors are significant in making these programs successful. These methods included interviews, focus groups, and classroom observations. Focus groups were formed from students enrolled in said programs to gain information on student perception of the program. Guided interviews of the instructors of each program were conducted in order to identify teaching method, style, classroom and school environment, etc. Classroom

observations were made to gain a third-party independent perspective of the programs. Using triangulation, the results generated from one method confirmed those of another. The researcher compared results from the observations, focus groups, and structured interviews. These methods identified factors that could be tested in order to replicate success in other vocational programs. These findings include, but are not limited to, the following: teacher quality, use of guided/leading questions, differentiated instruction, teacher enthusiasm, caring quality of the teacher, teacher's involvement with students, celebration of achievement, fun and interactive classroom setting, classroom management, student recruitment, C-PAS preparation, classroom interaction between students and with the teacher, and the classroom layout.

The findings from this study give school districts a framework by which to build their vocational programs. This study creates a foundation for further vocational research on the secondary level and provides support for researchers interested in showing the benefits of vocational education. Recommendations for further study are indicated.

#### **ACKNOWLEDGMENTS**

It is said that one is only as good as the company they keep. In this case, I am blessed. The support I have received from my family and friends has been awe inspiring. I would first like to thank God for His faithfulness and guidance. I would be nothing without Him. I would like to especially thank my husband, Matt Parker, who would not let me quit no matter how many times I declared that I would. Without his undying support and encouragement, this would not have been possible. I would also like to thank my mother, Loretta Goff, Ph.D., who has been my bright and shining example and inspiration in pursuit of this goal. Without her, I would never have attempted this degree in the first place. For my faithful friends and family, thank you for your prayers, your support, and your words of encouragement. I am truly blessed.

In addition, I wish to express my sincere thanks and appreciation to the members of my committee, Dr. David Lee, Dr. J. T. Johnson, Dr. Gaylynn Parker, and Dr. Rose McNeese, for all of their help and support. I have grown as a person and a professional throughout this process.

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#### CHAPTER I

#### INTRODUCTION

If a nation expects to be ignorant and free, in a state of civilization, it expects what never was and never will be.

—Thomas Jefferson, 1816 (Bush, 2008)

Public dissatisfaction with the educational system of the United States of America has been evidenced by the increased requirements placed upon schools by the federal government in legislation such as the No Child Left Behind Act of 2002. In his introduction of the legislation, President George W. Bush stated

The quality of our public schools directly affects us all as parents, as students, and as citizens. Yet too many children in America are segregated by low expectations, illiteracy, and self-doubt. In a constantly changing world that is demanding increasingly complex skills from its workforce, children are literally being left behind. (Bush, 2008)

These statements emphatically suggest that federal intervention was a necessity; however, the media continued to report negative aspects of governmental control. Chester E. Finn, Jr., of the *Washington Post* referred to the NCLB Act as "the 800 pound gorilla of U.S. education," suggesting that even though the legislation was influential or "carried a lot of weight," many were unhappy with the results (Finn, 2003, p. B03).

The, on August 12, 2006, the president signed the reauthorization of the Carl D. Perkins Vocational and Technical Education Act of 2006 into law. "The new Act will provide an increased focus on the academic achievement of career and technical education students, strengthen the connections between secondary and postsecondary

education, and improve state and local accountability" (U.S. Department of Education, 2006a).

As with NCLB, the federal government was imposing higher accountability requirements on vocational programs that could impact the selection of students and the focus of training within the existing programs.

Vocational training is one of the oldest forms of education. The goal of Vocational Education is to produce a workforce that is better prepared to excel in the world of work than it was 10 year ago (The Secretary's Commission on Achieving Necessary Skills [SCANS], 1991). Vocational programs such as apprenticeships or onthe-job training programs have long been established as one of the best ways to learn certain trades. Men of ancient times learned their trades as apprentices of a parent or family member with whom they worked until they were old enough to work alone. Internships and some Cooperative Education programs are modern forms of apprenticeships. In later years, it was determined that children needed to receive a public education, so apprenticeships became less common (Ball & Lamb, 2001).

In 1991, the Secretary's Commission on Achieving Necessary Skills (SCANS) issued a report that outlined all of the necessary skills for improving the nation's workforce. Employers said that a large percentage of their employees did not possess the basic skills necessary to perform their jobs effectively (SCANS, 1991). As a result, additional and more stringent academic requirements have been implemented for vocational students in secondary schools. Rigorous academic requirements of vocational teachers and administrators have been enforced. Teachers have become more selective in the type of student that they admit to their programs, thereby potentially denying

admittance to the students who could most benefit from the programs. A current criterion established success or failure of vocational program upon student achievement, enrollment, and completion rate (the number of students who complete 2 years of a particular program). The problem for vocational educators who are seeking to build a successful program is the lack of a set of concrete and identifiable strategies or methods specified for each program. The question becomes, "How do we determine what makes a program successful?"

This study attempted to identify factors that make successful vocational programs. The study analyzed the impact of identified attributes of successful secondary vocational programs and sought to identify factors necessary for replication. The purpose of this study was to identify and discuss the current environment of secondary vocational education and the factors that impact vocational students' success. In 1989, the Office of Technology Assessment (OTA) was commissioned to assess the effectiveness of current vocational programs, and the performance measures that were used at the time before the reauthorization of the Carl D. Perkins Vocational Education Act. They concluded that outcome-based performance measures, which have been effective in other areas of training in the federal government, would also be effective for assessing the performance of existing vocational programs. The two indicators that they examined were: (a) labor market performance indicators (such as job placement, average earnings, etc.), and (b) occupation-specific skills competencies (as measured by the currently used C-PAS test) (OTA, 1989). For the purpose of this study, Mississippi Career Planning and Assessment System (MS-C-PAS) test scores were used to identify the most successful programs in the state. The researcher further identified what specific factors contribute to the success of

vocational programs and whether or not these can be replicated in other areas. The goal of this study was to determine if the millions of dollars spent each year on vocational programs is justified, and, furthermore, if those dollars should be increased. It is an established assumption that educational systems desire to help all students, not just those who are college bound, and that a skilled labor force is essential to the operation of this nation. If these assumptions are accurate and quality vocational programs are not available to students interested in pursuing a career in vocational education, the future of today's labor force may be in jeopardy. This study emphasized the importance of quality vocational programs and the need for more research in this area.

#### Statement of the Problem

The highest achieving programs in Mississippi in each identified vocational training area were selected as sources of information because of the predetermined credibility of their success. Primary sources, such as the individuals involved in these vocational programs, are considered viable sources to determine the factors about success because of their current experience and involvement. As an information source, the researcher asked the current vocational students to provide information identifying their opinions about the programs that they attend. Teachers have great impact over the success or failure of any program. The best way to identify factors that impact the quality of a vocational education program is to ask the teachers and students involved in the classes at the schools identified to be the most successful. These key individuals have great influence over the students. Changes (or lack of changes) in the current environment are a direct result of the actions of these people. Students will provide information on the current setting in vocational centers. This information allowed the researcher to identify

and categorize factors that influence or are common to successful programs. By analyzing answers to questions asked of the teachers of identified vocational education programs about the attributes of their respective programs, the researcher identified factors that contribute to the learning environment leading to conclusions that may be drawn about the learning environment that they create.

#### Purpose of the Study

The future state of vocational education rests upon the need for such programs at the secondary and post-secondary level. For the purpose of this study, perceptions of students and teachers are factors that can be measured; therefore, these are appropriate standards of measurement for use. The researcher has not identified a study of statistical significance indicating the effectiveness of vocational training programs in high schools. This is perhaps due to the lack of consistent research in the area examining benefits of vocational programs to students and schools. Whether as a direct or indirect result of such studies, criticism of vocational education programs in high schools has grown substantially over the years (Claus, 1990). At a time when the benefits of Vocational Education have come under significant scrutiny by skeptics, it is increasingly more important to improve the success of vocational training programs and clearly indicate a valid analysis of their productively and effectiveness. By identifying the aspects that make up a successful program, a framework might be created for use in the other programs. There are many factors that could influence the success of a vocational education program. For the purpose of this study, students who had already chosen to participate in vocational education courses comprised a focus group to identify factors that make programs appealing and successful.

#### Research Questions

The questions addressed in this study evolved from the question, What makes a high school vocational program successful? The researcher identified two research questions that arose from current research. The two questions examined were:

- 1. What are the attributes of the vocational instructors of the higher scoring schools in the state of Mississippi?
- 2. What do students enrolled in the vocational programs of higher scoring schools indicate are the attributes of their respective programs?

#### Limitations

This study was limited by typically identified factors that limit many educational research studies. These include the small sample size and the possibility of researcher bias. Participation in this study was completely voluntary. The researcher in this study was a former vocational educator and may have been inclined to favor vocational education during the research process. To some, the familiarity of the researcher with the topic of the study could be seen as a limitation; however, it is the intent of educational research to involve the researcher in the depth of the experience (Fitch, 1994; Patton, 1990). Although there may be other items that influence the success of vocational education programs, these items are of particular interest to the researcher and were, therefore, chosen as the focus of this study. The study was further limited by use of volunteers. The total population included vocational students enrolled in programs identified by the state of Mississippi to be the highest performing. All students enrolled in these programs were invited to participate; however, participants were limited to students whose parents gave written consent. The study was also limited because of the

dependency upon schools' voluntary participation. The vocational teachers of the identified schools were provided needed information for the study; therefore, their choice to participate became a limitation.

This researcher believes firmly in the need for continued improvement in the educational system and sees a particular need in changing and improving the approach to vocational education. By identifying what the attributes of a successful vocational program are (since no definitive and proven standard and/or protocol for secondary vocational programs has been established), the researcher intended to identify important elements or procedures that add clarity to the needs of vocations programs that promote success.

#### **Delimitations**

The geographical delimitations for this study related to both the practicality and the scope of the study itself, such as creating a realistic timeline for completion of said study and to the unique structure of the secondary vocational system. Each high school in Mississippi does not have a vocational center, and environmental factors are not consistent. Some districts share vocational centers, and students must travel to other locations in order to take vocational courses. These factors affect enrollment, achievement, level of participants, and possibly other factors related to the programs' success.

The vocational students participating in high school vocational programs represent a high percentage of students who participate in apprenticeships as well as other post-secondary vocational education programs in the state. Students in focus groups were asked to give specific information regarding all aspects of their programs, including

questions about their instructors. They were asked questions regarding the learning environment, as well as any individuals who would have influence over their choices. In addition, their instructors were interviewed in order to paint a picture from their perspective of the important aspects that set their programs apart from other programs.

#### Assumptions

The assumptions recognized as foundational to the findings of this study include several factors. First, one must assume that the methods of research used are reliable and valid. For the purpose of this study, the researcher conducted interviews of teachers, and focus groups were formed to provide information from a student's perspective. Second, it was assumed that people would respond to these research methods in an honest and accurate manner. The only instruments used for measurement in this study were the interviews and focus groups. It was assumed that participants would answer the questions truthfully. Finally, it was assumed that the participants of this study are representative of the population.

#### **Definition of Terms**

The following terms provide context for understanding and interpretation of the concepts presented and explored in this study.

Accountability is liability to give an account of one's actions. For the purposes of this paper, this pertains to the actions of education professionals.

Apprenticeship programs are programs that allow students to learn a trade by participating in on-the-job training.

Performance measures are reference standards used for quantitative comparison of units specified by a scale.

Qualitative research methods are "methods [that] aim to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (Greenhalgh, 1997, p. 743). Fitch (1994) explained that in qualitative research, "The researcher should have been deeply involved and closely connected to the scene, activity, or group studied" (p. 35).

Reliability is defined for this study as consistency of response.

*Triangulation* is an approach that contributes to the validity of qualitative research when multiple research methods or theories are used.

Vocational education is education that is related to, providing, or undergoing training in a special skill to be pursued in a trade.

Work-based learning combines work and study experiences to allow students to enhance their academic knowledge while preparing them for a professional career.

#### Justification of the Study

By conducting qualitative research based on the particular protocol and procedures at these secondary vocational centers in the state of Mississippi, the researcher was able to determine to some level of significance whether there is a relationship between the factors identified in this study and student achievement. The interviews with teachers of the previously identified successful vocational programs were conducted for each of the five programs. These five programs were chosen because they are programs that are the most common throughout the state. The interviews shed light on how these teachers approach teaching their subjects and allowed the researcher to see the program through his or her eyes, obtaining a unique perspective of how that program can be approached. The student focus groups brought another perspective into the pool of data.

Each participant was asked to participate by his or her teacher, but students were not pressured in any way to participate; participation was strictly voluntary.

#### CHAPTER II

#### REVIEW OF RELATED LITERATURE

#### Introduction

This chapter provides a discussion of theories related to the development of vocational education and its benefits to the students who participate in the programs offered, as well as an overview of the current landscape of vocational education on the secondary level. In order to understand what factors contribute to the development of a successful vocational program, one must first examine the history of vocational education, where it came from, when it was implemented, why is was needed, and where it is today. The framework used in this study for understanding the context of current vocational training programs and the established performance measures emerged from a review of the related literature. This review of literature presents a summary of information on several related topics that comprise the main sections of this review.

The first section examines vocational and technical training programs in the United States. The nature of job-training programs, the methodology of such programs, and the effects on the participants are explained. This section examines how vocational education at the post-secondary level affects that of secondary vocational education, as well as the current legislation regarding vocational education. The second section presents an overview of the potential benefits of vocational education, the myths and realities about popular beliefs of such programs, and the impact of these programs on today's students. This section discusses the effects on both nominal and high-risk students at the secondary and post-secondary level. The third section in this review gives the reader a look at how other countries address vocational education. This section

analyzes secondary vocational education in today's international economy and compares it with that of the United States. In addition, a comparative examination of the similarities and differences between traditional academic education and vocational education follows. Finally, the educational theory that led to the groundwork for this research is explored. Concluding remarks summarize thoughts concerning the importance of these theories as they relate to current vocational programs.

Vocational Training Programs in the United States

Throughout the past 30 years, the educational system in the United States has striven to educate and train people for employment in a variety of ways. Both high schools and post-secondary institutions provide some job-specific educational programs. The development of vocational training programs has reflected a concern with particular economic problems, especially unemployment, underemployment, and poverty. A study conducted by the National Center for Research in Vocational Education (NCRVE) evaluated the results of vocational training programs and the questions concerning them. The major question addressed whether job-training programs have been, by and large, successes or failures. A thorough look at this evaluation showed that vocational training programs lead to small but statistically significant increases in employment and earnings, as well as small decreases in welfare payments. Cost benefit analyses from the same study showed that social benefits usually outweigh the costs. One may then conclude that these programs are relatively successful. However, the gains in employment (shown in this study) and earnings are small from a practical standpoint (Grubb, 1995).

Although the monetary benefits may be small, the extemporaneous benefits (i.e., unemployment, underemployment, and welfare dependency) are too serious to ignore

(Grubb, 1995). Therefore, the present study could present a vision of how vocational training programs could be structured in such a way as to target the weaker points, such as higher earnings.

In recent years, changes in traditional vocational education abound. A term coined in early 2001, the "new vocationalism," refers to the way that current vocational programs focus on curriculum alignment and integration of academic concepts and methods into career and technical programs. This idea supports transitioning students into not only sustainable careers but also collegiate programs. Curricula that are linked in such a way are quickly becoming known as "career pathways" (Hull, 2005, p. 14). Career pathways are clearly stated sequences of rigorous academic and vocational coursework. These sequential activities lay out the path for a student's entire high school career, on through junior college and college, and/or industry recognized licensure. These pathways must be developed as a partnership between secondary and post-secondary institutions. Career pathways are designed to create multiple options to prepare more students for high school and college matriculation and better prepare them for meaningful careers in the future (Bragg, 2007).

Vocational education has been used as a means of reforming prisoners and inmates and preparing them for their release into the general population. In 2006, the Office of Vocational and Adult Education and the National Institute of Corrections ventured into a partnership to "provide training, technical assistance and policy/program development assistance to the field of corrections" (Linton, 2006, p. 272). Their goal is to increase the employability of these inmates before their release, thereby increasing their

likelihood of success without returning to the life of crime that they once participated in (Linton, 2006).

The most recent issue in vocational education in the United States is the everpresent legislation with global implications—No Child Left Behind (NCLB). When the
president of one of the most powerful countries in the world announces that his new
mission in life is to ensure that every child receives a good education, no politician wants
to argue for fear of losing his or her constituents. It is a common desire for all children to
succeed, but in the rush to achieve political gains, many key aspects of this important
piece of legislation were overlooked. In the beginning, the public recognized that some
form of national accountability standard was needed. Nonetheless, opposition to the
NCLB legislation has increased. It seems that the more familiar Americans become with
the legislation, the less likely they are to support it (Azzam, 2004).

The new laws use test data to measure performance of students in the schools. The data were disaggregated by race, gender, income status, and other demographics to measure and compare performance of subgroups. Not only do students have to achieve proficiency on the tests administered, which are different in every state, but they are also required to meet adequate yearly progress (AYP). States provide parents with reports that detail not only their child's performance, but also the overall school's performance as well as their child's progress from year to year in several different subject areas (Emrick et al., 2004). The pressure accumulated by schools from these types of performance measures led to increases in required academic programs. For vocational education, this means fewer students with time in their schedules allotted for vocational programs. In addition, students who would normally have chosen specific occupational instruction in a

trade or technical area instead of higher level academic programs are now required to take the same higher-level academic courses to prepare them for the subject area tests used to rate each student's achievement.

Educators know that teacher quality is an integral part of student achievement. However, a question exists as to whether or not the provisions outlined by NCLB for becoming a "highly qualified" teacher accurately measure teacher effectiveness. In fact, some would say that in vocational programs a person who had 10 or more years of experience in the field of education, but could not pass an educators' proficiency test, would make a better teacher in that vocation than a person who successfully challenged an equivalency test with little or no field experience. Although the propaganda around NCLB seems to promote the idea that a highly qualified teacher will both know his or her subject matter and be able to teach it effectively, the methods for becoming a highly qualified teacher cannot ensure this claim. In fact, the NCLB legislation failed to indicate veteran teachers as highly qualified even when their students consistently receive high test scores and who serve as teacher coaches or mentor teachers. Some of these teachers have been forced to return to school at their own expense. Many vocational educators have been forced to retire because they either could not pass the exam required for certification or were not willing to jump through the hoops required to obtain highly qualified status. Likewise, some teachers right out of college who are not skilled and knowledgeable in their subject areas are considered highly qualified in more areas than their main subject area or grade (Amrein & Berliner, 2002). As if this were not enough of a burden on vocational administrators, over the last decade there has been a shortage of vocational teachers nationwide. Experts say that a lack of financial support is the primary

problem. Due to the national shortage of highly skilled laborers, employees of private industry can make as much as \$80,000 per year in some vocational occupations. In 2001, the superintendent of the Regional Occupational Program in Livermore, California, said that there has been a "dying out of interest in vocational education" ("Voc Ed Classrooms Face Severe Teacher Shortage," 2001).

Extrinsic motivation, such as verbal praise, is the predominant form of motivation used in schools today. This by its very nature is unrelated to the act of learning itself. Extrinsic rewards work well for self-motivated learners as a way to reinforce good behavior and productivity, but for the struggling learners the attention is placed on tangible rewards rather than the true benefits of learning. In this instance, learning becomes a means to an end, and when the reward is obtained, the desire to continue learning dissolves (Covington & Mueller, 2001). Intrinsic motivation, however, comes from an internal drive or desire to learn something (e.g., through personal interest). The difference between extrinsic and intrinsic motivation supports the theory that the concept of vocational education can mean the difference between educational apathy and a lifelong love of learning. Vocational education can be used as a motivating factor because of the real-world application. It seems, however, that many daily teaching practices suggest that educators are unaware of this distinction. For some students, vocational programs keep them grounded. It is important for every student to be able to demonstrate success. A student who may be unable to work a proof for geometry may be able to rewire an internal combustion engine with little or no direct instruction. Vocational programs allow students who show more spatial and kinesthetic types of intelligence to experience the success that is often lacking in academic subjects. The importance of the contrast between motivating students to think about how well they are doing versus what they are doing can mean the difference between a person who avoids difficult tasks for fear of failure and a person who seizes an opportunity for the sake of learning. Thus is the problem with standardized testing (McColskey & McMunn, 2000). The error is not the test itself, but how much attention educators give the results. Research shows that when students are taught to focus on grades, they are less likely to think creatively, and they also come to see learning as a chore rather than a pleasure. America is graduating generations of students who do not think as creatively or as critically as generations before them.

Students are bombarded with pressures from peers, parents, and society, and adding testing to the mound may have catastrophic consequences to their mental development (Kohn, 1999). Studies in other countries, like Japan, where extreme consequences are placed on testing have shown that there is a mild correlation between teen suicides and scholarly pressures (Zeng & Le Tandre, 1998).

Parents and community members alike recognize the need to narrow the achievement gap between students in the United States and those of other countries. However, some argue that the gap is created because the United States does not select students who will be tested or who will be educated; instead, everyone has an equal chance of receiving a quality education. A superior educational system takes time to develop. Even though the intentions of NCLB are good, more research and thought should have been put into the development of the legislation (Emrick et al., 2004).

A positive impact of the NCLB legislation is that it places the spotlight on educational leadership at the local, state, and federal levels. Educational accountability is a responsibility that all must shoulder. For far too long, principals and superintendents

have run their schools with little or no standard of accountability. Now that schools must meet strenuous curriculum standards, achievement benchmarks, program requirements, etc. they must respond to these standards. Principals have the complicated responsibility of taking into account social, ethnic, socioeconomic, cultural, and mental diversity. Principals must collaborate with other social agencies and integrate new technologies for teaching and communications (Linn, 1998). They are forced to keep up with current trends in education, as well as the educational status of their teachers. When principals and teachers are held responsible for their students' academic achievement, they will be more likely to teach students what they need to know. When a person's job is in jeopardy, he or she is more likely to work harder to assure success. After all, is not that leadership? So, how does leadership and accountability impact vocational education?

