

AN INVESTIGATION OF THE EFFECTS OF OFFICE REFERRALS  
AND ABSENTEES ON THE GRADE POINT AVERAGE  
OF CAREER TECHNICAL STUDENTS

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Brindlea Wilson Griffin

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## VITA

Brindlea Wilson Griffin, daughter of Clyde Brindley Wilson, Jr. and Betty Harris Wilson was born on September 27, 1970 in Opelika, Alabama. She graduated from Auburn University with a Bachelor of Science degree in Family and Child Development in 1992. She taught Eighth Grade Home Economics in Phenix City, Alabama for one year before moving to Columbus, Georgia where she directed the 4-H program in Muscogee County with The University of Georgia Cooperative Extension Service for four years. She received her Masters Degree in Adult Education from Auburn University in 1999. In 1999 she obtained certification in Family and Consumer Sciences from the State of Alabama Department of Education. She began teaching Early Childhood Education with the Phenix City Public School system at Central High School. In 2000, she received a second Masters Degree in Educational Leadership. She taught Early Childhood Education for eight years, worked as an Assistant Principal Intern and 21<sup>st</sup> Century Grant Site Supervisor for one year. She entered Auburn University in August 2005. She transferred to Child Nutrition Program (CNP) Director with the Phenix City Public School system in July 2006. She is married to Donald L. Griffin and has one daughter, Lena.

DISSERTATION ABSTRACT  
AN INVESTIGATION OF THE EFFECTS OF OFFICE REFERRALS  
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OF CAREER TECHNICAL STUDENTS

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The purpose of this study was to determine the relationship between a career technical student's number of office referrals and number of absences effect on their overall grade point average and career technical grade point average. Investigating such relationships yields information that would be beneficial to career technical educators in providing tomorrow's workforce. By fostering and understanding these possible relationships between factors influencing students work performance, provides insight to educators and business and industry on tomorrow's worker. The overall outcome of

tomorrow's workforce comes from today's career technical student. The overall performance of each student carries over to the work ethic of our country.

The overall grade point average does not always reflect a skilled worker's ability. Career technical students are hands-on learners, therefore better scores in these courses is better job placement. Increased projects that incorporate core courses will better develop the overall knowledge of a career technical student in English, Math and Career Technical courses. This does not mean that a student cannot learn the material. It is their interest that results in lower achievement. No significant effects were found between gender, grade point average or demographic variables. Students with higher grade point averages had a higher employability rate.

## ACKNOWLEDGEMENTS

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This dissertation is dedicated to my daughter Lena, my mother Betty Harris Wilson and my deceased father, hence my namesake, Clyde Brindley Wilson, Jr. Without your love, support, encouragement, patience and guidance throughout my life this project, which was a dream, would not have become a reality.

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Style manual journal used: Publication Manual of the American Psychological Association, 5<sup>th</sup> Edition.

Computer software used: 1) SPSS 12.0.1--15.0, Windows Pro/Vista, 2) Microsoft Office Suite 2002/2003/2007, and 3) SurveyMonkey (<http://www.surveymonkey.com>).



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## CHAPTER I

### INTRODUCTION

In the 21<sup>st</sup> century, the demands for providing a traditional classroom education and the need for practical education attempted to mainstream career technical education. Career and technical education provided training and knowledge to develop skilled workers. Each Career Technical area specializes in a specific skill or task. For example, Welding, Cosmetology, Healthcare, Business and Finance, Family and Consumer Sciences, Masonry, and Culinary Arts each have specialized skills differing from the other. An attempt was made to enhance a student's marketability by combining their school schedule with not only Math, Science, and English, but Career Technical skills courses as well. Upon graduation, a student would have increased experience for job placement as well as curriculum based knowledge.

In the past, students have obtained either an Alabama High School diploma or Career Technical diploma. With these changes, a student could earn the Alabama High School diploma, Alabama Advanced High School diploma, Alabama Career Technical diploma or the Alabama Advanced diploma with Career Technical endorsement. The number of vocational education participants varies depending on the demand for trained workers (Alabama State Department of Education, 2005). During the 20<sup>th</sup> century, demands increased for an educated, prepared workforce. The public school systems have

grappled with providing the ways and means by which our students are educated (Alabama State Department of Education, 2005).