Better leaders play an important part in improving all schools, including vocational and technical centers. They are the captains and lieutenants on the front lines of education making the crucial decisions governing curriculum, scheduling, expenditures, etc. It is essential that school leaders focus on what is best for the students. If educators lose touch with what is best for the students as a result of the pressures of NCLB, vocational programs will not succeed. So, what is better for students? Is it better to offer occupation-specific programs that prepare students for a trade? Is it better for students to learn valuable technical skills that they can use in any career choice, including technology and computer instruction, building trades, and office systems? Many times, the impact of a particular vocational program, as with academic programs, depends upon the dedication and enthusiasm of the instructor (Association of Career and Technical Educators [ACTE], 2007).

Leslie Watkins was named career and technical teacher of the year for the ACTE for 2007. Mrs. Watkins is a dedicated teacher who devotes a great deal of her time and effort into ensuring that her students succeed. When she noticed a correlation between the higher rate of teen pregnancies and the increased dropout rate in her school, she wrote, organized, and implemented a grant to fund a school daycare. In addition, she initiated a program called "Project Graduation" designed to offer safer alternatives to after-prom and after-graduation activities. She works consistently to develop new programs for her students while continuing to expand her own knowledge through furthering her own education (ACTE, 2006-2007). It is not rare to encounter teachers who are counting down the days until retirement and basically doing only what is demanded of them to persevere a little longer. Many teachers will admit that they are ready to retire and that they do not have a passion for teaching any more (Carter, 2004). When teachers are unhappy and unenthusiastic about their jobs, the students suffer. So, is NCLB hurting vocational education by forcing the hands of school leaders and teachers to make decisions that will negatively affect vocational programs in the future?

The No Child Left Behind legislation is a response to several long-ignored problems in the country's educational system. Despite the enormous support for No Child Left Behind before it was passed, public support has since dwindled. Educators need to return to the original goal of this country's education system—to produce a well-educated next generation of citizens, a highly skilled labor force that will fulfill the needs for America's employers, with confident and capable students who have usable skills. As the nation's focus is regained, students will benefit (Kohn, 2004).

A piece of legislation that has become an integral part of vocational education is the Carl D. Perkins Vocational and Technical Education Act, Public Law 105-332 (hereafter referred to as the Carl D. Perkins Act). Initially, the Carl D. Perkins Act was designed to reform vocational education in an attempt to show the value of vocational education in today's society. Money set aside by the Carl D. Perkins Act refocused vocational programs into a more integrated curriculum. Programs were required to integrate academic concepts into vocational programs, and vice versa. This act also emphasized programs that produce measurable results. The authorization of this act initially in 1984, and most recently in 1998, led to the use of standardized assessments as a measure of academic rigor for each occupation-specific program. In Mississippi, the assessment used is the Mississippi Career Planning and Assessment System (MS C-PAS). The Carl D. Perkins Vocational and Technical Education Act of 1998 (a renewal of the Carl D. Perkins Act) identified several key indicators that must be met in order for states to receive funding, as shown in Table 1 (One Hundred Fifth Congress of the United States of America [105 Congress], 1998). These indicators are used to measure state and local performance of vocational programs.

Some have argued that the part of vocational education that revolves around occupation-specific instruction should be reserved for post-secondary education (Lewis, 1998). Several complaints about the current secondary vocational education system help one to understand the reasons for greater emphasis on vocational programs at the post-secondary level. Parents complain that participation by their children in secondary vocational programs will not lead to college programs. Students who complete secondary vocational programs are not guaranteed a license or certification of any kind and may still

Table 1

#### Perkins Act Core Indicators

Performance Indicator	Requirement of Perkins Act Legislation
Placement in Employment	Placement in employment (relevant to occupation-specific program
Retention in Employment	Retention in employment (unspecified duration of employment retention)
Secondary School Diploma or Equivalent	Student attainment of a secondary school diploma or its recognized equivalent
Occupational Skill Attainment	Student attainment of challenging state established vocational and technical skill proficiencies; student attainment of a proficiency credential in conjunction with a secondary school diploma
Postsecondary Education	Placement in retention in, and completion of, postsecondary education or advanced training; placement in military service; attainment of a postsecondary degree or credential
Nontraditional Employment	Student participation in and completion of vocational and technical education programs that lead to nontraditional training and employment

From the Core Indicators Crosswalk, U.S. Department of Education Archives

have to complete the post-secondary programs for technical and vocational jobs in order to obtain a job in that trade. In addition, employers report that the technical skills required by specific trades are not being learned by the participants in said programs. Finally, schools report that vocational programs lack academic rigor, resulting in the perception that academic programs are merely an alternative for students who cannot succeed in college (Stasz & Bodilly, 2004).

#### Vocational Education Benefits

In the 1980s, vocational education enrollment was in decline due to negative public perceptions; but during the 1990s, a resurgence of enrollment began. A survey of secondary vocational programs revealed that 70% of the programs showed a significant increase in enrollment since 1990 (Husain, 1999). In fact, nearly all high school students take at least some vocational courses. Eighty percent of students take at least one occupationally specific vocational course, and one in eight academic students nationwide take more vocational courses than do vocational students (Wonacott, 2000). Vocational Education is "big business" in education. About 1.9 billion dollars was spent on vocational programs for 2006. Over one billion of that was spent on the secondary level alone (U.S. Department of Education, 2006a).

The United States is known for giving every student the opportunity to go to college. Although this is a positive point of view, the problem arises from the perception that the only way to make enough money to support one's family is to attend a 4-year college and earn an academic degree. This belief further reinforces the traditional negative image of vocational education, assuming that technical training is inferior to academic education. Such beliefs are attributed to the numerous reports during the 1980s

that American industry would suffer from shortages of scientists, engineers, and other college-educated professionals (Berliner & Biddle, 1996). Recent research revealed that the opposite is true. In his research and analysis of the misconceptions of vocational education, Wonacott (2000) cited these facts:

- 1. Among college students who graduate with a 4-year degree, only two of three will find employment related to their field of study.
- 2. A 4-year degree does not guarantee a high income. Although college graduates have higher average earnings than high school graduates, only some of the variation in earnings can be attributed to education; supply and demand are the most important factors.
- 3. The U.S. Department of Labor's Managerial/Professional job grouping is the top of the salary ladder, but on the next rung is Craft, Precision Metal, and Specialized Repair—occupations in almost every industry and work environment (i.e., drafting, medical lab technician, manufacturing systems operator, computer repair, paralegal, etc.) (Wonacott, 2000).

#### Impact

Since their onset, career and technical education programs, such as Tech Prep, have integrated work experience with traditional academics. In addition, school-to-work programs, such as Cooperative Education, by definition are composed of school-based learning combined with work-based learning, bridging the gap between these activities. This section discusses the impact of such programs.

Work-based-learning programs were developed from the belief that learning set in and applied to real-world context makes academic learning more accessible and engaging to students. In secondary education, such exemplary rewards have been cited over and over again (Wonacott, 2002). In spite of the wide variation in the details of the different school-to-work programs, studies show that the benefits are consistent. Apprenticeship programs show decreased dropout rates and increased attendance when presented with an option of vocational education in addition to or in lieu of traditional academic education (Ball & Lamb, 2001). In a study conducted comparing 4,700 Tech Prep and non-Tech Prep participants from eight different consortia, it was determined that in four of those consortia, Tech Prep students were more likely to begin high school below the level of Algebra I than their non-Tech Prep counterparts, but almost all had completed Algebra I by graduation. In addition, higher grade point averages were reported for high-risk participants of school-to-work programs (Bragg, 2007). Employment prospects for participants of these vocational programs are good. Adler, Searls, Weigel, Hemsley, and Dick (1996) reported not only higher employment rates, but also twice as many students employed in upwardly mobile jobs. A study by the U.S. Department of Labor found that programs targeted to a specific segment of the at-risk population are more successful at increasing employment (U.S. Department of Labor, 1995).

For at-risk students, vocational programs are also a good way to decrease the risk of dropout for the participating student. Coordinating vocational education programs with other programs that address the special needs of the individuals at risk may provide better outcomes than programs solely devoted to vocational education. In an examination of several studies on the subject, Brown (1998) found the following statistics:

- 1. Sixty percent were employed, most within 3 months.
- 2. Seventy-eight percent were employed in nontraditional occupations.

- 3. Sixty-nine percent were employed in jobs directly related to their training.
- Sixty percent of those employed reported earning more than \$10 per hour
   (Brown, 1998).

Limiting program focus to dropout prevention only would be a mistake. The chance of skill development problems, teenage pregnancy, alcohol and drug abuse, poverty, and crime occurring has been shown to decrease when vocational programs are introduced into high-risk populations (Woloszyk, 1996).

#### International Treatment of Vocational Education

Countries other than the United States approach vocational education differently. In the Netherlands, vocational education is treated not only as an alternative path to a career from that of traditional academic education, but also as an option that is equal to that of traditional secondary education. The educational structure of the Netherlands differs considerably from that of the United States. Dutch students attend traditional grammar schools with general subject areas, but when they reach the level of secondary education, they are placed on either a vocational or academic route. The route students take is dependent partly on their desires for their own future, but mostly upon school achievement tests. Although achievement tests are used to determine a student's aptitude, the degree of difficulty between the academic secondary school and the vocational/technical school is the same; therefore, neither option is perceived as less significant than the other. This results in a "dual-track system" of education.

In this system, both vocational and academic education have separate higher institutions. In addition, there are several different paths one can take to progress to either type of institution. Although a student may start out on one track and move to another, the

two routes to higher education continue to be held as separate entities. The positive public perception held by the public allows for higher enrollment in these vocational centers, resulting in a more highly skilled and diverse labor force. In fact, the universities offer more vocational oriented courses in an effort to compete with the vocational centers for students (Dronkers, 1993).

In Sweden, the lines are blurred between traditional and vocational education. This country offers an educational system that is fully integrated between disciplines. The secondary schools are not distinctly academic or vocational. Separation is, however, sustained through separate programs within the interdisciplinary school. In the early 1990s, Swedish schools suffered problems as a result of class divisions. If a student's parents were educated through a traditional academic route, the student is almost certain to follow the same path, and likewise with the vocationally educated. The major problem resulting from this class system is that students graduating from vocational institutions were not offered many job opportunities because employers were hiring graduates from university and traditional education routes to fill the positions intended for vocationally certified students. This lack of job prospects keeps vocationally educated students in a lower income bracket than that of traditionally educated students, therefore decreasing the demand for traditional education. The failure of vocational programs in countries where the educational system is integrated has spurred the debate over educational structure, which has continued to this day (Young, 1993).

In the November 2000 issue of *Comparative Educational Review*, Ertl stated the following:

With the increase in global competitiveness in the business world, companies have to offer higher quality goods, introduce diversity and customization into their products and services, and maintain short cycles of innovation and low prices. In these circumstances a country's system of vocational education and training is faced with the challenge of providing qualifications to enable students and trainees to live up to the complex and wide-ranging demands of the world of work. (p. 464)

In this article, the author advocates a dual system of education in order to create a more highly specialized work force. This article outlines the system of education in Germany. In this system, trainees spend 3 to 4 days out of the week at their "training enterprise." This is part of a true work-based vocational system where there is a joint venture between enterprise and the educational system. The rest of the students' days are spent at a state-run vocational school. This true apprenticeship program allows for a contract between the training station and the trainee, or apprentice. In Germany, this is seen as an important step for young people who are transitioning from school to work and who do not intend to attend university. The fact that Germany enjoys one of the lowest rates of youth unemployment among the Western world is directly attributed to this system. Officials believe that when a student intends to practice a particular trade, the best learning experience is on-the-job training (Ertl, 2000).

Comparing Academic Education to Vocational Education

Differences exist between traditional academic education and vocational education. In the United States, numerous attempts have been made to integrate academics into vocational instruction, and vice versa. Despite these efforts, vocational

instructors continue to be mostly responsible for curriculum integration that has failed to be internalized by the traditional academic processionals (Lewis, 1998). There is considerable research on learning styles, preferences, and processes. Vocational curriculum and instruction appeal to learners who respond to more hands-on instruction rather than visual and audio learning. Finding the balance between practical performance and conceptual skills is the most difficult task as it relates to academic education as well as vocational education. Knowing the students and their best learning style helps to effectively implement instruction in any discipline. The expectations of student achievement in academic courses often exceed those of students in vocational courses for the simple fact that teachers feel that it is necessary to "dumb down" the curriculum for vocational students to learn, assuming students are enrolled in vocational programs because they cannot make it in academic programs. This error in judgment stems from the popular public perception of vocational programs as a lesser alternative to traditional academic education (Sanderson, 1993).

### Theoretical Foundations

Throughout the past 30 years, the United States educational system has attempted to educate and train people for employment in a variety of ways. High schools and post-secondary institutions provide some job-specific education programs. The development of Vocational Programming has reflected a concern with particular economic problems, particularly unemployment, underemployment, and poverty. A study conducted by the National Center for Research in Vocational Education (NCRVE) evaluated the results of vocational programs and the questions concerning them. The major question addressed whether vocational programs have been, by and large, successes or failures. A thorough

look at this evaluation shows that vocational programs lead to small but statistically significant increases in employment and earnings and small decreases in welfare payments (Grubb, 1995).

Vocational programs have evolved from several different educational theories. Howard Gardner's theory of Multiple Intelligences discusses the fact that people learn in different ways. Gardner recognized eight types of intelligence: linguistic, logicalmathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic. Gardner believed that people are "smart" in different ways and that schools traditionally recognize the students who possess linguistic and logical intelligence (Armstrong, 2000). Vocational courses appeal to students who learn in different ways, such as spatial (visual), by offering more hands-on learning. In addition, vocational programs offer real-world experiences, which appeal to naturalistic and kinesthetic learners. Constructivist theory, generally attributed to Jean Piaget or Jerome Bruner, revolves around the idea that people learn more from experiences than from direct instruction. Constructivism even goes so far as to say that individuals learn as much from their failures as from success. The instructor serves as more of a learning facilitator than with the traditional instruction (Kearsley, 2006b). Vocational education is fundamentally founded around this type of instruction. Finally, the cognitive flexibility theory builds upon the constructivist theory in that it adds adaptability to the mix. The cognitive flexibility theory emphasizes using case studies and multi-directional lessons to give students a chance to use their problem-solving skills and prior knowledge to solve problems. This theory insists on using specific information due to the context-dependency of the interactive learning environment that it fosters (Kearsley, 2006a). Again, vocational education revolves around this type of instruction in that every vocational program incorporates hands-on learning with occupation-specific instruction.

Prior to the early 1970s, research on how students learn revolved mostly around cognition, the brain's method for physically processing information, and the effect of this process on an individual's perceptions and environment. However, in 1972, Prentice-Hall published a book by Dunn and Dunn that began a series of ground-breaking research and theory of learning styles called *Practical Approaches to Individualizing Instruction*. Over the past several decades, the Dunns created and further developed a model that is based in Cognitive Style Theory and Brain Lateralization Theory. Unlike other learning style models, the Dunn and Dunn Learning Styles Model has been researched more extensively and has been demonstrated to be more consistently effective (Lovelace, 2005), According to the Dunns, it is difficult to identify a person's learning style without a reliable instrument. Some traits that can be identifiers of a person's learning style are not identifiable through observation alone (Dunn & Dunn, 1993). The Learning Style Inventory is based on the Dunn and Dunn Learning Styles Model. Results from a learning styles inventory indicate elements of basic stimuli. These include, but are not limited to, biological/environmental elements, emotional elements, sociological elements, physiological characteristics, and finally global/analytical processing style differences (Dunn, Dunn, & Price, 1996).

Most research on learning styles identifies other sub-categories contained within these five basic elements. Dunn and Dunn's Learning Styles Theory has given rise to a plethora of other theories and models in this area, including Gardner's Theory of Multiple Intelligences, Felder's Index of Learning Styles (ILS), Kobl's Experiential Learning

Theory, Sternberg's Theory of Triarchic Intelligence, and the list goes on. The ILS measures whether a student is active or reflective, sensing or intuitive, visual or verbal, and sequential or global. So far, there is little "objective and reliable evidence" that learning style inventories can improve student performance (Nixon, Gregson, & Spedding, 2007). They do, however, give the administrator insight into how a child processes information. This knowledge can arm teachers and administrators with powerful insight into the minds of their students. It is common knowledge that most people who end up in blue-collar jobs seem to learn better by real-life and practical experience rather than lecture or presentation. The ILS asks questions related not only to how a person processes information but also how they relate to other people, how they see the world, as well as their preferences. It is designed to identify eight types of learners: active, reflective, sensing, intuitive, visual, verbal, sequential, and global. A person could fall into one or more of these categories. Knowing which category one falls under can help them to better understand why certain things may come as a struggle to them and why other things are easier to them than to others. For vocational educators, knowledge of this type of learning style can better help them to understand which types of learners are drawn to their programs and what they may need to do to encourage other types of learners to participate.

Educators often credit teacher differences as the primary factor in student achievement. Parents also note these differences and request certain teachers for their children because of discussions in the community about how the teacher had a good (or bad) impact on a child's education which had lasting effects on their children. In recent history, researchers have begun to identify the impact or effect of teacher factors on

student achievement. Although there remains some debate among researchers about teacher effects isolated from other factors, many researchers agree that the single most important and determining factor of student achievement is the influence of the teacher (Collias, Pajak, & Rigden, 2000; Lasley, Siedentop, & Yinger, 2006; Sanders & Rivers, 1996). Researchers have compared teacher quality to differences in student test scores and found the impact of the teacher as a determinate factor to achievement. According to a study conducted by the National Education Goals Panel,

The average student assigned to ineffective teachers 3 years in a row scored 50 percentile points lower on achievement tests than those assigned to the most effective teachers. As teacher quality increased from low to average to high, so did test scores.

The study continued by demonstrating that 40% of the variance in student achievement was attributed to teacher qualities (Darling-Hammond & Ball, 1997). In addition, the impact of the teacher may be either positive or negative. Dr. William Sanders, in his research to design the accountability system in Tennessee, also identified teacher factors impacting student performance on state assessments. He and his colleagues also determined that one year of exposure to an effective teacher can positively impact the student achievement for many years, but the reverse is also true (Sanders & Rivers, 1996). In a study conducted in the Pittsburgh Schools it was reported that teachers who are successful with Black children are also successful with White children. The 2-year study presented to the district's board of education indicated that the variance in test scores was fully attributable to the effectiveness of the teacher. The study found that average test

scores varied as much as 59% from the top teacher's classroom to the bottom, regardless of the students' race (Wereschagin, 2007).

From a qualitative perspective, the researcher becomes the primary instrument. The researcher's disciplinary orientation guides the qualitative study, and the theoretical framework is the "researcher's preconceived conceptual perspective" (Camp, 2001, p. 16). In 1998, Marriam said about theoretical foundations in vocational education, "It is the lens through which the [researcher] views the world" (p. 45).

### Conclusion

In conclusion, this chapter provided a discussion of theories related to the development and benefits of vocational education. Students who participate in vocational programs realize some monetary benefits but find greater satisfaction and motivation since the structure of the instruction matches the learning styles and modalities of students. From its origin, vocational education was intended to offer students authentic work experience integrated with traditional academic training. This learning theory suggests that such applied, real-world learning produces academic expertise that is readily accessible and engaging to students.

Complications of recent years include new standards imposed on academic and vocational programs through legislation such as No Child Left Behind. The requirements of NCLB impede the success of vocational programs because requirements on schools force additional academic requirements for students. These legislative regulations limit student participation in vocational programs and force inequitable requirements on teachers. In addition, the emphasis on accountability measures has led to performance measures that limit participation of many students who may be successful as a skilled

laborer but cannot complete the stringent academic requirements. The expectation of students to be able to choose either higher academic degrees or skilled labor becomes problematic. Leaders in schools are forced to follow paths that lead to meeting requirements rather than help students achieve vocational training within their capabilities. Rather than adding skilled workers to the labor force, more students drop out of school and the economy faces the problems of unemployment, underemployment, and welfare dependency. The national shortage of highly skilled laborers may be resolved if vocational education programs were encouraged rather than limited.

### CHAPTER III

#### **METHODOLOGY**

Chapter III describes the methods and procedures used to address the purpose and research questions of this study, which are qualitative in nature. The research questions addressed in this study focused mainly on perceptions of students and vocational instructors. The methods of data collection measuring these perceptions were triangulated to prove validity. This chapter is divided into three sections: Methodology, Participants, and Data Collection. The first section, Methodology, gives a brief description of the procedures utilized to answer the problem statement and test the hypotheses. The second section, Participants, provides an overview of the population to be used as subjects for research in the study. The final section includes a time schedule for data collection and procedures for recording.

## Methodology

This study was conducted in an attempt to support the use of vocational instruction on the secondary level. In order to investigate the research questions, there will need to be sufficient data. MS-C-PAS test scores for the state of Mississippi were analyzed in order to identify the top five schools in the state for five specific vocational programs: Welding, Carpentry/Building Trades, Business and Computer Technology, Marketing Management Technology, and Allied Health. These areas were chosen because they are offered at the largest number of schools in the state. These test scores were analyzed by finding the mean scores of students who had taken the C-PAS for the past 2 years. The top five mean scores were ranked. Beginning with the highest score for each program, the researcher contacted the instructors of these programs and their directors to

solicit participation. For a copy of the letter to be sent to directors, see Appendix A. If the request was denied, the researcher moved on to the second highest, and so forth until one school was confirmed for each of the five training areas (for a total of five individual programs evaluated). Once permission had been obtained from the director and instructor of these programs, the researcher solicited parents of the students involved in the programs for participation. For a copy of the letter sent to parents for consent, see Appendix B. The first eight students in each program who had confirmed consent participated in the focus groups. The participants of these focus groups were asked questions about their programs in an attempt to determine the attributes of these programs that make them successful. For a draft of the questions asked, see Appendix C. In addition, the instructors were carefully interviewed to identify characteristics and methods that make him or her successful. Targeted questions were asked of the instructor in an effort to better determine what questions to ask of the students during the focus group in order to gain enough information to make an educated analysis. For a draft of the interview questions, see Appendix D. In addition, field notes were taken during observations of the teacher during class sessions. These three methods of data collection allowed for proper triangulation. The main design of this study was qualitative in nature. These methods of investigation provided the researcher with the best tools to answer the research questions.

### **Participants**

The targeted population for this study consisted of vocational instructors and their students, specifically in the state of Mississippi. Existing statistical evidenced from the Mississippi Department of Education, Office of Vocational Education, was used to

identify the highest performing Vocational Education Programs as ranked by mean MS-C-PAS test scores. The data from the Mississippi Department of Education was then used to identify the five highest performing programs for each of the five subject areas. For the focus groups, the researcher relied on volunteer participants from the schools. These focus groups were comprised of students who were currently enrolled in those programs who had previously been selected. Interviews of the instructors of said programs were also conducted. They were asked to answer questions regarding the current status of their programs, teaching methods, student performance, etc., as well as their perception of vocational education in their district as compared to other districts in the state. The observations were then analyzed and the validity measured by qualitative methods.

## Data Collection and Analysis

Prior to data collection, permission was obtained from the Institutional Review Board at The University of Southern Mississippi (see Appendix E). Data should be the main focus in any qualitative study. The quality of the research project is based upon how well the data are collected (Chenail, 1995). One of the most important parts to data collection in qualitative research is the setting. Where the research takes place in the context in which all of the data that are collected must be positioned. Without an accurate description of the environment of a qualitative study, valuable data that could affect the outcome of a researcher's analysis is neglected (Chenail, 1995). No detail must be overlooked. For the purpose of this study, field notes were taken on site before the focus groups and interviews to accurately describe in detail the environment from which the data were collected. This setting included not only the rooms in which the research was conducted but also the school itself. Another important factor to consider in qualitative

research is the development of context. Field notes were taken during teacher observations of class sessions. This gave a new perspective of not only the environment and setting, but how the teacher used his or her environment, giving context to the study. The observations also served to triangulate other data in that answers could be compared from the interview and focus groups to the observations from the researcher's perspective. Another way to build context is to record before and after the sessions in order to have a better perspective from which to judge the claims of the participants in the study. This allows the researcher to view the proceedings from a "solid vantage point to render the critiques of the [session]" (Chenail, 1995). For the purposes of this study, letting the tape recorder begin before the actual focus groups and interview began, one can gain an idea of the mood or feelings from the participants. There are a variety of organizational techniques used in qualitative research. For the purpose of this study, data were arranged in a natural progression. This means that the data were presented in sequential order (the order in which the information was given or obtained).

In order to analyze the data collected, triangulation was used to interpret data. Triangulation is a method that uses multiple strategies to study the same phenomenon. Each strategy confirms data from another, thereby validating the results (Sands & Roer-Strier, 2006). This process for the validation of qualitative research uses the strengths of one research method to offset the weaknesses of another. For the purpose of this study, methodological triangulation was used, which involved a variety of methods for data collection (Sands & Roer-Strier, 2006). In this case, the combination of methods used was observations, focus groups, and structured interviews. The researcher used transcribed narrative of the observations, focus groups, and interviews, as well as audio

recordings. Questions for the student in the focus groups revolved around personal experiences. Some examples of questions to stimulate discussion were: (a) Describe your experiences in the vocational program that you are enrolled in; (b) How and why did you choose this particular program in which to participate; (c) What specific factors (environmental, instructional, logistical, etc.) do you feel have been most influential in the success of this program and why? The focus groups were conducted before the interviews, and interview questions were influenced by the information gained from the focus groups. Semi-structured interview questions were formulated from this information, and participants were allowed opportunities to share thoughts and feelings to elaborate on the narratives and video were analyzed for patterns, themes, repeating accounts, and body language. To reduce the risk of researcher bias, experts in the field of vocational education were consulted regarding research design and were asked to review the results. The interpretation of these results by other researchers was expected to further qualify the researcher's findings.

To increase the validity of the research, methods used in this study were adapted from ethnographic methods discussed in other research studies. Field notes were taken from the videos of the focus groups. Some standard rules for field notes were adapted to give researchers a guide in order to ensure that there would be no attempt at summarizing or generalizing and that the notes would capture a description of the events as close to factual as possible. These rules are as follows:

- Take notes as soon as possible.
- Count the number of times key words or phrases are used by members of the group.

- Record the order or sequence of events and how long each lasts.
- Record even the smallest things (nothing is too insignificant).
- Draw maps or diagrams of the location, including movements and reactions by others.
- Write quickly and do not worry about spelling.
- Avoid personal judgments or summarizations (for instance, do not call someone "pretty," but describe them).
- Include one's own thoughts and feelings separately or in another section.
- Always make back-up copies of notes (Neuman & Wiegand, 2000).

Vocational instructors in the state were solicited for participation. Because of the nature of the interview questions, there was little need for anonymity, but personal information was only used for the purposes of identifying aspects of that instructor that contributed to the success of his or her programs and was, therefore, of little or no risk to the participant.

#### CHAPTER IV

# RESULTS AND FINDINGS OF THE STUDY

### Introduction

The purpose of Chapter IV is to compile and summarize the major findings of this research. The format is divided into three parts: classroom observations, instructor interviews, and student focus groups. The structure of this study shaped the organization of the findings to be addressed by each school and program reviewed. The selection criteria for inclusion in the study were determined by averaging C-PAS test scores over a 2-year period (2006 and 2007) for every school in the state of Mississippi. The highest performing schools in the programs used for the purpose of this study were solicited for participation. If the highest performing school declined participation, the next highest performing school was selected. The top four schools for each of the five subject areas are summarized in Table 2.

Responses of classroom observations, focus groups, and interviews are summarized, after which a conclusion captures the common and unique responses and are reported in a summary of the data. The intent of this structure is to outline the underlying principles of these higher performing programs so as to create a framework by which other instructors may create similar program designs. The commonalities between program designs, instructional practices, and instructor actions and beliefs are discussed.

Data collection began in 2006 and continued through 2008. The classroom observations, interviews, and focus groups were conducted between April 2008 and June 2008. The researcher compiled data from four focus groups, four interviews, classroom observations of programs at the four schools selected, and various notes throughout this

Table 2

C-PAS Test Score Averages for 2006-2007

Program Title	School	2-year Average Score
		0.897
Allied Health	School A	0.874
Allied Health		0.875
Allied Health		0.872
Allied Health		0.856
Allied Health		
		0.772
Marketing Management Technology	School B	0.735
Marketing Management Technology		0.725
Marketing Management Technology		0.704
Marketing Management Technology		0.695
Marketing Management Technology		
		0.782
Building Trades	School C	0.781
Building Trades		0.760
Building Trades		0.740
Building Trades		0.734
Building Trades		
		0.835
Business & Computer Technology	School D	0.834
Business & Computer Technology		0.793
Business & Computer Technology		0.786
Business & Computer Technology		0.779
Business & Computer Technology		
•		0.772

2-year process. Eight second-year students from each program were invited to participate in focus groups. The first eight students to turn in their permission forms signed by legal guardians were selected for participation. Absences on the day of the focus group in turn caused some groups to fall short of eight participants. The researcher conducted an interview with the teacher of the program, observed instructional methodologies and teaching styles, and conducted the student focus group on a date prearranged with the administration of the school and the teacher. Focus group sessions were scheduled by each teacher. The structure of each focus group was open to encourage free exchange of information and interaction. The questions used to facilitate and guide discussion in the focus groups are identified in Appendix C and interview questions reported in Appendix D. These sources were compared with classroom observations and C-PAS scores to provide triangulation of data and confirmed findings. Classroom observations were included to gain an additional perspective on the instruction and environment of each program. The researcher served as an impartial observer in the classroom environment. Observations were recorded in the form of hand written notes. Permission was solicited from the director as well as instructor before the visit. Data were summarized from transcripts of each focus group session, interviews with teachers, and notes taken during observations.

### Purpose

The purpose of this study was to identify factors that impact the success of identifiably successful vocational programs in the state of Mississippi. The intent of this study was to identify specific factors responsible for a program's success that can be reproduced in other vocational programs to improve their performance.

## Research Questions

The researcher identified three research questions for the purpose of this study that have arisen from current research. The three questions examined are:

- 1. What are the attributes of the vocational instructors of the higher scoring schools in the state of Mississippi?
- 2. What do students enrolled in the vocational programs of higher scoring schools indicate are the attributes of their respective programs?

# Report of Findings of the Study

C-PAS test scores provide a basis of comparison of all vocational centers in the state of Mississippi. This study evaluated scores for four occupational training areas averaged over a 2-year period: Building Trades, Marketing, Allied Health, and Business and Computer Technology. The highest performing school in each program was selected for analysis. Secondly, classroom observations were conducted at each of the target schools. The researcher then conducted interviews with each instructor. Finally, oral data were collected from focus groups at each site. The focus group was comprised of students enrolled in each of the five programs.

For the purpose of this section, refer to Appendix D for the list of interview questions, Appendix C for the list of guiding questions asked of each focus group, and Appendix F for the classroom observation instrument. Some additional questions for the focus group and interview participants may have arisen during the research process. Individuals who participated in interviews and focus groups were informed that the video recording of the discussion would not be viewed by anyone but the researcher and that names of participants and data gleaned would not be disclosed. Therefore, in this

compilation of data, names are not mentioned in order to protect the identifies of the participants.

### School A

The first program addressed is the Allied Health program, which focuses on health-related occupations. In comparison to other vocational programs, the Allied Health program, while maintaining a career focus, tends to be more academic. The school with the highest C-PAS test scores in Allied Health declined the request to participate in the study. The difference in scores between first and second highest performing program was less than two percentage points. Due to this minor difference, this researcher believes that the second highest performing program would provide equally valid results for the purpose of these research data.

#### Classroom Observations

In addition to observing classroom instruction, the researcher took time to document the school and classroom layout. This vocational center is located in a municipality and off campus from the high school that it services. Students are bussed in from the high school. The proximity to the high school is less than one mile. The classroom is divided into two sections, one for lecture and the other for lab activities (see Appendix G). This center has a director who is very visible and familiar with the students.

The researcher completed observations during two class periods on April 22, 2008. Results were similar between the two classes. Both classes observed were Allied Health I, as Allied Health II students were participating in "clinicals." The following is a summary of observations for both class periods.

As students were entering the classroom at School A, they began reviewing the previous day's material for a quiz that would be given during that class period. When the tardy bell rang, students were still studying and talking to each other, but as the teacher approached the board and began instruction the students began to be seated and gave her their attention without verbal correction from the instructor. Students had items that could be considered a distraction out on their desks (i.e., cell phones, snacks, drinks) but remained actively engaged in each activity. The teacher began by reminding the students about a new initiative to increase health awareness in the community.<sup>2</sup> The goal of the initiative is to cut junk food and fast food consumption by 50% and increase participation in exercise. Participants in the initiative will walk 3.5 miles 50 times in 50 days.

The first activity was a class review before the test. The instructor asked leading questions throughout the review time. Students were free to ask questions when needed. Even when students attempted to get off task, the teacher found a way to bring them back without direct correction. For example, one student asked, "How big are your sinuses?" The student appeared to have a cold and wanted to understand the origin of mucus. The instructor took the opportunity to answer her questions and used the question and answer in the review on anatomy to illustrate various concepts. Students struggled with correct pronunciations of terms and so the teacher used class time to practice these with students prior to the class assessment. The teacher appeared energetic and enthusiastic about the lesson. Both answers to questions and explanations of concepts were clear and concise. The instructor called the class to order while passing out the assessment. As students finished their test, they automatically began to read in a routine fashion without direction from the teacher. After the assessment, Instructor A began new instruction. The day's

lesson was an introduction to the anatomy of the mouth and digestion. The instructor asked questions during and after activities and assignments. She used a special bitter dye to color their taste buds and to make the papillae stand up and become more visible. The students used magnifying glasses to look at each other's tongues. The students were actively engaged and interested in finding out more about the topic.

### Interview

The interview with the instructor for School A took place after school on May 15, 2008, at 2:08 p.m. Central Standard time.

Question 1: Tell me about your program. Describe a typical week in your classroom.

When asked to describe a typical week in her classroom, Instructor A said:

There isn't a typical week, because we try to vary the activities so much. The beginning of the week I have Allied Health 2 students, who are right now in clinicals. I take them to their stations. Today three of my students got to see a cesarean birth. Unfortunately, two of my students had to see a miscarried baby in pathology, so we go from one extreme to the other, and that was just today. Allied Health 1 is second and third block, and currently we are studying the nervous system. This week we had lecture, we played the Brain Drain bingo game so they can review the parts of the brain and the neurological disorders that are associated with it. They might have art projects; they may have a PowerPoint or a research project. Sometimes we play games, like I take the Jenga game and in order to be able to pull a block you have to answer a question correctly. At the end of the game (when the tower crashes), whoever has the most blocks wins. Another day

this week we planted a pharmaceutical herb garden. Last week we had a big cookout and we prepared AIDS posters (students did a project on AIDS awareness and AIDS prevention). The students had the cookout for the entire vocational center and displayed their posters and talked to the students who came about AIDS and how to prevent AIDS. We also celebrated our C-PAS scores. We looked at clips of movies that were relevant to some of the neurological disorders that we discussed. One movie called *The Savages* is about a brother and a sister who have to deal with their father's dementia. Another that is perfect is called *The* Diving Bell and the Butterfly. It is a French film about the editor of Elle magazine who had "locked-in syndrome." He had a stroke and after the stroke his brain quit talking to his body, and he had function in only one eye. It was incredible that the doctors and nurses realized that he was still in there. They had to sew one of his eyes shut to prevent him from getting corneal abrasions. He worked with a therapist so he could communicate with only one eye. The way they did this was she would read every letter of the French alphabet to him and when she came to the correct letter he would blink his eye. Together, they wrote an entire book about his condition. After the book was published he died 10 days later. It fits right in to what we are learning about. We have a test tomorrow. Some weeks they get tested every day, and other weeks they get one big test. It just depends on how well they are getting the information. By playing the bingo game or crossword puzzle games, I can gauge how well they are getting the information. If I do not feel they are getting it, then I will say, "O.K., at the end of the day we are going to have a test on everything we have covered today," and I will give them lots of

small tests to build up to their chapter tests. I have several students who perform much better when they have many small tests rather than one big one.

Question 2: What routines do you regularly practice in your classes?

The instructor said that there were no daily routines that were followed in this class because they vary activities daily. Assessments are given at least once a week, but sometimes more.

Many of the students that take this class get bored very quickly, so if you don't vary your routine, if you don't have something surprising every day, they grow bored, and then they get in trouble, and there is no reason for them to get bored because there is so much information to cover in this class and so many different activities to do.

The nearest activities described as routine would be giving a test when a unit has been completed, checking roll every day, reading the chapters at the start of a unit, and going to clinicals. Other instructional activities vary with the content included in the unit. For example, for the study on anatomy and physiology, Instructor A uses lecture because she feels it is necessary for them to hear her pronounce the terms since these are unknown to them. She thinks that the students learn a great deal by hearing her pronounce the words and use them in context. Students are also required to write the vocabulary used in the lecture to reinforce visually what they are hearing. She feels it is important to teach Anatomy and Physiology in the same way that someone would teach a foreign language. Instructor A explained how she stresses to students the importance of mutual respect among the students. They are not allowed to use inappropriate language in the classroom, and they are to treat the classroom as if it were a work environment.

This is a technology program and I am preparing them for the world of work, I am not preparing them for something that they don't need an education for. I expect them to speak to each other and myself in a professional manner and to dress appropriately.

Instructor A often places students into teams for group activities:

My lower performing students will work with the higher performing students, or sometimes I group all of my lower performing students together because they build on each other's strengths instead of focusing on the weaknesses in order to get things done."

The instructor has a commanding presence in the classroom, and the students demonstrate a high degree of respect without reminders. Students see the instructor as someone they aspire to emulate: "I am an RN and some of them want to do that. I have been in the health field for 30 years, so they automatically give me some respect."

Question 3: What is important about the classroom environment in which you teach?

Instructor A said she rarely has a behavioral issue because plans keep students engaged in hands-on activities rather than always using a lecture or working from a text.

That is one thing that is great about the way this class is set up because when I see that a student may become a behavioral problem, I will send that student into the lab area to do some physical activity with the mannequin or I will have that student demonstrate an activity, or have them go out and weed the pharmacy garden.

The classroom is set up in two sections: the lab and the lecture/classroom (see Appendix G for the floor plan). Although both areas are in the same classroom, students understand the expected behavior for each area. Students are taught how to act in a professional manner and treat the mannequins as real patients.

We put up screens to simulate doors, and the students will knock on the screen and introduce themselves to the mannequins so, again, this lends itself to the portrayal of a hospital environment, and most of these students want to be working in that type of environment.

Question 4: Why do you think your program is successful?

Instructor A believes that teaching and learning must happen continuously from the beginning bell until dismissal. "I am very guarded and jealous of my time, because I never have enough of it! There is so much information that I want to cover that I get frustrated if there is a lot of interruption." In her vocational center, the classes are smaller, her largest class is 18, and she finds it easier to keep them on task. There are few students in the hallway, few announcements, so when students walk into class they begin immediately. Although Instructor A is confident in herself as an instructor, when asked why she thinks her program is successful, she responded:

I think that I have really bright students and we have a good selection process because the students compete to get into the program. They apply, they want to be here, and this is an elective so they are here by choice. They compete against other students with GPA, attendance, discipline record, so if they are poor in any of these areas they have less of a chance of getting in.

Instructor A also said the students are interested in the material and that interest makes them want to learn more and be successful. She said the information covered in the class is something that the students will use, and the real world applicability is essential. "I think the students know that I want them to succeed, and they know that I love what I do. They know I am excited and always looking for great things to do and see, and interesting ways to learn."

Question 5: How do you prepare your students for the C-PAS test?

Because C-PAS test scores were used to identify which programs were the most successful, the researcher asked about how she prepared students for the state assessment.

I hope that I prepare them by teaching to the objectives for 2 years. I take the state objectives and I teach every one of them over the 2 years. Beyond that, I give the students fun activities and games with study information incorporated.

Before the C-PAS the students are given a review, and their chapter tests are returned to them for their use in studying.

I try to downplay the test. I do not think it should be the be all and end all in their minds, because what I keep telling them is, "You have been with me for 2 years. If you don't know it, you won't know it by my telling you again." I feel as though, if they have not learned it by being with me for 2 years, then they really shouldn't do well on the C-PAS. I don't want false numbers. I want to know if I am doing my job well.

Question 6: What important features of your vocational center impact the success of your program?

This question seemed difficult for the instructor to answer. The vocational center's ability to recruit effectively and utilization of a selection process affords the selection of students who really desire to be in the class. In addition, the instructor feels that the support received from the director and support staff at the school impacts the ability to perform the job effectively. The instructor also cited the varying activities, the use of literature, and outside activities as reasons for success.

Question 7: Tell me about your recruitment program.

One thing we do [to recruit students] is a tour for eighth and ninth grade students of the Vocational Center so they can see what we have to offer. I use my students as my recruiting tool. When the students come through to tour the building, I will send a couple of my students over to talk to them while I am teaching. They will answer their questions about the program and tell them why they should take the class. They tell their friends to take the class!

Question 8: What one factor do you perceive has the largest impact on the success of your program?

Instructor A enjoys teaching and often surpasses requirements to effectively communicate and deliver the curriculum to students.

Loving what you are doing is so important because I think that sometimes people get bored with what they are doing and that transfers to the students. If you are not excited about what you are teaching, then you probably should retire!

Instructor A said that she enjoys teaching secondary students because they have no fear:

When I taught college there is so much riding on their grades and their skills because these are adults and there are so many other factors that could affect their fear of failure. These [high school] students are just out there! They are willing to try anything, anywhere, whether it be dissecting a heart or brain, or performing sutures. We do many procedures that I did with my nursing students, but since there is not as much riding on their performance, it is just fun!

Since Instructor A has experience teaching both college and secondary students, she said:

I have learned that the students will tell you everything, even things you don't want to hear. I have learned that they are so much fun. When I started teaching high school, I had taught nursing at the collegiate level and I had retired. When I came back to work, this job came open and I was used to teaching college where when the teacher walks in, everyone quietly starts to take notes. I walked in here and the students were so in-your-face and climbing all over each other, that it was just crazy! So I was kind of shocked by that.

Instructor A had small children at the time she began this position and had never interacted with high school-age students but discovered she loved the age group.

They are so real and fresh and full of ideas. They are so bright and fun and willing to learn. I think I had a fear of high school students coming into the job but after about 2 months, I figured out that I loved them! They really keep you young.

# Focus Group

Eight students participated in the focus group. All participants in this focus group were female. Gender specific pronouns may be used but should not be identifying descriptors. The focus group took place after school on April 24, 2008, at 3:10 p.m.

Central Standard time. The following is the summarization of data collected from the focus group from this school.

Question 1: Tell me about your program.

Student answers for the Allied Health program centered on the curriculum and activities that students completed during the course of the program. Most of the students gave general answers, such as, "We learn about the body and different health occupations, like nursing first aid and emergency response, veterinary medicine."

Question 2: Describe your experiences in the vocational program that you are enrolled in.

Clinical assignments were dominant in their responses to the researcher. For the purpose of clinicals, each student goes to a health occupation site for one and one-half hours to shadow a professional 3 days each week then must write in journals about experiences. The experience referred to as "clinicals" is the application of learning taken place during class. The students explained that often questions are asked by the mentor, and students know the answers. One student commented that during "clinicals" she was shadowing a doctor and she was able to answer questions that the nurse's assistant could not answer.

Question 3: How and why did you choose this particular program in which to participate?

When asked why they chose the Allied Health program over the other programs offered at the vocational center, many of the students said that they wanted to go into the medical field and that the program gave them an opportunity to decide which area was to be their career choice. The choice also helped them decide what area of the field would be

the best fit. All of the students in the group explained their desire to know more about the vocational area and that the Allied Health program had given them a better insight into the medical field in general.

Question 4: Do you plan to pursue a career in this type of work?

All of the students said they were going into the medical field when they graduated.

Question 5: How did your training impact this decision?

When asked how their training in the program impacted their career decision, a variety of responses were given. Several students said that participation in the program changed their minds about specific vocational choices. One student said she wanted to be a nurse before taking the class but had changed after learning about the unpleasant aspects of the job, such as psychological factors and the "gross" aspect that they observed during "clinicals." She changed to pharmacy because she liked math. Another student wanted to be a doctor but changed to dentistry because schooling requirements for a medical degree were both difficult and lengthy. Dentistry was equally fulfilling but less rigorous.

Question 6: Do you feel that you have been prepared to have a career in this field? If so, why?

Students felt well prepared for their future careers and credited the amount learned in class for this foundation.

Question 7: What further preparation will you need to have a career in this type of work?

The students were knowledgeable about requirements needed to pursue their career goals. The researcher received answers ranging from biomedical science to

nursing. Every student knew exactly what fields and courses were required for college, the number of years it would take to complete their degrees and even the exact type of work experience needed to pursue their career goals.

Question 8: Describe your school's recruitment program.

One of the areas that make each vocational center different is the method of recruitment. For this school, the students felt that the recruitment program was highly selective. When students chose to take Allied Health, they were required to fill out an application and then were ranked by grades, discipline records, and recommendations of teachers and other students currently enrolled in the program. The highest ranking students were selected. A factor leading to the success of the recruitment program was the amount of student promotion of the program to other students. When asked why they would advise someone to take the class, one student stated that not only do they learn a great deal in the class, but also have a lot of fun. Another student indicated that it was a great way to explore the medical profession to determine the match for an individual career. "Coming into this program I thought I wanted to be a physical therapist, and now I know that is not what I want to do. I want to be a pharmacist." Other students indicated a desire for occupations ranging from dentistry to gynecology.

Question 9: Did you feel prepared for the C-PAS test in this class? How and why?

The students were well prepared for the C-PAS test, as evidenced by their superior test scores. The 2-year average score for students from School A was 87.43%.

When asked about their preparation for the test, students said they played games, such as Jeopardy, with the test questions; they were given practice tests and review packets in the month before the exam to review the prior year's content; and they were given their old

chapter tests from both years to study. Paramount to the students was the instruction they received. They emphasized that the classes prepared them because each lesson built on the one before, and the content was covered over and over, never allowing them to forget what they had already learned. When they took the test they simply remembered what they had learned.

Question 10: What questions do you remember that you did not know the answer?

They said there were only a few questions they did not know.

Question 11: Discuss some specific class activities that stand out in your mind from this course.

One thing that distinguishes a program is the class activities that are part of that program. For this Allied Health program, the students identified particular activities that stood out in their minds from the 2 years of their enrollment. One of these activities included what they called "triage." During "triage" the teacher gives an emergency scenario and the students are expected to sort it out by which patient needed to be helped first and in what order the patients are to be addressed. This activity takes place in the lab portion of the classroom. Each student is assigned a different job, and they are to treat the patients as a live situation. Some other memorable activities included CPR and heart saver certification, practicing sutures on stuffed animals, planting a pharmacy garden in the courtyard with herbs that have medicinal properties, and visiting the Human Body exhibit and the Pharmacy Museum in New Orleans. They also dissected different things. One student said, "Dissection is cool. We dissected an eyeball, a pig, a heart, a brain, and some other stuff."

Ouestion 12: What have you learned from this course?

When asked what they have learned from this course, the students erupted with answers talking over each other. They were so excited about the knowledge they had gained from this class. One student said, "I play sports and I like to run a lot, and so, sometimes when I get hurt, it is kind of fun to know which muscle I hurt and what to do." Anatomy and physiology was attributed with this understanding. Another student said, "Learning how to deal with any kind of emergency situation was great. CPR was definitely an important thing to learn because I just got a job as a lifeguard and knowing how to save people makes me proud." Yet another answer was,

I liked HOSA (Health Occupation Students of America) because we had to go and compete. You have to really know what you are talking about. The first year I went I had to learn all of my medical terms. It was a lot of memorizing! Then we went and did medical math and that was a lot of fun. You have to take tests and then you get graded on it and the top five advance. If you place at state you get to go to nations, and that is really fun.

The students were exposed to a vast variety of different health occupations. One student thought that "Dog CPR was pretty cool. I did veterinary clinicals." Sometimes the things that they learned were what they did not want to do rather than what they wanted to do. One student said,

I learned that I definitely do not want to do anything with kids. We had to do child care and we have to weigh them at the doctor's office sometimes and they are so bad! They get vicious, like jumping all over the place!

Many students seemed excited about the current relevance of the skills learned. "I learned to do range of motion exercises, and my mom is going to have surgery on her shoulder.

Now I know how to do ROM (Range Of Motion) with her." "The biggest thing for me was first aid because I get to use that in soccer, you know taping wrists and ankles and stuff when [the players] have minor injuries," said another student.

Question 13: What specific factors (environmental, instructional, logistical, etc.) do you feel have been most influential in the success of this program and why?

When asked what factors (environmental, instructional, logistical, or others) they felt had been most influential in the success of this program and why, the answer was unanimous. They felt that their teacher was the reason their program was successful. The students all said that their instructor was the one factor that had the greatest impact on their program. Reasons given by students explained that the instructor gets grants for supplies and equipment, and is excited about the program. They feel that she makes learning fun. They can tell she is passionate about what she does, and she does everything that she can to make their learning experience enjoyable and fulfilling. They said that she cares about whether or not they succeed. The students said that they were always doing something different, so the class was never boring. Even though they had tests often, they said that their instructor always made it hands-on and explained things where they could understand it. "She changed activities a lot, she brought in guest speakers, and she told us a lot of stories about her own personal experiences."

### School B

The second program addressed is the Marketing program. This program is under the vocational umbrella and focuses on marketing technology and business occupations. The atmosphere of this program tends to be more academically focused, as with the Allied Health program, with a professional environment and career focus. The highest

scoring program declined the request for participation in the study. The difference in scores between first and second highest performing program was less than four percentage points. Due to this minor difference, this researcher believes that the second highest performing program would provide equally valid results for the purpose of this research data.

### Classroom Observations

In addition to observing classroom instruction, the researcher took time to document the school and classroom layout. This vocational center is located on the high school campus in a separate building within walking distance. The classroom is divided into two sections, one for lecture and the other for computer lab activities (see Appendix H). This center has a director and guidance counselor who is very visible and familiar with the students. The school is located in a municipal area but services a county high school.

Classroom observations for School B were half of first block and through second block. The first block class was made up of second year students and the teacher was covering mostly housekeeping tasks, such as due dates, deadlines, DECA information, and end-of-the-year information. They were also working on previously assigned projects in the computer lab. The majority of observations in this section are from the observation of the Marketing I class during second block on May 6, 2008.

The instructor appeared to be well prepared for the day's lesson. The students appeared interested and alert throughout the hour and one-half block. The instructor's teaching style was very animated and energetic. The classroom was open and interactive, and students were free to ask questions. Transitions between activities were smooth. The

teacher repeatedly emphasized the importance of positive attitudes. The lesson followed the following format: introduction of concept (lecture), assessment (vocabulary test), assign classroom project, presentation of projects, and chapter assessment. The instructor changed activities four times during the block, and transitions were smooth and deliberate.

As Instructor B was lecturing, students were engaged. As with School A, students had access to many items that could have been a distraction, but students showed respect for the instructor. Though Instructor B does not appear to be a strict disciplinarian evidenced by the activity in the classroom, the instructor continuously interacted with the students during instruction to keep them engaged and on task. One particular time during the lesson the researcher observed a student who was talking to another student. As Instructor B was lecturing, she asked a question of the class and called that particular student to answer the question, which resolved the distraction and brought that student back to task. After the brief lecture, the instructor introduced a group activity to the students. As the students were working together in their groups the instructor walked around to the individual groups offering guiding questions to lead them to an accurate resolution of any problems faced. The instructor did not provide answers, but rather led students to answer their own questions. She used competition between groups as a tool to encourage them to work quickly and efficiently. After sufficient time elapsed for completion of the projects, Instructor B instructed each group to present their results to the class. Presentations were handled in an orderly fashion, and students in other groups attended while the group presenting was speaking. After group presentations, the

instructor led the class in a short review. At the end of class a chapter assessment was given.

#### Interview

The interview with Instructor B took place in her classroom on her planning period on May 6, 2008, at 1:10 P.M. Central Standard time. Because Instructor B came from the private sector into education, the researcher began the interview with asking how she entered the field of education.

First of all, growing up I said there were three things I would never do. I said I would never live in Wiggins, which is where I grew up, I would never teach, and I would never have kids. Well, my grandmother told me "never say never" and that is so true! Now, I live in Wiggins, I am a teacher now, my grandmother taught for 41 years and my mother taught for 31. I started teaching right after I had my daughter. I was the visual merchandising and marketing director for the Mercantile Company, which was Gayfer's. I traveled a lot with that job, and I just didn't feel like I could be away from her any more. I never thought that having a child would be so life altering. I loved my job, so I decided if I couldn't work in marketing any more, maybe I could teach it! That first year was rough. I honestly think that teachers should take a management class, because it is about managing your time, it's about managing your students, and I really think my background with management helped me a lot because there really wasn't anything out there for new teachers. I was an alternate route teacher and when I started teaching, although I had my degree in Marketing, I had not seen that content in 13 years, so going back was a learning experience for me. Today you just can't be a teacher

who sits behind the desk. You can't be effective like that any more. You have to come up with different activities and find ways to pull them into the information. I think that being from the management side and having to motivate a crew of managers and salespeople really helped me out.

Question 1: Tell me about your program. Describe a typical week in your classroom.

The researcher asked the instructor to describe a typical week in her classroom. There is no typical week, according to Instructor B. The instructor integrates hands-on activities and technology as much as possible. The instructor credits the success of the program to the financial and moral support given by the vocational director and the district. The instructor indicated that it allows her to give her students an opportunity to seek out new information and apply it in the projects that she assigns.

I tell the students that "sometimes you are going to have to hear me lecture, but not for very long." I try to separate it into different days for maybe 20 minutes at a time and then we will shift to a group activity or application project or Internet activity, to pull the content in and really bring it home. We will work on the lesson for about a week, have a vocabulary quiz during the week and a test at the end of the week because there is so much information to cover in Marketing: from Sports and Entertainment, Travel and Tourism, Hospitality Marketing, Financial Services, and you have to use a separate book for each of those areas. As an instructor you have to pull out the relevant content from each of those in order to meet the curriculum because the information available is just so vast. It took me a long time to get the right information and to be able to teach it to them.

Question 2: What routines do you regularly practice in your classes?

As far as routines go, there really are not any in this classroom. Aside from lecturing at the beginning of each unit, activities vary from unit to unit.

The great thing about all the technology we have now, like the Smart Board, is that I can pull up different things, for instance, a video clip that is applicable to what I am lecturing on to break up the monotony of lecture. If we are talking about the difference between institutional and promotional marketing, I will pull up a video of each so they can see the difference between the two. I also try to find something funny to go along with them to wake them up and get them involved.

Depending on the chapter they are studying, they may start with a group activity. This year, Instructor B decided to change her lesson plans and order of activities from the year before in order to help herself to be excited about the information. "I am constantly looking for things to get them into learning." Instructor B says,

I don't like routines. I have to mix it up for me as well as the kids because I can't stand to have the same thing every day or every week, or even every month. I always cover the curriculum, but it will always be different.

Question 3: What is important about the classroom environment in which you teach?

The marketing classroom at School B is very interactive. Instructor B says, Some teachers are so strict about everything being quiet. I'm not a big fan of quiet. Different students work at different paces and I think it is important that they have different activities and different things they can be working on. For instance, I might have one section of the room doing a role play and another

section doing an Internet activity, and another doing an application project because I know that this section works a little bit faster and they can finish the role play faster than some of the others, and it all works out that by the end of the week they are all finished or ready to present.

She usually changes the group members so that they are never working with the same people. This is because she thinks that it is important for them to learn to work with different kinds of people and different personalities while developing their interpersonal and communication skills. "I try to get them out of their comfort zones. I think the classroom environment needs to be fun, it needs to be motivating, and they have to be excited about the work."

Question 4: Why do you think your program is successful?

The researcher then asked her why she thought her program was successful. She said that the main reason is her students. "I think that they want to be involved so they get involved, and maybe that is partially due to my excitement. I want to see them do great things." Instructor B has students come back after finishing her program to solicit her help with a number of different things.

I am not a counselor, but they know I will help them with any direction in order to achieve their educational and career goals. I want them to be successful and have great careers, and I say careers because I tell them all the time that jobs stand for "Just Over Broke" so they want to have careers, not jobs!

She views herself as a teacher/psychiatrist/nurse/counselor, and so on.

We are like a DECA family, and if there is a problem with one of my students I want to know about it and I want to help them handle it. My kids are role models

here at this school. Whether they know it or not, other students look up to them, and I make sure they know that, and I think it makes them more careful about their actions. I think that as long as the teacher is energetic and excited about the information they are covering, they get excited about it.

Question 5: How do you prepare your students for the C-PAS test?

When preparing for the C-PAS test, Instructor B focuses on covering the curriculum. She says that she has never actually seen a C-PAS test except for the sample tests provided by the State Department. In some of the areas, such as Marketing Principles, nearly all of her students scored 100%. Interpersonal skills, Sales Promotion, Math, and Communication skills were high as well. She feels that in the specialty marketing areas that are broad and difficult to cover, there is still more work to do. In order to prepare for the C-PAS test, she went through the Marketing Essentials book and pulled out the information that she felt might be on the C-PAS. "I have also worked all of the questions from those sample tests into my 9-week tests. We play Marketing Madness all of the time which the kids love."

Question 6: What important features of your vocational center impact the success of your program?

Having a separated vocational center from the school is an important feature of the facilities for School B, in Instructor B's opinion.

We have our own counselor who looks out for the students here if there is ever an issue about tardiness or absences, and we feel like we can go to her and ask about grade point averages. I feel like we are more of a family rather than being just another part of the masses.

She feels this creates a better learning and teaching atmosphere for the students because the students here are taking the same kinds of classes, they are familiar with all of the student organizations, and the teachers are more collaborative because they share some of the same issues as a result of being vocational teachers. Instructor B feels that there is a stigma attached to the program because it is labeled "vocational."

I have had students tell me in the past, "My mom doesn't want me to take this class because it is a trade class," and I'm like, Holy Mackerel! That is the thing about recruiting that is so important because they need to see that the skills they will learn in Marketing can be translated into any career they choose to pursue. Those communication and interpersonal skills are so vital.

Question 7: Describe the recruitment programs used by your vocational center.

When asked to describe the recruitment programs used by School B, Instructor B said that it is one of the biggest reasons why her program is successful. "Recruiting is so important for us because a lot of these students don't understand what marketing is. They think it is a fashion class or something, which it used to be called Fashion Merchandising many years ago." The instructor recognizes the importance of ninth graders touring the program.

Our vocational director and counselor bring them over and each teacher gives a 10-minute presentation to sell their program. I always have some of my students dress up in their DECA (Distributive Educational Clubs of America) blazers and we have a really cool movie that the kids made of all of their trips and the things that they can learn being involved in DECA, and it is always with current music and really enticing to the students.

After students decide whether or not they want to take a course they go through a qualifying process.

Question 8: What one factor do you perceive has the largest impact on the success

of your program?

"The stronger your recruitment program, the better the pool of applicants you will have," said Instructor B. She continued:

If you don't have enough students to apply, you won't have enough to fill your programs. DECA is a draw because once the students hear they get to travel, and learn something they can use in the future, and get scholarship opportunities, it makes them want to be a part of it but students have to be in 10<sup>th</sup> or 11<sup>th</sup> grade to take the class.

Students who score the highest on a rubric that prioritizes grades, absences, and demerits are selected for the class. Those who do not make application their sophomore year can reapply during their junior and senior year.

I have A students, A and B students, some C students. Sometimes I have seen the lower performing students make As in here. It all depends on how involved they get and how well they like it, and it gives them a chance to shine.

Focus Group

The focus group took place during 1<sup>st</sup> block on May 6, 2008, at 8:52 A.M. Central Standard time. The following is the summarization of data collected from the focus group from this school.

Question 1: Tell me about your program.

As with School A, the researcher opened the focus group by asking the students to talk about their program. All of the students in the focus group said that there was no typical week, and that the instruction varies. They study the basic principles of marketing, but during certain weeks go into greater depth about specific types of marketing, such as Sports and Entertainment marketing or Hospitality services, covering the whole range of careers in marketing. One student said,

The first year of Marketing I is just a broad overview of marketing as a whole, and then the second year breaks it down into specific specialty areas, and usually we will start each chapter with lecture and then do application projects, vocabulary, and answer questions so that [the teacher] will know if we got the concept.

After teaching each unit, the instructor gives students a project to apply skills from the unit of study. For example, during the travel and tourism unit, students created a travel brochure. Two girls did a "learn-and-earn" project, and made jewelry and sold it at football games and other school activities. They competed with that project at DECA competition. "After completion of projects, the instructor conducts assessments to determine the level of application of skills."

Question 2: Describe your experiences in the vocational program that you are enrolled in.

The students were asked to describe some of their experiences in marketing. They described some of their projects from class. It was evident to the researcher that the project created memorable experiences for the students, which helped them to remember what they had learned.

We had to research a fashion designer and tell about the things that they do, and then make some product to present. Some of us made a PowerPoint and some of us made a story board to show the designers' lines and what they do.

Another student spoke about a project that stood out in their mind:

Last year in Marketing we had to come up with our own products and figure out how to market them. We studied pricing and how to figure out how to price your product effectively for the target market. We went through everything from distribution and production to sales and marketing.

Another project assigned was the development of a business. Many of these students chose retail businesses. Each student was very familiar with the businesses they created and each step of the project, even though it had been conducted one year ago. The projects were what students continued to describe. They talked about their businesses and slogans with great pride; they smiled and were excited about what they had learned. One student said that her camouflage store was named "Soggy Bottom" and her slogan was "From duck calls to overalls, we've got you covered." The students were active in DECA, with one of their classmates serving as state president. Competition is a big part of their program. They study and prepare, and every year they go to national competition. Last year this program sent several students to national competition in which several students placed in the competition. "We have the highest membership in the state for DECA. All of us compete. Most of our teachers are good about letting us go on DECA trips. We went to New York before Christmas." The students emphasized that the trips were extremely enjoyable.

Question 3: How and why did you choose this particular program in which to participate?

When asked what specific factors (environmental, instructional, logistical, others) do they feel were most influential in the success of this program and why, the students unanimously said that Instructor B was the most influential, followed by DECA competition. With competition, one has to learn the concepts in order to succeed, and the students indicated that the competitiveness fostered in their program made them want to put forth the extra effort. The concepts required must be applied in order to win.

[Instructor B] is our motivation. She pushes us. DECA and marketing is such a huge part of her life that she has missed some of her daughter's dance recitals to go on DECA trips. She's our DECA mom. One time she had to go bring a girl who was in her class gasoline on the side of the road at 10:00 at night. She'll do anything for us. She helps us with scholarships and she writes recommendation letters for us. It bring her joy if we succeed.

The students talk about each other and about their teacher as if they are a family.

Ouestion 4: Do you plan to pursue a career in this type of work?

Many of the students in the focus group are open to careers in Marketing, and the ones who are not think that the skills they have learned will help them in the careers that they choose.

Question 5: How did your training impact this decision?

When asked about how the training in the Marketing program has impacted their decision of which career to pursue, the students responded by saying that presenting and speaking in front of others has made them more confident and outgoing. In addition, the

experience with job interviews and resumes has helped them prepare to apply for a job.

They also indicated an understanding of cultural diversity after learning how to market to specific cultures.

Question 6: Do you feel that you have been prepared to have a career in this field? If so, why?

Students indicated preparedness to pursue a career in marketing as a result of the many simulated experiences.

Question 7: What further preparation will you need to have a career in this type of work?

Students learned precisely what type of education and experience needed to pursue specific careers in business and marketing.

Question 8: Describe your school's recruitment program.

Students are strong recruiters for School B. The ninth grade students take a tour of the vocational center and learn about DECA. Students talk about the program to other students enrolled in the program. Most of the focus group students took the class because someone they knew took it and told them how they enjoyed the class.

Question 9: Did you feel prepared for the C-PAS test in this class? How and why?

All students felt well prepared for the C-PAS test. They said that they took practice tests before this State assessment, but expressed how everything they did in the class prepared them for the assessment. The entire 2-year program prepared students by building on the knowledge obtained during each unit. The instructor counted the C-PAS test for their 9-weeks test grade. One of the fun things they did to prepare for the

assessment was to play "Marketing Madness" (a computer-based trivia game). The test was quite long, but students indicated that they felt prepared.

Question 10: What questions do you remember that you did not know the answer?

There were only a few questions that they felt they did not know the answer.

Question 11: Discuss some specific class activities that stand out in your mind from this course.

See answers to Question 1.

Question 12: What have you learned from this course?

When asked about what they had learned from the course, students responded, This class as a whole has built us as individuals. We have made long-lasting friendships and built our own confidence, learning interpersonal skills, how to apply for a job, about the stock market, and so many other things that we can apply no matter what we do for a living.

Question 13: What specific factors do you feel have been most influential in the success of this program and why?

These students were unanimous in answering which factor had the greatest impact on the success of their program: their teacher. They described the teacher as very energetic and passionate about her job. Other adjectives used by students were motivating, loving, dedicated, caring, inspirational, "DECAcated," and passionate.

## School C

The third program addressed in this research is the Building Trades program. This program is under the vocational umbrella and focuses on all construction-related occupations. The atmosphere of this program incorporates active participation in many

different building trades. It tends to be more kinesthetically focused than academic. Seven students participated in the focus group from this school. Because all of the participants in this focus group were male, gender-specific pronouns may be used, as they would not be identifying descriptors.

## Classroom Observations

As with Schools A and B, in addition to observing classroom instruction, the researcher took time to document the school and classroom layout. This vocational center is located on campus with the high school that it services. The classroom is separate from the workshop, and the workshop meets OSHA safety regulations (see Appendix I). This center has a director who is very visible and familiar with the students. This school is located in a rural community.

The researcher completed classroom observations on April 25, 2008. Classroom observations for School C began after the first class had begun. As the researcher entered the classroom, the instructor seemed undeterred. The class was discussing small engine repair and relating it to the building trades. The instructor began the lesson by asking the students

If you were on a job and your cement mixer breaks down, and you're paying two or three guys \$10 an hour to be there, someone had better get the thing running or you're going to lose a lot of money.

He related the subject matter to real-life situations. He began the lesson by talking about how small engines work. He described the parts of the engine. As he was talking, he wrote the important points on the board. There was a consistent flow during the instruction. Students were engaged and interested.

The instructor asked leading or probing questions, connecting what he was saying with the students' experiences. He told them, "I promise you that if you bring me an engine that isn't working, as long as you have all of the parts, I can get it working." He asked them if they had ever had a lawn mower or other small engine break down. The instructor then took examples from the class and asked the other students what they thought was wrong with it, then probed further into one student's problem. The student said his car was running fine but one day started to spit and sputter. After several questions from this student and the rest of the class, they decided that the car probably had water in the gas tank. The class discussed engine timing, and the instructor compared timing to the rhythm of the human body, how everything is synchronized with other parts of the body, like the heart pumping, breathing in oxygen, and continued with other examples. The instructor spoke with enthusiasm.

After the lecture, the students transitioned into the shop. On the shop table was an old, rusty lawn mower. The instructor told the students that he pulled it out of the woods by his house. It had obviously been neglected as evidenced by the rust, spider webs, and layers of dirt, dead leaves, and pine straw attached. He had students make predictions about why the mower was not running. As they began to diagnose the problem, he talked the students through the process. He began to lay out all of the possibilities for the malfunction and asked students for input and assistance (students took off the cover, removed bolts, air filter, etc.). After about 20 minutes and several improvements, the motor was running. The instructor closed the lesson by emphasizing to the students how they could make money this summer repairing law equipment. "Why would you pay

someone else \$100 to do what we did in 20 minutes? All it took was some cleaning, sanding of rust, and adjusting some of the parts."

Interview

The interview with Instructor C took place on April 25, 2008, at 9:26 A.M. Central Standard time in his classroom. The following is a summation of the recorded data.

Question 1: Tell me about your program. Describe a typical week in your classroom.

The researcher began the interview with asking Instructor C to describe a typical week in his classroom.

A typical week involves some classroom instruction, but mostly hands-on activities. This class is almost purely lab work. This week, for example, I am teaching our last unit which is on the subject of plumbing. We start in the classroom with basic plumbing applications. We then move to the shop where we actually perform examples of plumbing problems and the correct way to apply what we have learned.

Instructor C typically starts each unit with classroom instruction and moves into the shop for demonstrations, practice, and application. The class is part theory and part application (hands-on). Sometimes with second year students the instructor combines classroom activities and lectures for 3 weeks and then lab applications for 3 weeks.

Question 2: What routines do you regularly practice in your classes?

Instructor C uses a bell ringer as a preparation tool for the C-PAS test. Each day he puts a different question from the practice test provided by the State Department on the

board and the students answer it as soon as they come into the classroom. This routine provides a management tool by having the students immediately on task when the bell rings.

Every Friday we go over the bell ringer questions for the week and then we test on the information covered. This is an incentive for them to make good grades. Routine tests are given at the end of every unit (i.e., plumbing, carpentry). If the unit is very long I will throw in a few short quizzes for additional grades. Written tests are not my favorite. Performance assessments are given while students are applying what they have learned in the shop.

Because the course is active, most of the students' grades come from the application activities.

You know the old saying "show me" is a great tool in teaching this class. Most students can take written tests, but if you give a student the opportunity to experience it hands-on, then they feel they are more accomplished in the subject matter.

Question 3: What is important about the classroom environment in which you teach?

The researcher asked Instructor C about his classroom environment. He encourages independent thought in his class and emphasizes the importance of problem solving.

I tell my students that this is probably the most important class they will ever take in life besides your basic academic classes. This class will teach young men and women how to solve problems without hiring professional help. When you are able to fix the problem yourself, you have a great amount of satisfaction.

Instructor C often comes up with unique problems for the students to address:

We were able today to bring a lawnmower that had been sitting in the rain for several years and fix the problem. Most people would have looked at this lawnmower and put it out for trash. This lesson showed how something can be repaired with just a little sandpaper and about 20 minutes of your time. By process of elimination, we were able to fix the lawnmower.

Instructor C said that girls take his class as a way of learning to repair things without relying on someone else to do the task for them. He said that they are often some of his best students. Instructor C tries to provide opportunities for fun activities throughout the year, such as cookouts.

Question 4: Why do you think your program is successful?

Instructor C has a great deal of experience in Building Trades. He worked with his father on construction projects from a very young age.

I was born with a wrench in one hand and a hammer in the other hand. I went to work every summer with my daddy and was exposed to this type of work all of my life. My daddy built just about every house we lived in while growing up. I built the house I presently live in.

Instructor C feels that his experience is respected by his students. He also feels that they have a willingness and desire to learn a trade. He communicates high expectations, and his students aspire to reach the expectations.

Question 5: How do you prepare your students for the C-PAS test?

Instructor C does not emphasize the C-PAS test preparation. Several weeks before the test, he gives his students a practice test that contains approximately 100 questions. They review each missed question and re-test until he sees that students have mastered the assessed curriculum. His primary method of preparation for C-PAS is classroom instruction. Instructor C feels that his lessons build on each other throughout the 2-year period in such a way that the students do not get a chance to forget what they have learned. Instructor C is passionate about his work, and he emphasizes his belief that he is making a difference.

After 6 months of high school, reality sets in to those young men and women. They realize, hey, I need some type of basic skills to go out and find a job. I preach to my students everyday how important education is to better themselves in life. So, I would say this class has a lot more to do about life's lessons than just your normal classroom material.

Question 6: What important features of your vocational center impact the success of your program?

The proximity to the high school is important to this instructor as well as the support from his director and fellow teachers.

Question 7: Describe the recruitment programs used by your vocational center.

Because of the close proximity to his high school, recruitment is not an issue for this program. Students tour the Career Center in ninth grade to see what is offered.

Students also find out about the program from their peers who have taken or are currently enrolled in the program.

Question 8: What one factor do you perceive has the largest impact on the success of your program?

When asked why he thinks the program is successful, Instructor C humbly answered,

I feel the students are receptive to learning the material given and they feel I explain it in a manner they can understand. You also have to know the subject matter and be able to teach it backwards and forwards. I feel that I am not the best teacher but God smiles down on me every day and He thinks I do all right.

## Focus Group

The focus group took place during school on April 25, 2008, at 1 10:15 A.M.

Central Standard time. The students were all informed that anything they revealed during the focus group sessions would be kept confidential in that their names would not be associated with the answers and no one would see the tapes of the sessions other than the researcher. The following is the summarization of data collected from the focus group from this school.

Question 1: Tell me about your program.

One student answered, "Our program is different." When asked why, they said, "Our teacher. He is so dedicated, and we have a lot more freedom in this class than in other classes." I asked them to give me a comparison, and one student said, "I take Ag(riculture) and this is a lot different because with Instructor C when we aren't working on class work, he lets us use the lumber in the shop to build things for ourselves." Another student said,

It is different because Instructor C cooks for us sometimes, and sometimes he lets us sell the things that we build in this class. One time we refinished a bedroom suite. We stripped it, sanded it, and stained it. We've built bird houses, speaker boxes, magazine racks, garbage cans, dog houses, and all kind of things.

The students feel that their teacher makes learning a trade fun, interactive, and never boring.

Question 2: Describe your experiences in the vocational program that you are enrolled in.

The students were then asked to describe their experiences in the Building Trades program. They are involved in Skills USA competition. They cover electrical, plumbing, masonry, mechanics, and a wide variety of trades in the Building Trades class. "We helped to build Instructor C's house, building the walls and stuff." The activities that stood out in their mind all involved physical performance of a task.

Question 3: How and why did you choose this particular program in which to participate?

Students said that it was because it looked like fun. "In some of the other vocational classes, they do not do as much as we do." Another student said, "My brother took it and told me that Instructor C was a good teacher." Word of mouth is an important recruiting tool for this program. "I took it because a lot of other students took it and said that Instructor C was a really good teacher." A couple of students said that they took it because they did not think they were going to college and thought it would give them skills that they could use now.

*Question 4: Do you plan to pursue a career in this type of work?* 

Six of the eight students in the focus group said that they were going to pursue a career related to their training program. Two said carpentry, another mechanics, another said welding. Three said they would go to college, and one said the Air Force.

Question 5: How did your training impact this decision?

When asked how their training had impacted this decision, one student said, "It helped me to figure out that I am better suited for hands-on work. We took a survey in this class that showed what kind of learner we were. I am a kinesthetic learner." Actually, all of the students in that class said they were kinesthetic.

Question 6: Do you feel that you have been prepared to have a career in this field? If so, why?

The students are well aware of what they will need to further their career and education in this field (e.g., apprenticeships or college courses). Students said that when they graduate they will receive a certification that will help them get a job, and the teacher told them that he would help to place them in a job.

Question 8: Described your school's recruitment program.

Ninth grade students are given a tour of the vocational center, and each teacher gets an opportunity to talk with them about their program.

Question 9: Did you feel prepared for the C-PAS test in this class? How and why?

The C-PAS was not seen as a focus for this program. The students did, however,

feel prepared. They were given a study guide by their instructor as well as a question each
day from the practice C-PAS test.

Question 10: What questions do you remember that you did not know the answer?

They did not remember specific questions from the test, but they said that because of the way Instructor C covered the material, they knew the answers when they took the test. He covered the curriculum in a way that prepared them for the test. The students said that each lesson built on previous lessons, so they did not have time to forget what they had learned.

Question 11: Discuss some specific class activities that stand out in your mind from this course.

When asked to discuss specific class activities that stand out in their minds from this course, the students spoke of many kinesthetic and interactive exercises. These activities included a variety of construction trade projects. "He asked us to wire some electrical things and told us if we could do it we would be exempt. We thought it would be really hard, but after we figured it out, it was actually pretty easy."

Ouestion 12: What have you learned from this course?

The students mentioned team work and honesty as skills learned in this program. If you lie to Instructor C, he won't trust you and if we are working on something difficult, he won't trust you to do what you are supposed to. He makes you feel bad when he is disappointed, but he makes you want to make him proud of you.

The students unanimously indicated that their teacher is predominately responsible for the success of the program. His family is in construction, so he has been around the trades all of his life. Mr. Ellis, the director, was the former teacher for this class. He comes in sometimes and works with the students as well.

Question 13: What specific factors do you feel have been most influential in the success of this program and why?

Although these students were more reserved than some of the other groups that were interviewed, they emphasized the importance of the instructor. When asked to identify factors most influential in the success of this program, the students all agreed that Instructor C had the greatest impact. "He is dedicated and he's a really hard worker. He's loyal—when he tells you he's going to do something, he'll do it." Another student commented that,

He puts things in words that we can understand. He's trustworthy. I've worked with him outside of class before, and he said that he was going to come get me to take me to work, and he was always there when he said he would be.

The students agreed that he challenged each of them and inspired them to work hard.

#### School D

The fourth program addressed in this research is the Business and Computer

Technology program. This program is under the vocational umbrella and focuses on a

variety of business and computer-related skills useful in most any type of occupation. The

atmosphere of this program tends to be more academically focused but still has a

vocational emphasis and skills-based learning. Eight students participated in the focus

group from this school.

## Classroom Observations

In addition to observing classroom instruction, the researcher took time to document the school and classroom layout. This vocational center is located off-campus from the high schools that it serves. Students are bussed in from the high schools or may drive with proper permission and license. The vocational center is not in close proximity to the high schools. Some students spend 20 minutes on the bus each day. Students from

three different high schools attend this center. The BCT (Business and Computer Technology) classroom is a computer lab setting arranged into pods (see Appendix J). The classroom also is adjacent to another computer labs with tables lined up in the middle of the room that is well suited for group lecture. This center has a director who is very visible and familiar with the students. This school is located in a rural area and serves county schools.

Classroom observations for School D were taken during two periods on May 5, 2008. The first class had begun when the researcher arrived. The lesson was on creating an e-folio or online portfolio. The students had already begun the activity, and the instructor was answering questions. No disciplinary issues were evident. Students answered questions when asked. The instructor used correction to bring students back ontask when they were distracted. The teacher knows students well, as evidenced by her use of their experiences to draw comparisons to the lesson; for example, she used one student's participation in the flag corps and another's job at a fast food restaurant as examples of teamwork and the skills needed to be a team player.

During the second class observation the researcher was able to sit in on an entire class period. The subject of the day's lesson was the job application process. As the students entered the classroom they answered the bell ringer assignment. When the teacher began the lesson, students asked questions as she talked. She used student experiences to draw comparisons, as with the previous class. The instructor used a PowerPoint presentation during the lecture time and used guiding questions to get the students involved in the lecture. To break the monotony of the lecture she used humor related to the interview process (the top 10 interview mistakes). She changed activities

often, four times during the class. After going over the interview process, the instructor took a volunteer from the class and conducted a mock interview with him. After the interview she asked the class to point out what was right and what was wrong about the interview. She then reiterated the rules to follow when interviewing. As she was teaching, the instructor moved about the room. She gave several short assignments during the course of the lecture to maintain the students' attention.

## Interview

The interview was conducted during Instructor D's planning period on May 5, 2008, at 11:22 A.M. Central Standard time. The following is a summation of data gathered.

Question 1: Tell me about your program. Describe a typical week in your classroom.

The researcher began by asking Instructor D to describe a typical week in her classroom. "I start off each class very structured with bell ringers and then I go immediately into my lesson plans which include the state curriculum for this subject. We have 2 hour classes which include traveling time." School D's Vocational Center is not on the site with the high school it services, which is different from the other programs in this study. Students enrolled in the program are bussedin from their respective schools. "I teach BCT periods 1, 2, 3, and 4. Period 5 is lunch time and I do not have students. Periods 6 and 7 are BCT as well," said Instructor D.

We do not have electronic lesson plans, grade books, or lesson plans on this campus. Everything is set up manually. I have my own spreadsheet that I keep for

this subject. I have different lesson plans because of so many changes from year to year.

During the spring term the BCT program has fundraisers for the class.

Because the curriculum is so vast, Instructor D has to pool resources from many different areas to teach the skills: "I rarely use a textbook. I use more resource materials than chapters from a textbook," she said. She uses different resources to meet different objectives. She uses both digital and print sources, as well as some she created herself. She uses interactive lessons, performance assessments, and projects to communicate the curriculum using real-world lessons.

I try to teach on subjects that apply to everyday life. One of my main chapters is on insurance. Both of my children went to school to become Occupational Therapists and presently are working in this career field. Upon completing their employee packet, I received a call asking, "what is all of this insurance stuff?" I try to teach my students how to answer those types of questions. I want them to be able to answer, "should I take out the vision insurance, should I take out the dental insurance," and so on. If they are unsure, I'll have them get on the telephone with their dentist to find out how much two cleanings a year will cost.

Question 2: What routines do you regularly practice in your classes?

Instructor D said that she tried not to create routines in her class. She tries to schedule her tests around school events so that it does not place undue stress on her students. She tries to give her students plenty of time during class to complete their work, given that many of the students do not have the necessary equipment at home to complete it. She also gives the students a specified format from which to complete their

assignments. She maintains consistency in her expectations, such as having students to complete all of the letters for class in either block or modified block format. She emphasizes the importance of excellence, and the students' grades depend on both neatness and organization. "Each student is required to keep a BCT notebook, which includes all of their handouts they will need for next year's class. This is one way I teach organizational skills."

When students are reviewing for the C-PAS test, she instructs them to go back to their BCT notebooks. "I have students keep a notebook and pull out the items for their study guides." She uses a variety of strategies to keep herself organized as well. "I received a great tip from one of the Coast instructors. When I give a test, I give the test on colored paper." She tries to make accommodations for her students based on their ability and achievement. She differentiates her instruction and gives incentive to keep the higher achieving students on task.

I may have a student who types 15 words per minute and another student who may type 80 words per minute. I do not punish the advanced students by making them type two more letters than everyone else. I allow them to use a typing program to receive extra credit (100) when they have completed every third lesson.

Instructor D feels that the biggest issue facing this class is absenteeism.

I do not know if this is local or statewide. When students miss, making up work becomes a challenge. Most of the students do not have the means to complete the computer assignments at home and must come to the school on their own or stay after school. Many do not computers at home or even Internet access. I know the handbook states they have a particular time to make up the work but it is very

difficult with the assignments from this class. I have only had two failures in 31 years and that is because they refused to come in and complete their make-up assignments. I will do whatever I can to help my students succeed!

Question 3: What is important about the classroom environment in which you teach?

Instructor D has an interesting and interactive classroom layout (see Appendix J). "I chose to have my classroom set up in pods so it would resemble a real work place." She has decorated her room in a Hawaiian theme and gives her program a new theme or slogan each year. "This year's theme is 'Surfing to BCT Success'."

Question 4: Why do you think your program is successful?

When asked why she felt her program was successful, Instructor D felt that the environment, screening procedures for entry into the program, and the modern equipment used in this class was to thank. Instructor D seems to genuinely care for her students. "I try to make them feel that they are a select group of students. Our letterhead states, 'High Expectations—No Excuses,' and I feel this reflects how the students expect success from themselves." Instructor B said she has a passion for her job and helping students to succeed.

Question 5: How do you prepare your students for the C-PAS test?

She prepared for the C-PAS test in a variety of ways. First of all, the students complete bell ringers with C-PAS test questions on a daily basis. She also gives short five-question oral quizzes on the subjects covered. "The number one way to be successful on the C-PAS test is to teach students the curriculum. I have been on the committee that writes the C-PAS curriculum and I tell teachers, do not teach out of that box!" She also

gives her students a study guide that she has compiled, in addition to the games she created on the Internet for practice.

The closer we get to the C-PAS test, we review each benchmark and have additional tests on the subjects covered. I even give out prizes to the student who scores the highest on each test. Most of the items on the test are items we have covered in the BCT I. Also, I try to have the students apply what they have learned instead of just lecturing every day. C-PAS is counted as a major test grade in this class.

Question 6: What important features of your vocational center impact the success of your program?

One thing that helps our program is the ability to receive a new lab every 2 years. When I get a new lab, the old lab is transferred to other vocational programs in the district (i.e., drafting, Computer Discovery). We are very lucky to have state-of-the-art equipment and software to back up our program.

Question 7: Describe the recruitment programs used by your vocational center.

The application process for the BCT program includes several steps. First, students must have passed Computer Discovery. They are also ranked by grade point average, discipline, and counselor recommendations. "We have a difficult time recruiting students due to honors classes as well as the Mississippi Scholars program. We are an elective class and this type of class does not fit easily into their schedule." In the past, they have only included juniors and seniors into the BCT programs but are beginning to consider sophomore students as well. Another challenge that Instructor D faces is bringing students back for the second year of the program. She feels this is due to

scheduling conflicts as well. To help with recruitment, Instructor D uses her FBLA (Future Business Leaders of America) club to introduce the class to other groups of students.

FBLA sponsored a computer class one Saturday for grades 1 through 6 as a fundraiser. I think second and third grade students were probably the biggest draw. We have in the past raised over \$12,000 for the March of Dimes "Wonder Walk."

One of the problems for recruitment at School D is the proximity of the Vocational Center to the high schools that they service. Students have to be bussedin, although students are allowed to drive with permission from their parents.

Question 8: What one factor do you perceive has the largest impact on the success of your program?

Instructor D has learned from her experiences, and that translates into confidence in her teaching ability, not only from her students but also her director. She has been teaching for 30 years and worked at an employment office before that. She has been assigned around 20 student teachers to learn under her. She feels she has not only grown this program, but grown with it as well.

We started this program in 1979 with just one computer. We then worked up to five computers, 10 computers, and now to a full computer lab. I start early each day and I expect students to remember what they have learned from semester to semester. I want to be able to walk up to one of my students 5 years from now and ask them "do you remember how to set up a block letter?" and I expect the answer to be "yes."

## Focus Group

The focus group took place during school on May 5, 2008, at 8:21 A.M. Central Standard time. The students were all informed that anything they revealed during the focus group sessions would be kept confidential in that their names would not be associated with the answers, and no one would see the tapes of the sessions other than the researcher. The following is the summarization of data collected from the focus group from this school.

Question 1: Tell me about your program.

As with the other focus groups at Schools A-C, the researcher opened the session by asking the students to tell about their program. "Last year we started out by learning all of the Microsoft programs such as Word, Excel, etc. This year we are learning more accounting and office procedures," said one student. Students did not mention particular routines used in this class. The instructor changes methods of instruction according to the unit and then conducts the assessment. Assessments are given at different times and different days.

Question 2: Describe your experiences in the vocational program that you are enrolled in.

The researcher asked the students to tell about any experiences they had during this program. They talked about several activities that were completed during the course of the program. One activity was creating a career portfolio. Another was a fun, get-to-know-you activity. "At the beginning of the year we put five items in a box to describe ourselves and then throughout the year each student gets to draw from the box and

describe what is written." The students were all fond of their job shadowing experience from the second year of the program.

During our class period, we would go to a business and shadow an employee.

Once we were able to go to the elementary school and make copies for teachers.

Another time we were able to work in the billing department and the benefits department of the school district. We were able to apply all of the skills we learned in this class to each job position.

Each student was given three choices of jobs and Instructor D then paired each student with a particular job based on their request.

Question 3: How and why did you choose this particular program in which to participate?

Most of the students chose this class because they felt that they would learn skills that would benefit them in college and also in the workforce. "We have been able to learn in-depth computer skills." The recruitment program provided by this vocational center played a large part in the students' choice of program. The students participating in this focus group all said that they chose this program after the tour of the center that they took their sophomore year. The students enrolled in the program also help the instructor with special projects aimed at educating future students about their program. "We have helped [Instructor D] by doing fundraisers on Saturday to let students know about this class. We usually have second through seventh graders come in and work on their computer skills."

Question 4: Do you plan to pursue a career in this type of work?

When the researcher asked the students how many of them plan to pursue a career using the skills they have learned, many of the students stated that they wanted to enter

the educational field and one stated he wanted to work in broadcast journalism. Others were undecided but said that the skills they learned would help them no matter what career they planned to pursue.

Question 5: How did your training impact this decision?

Two students said that the career project they completed helped them decide, but the rest said that their training in this class did not really impact their decision of what career to pursue.

Question 6: Do you feel that you have been prepared to have a career in this field? If so, why?

They felt that this class prepared them for the career paths they had chosen. One student changed her mind about her chosen career path based on the research she had completed during this course. One student changed her mind about her career choice based on her ACT score.

Question 7: What further preparation will you need to have a career in this type of work?

All eight of the students in this focus group said they planned to attend college. "We all are planning on attending college and using the computer skills we have learned in this class to make each of us successful."

*Question 8: Describe your school's recruitment program.* 

The students in this class are members of FBLA (Future Business Leaders of America) and have several events to let people know about their program. The activities vary from year to year, but they try to communicate the benefits of the program. In

addition, the vocational center provides guided tours for the ninth grade students from each of the high schools serviced by this center.

Question 9: Did you feel prepared for the C-PAS test in this class? How and why?

All of the students said that they felt prepared for the C-PAS test. The biggest challenge, in their opinion, was taking the test in a room with students other than those in their class.

Question 10: What questions do you remember that you did not know the answer?

There was one question that stood out in their mind that they did not know the answer, which was how to properly use a wrench, which the students felt was not a question that was intended to be included in the BCT C-PAS test. These students felt that they practiced a great deal for the test and that it was a major focus and emphasis for the program. The students discussed the incentive program provided by the vocational center. The director gives a steak dinner as an incentive for the student who scores the highest in each program on the C-PAS test. The other students who score well have a cookout and grill hamburgers. This incentive program generates a competitive attitude among the students in a class, and they study diligently in order to win.

Question 11: Discuss some specific class activities that stand out in your mind from this course.

Although Instructor D had to take medical leave during the second 9-week period of 2007, they felt that they were prepared enough during the first 9 weeks to proceed with the class as planned without a great deal of interruption. "We worked really hard the first 9 weeks of school. When [Instructor D] was out on medical leave we worked really hard for her because we had to take the C-PAS test when she came back to work." Instructor D

communicated often with her substitute to make sure that the students were proceeding with the curriculum as planned. In preparing for the C-PAS test the students at School D were given study guides by their instructor and took daily quizzes on the study guides as the day of the exam approached. "[Instructor D] drills the material into our heads. We also use some games [Instructor D] created on the Internet." The students felt that the way their classroom was set up was great for their program's function. "We are able to work individually or in small groups. We also complete a PowerPoint presentation in our small groups on Business Etiquette." The students in this class complete a wide range of computer related units, including (but not limited to) Word, Excel, Access, PowerPoint, Business Ethics, Job Application process, and Telecommunications. The students said that the on-the-job training (job shadowing program) prepared them for the work environment.

# Question 12: What have you learned from this course?

Each of the students in the focus group was given an opportunity to pick one skill to identify as the most useful one learned during the course of this class. Many of the students said that the interview skills they learned were most important. Many of them had put the skills to good use by applying for part-time jobs. "Instructor D taught us the proper business etiquette to immediately go out and find a job. We also completed mock interviews, resumes, and learned interview skills." Another popular answer was typing. The students said that almost every student in the second year of the program could type over 40 words per minute.

Question 13: What specific factors do you feel have been most influential in the success of this program and why?

When asked what factor was the most influential in the success of this program, all of the students said that it was their instructor, Instructor D.

She is a great teacher who cares about her students and also cares about the success of this program. Even when we have other work due, she will allow us to come in on our extra time and help us with the work. Many of us have research papers due this year and she allows us to come in and use the computers. Many of us do not have computers or Internet access at home. She also cares about all of the students away from her class. Her class is never boring!

The researcher probed for more information by asking the students to use three adjectives to describe Instructor D. They said (a) Out-going, (b) Trustworthy, and (c) Dedicated. They feel that she is very energetic. "Sometimes when we come in the classroom we are really tired and she is always bouncing around the class with a smile on her face. She definitely pumps us up."

The director of the vocational center is very visible and involved in all of the programs at the center. He came up with the incentive program for the C-PAS test, and along with the dinner and cookout Mr. Strickland has a plaque posted in the hallway from each year listing the names of all of the students who score the highest on the test. All of the students know him and say that he comes into their classes from time to time. When asked how they would compare him to the high school principal, the students answered that they have the opportunity to see him out on campus more often. Before the C-PAS test the director came into the class to talk to the students about the incentive program.

He told us whoever makes the highest score gets a steak dinner and their name on a plaque in the hallway. He then told us whoever makes a good score will get hamburgers. If you score low on this test you do not get a hamburger.

# **Classroom Observation Summary**

All four programs, overall, had an interactive environment. The proximity of the centers to the schools that they serviced differed. Each vocational center reflected a supportive relationship between their administrators and instructors. Schools B and C were the most similar in layout and staffing. They were both on campus with the schools that they serviced. Even though Schools A and D were off campus, School A was in closer proximity and only served one attendance center.

The classroom environment for all four schools reflected an open and honest exchange of information. All four instructors used a Socratic questioning method, asking questions of the students in an effort to draw information from them rather than deliver all of the information in a lecture. None of the instructors ran their classrooms in a strict format. All allowed students to have a certain level of freedom. For Schools A, B, and C, the classrooms were broken into two distinct areas: one for group instruction and the other for lab activities. In School D, the adjacent computer lab provides this effect as well.

# Interview and Focus Group Summary

Overall, most of the statements given by students in the focus groups from each school corroborate the statements given by the instructors during the interview sessions. The statement regarding the recruitment and selection process from all four schools are consistent. Each school has some sort of recruitment process for encouraging students to

enroll, but the four schools in this study each had varying degrees of solicitation.

Preparation for the C-PAS test is a part of each school's routine; however, the emphasis placed on the review varies. For Schools A and C, the instructors focus more on ensuring that the curriculum speaks for itself, with less review before the test. For Schools B and D, greater emphasis is placed on review, and competition plays a key role in encouraging students to prepare. All four instructors place great emphasis on the importance of building on content and skills from one day to the next. In all four schools, the students participating in the programs identify their instructors as the primary reason for the success of their programs. Characteristics such as honesty, caring, trustworthiness, and energetic are used to describe their instructors.

# Summary

The statements of both students and teachers, as well as the observations by the researcher, comprise the data for this study. It is important to note the similarities in the answers of the teachers and students, as well as the observation of the characteristics and environment described by both the teachers and students.

<sup>&</sup>lt;sup>1</sup>"Clinicals" are courses or activities which provide a supervised clinical experience in an approved medical setting.

<sup>&</sup>lt;sup>2</sup>She wrote a grant for funding for the program, and the students in this class will be responsible for implementing it.

# CHAPTER V

# FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to identify factors that make a secondary vocational program in the state of Mississippi successful, and to further outline these factors for the purpose of illustrating the makeup of these programs so that other teachers, administrators, etc. may be able to reproduce the results of said successful programs.

# **Research Questions**

- 1. What are the attributes of the vocational instructors of the higher scoring schools in the state of Mississippi?
- 2. What do students enrolled in the vocational programs of the higher scoring schools indicate are the attributes of their respective programs?

# Methodology

This study used a qualitative case study research design. Data were collected using three sources: classroom observations, interviews, and focus groups. An average of C-PAS test score data was requested initially from the State Department of Education in order to identify the highest performing programs in these four vocational training areas: Allied Health, Marketing, Building Trades, and Business and Computer Technology. These four programs represent a sample of different training focus areas offered in the state of Mississippi: health, business, trades, and computer technology.

The interview questions were designed to describe the program from the teachers' perspective. Likewise, the focus group questions were designed to describe the program from the students' perspective. The observations were conducted to give third party view

of the program. This study was conducted to identify characteristics of successful secondary vocational programs in Mississippi.

Collection of data began in April 2008 with the request for C-PAS test scores from the Mississippi State Department of Education. Interviews with the four instructors as well as the student focus groups were held during April and May of 2008. The data were analyzed in phases. First, on-site notes were taken by the researcher during the observations, interviews, and focus groups. Second, the videos from the interviews and focus groups were transcribed. Finally, the answers and observations were categorized according to the questions asked (see Appendices C and D).

# Findings and Conclusions

# Teacher Effect

The teacher was identified in all four cases as the chief contributing factor to the success of these programs. There were several characteristics that all four teachers had in common. These characteristics, along with the triangulation of data for each, are summarized.

# Guided/leading Questions

As noted in the classroom observations from all four programs, all of the teachers in this study use some form of guided or leading questioning to help students in finding the correct conclusions on their own. They used a scaffolding method to build a framework by which the students could reach their conclusion. They each used different techniques in order to do this.

During the classroom observation the researcher observed Instructor A using guiding questions to keep the students on task. As students asked questions that could

have affected the course of the lesson, the teacher would answer the question and ask another to bring the class back to the point of the lesson. She also used leading questions during the review for the test the students were about to take. Instructor B asked questions during her lecture to keep the students' attention. Also, as the students were working in groups, if they had trouble coming to the right conclusion, she would ask guiding questions to help them find an accurate resolution to the problem. Instructor C used guiding questions during his lab activity to show his students the thought process one would go through in repairing a small engine. As he asked the questions, the students offered solutions. By trial and error, the students discovered the correct answer and repaired the lawn mower. Instructor D used guiding questions to involve the students in her lecture of new material. She used their own personal experiences and created a framework of questions that helped the students to understand the concept, and helped the instructor to know whether or not the students grasped the concept.

# Differentiated Instruction

All four instructors changed activities during the block of time allotted. The amount of activities during the class period varied, but differentiation was occurring.

During the class period observed, Instructor A changed activities three times during the course of the block. The first activity was a test review, then the assessment, then the lecture on the anatomy of the mouth, and finally the activity of dyeing the papillae and looking at their tongues through a magnifying glass.

At School B, the instructor changed activities four times during the class period observed by the researcher. The class began with an interactive lecture on the day's topic, followed by a group project assignment, presentation of those projects, and a review for

the assessment; the chapter assessment itself was given last. Her transitions between activities were smooth.

Instructor C did not differentiate instruction as much during the lesson observed by the researcher. There was, however, a high level of interactivity in the lesson. Though he only changed activities once, he involved the students into the lesson at every step. The first activity was class discussion/lecture. The students were engaged in the lecture through questioning. The second activity was in the workshop. The students were troubleshooting problems with an old lawn mower. Using trial and error, they were able to fix the problems.

Instructor D changed activities four times during the class period observed. The class began with a bell ringer activity, then the teacher lectured, there was a mock interview activity, followed by an analysis of the activity, and finally a brief summary by the instructor of the rules to follow during an interview. The teacher gave short assignments and kept the lecture sessions short. Students remained on task throughout the lesson.

# Enthusiasm

At all four schools, the enthusiasm of the teacher was evident. In the classroom observations, interviews, and student focus groups, the enthusiasm of the teacher was a factor identified.

During the classroom observation at School A, the researcher noted the instructor's enthusiasm in several ways. First, her excitement about the new health initiative was evident. Second, the researcher noted that the teacher was energetic and enthusiastic about the day's lesson, In the interview, the instructor emphasized how

enthusiasm for her position. She also said that she feels the students know that she wants them to succeed and that they know that she loves what she does. "I am always excited and always looking for great things to do and see, and interesting ways to learn," said Instructor A during her interview. The students likewise noted her enthusiasm in the focus group. They said that she is excited about the program and that she makes learning fun.

During the classroom observation at School B, the researcher noted that the instructor was animated and energetic. The instructor repeatedly emphasized the importance of positive attitudes. During the interview, Instructor B talked about how she became a teacher. She said that she likes to change her lesson plans and activities from year to year to help keep her excited about the information. She recognizes that the students' willingness to get involved is partially due to her excitement. "I think that as long as the teacher is energetic and excited about the information they are covering, [the students] get excited about it," said Instructor B. During the focus group the students described their teacher as energetic and passionate about her job. "DECAcated" is their word to describe the teacher who devotes so much of her time outside of class to the students organization, DECA.

During the observation of Instructor C, the researcher observed that he spoke with great enthusiasm. During his interview, Instructor C spoke about encouraging independent thought in his students, about the students' respect for him, and his love for what he does. This demonstrates his enthusiasm for this class and for teaching. Instructor C has impacted his students. During the focus group they mentioned how he makes

learning a trade fun and interactive. They said that Instructor C makes them want to make him proud of them. His enthusiasm about the class is subtle but evident.

Instructor D moved around during the lesson observed by the researcher. She changed activities often and demonstrated a high level of energy. During the interview she talked about the theme for her program, her appreciation of his students, and her passion for her job. The students in the focus group described Instructor D as dedicated to her job and out-going.

# Caring

Caring for one's students is a characteristic that was identified in this study. All four teachers in this study showed how they care about their students. In addition, the students recognized the care of their instructors.

Instructor A is passionate about her job. She said that she loves what she does.

Her students feel that she cares about whether or not they succeed. They said that she brought in special guests, wrote grants, and went above and beyond to make the program great.

Instructor B said during her interview, "I want [my students] to do great things." She sees her job as more than a teacher to her students. "We are like a DECA family, and if there is a problem with one of my students I want to know about it and I want to help them handle it." The DECA club, the student organization for marketing students, is an avenue for her to connect with her students and help them succeed. She refers to her marketing students as her kids. During the focus group, the students spoke about their instructor as their "DECA mom." They know that she cares about them. They gave examples of how she had gone above and beyond to help them when they needed her.

High expectations are emphasized in Instructor C's classroom. He tells his students that his Building Trades class is one of the most important classes they will ever take. He feels that giving his students the necessary skills to learn a trade is rewarding. He shows his care for his students through his passion and dedication for his job. He emphasized his belief that he is making a difference. The students recognize his dedication and commitment as well.

Instructor D makes every effort to help her students succeed. She gives them multiple opportunities to make up work, including staying late, recognizing that many of them do not have access to computers at home. The researcher noted that Instructor D genuinely seems to care for her students. She emphasizes high expectations and success. The students recognized the feelings of their instructor as well: "She is a great teacher who cares about her students and also cares about the success of this program."

Involvement and Students

All four of the instructors sponsor student organizations that allow them to be involved with students outside of class. The students at each center also cited specific examples of how each instructor went above and beyond their role as teacher to help them. At School A, the students talked about all of the grants that the instructor had written to benefit the program, as well as the special guests she solicited. At School B, the students spoke about how much they trust and rely on their instructor. In one case, a student gave the example of running out of gas in the middle of the night and Instructor B was the one they called to help them. Students at School C spoke about how Instructor C would help them find jobs, even hiring some students to work for him in order to help

them be successful. Instructor D often stayed after school to allow students time to make up class work or help them with resumes.

#### Celebrates Achievement

All four programs in this study celebrate the achievement of their students in one way or another. A popular activity to celebrate C-PAS test score achievement is to have a cookout. Schools A and D both have cookouts to celebrate C-PAS scores. Instructor C cooks for his students periodically throughout the year if they are doing well. Instructor B uses the trips for the DECA club as a reward for hard work. If students learn the material for competition, and do well, they will advance and be able to take more trips.

#### Fun and Interactive

Instructor A enjoys teaching. She said that "Loving what you are doing is so important because I think that sometimes people get bored with what they are doing and that transfers to the students." She said she enjoys teaching secondary students. The students in the focus group said that she makes learning fun. The projects that stood out in the minds of the students were interactive projects.

Instructor B said that "I think the classroom environment needs to be fun, it needs to be motivating, and they have to be excited about the work." To her, making the class fun is a necessity. She feels that if the students enjoy the activities, they will be more receptive to learning. This was confirmed during the focus group session with the students. They said that not only were DECA and the trips that they took with DECA fun, but also the class activities were fun. They said that Instructor A used games, such as Marketing Madness, to make studying fun.

Instructor C tries to provide opportunities for fun activities throughout the year for his students. The students in the focus group said that the class offers them more freedom than in other classes. They confirmed that the instructor cooks for them occasionally, and also lets them build things in the shop if they are finished with their work. They feel that Instructor C makes the projects and activities in the class fun and interactive.

During the observation time the researcher noted that the instructor used humor to break up her lecture and regain the students' interest. She decorates her room with fun themes each year and has her classroom arranged in an interactive layout. She creates games online for the students to have a fun way to practice for the C-PAS test. The students said of Instructor D, "Her class is never boring!"

# Classroom Management

All four of the instructors in this study say that they do not have many discipline problems. Students stay actively engaged in the class, and even though classes are interactive and often packed with distractions, students remain on task. The teachers and administrators at these schools are very visible.

During the interview Instructor A said that the students see her as someone they aspire to emulate. The respect they give her is not only from her experience and knowledge, but also because of the way she treats them. She rarely has discipline problems because she keeps the students engaged in hands-on activities. The students understand the expected behavior in both the classroom setting and the laboratory setting. The researcher noted the many distractions available and accessible to students in this class, such as cell phones, but they seemed to have little impact on the class.

Instructor B runs an interactive classroom. "Some teachers are so strict about everything being quiet. I'm not a big fan of quiet." She feels that having different activities going on at different times works best because students work at different paces and learn in different ways. Because her students are always actively engaged, she has few discipline problems. Instructor B noted how important it was to her to feel the support of her administrators and counselors. During the observation the researcher noted that the instructor did not appear to be a strict disciplinarian, but her continual interaction with the students keep them engaged. As with School A, the researcher noted the many distractions available to students, but students remained on task.

The students at School C respect their instructor. During the focus group one student said that Instructor C "makes you feel bad when he is disappointed, but he makes you want to make him proud of you." He relates to the students and involves them in all aspects of the program. Both the instructor and students commented on the visibility and support of the vocational director at this school. Instructor C does not feel that he has many discipline problems because the students respect his experience and they are receptive to learning the material and have a desire to learn a trade. During the observation, the researcher did not note any discipline problems.

One of the most notable characteristics of School D was the vocational director. He was very interested in this study and even took time to talk to the researcher about his thoughts on the program and vocational education in general. Both the students and faculty commented on the involvement of the director in the program. Instructor D uses high expectations as a classroom management tool. "I try to make them feel that they are a select group of students." She emphasizes her expectations often.

#### Classroom Routines

In all four schools, teachers reported that they followed no particular routine in their classes. Instructor A said that there was no typical week. Her reasoning was that she tried to vary activities from week to week to keep it interesting to her students. During the classroom observations, the researcher observed that students did not appear to know a particular routine, but when instruction began, they came to order and quickly became on task. The student focus group for School A revealed a variety of different types of activities throughout the 2-year program. The students felt that the class was fun because the instructor planned so many different types of activities for them. They did not have a daily routine.

Instructor B also mentioned that there was no particular routine that she followed. Her lessons are different, and she does not even use the sample lesson plans from year to year. She tries to "get them out of their comfort zone" by changing up what they do from day to day and lesson to lesson. During the classroom observation the researcher observed a format to the lesson but did not see a routine from one class to the other. During the focus group session for School B, the students confirmed the teacher's statement that there was no typical week in their classroom, and that the instruction varies.

Instructor C said that he does use a bell ringer as a tool for preparing for the C-PAS test. His routine is limited in that he tests at the end of each unit and offers mostly hands-on instruction. As far as a week-to-week or day-to-day routine, there is none.

During the classroom observation the researcher observed no particular routines other than spending the first half of the class period in the classroom and the second half in the workshop. During the focus group session for School C, the students simply stated that

their program is different because they have more freedom than in other classes. They feel that because they have different activities and the class is not the same very day the class is more fun.

Instructor D uses a bell ringer each day and moves into her lesson from there.

Other than that, she says that she tries not to create routines. During the classroom observation, the researcher observed no consistent routine from class to class, other than the bell ringer. The instructor lectured at different times and the students worked on their own at different times. The focus group for School D revealed the students' perceptions that the instructor changed methods of instruction according to the unit they were studying, and that assessments are given at different times and on different days. They did not feel there was a particular routine in their class.

#### Recruitment

All four programs chosen for this study have similar recruitment programs. They all provide a tour of the center for students to introduce them to the programs offered by the vocational center. In addition, word of mouth was an important recruiting tool.

Former students, in all four cases, were one of the best recruiting tools.

School A arranges a tour of the vocational center for eighth and ninth grade students. In addition, the instructor allows her students to talk to the students who are touring the center to tell them why they should take the class. The students said that they heard about the program from other students. They also said they would recommend the class to others.

Instructor B said that her school's recruitment program is one of the reasons her program is so successful. During the tour of her vocational center, the students listen to

each vocational teacher tell about their program. In addition, she brings some of her students to talk about their DECA program, whose competition and many trips have become a recruitment tool.

School C arranges a tour of the vocational center for the ninth graders at the high school they service. Since they are on campus with the high school, this is relatively easy to accomplish. In addition, many of t5he students decide to take the program on the recommendation of their peers.

Guided tours are also provided at School D for the ninth grade high school students. In addition, the FBLA club, the student organization for the Business and Computer Technology classes, helps with recruitment. One example is that they sponsor Saturday workshops for elementary students.

# C-PAS Preparation

None of the teachers who participated in this study put a great deal of emphasis on the C-PAS test in their classroom. They all emphasized the importance of sticking to the curriculum, with reviews before the test.

# Teach Curriculum

Instructor A said that she hopes she prepares her students for the C-PAS test by teaching the curriculum. She teaches the state objectives over the 2 years, and before the C-PAS test she returns the chapter tests to the students for them to study. She said that she tries to downplay the test. She feels that if her students have not learned what they need to learn during 2 years in her class then they should not do well on the test. She does not want false numbers, but she wants to know if she is doing her job well. The students who participated in the focus group felt very prepared for the test. They confirmed the

statement from their instructor that the lessons prepared them for the test because each lesson built on the one before, content was covered over and over so they did not forget anything, and when they took the test they just knew the answers.

Instructor B focuses on covering the curriculum also. She says that she has never actually seen a C-PAS test, except for the ones sent to all of the schools by the State Department of Education several years ago. She works sample questions into the students' chapter and 9-weeks tests. She also has a game called Marketing Madness that the students play for practice. The students' answers during the focus group session confirmed Instructor B's statements. All of the students felt prepared for the C-PAS test. They said it was because each unit built on the knowledge they gained from the previous one. They also said they enjoyed playing Marketing Madness for practice.

Instructor C uses the bell ringer for his class to give students practice C-PAS test questions. He does not try to emphasize the C-PAS test, however, He feels that his lessons build on each other throughout the 2 years in such a way that students do not get a chance to forget what they have learned. Through application, they are always reviewing. He gives a review several weeks before the test as well. Students take practice tests and they go over the questions they miss. This gives him an idea of what he needs to review.

Instructor D also gives sample test questions as bell ringers. She will occasionally give short five-question oral quizzes on the subjects they are covering to help gauge whether or not the students have mattered the material. She feels that the primary way to be successful on the C-PAS test is to teach the curriculum. "I have been on the committee that writes the C-PAS curriculum and I tell teachers, do not teach out of that box!" In

addition, she gives her students a study guide and games that she has created on the Internet for practice.

# Review Before Test

All four programs offer some type of review before the test. For Schools A and D, the instructor gives the students their chapter tests back to study. Schools A, B, and D play games with practice questions and are given a review packet. For School C, the students take practice tests and are given a study guide.

# Classroom Environment

It became evident to the researcher that the classroom environments for these four programs were quite similar. All four programs were sometimes loud and bustling with activity, but students were always on task. Students felt free to voice their opinion or ask questions at any time, and teachers reinforced the feeling of security by acknowledging the students and showing them respect when they were speaking. Likewise, the students reflected that respect shown to them by respecting the teacher.

#### Classroom Interaction

The researcher observed a great deal of activity in the classroom at School A, but noted that students remained actively engaged in their assigned activities. Instructor A uses group activities to help her lower performing students. She sometimes groups the lower performing students together because she feels that they build on each other's strengths. Other times she groups lower performing students with higher performing students in order for them to receive additional help.

The activity in the classroom at School B was similar to that of School A.

Students, though quite active, remained on task. The instructor moved from group to

group to keep students on task and answer questions. Instructor B integrates technology and hands-on activities as much as possible into her lessons.

Instructor C's class was more structured than the other classes. The students were involved into the lesson at every point, from lecture to shop activity. Students were open to ask questions and make comments at any time. Answers to their questions were structured to direct students to the correct conclusion rather than deliver the conclusion.

Like the other teachers in this study, Instructor D has an open and interactive classroom. Students are involved in classroom activities and lectures. Students are free to ask questions and make comments at any time.

# Layout

Schools A, B, and C have separate lecture and lab facilities. School D has a classroom that connects to a separate lecture hall/computer lab. All four programs have an open and interactive classroom environment.

# Implications for Action

The findings for this study suggest the following implications for action:

- 1. Teachers of secondary vocational programs use guided or leading questions to provoke independent thought and involve students in the lessons.
- 2. Teachers of secondary vocational programs differentiate their instruction and change activities often in order to keep students engaged in the lesson and reach students with different learning styles.
- 3. Teachers of secondary vocational programs are enthusiastic about their jobs and that enthusiasm and excitement are obvious to the students, and they, in turn, may become excited about the class as well.

- 4. Teachers of secondary vocational programs show students that they care about their success and communicate high expectations of such.
- 5. Teachers of secondary vocational programs are involved with their students, not only through class work but also through student organizations and afterschool activities.
- 6. Teachers and directors of secondary vocational programs celebrate their students' success.
- 7. Teachers of secondary vocational programs have fun teaching and choose interactive and hands-on activities.
- 8. Students who are actively engaged from the beginning of the class present few disciplinary problems.
  - 9. Secondary vocational students respond well to being treated with respect.
  - 10. Routines do not necessarily work well in a secondary vocational program.
- 11. Recruitment is an important part of the role of a vocational center in creating a quality vocational program.
- 12. If a student does well in a program and enjoys that program, he or she will tell other students about the program and this becomes an effective recruiting tool.
  - 13. The best preparation for the C-PAS test is to teach the curriculum.
- 14. An open and interactive classroom environment is a characteristic of good vocational programs.

# Recommendations for Further Study

This study is an introduction to quality vocational programs. Further research would expand the knowledge and replication ability of the factors identified in this study.

The data analyze and literature reviewed in this study create the groundwork for the following recommendations for further study:

- 1. That this study is replicated with other vocational training areas and in other states to see if results are similar.
- 2. That the number of students taking the test at each school be used as a factor to identify the schools chosen to participate in the study.
- 3. That further study is conducted to identify factors that motivate students to achieve in secondary vocational programs.
- 4. That further study is conducted on the impact of teacher attitudes and enthusiasm on student success.
- 5. That further study is conducted on the impact of the student-teacher relationship on student success.

# Reflections and Conclusions

Secondary vocational education programs fill a void in today's educational system. For students both college bound and not, it offers a chance to learn a trade that will be useful no matter what their chosen career path. This nation's accountability system focuses on academic programs rather than vocational. There is no clear outline as to what a quality vocational program should look like. This study begins to look at quality vocational programs and identifies specific characteristics of their teachers and environments.

Chapter V presented the findings, conclusions, implications, and recommendations of this study. It was determined that the chief contributing factor to the success of secondary vocational programs lies with the teacher of that program. There is a

need to create specialized training programs to equip vocational educators with the skills necessary to teach more effectively. This study has outlined specific identifiable skills, some teachable and some not, that are reflections of the teachers of successful vocational programs of four separate disciplines. While this study addressed vocational education specifically, the findings of the study may be applicable to any educational class or program. Additional study is warranted to expand on the knowledge gained from this study.

#### APPENDIX A

# LETTER TO DIRECTORS

P.O. Box 2243 Pascagoula, MS 39569 January 26, 2008

Dear Sir or Madam:

I am a doctoral student in the department of Educational Leadership and Research at the University of Southern Mississippi. I am conducting research for my dissertation. The object of my dissertation is to identify factors that impact the success of certain Secondary vocational education programs. After analyzing C-PAS test scores over a two-year period to identify the highest performing vocational program in five occupational training areas. Your (name of program here) program was identified as one of these programs. As part of my efforts, I will be conducting focus groups made up of students enrolled in the highest performing vocational programs in the state of Mississippi. By asking these students questions about the programs in which they are enrolled, I will gain a unique perspective from that of any other source. In turn, I will be better able to identify the factors that make these vocational programs successful. This focus group will consist of one session of approximately 45 minutes in duration. There will be eight students in each focus group. I will need to obtain parental consent for their participation. The consent form that will be sent out to parents is attached to this letter.

The second step in the research process will be to conduct structured interviews of the instructors of these programs to identify factors from his/her perspective that impact the success of their program. Questions that will be asked will revolve around teaching methods, environmental factors, and any other questions of interest that come up during the focus groups.

This is where I need your help. I would like consent to include your students and instructor from the (name of program here) program in my study. I will not require any personal information of any of the participants for the purposes of my study. I do not anticipate any risks to your employees or students as a result of their participation in this study. After the questioning is complete, I would be happy to share my findings with you, parents, and teachers at your school.

Please sign and return this form as soon as possible if you agree to participate in this research. If you have questions, please call me at 228-217-6037, or e-mail me at elparker@bellsouth.net.

Name (print):	
Approval (signature):	
Consent Date:	
Thank You	

#### APPENDIX B

# AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

Erin Parker Graduate Student University of Southern Mississippi

# THE UNIVERSITY OF SOUTHERN MISSISSIPPI CONSENT FORM (LONG FORM)

AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

Consent is hereby given to participate in the study titled:

Factors that Impact Success in Secondary Educational Programs in the State of Mississippi

- 1. Purpose: The purpose of this study is to determine why five vocational programs in the State of Mississippi are more successful than all of the other programs. Using C-PAS test scores for the occupational training areas of Welding, Carpentry/Building Trades, Business and Computer Technology, Marketing Management Technology, and Allied Health, I hope to ascertain which programs across the state have the highest average test scores over the last two years. By conducting a focus group of second-year students enrolled in these five individual programs across the state, and using their answers to create and conduct a structured interview of the instructor of the respective programs, I will be able to identify factors that impact the success of these programs.
- 2. Description of Study: There will be 5 vocational centers involved in the study. Focus groups of 8 students enrolled in these programs will be conducted. These students will be 10<sup>th</sup> 12<sup>th</sup> graders, ranging in age from 15-18. The first 8 students who have confirmed consent will be chosen from each school. The instructor of each program will be interviewed. In addition, three class sessions will be video taped (no students will be shown on the tapes) from each of the 5 programs involved in the study. Field notes will be taken from each of the class sessions, and compared to the data from the other sources.
- 3. Benefits: The benefits to the participant of this study include a sense of pride in the program in which the student is involved, as well as in his/herself having been a part of one of the highest performing programs in the state. In addition, the need for quality vocational programming is evident. This proposed study could present a starting point for vocational instructors to use in order to structure their programs for improvement. Furthermore, this study is intended to provoke further study in this area, in order to identify methods for improvement in vocational education.

- 4. **Risks:** There are no known risks to the participants of this study.
- 5. Confidentiality: No names will be included in this study. Programs will be known by occupational training area alone. Participants will be known as just that, and not by name, gender, or ethnicity. All data collected will be transcribed and used for the purpose of this study alone. All answers to the questions will be held in strict confidence and used only in the analysis of this research study.
- 6. Alternative Procedures: All second year students enrolled in the five identified occupational programs will be invited to participate, however, only the first 8 students with confirmed consent will participate in the focus group. As a result, not all students in the programs will be asked to participate.
- 7. Participant's Assurance: Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to researcher(s) name(s) at telephone number(s). This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820. A copy of this form will be given to the participant.
- 8. **Signatures:** In conformance with the federal guidelines, the signature of the participant or parent or guardian must appear on all written consent documents. The University also requires that the date and the signature of the person explaining the study to the subject appear on the consent form

Signature of the Research Participant	Date	
Signature of the Person Explaining the Study	Date	

In instances where the participant is a minor (under the age of eighteen years), a signature line for the minor's assent and a signature line for the parents/guardians' consent is required:

ignature of the Minor Research Participant		Date	
Signature of Parent/Guardian		Date	
Participant's Initials			

# APPENDIX C

# GUIDING QUESTIONS FOR STUDENT FOCUS GROUPS

- 1. Tell me about your program.
- 2. Describe your experiences in the vocational program that you are enrolled in.
- 3. How and Why did you choose this particular program in which to participate?
- 4. What specific factors (environmental, instructional, logistical, etc.) do you feel have been most influential in the success of this program and why?
- 5. Do you plan to pursue a career in this type of work?
- 6. How did your training impact this decision?
- 7. Do you feel that you have been prepared to have a career in this field? If so, why?
- 8. What further preparation will you need to have a career in this type of work?
- 9. Did you feel prepared for the C-PAS test in this class?
- 10. What questions do you remember that you did not know the answer to?
- 11. Discuss some specific class activities that stand out in your mind from this course.
- 12. What have you learned from this course?
- 13. What one factor do you perceive has the greatest impact on the success of your program?

# APPENDIX D

# INTERVIEW TARGETED QUESTIONS

- 1. Describe a typical week in your classroom.
- 2. What routines do you regularly practice in your classes?
- 3. What is important about the classroom environment in which you teach?
- 4. Why do you think your program is successful?
- 5. How do you prepare your students for the C-PAS test?
- 6. What important features of your vocational center impact the success of your program?
- 7. What one factor do you perceive has the largest impact on the success of your program?
- 8. Describe the recruitment programs used by your vocational center?

Additional questions will be formed after the focus groups are conducted, using the student's answers as a guide in order to increase the validity through triangulation of data.

# APPENDIX E

# INSTITUTIONAL REVIEW BOARD APPROVAL



# THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147 Hattiesburg, MS 39406-0001 Tel: 601,266.6820

Fax: 601.266.5509 www.usm.edu/irb

# HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects
  must be reported immediately, but not later than 10 days following the event. This should
  be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
   Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 28021102

PROJECT TITLE: Factors That Impact Success in Secondary Vocational Education

Programs in the State of Mississippi

PROPOSED PROJECT DATES: 05/21/08 to 05/21/08

PROJECT TYPE: Dissertation or Thesis
PRINCIPAL INVESTIGATORS: Erin L. Parker

COLLEGE/DIVISION: College of Education & Psycholgoy DEPARTMENT: Educational Leadership & Research

FUNDING AGENCY: N/A

HSPRC COMMITTEE ACTION: Expedited Review Approval

PERIOD OF APPROVAL: 03/24/08 to 03/23/09

Lawrence A. Hosman, Ph.D.

Date

Date

HSPRC Chair.

# APPENDIX F

# OBSERVATION CHECKLIST

Revised January 2006

#### Critical Indicators Observation Checklist

Tea	acher Name:	Date:			Observer:	
Scl	nool Name:	Start 7	Time:		End Time:	
Gra	ade & Content Area:	Codes			I = Improvement Needed (above	50%)
Cla	ss Size:		vanced/Me	entor (100%)	U = Unacceptable (below 50%)	,
Cla	ssroom Activity:	P = Pro	ficient (ab	ove 75%)	N = Not Observed	
		n de la	Code	Commen	ts/Suggestions	
1.1.		200 200 200 200	100000000000000000000000000000000000000	-		<u> </u>
	and verbal).			ì		
1.2.			<b> </b>			
1	source for planning and instruction.		1			
1.3.	Teachers know the state assessment emphasis of lesson					
1.4.	Plans are comprehensive.	·	<del> </del>	<del> </del>		
1.5.	All attachments are included.		ļ —			
1.6.	Evidence of careful/thoughtful planning is exhibited.		<b></b>			
1.7.	Plans are available for review by observer and teacher.			<del> </del>		
1.8.	Lesson plans are implemented as written or revised			<del> </del>		
1.0.			[			
1-	appropriately with just cause provided.					
1.9.	IEPs for students with disabilities are a source for planning	g and		1		
520 (500)	instruction.	00986621	This delicate of the	2002		ESTRET PROFILE
11.		25,641		100		
11.1.	Students are on-task.					
11.2.						
11.3.	,,	- 1	ı	1		
	achievement.					
11.4.	Student input is solicited and respected.					
11.5.	An effective system is in place to manage classroom disci	pline.				
11.6.	High expectations are evident.					
11.7.	Procedures for managing daily routines are in place and					
	effective.					
11.8.	Instructional time is protected.		***************************************			
: III. *	Delivery of Instruction		d to			
111.1.	Learning is appropriately introduced.					
111.2.	Learning is given appropriate closure.				, j	
111.3.	Instructional strategy connects learning to students for					
	relevancy.	- [				
111.4.	Teacher utilizes differentiated instruction to reach all learned	ers.				
111.5.	There is sufficient time given to the topic.					
111.6.	Activities and strategies exhibit varied levels of complexity.					
	Activities exhibit best practice strategies, which include					
	engaging, learner-involved, hands-on activities.	ļ				
111.8.	Student-teacher interaction is positive and appropriate.					
111.9.	Teacher checks for understanding & adjusts based on stud	dent				
	needs.	1	l			
III.10	. Effective questioning techniques are utilized.					
	Students with disabilities are receiving appropriate					
	accommodations.		}			
iV.	Assessment					
DESCRIPTION OF THE PROPERTY OF	Assessment is tied to state testing objectives.		CONTRACTOR OF STREET			
	Assessment is appropriate for the expected outcome.					
	Assessment mirrors the complexity and format of state test	s.				
	Sample test items are used appropriately.					
	Assessment is utilized for further planning.				<u></u>	

□ Comprehensive

Commendations: Actions to be Taken: Time Line:

☐ Brief

**Teacher Conference:** 

Signatures:

#### Directions for CODE on Observation Checklist:

The observer is to assign a score as follows:

A: Advanced
P: Proficient

I: Improvement Needed U: Unacceptable

N: Not Observed

ALL (100%) of the descriptors are OBSERVED appropriately during the observation.

MANY (at least 75%) of the descriptors are OBSERVED appropriately during the observation.

SOME (at least 50%) of the descriptors are OBSERVED appropriately during the observation.

FEW if ANY (less than 50%) of the descriptors are OBSERVED appropriately during the observation.

The observer did not have an opportunity to see the indicator or was not present at the time the activity was implemented. For example, if the observation occurs at the end of class, the introduction (III-1) would be "not observed."

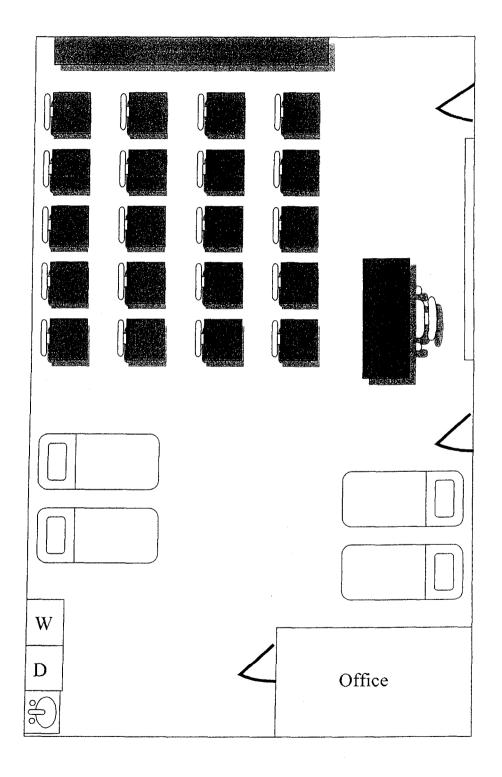
in	dicator	Descriptors
1.	Planning	
1.1.	State testing objectives being taught are evident (written and verbal).	Objectives are  • written in lesson plans,  • written on the board,  • verbalized to students,  • verbalized BY students, and  • evident in the lesson presented.
1.2.	Assessment standards are the primary source for planning of instruction.	Assessment standards include MCT/SATP Blueprints, Course of Study and ARMT standards, and GLE/CCF/Benchmark standards.     Multiple resources are used to plan.     State content and assessment standards are used as the primary source of planning.     State content and assessment standards are readily available in the classroom.
1.3.	Teacher knows state assessment emphasis of lesson.	This indicator builds upon P-1. A teacher cannot make higher on P-3 than the score for P-1. Knowing emphasis includes integrating assessment connections into the classroom by using sample test items to make the level of difficulty clear for students and by using rubrics and other assessment tools throughout the lesson.
1.4.	Plans are comprehensive.	The lesson plan is comprehensive if it includes all sections of the JBHM-recommended lesson plan: assessment, materials, instructional strategies, set (model, guided practice independent practice, intervention strategies for any students that don't "get it", enrichment activities for those students that "get it", closure, and homework), and interdisciplinary items included.
1.5.	All attachments are included.	Attachments must include summative and formative assessments (to be evaluated for level of difficulty).
1.6.	Evidence of careful/thoughtful planning is exhibited.	<ul> <li>This indicator builds upon P-4.</li> <li>Handouts are readily available; smooth transitions between activities leave no downtime.</li> <li>Effective strategies listed in the plan address the skills to be taught.</li> <li>Procedures describe actions for the teacher. You should read the plan and KNOW what the teacher and students will do – you should be able to visualize the class after reading the plan.</li> <li>The plan includes best practices terminology.</li> </ul>
1.7.	Plans are available for review by observer and teacher.	Yes or No question.
1.8.	Lesson plans are implemented as written or revised appropriately with just cause provided.	Yes or No question.  "revised appropriately with just cause" includes documenting the reason that instructional plans have changed, such as —  Interruption in teaching through no fault of the teacher (e.g., fire drill, bad weather, absences by teacher or large number of students due to illness, emergency)  Having to reteach based on assessment results
1.9.	IEPs for students with disabilities are a source for planning and instruction.	Teacher has a copy of IEP. Lesson plan reflects appropriate accommodations/modifications as specified in IEP.

Indicator	Descriptors
11. Classroom Managemo	ent (a)
II.1. Students are on-task.	On-task is defined as "following instructions."  Proficient if  90% of students are on-task for the period of the observation.  Any off-task behavior is immediately redirected, and  Students enter the classroom and begin work immediately.
II.2. Students are engaged.	<ul> <li>For engagement, the quality of the engagement is a key indicator.</li> <li>Proficient if</li> <li>90% of students are "doing" and are excited about learning, working for a purpose, and responding appropriately.</li> <li>Includes active, INTERACTIVE participation</li> <li>During lecture/discussion, eye contact and interest are evident</li> <li>Students are internalizing information, as evidenced by student questions/comments.</li> </ul>
II.3. The learning environment is supportive of student achievement.	<ul> <li>Learning is focused on standards.</li> <li>The classroom is organized for free traffic flow.</li> <li>Student work and appropriate learning tools are displayed.</li> <li>Bulletin boards are current to the topics of discussion.</li> <li>Teacher uses wait time and positive interactions, including praise and motivation.</li> <li>There is a sense of classroom community.</li> </ul>
II.4. Student input is solicited and respected.	Teacher uses effective questioning techniques, asking for input of ALL students often.     ✓ Teacher uses wait time and positive interactions, including praise and motivation.
II.5. An effective system is in place to manage classroom discipline.	Rules and Consequences are reasonable and prudent. Rules and Consequences are posted in the classroom Consequences are consistently applied Any off-task behavior is addressed immediately and appropriately to effectively re-engage students in learning. System includes learning-based incentives for positive behavior. Teacher offers positive comments on appropriate behavior. Positive behavior plans are in place for students with disabilities who present significant behavior challenges.
II.6. High expectations are evident.	<ul> <li>Includes all of C-1 through C-5.</li> <li>All students participate.</li> <li>Teacher believes and exemplifies that ALL children can learn AT HIGH LEVELS by –</li></ul>
II.7. Procedures for managing daily routines are in place and effective.	No "down time" – No obvious gaps between activities. Students obviously know what to do when and do so automatically. Procedures are in place for EVERY routine classroom activity.
II.8. Instructional time is protected.	<ul> <li>Instruction is focused on standards-based activities.</li> <li>Classroom interruptions are managed with minimal time lost.</li> <li>Transitions are smooth and efficient</li> <li>Teaching lasts from "bell to bell."</li> <li>Reminder to Observer: Note interruptions that are not under the control of the teacher, e.g., needless all-call intercom interruptions?</li> </ul>

Indicator	Descriptors
III. Delivery of Instruction	
III.1. Learning is appropriately introduced.	The hook, bell-ringer, and connections are made. The bell-ringer applies to the lesson of the day. The introductory activities capture the students' attention and motivate learning. The purpose and importance of topics and learning are communicated clearly to students. Stating "This is importantget it in your notes" is not sufficient for this indicator.
III.2. Learning is given appropriate closure.	<ul> <li>Learning is made relevant by appropriate closure activity which exhibits a sense of reflective closure to a topic or the day with connections to future learning.</li> <li>Students should understand link between past, present, and future activities and/or content.</li> <li>Closure does not have to be only in the final few minutes of a lesson, but may be appropriate as activities and/or topics within a lesson are concluded.</li> <li>It may include a summary, review, recapitulation, or indication of how content is to be applied to future learning tasks.</li> <li>Teacher should provide sufficient time for closure to enhance student learning and to allow for reflection of learning.</li> <li>Effective closure is always content and/or activities focused.</li> </ul>
III.3. Instructional strategy connects learning to students for relevancy.	Gives the students PURPOSE for the lesson; answers "Why do I need to know this?"  Occurs throughout the lesson and is reiterated in the closure  Activates prior knowledge and future application  Connects to the state standards  Includes through provoking questions and/or requests for student input from the teacher
III.4. Teacher utilizes differentiated instruction to reach all learners.	<ul> <li>"One size does not fit all."</li> <li>Instructional approaches reach a variety of learner types.</li> <li>Strategies vary for purpose, product, and/or process.</li> <li>Learning objectives are planned to accommodate differences among students (by styles, interest, response preference, and physical capabilities).</li> </ul>
III.5. There is sufficient time given to the topic.	Plan time allows for introduction and closure activities. Pacing allows for necessary reteaching and adjustments, if needed. Time spent on an objective is appropriate to the level of difficulty – allowing adequate time to cover the topic.
III.6. Activities and strategies exhibit varied levels of complexity.	All levels of Bloom's Taxonomy are addressed.     Multiple steps, with varied levels of difficulty are required to solve problems.
III.7. Activities exhibit best practice strategies, which include engaging, learner-involved, hands-on activities	<ul> <li>Classroom instruction includes strategic activities that are</li> <li>✓ Engaging,</li> <li>✓ Hands-on,</li> <li>✓ Student-centered,</li> <li>✓ Research-based, and</li> <li>✓ Tied to state standards.</li> </ul>
III.8. Student-teacher interaction is positive and appropriate.	<ul> <li>Positive words are used.</li> <li>Incorrect responses are clarified without judgmental language. Note: Clarification is MANDATORY after confusion or incorrect answers occur. "Perfect practice makes perfect."</li> <li>Teacher encourages student "risk-taking."</li> <li>Feedback should be effective:         <ul> <li>Specific for the student/group</li> <li>Specific for the current topic/task</li> <li>State if the answer given is correct or incorrect</li> <li>Broaden the understanding of the learners</li> <li>Balance between adequate and inadequate responses (Not dwelling on either the bad or the good).</li> </ul> </li> </ul>
III.9. Teacher checks for understanding and adjusts based on student needs.	<ul> <li>Teacher uses assessment results to make instructional decisions.</li> <li>Teacher measures student progress regularly.</li> <li>Teacher provides feedback. See "Feedback should be effective" above.</li> </ul>

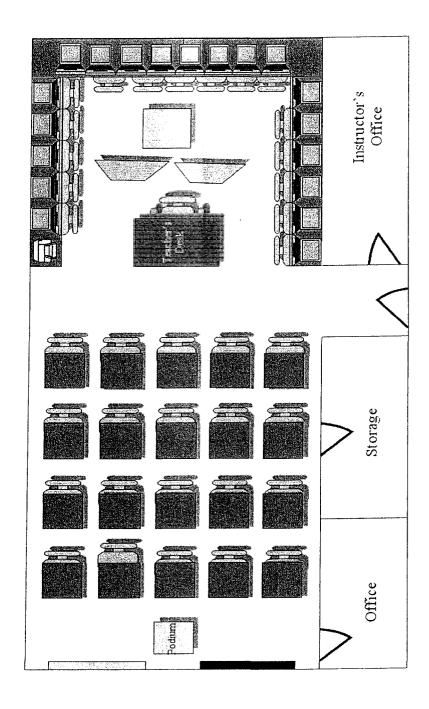
Indicator	Descriptors
III.10.Effective questioning techniques are utilized.	Effective questioning techniques include – Randomly calling on students  '"Ask, Pause, Call" (Wait time usually 5—8 seconds)  Probing of incorrect answers  Question formats aligned to standards and assessment instruments  Bloom's Taxonomy  ALL students reached with HOTS  See "Feedback should be effective" above.
III.11. Students with disabilities are receiving appropriate accommodations.	Individually provided as indicated in IEP     Addresses student's readiness, interest, and learning profile     Focuses on high expectations
IV. Assessment.	
IV.1. Assessment is tied to state testing objectives.	<ul> <li>Includes both formal and informal assessments, written and verbal, formative and summative.</li> <li>Assessment items are labels with the appropriate state content standards (i.e. benchmarks, GLEs, etc.)</li> </ul>
IV.2. Assessment is appropriate for expected outcome.	Assessment style provides information on what the students have learned – the outcome is CLEARLY connected.     Students provide evidence that they have met and/or exceeded the standard.     Outcomes are referenced to what has been taught.     Assessment requires application of knowledge rather than rote recall.
IV.3. Assessment mirrors complexity and format of state tests.	Meets level of difficulty     Mirrors sample test times     Format goes beyond simply being multiple-choice.     Includes multiple learning objectives in same assessment.
IV.4. Sample test items are used appropriately.	<ul> <li>Sample Test items are used –</li> <li>To build classroom assessments.</li> <li>As diagnostic tools</li> <li>Throughout the lesson to make connections between what students are learning and how that learning will be assessed</li> <li>In planning to determine instructional strategies to reach the appropriate level of difficulty.</li> </ul>
IV.5. Assessment is utilized for further planning.	<ul> <li>Provides evidence of mastery (work folders/samples).</li> <li>Data is used for whole-group, small-group, and individual instruction.</li> <li>Progress monitoring is evident and documented.</li> <li>Adjusting is evident in planning (written on lesson plans).</li> <li>Students are identified individually for intervention, enrichment, and remediation.</li> </ul>
IV.6. Assessment for students with disabilities is consistent with the IEP.	<ul> <li>Assessment accommodations are routinely implemented.</li> <li>State assessment decision is indicated on the IEP.</li> </ul>

# APPENDIX G SCHOOL A FLOOR PLAN



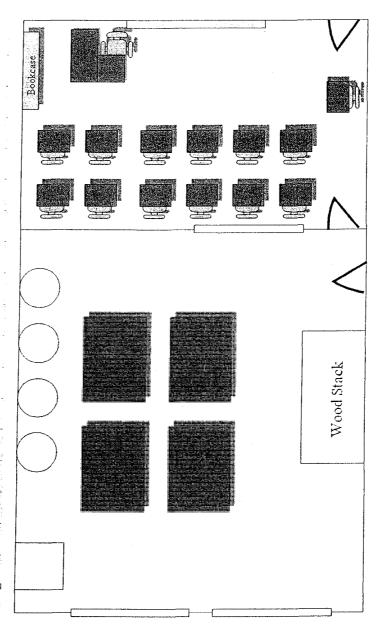
# APPENDIX H

# SCHOOL B FLOOR PLAN



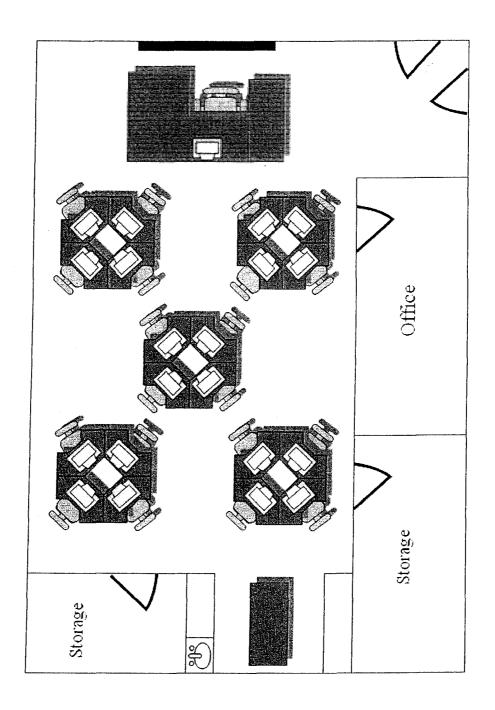
# APPENDIX I

# SCHOOL C FLOOR PLAN



j

APPENDIX J
SCHOOL D FLOOR PLAN



# REFERENCES

- Adler, L., Searls, P., Weigel, L., Hemsley, R., & Dick, J. (1996). The impact of a community based school-to-work program for high risk youth. *Research for Education in a Democratic Society* (AERA Vocational Education Special Interest Group No. 398 417). Washington, DC: American Educational Research Association.
- Amrein, A., & Berliner, D. (2002). High-stakes testing, uncertainty, and student learning.

  Education Policy Analysis Archives, 10(18). [On-line]. Available:

  http://epaa.asu.edu/epaa/v10n18/.
- Armstrong, T. (2000). *Multiple intelligences*. Retrieved July 19, 2006, from http://www.thomasarmstrong.com/multiple\_intelligences.htm.
- Association of Career and Technical Educators (ACTE). 2006-2007 ACTE award winners: Teacher of the year. Retrieved May 17, 2007, from http://www.acteonline.org/about/awards/winners06-07.cfm.
- Azzam, A. (2004). NCLB: Up close and personal. Association for Supervision and Curriculum, 62(2),
- Ball, K., & Lamb, S. (2001, March). School non-completers: Outcomes in vocational education and training. *Research to reality: Putting VET research to work*.
  Proceedings of the Australian Vocational Education and Training Research
  Association Conference, Adelaide, Australia. Retrieved August 13, 2007, from the ERIC database.
- Berliner, D. C., & Biddle, B. J. (1996). In defense of schools. *Vocational Education Journal*, 71(3), 36-38.

- Bragg, D. D. (2007). Teacher pipelines. *Community College Review*, 35(1), 10-29. Retrieved September 10, 2007, from the Ebscohost database.
- Brown, B. L. (1998). *Is vocational education working for high-risk populations? Myths and realities*. Retrieved June 27, 2006, from http://www.calpro-online.org/IERIC/docgen.asp?tbl=mr&ID=66
- Bush, G. W. (n.d.). *Transforming the federal role in education so that no child is left behind*. Retrieved August 18, 2008, from http://www.whitehouse.gov/news/reports/no-child-left-behind.html
- Camp, W. G. (2001). Formulating and evaluating theoretical framework for career and technical research. *Journal for Research in Vocational Education*, 26(1), 4-25.
- Carter, G. (2004). Is it good for the kids. *ASCD*. [On-line] Available: http://www.ascd.org/cms/index.cfm?TheViewID=2493
- Chenail, R. J. (1995). Presenting qualitative data. *The Qualitative Report*, 2(3). Retrieved November 29, 2007, from http://www.nova.edu/ssss/QR/QR2-3/presenting.html
- Claus, J. (1990). Opportunity for inequality in vocational education? A qualitative investigation. *Curriculum Inquiry*, 20(1), 7-39.
- Collias, K., Pajak, E., & Rigden, D. (2000). One cannot teach what one does not know:

  Training teachers in the United States who know their subjects and know how to teach their subjects. Retrieved September 11, 2007, from http://www.c-b-e.org/PDF/.OneCannotTeach.pdf
- Covington, M. V., & Mueller, K. J. (2001). Intrinsic versus extrinsic motivation: An approach/avoidance reformulation. *Educational Psychology Review*, 13(2), 157-176.

- Darling-Hammond, L., & Ball, D. L. (1997). Teaching for high standards: What policymakers need to know and be able to do. [Brochure]. Philadelphia, PA: CPRE Publications, National Education Goals Panel.
- Dronkers, J. (1993). The precarious balance between general and vocational education in the Netherlands. *European Journal of Education*, 28(2), 197-207.
- Dunn, R., & Dunn, K. (1972). *Practical approaches to individualizing instruction*. Upper Saddle River, NJ: Prentice Hall.
- Dunn, R., & Dunn, K. (1993). Teaching secondary students through their individual learning styles: Practical approaches for grades 7-12. Boston, MA: Allyn & Bacon.
- Dunn, R., Dunn, K., & Price, G. E. (1996). *Productivity Environmental Preference Survey*. Lawrence, KS: Price Systems.
- Emrick, S., Hirsch, E., & Berry, B. (2004). NCLB and teachers. ASCD Info Brief, 11(39),
- Ertl, H. (2000). The transition of vocational education and training in Eastern Germany:

  Notes on the role of European Union programs. *Comparative Education Review*,

  44(4), 464-492.
- Finn, C. E. (2003, March 30). 5 myths about No Child Left Behind: Myths about the education law everyone loves to hate. *Washington Post, p. B03*.
- Fitch, K. (1994). Criteria for evidence in qualitative research. Western Journal of Communication, 58(1), 32-38.
- Greenhalgh, T. (1997). Papers that go beyond numbers. *British Medical Journal*, 315(7110), 740-743.

- Grubb, W. N. (1995). Evaluating job training programs in the United States: Evidence and explanations. Berkeley, CA: National Center for Research in Vocational Education. (ERIC Document Reproduction Service No. ED 389899)
- Hull, D. (2005). *Career pathways: Education with a purpose*. Waco, TX: Center for Occupational Research and Development.
- Husain, D. D. (1999). Good news on the horizon. Techniques, 74(3), 14-17.
- Kearsley, G. (2006a). *Cognitive flexibility theory*. Retrieved June 15, 2006, from http://tip.psychology.org/spiro.html
- Kearsley, G. (2006b). *Constructivist theory*. Retrieved June 15, 2006, from http://tip.psychology.org/bruner.html
- Kohn, A. (1999). Tests that cheat students. *The New York Times, Op-Ed* [On-line]. Available: http://www.alfickohn.org/teaching/ttcs.htm.
- Kohn, A. (2004). Test today, privatize tomorrow: Using accountability to "reform" public schools to death. Phi Delta Kappan., (April) [On-line]. Available: http://www.alfiekohn.org/teaching/testtoday.htm
- Lasley, Siedentop, & Yinger. (2006). A systemic approach to enhancing teacher quality.

  \*\*Journal of Teacher Education, 5791), 13-21.
- Lewis, T. (1998). Vocational education as general education. *Curriculum Inquiry*, 28(3), 283-309.
- Linn, R. (1998). Assessment and accountability. Educational Researcher, 29(2), 4-14.
- Linton, J. (2006). United States Department of Education update. *Journal of Correctional Education*, 57(4), 271-273. Retrieved August 13, 2007, from the Ebscohost database.

- Lovelace, M. K. (2005). Metanalysis of experimental research based on the Dunn and Dunn model. *Journal for Educational Research*, 98(3), 176-183.
- Luborsky, M., & Rubinstein, R. (1995). Sampling in qualitative research. *Research on Aging*, 17(1), 89-114.
- Marriam, S. B. (1998). *Qualitative research and case study applications in education*.

  San Francisco: Jossey-Bass.
- McColskey, M., & McMunn, N. (2000, October). Strategies for dealing with high-stakes state tests. *Phi Delta Kappan*, pp. 115-120.
- Neuman, L., & Wiegand, B. (2000). *Criminal justice research methods*. Boston: Allyn & Bacon.
- Nixon, L., Gregson, M., & Spedding, T. (2007). Pedagogy and the intuitive appeal of learning styles in post-compulsory education in England. *Journal of Vocational Education and Training*, 59(1), 39-51.
- One Hundred Fifth Congress of the United States of America. (1998). Amendment to the Carl P. Perkins Vocational and Applied Technology Education Act (LOC No. H.R. 1853). Washington, DC: U.S. Government Printing Office.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2<sup>nd</sup> ed.). Newbury Park, CA: Sage.
- Sanders, W. L., & Rivers, J. C. (1996). Cumulative and residual effects of teachers on future student academic achievement. Research Progress Report. Knoxville, TN:

  University of Tennessee Value-Added Research and Assessment Center.
- Sanderson, M. (1993). Recent trends in vocational education and training. *European Journal of Education*, 28(2), 189-196.

- Sands, R. G., & Roer-Strier, D. (2006). Using data triangulation of mother and daughter interviews to enhance research about families [Electronic version]. *Qualitative Social Work*, 5, 237-260. Retrieved from Sage Publications (10.1177/1473325006064260).
- Stasz, C., & Bodilly, S. (2004). Efforts to improve the quality of vocational education in secondary schools: Impact of federal and state policies. RAND Corporation:

  Prepared for the National Assessment of Vocational Education, U.S. Department of Education.
- The Secretary's Commission on Achieving Necessary Skills, U.S. Department of Labor. (1991). What work requires of schools (Item No. 0745). Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education. (2006a). Carl D. Perkins Career and Technical Education

  Act of 2006. Retrieved August 18, 2008, from

  http://www.ed.gov/policy/sectech/leg/perkins/index.html#intro
- U.S. Department of Education. (2006b). Fiscal year 2006 budget summary and background information. Retrieved May 3, 2008, from http://www.ed.gov/about/overview/budget/budget06/summary/06summary.pdf
- U.S. Department of Labor. (1995). What's working (and what's not): A summary of research on the economic impacts of employment and training programs.
  Washington, DC: Department of Labor. (ERIC Document Reproduction Service No. ED 379 445)
- Voc ed classrooms face severe teacher shortage. (2001). *Vocational Training Newsletter*, 32(7), 1, 3-4.

- Wereschagin, M. (2007, September 11). Pittsburgh study: Teachers key in affecting pupils' success. *Pittsburgh Tribune-Review*. Retrieved May 3, 2008, from http://www.pittsburghlive.com/x/tribune-review/pittsburgh/print 526792.html
- Woloszyk. C. (1996). *Models for at risk youth: Final report* (ACVE Report). Kalamazoo, MI: Upjohn Institute for Employment Research. (ERIC Document Reproduction Service No. ED 404 477)
- Wonacott, M. E. (2000). *Benefits of vocational education*. Columbus, OH: ERIC

  Clearinghouse on Adult, Career, and Vocational Education. (ERIC Document

  Reproduction Service No. ED441179)
- Wonacott, M. E. (2002). The impact of work-based learning on students. Columbus, OH:

  ERIC Clearinghouse on Adult, Career, and Vocational Education. (ERIC

  Document Reproduction Service No. ED472603)
- Young, M. (1993). Bridging the academic and vocational divide: Two Nordic case studies. *European Journal of Education, 28*(2), 209-214.
- Zeng, K., & Le Tandre, G. (1998). Adolescent suicide and academic competition in East Asia. Comparative Education Review, 42(4), 513 (16p). Retrieved July 28, 2007, from the Ebscohost Database.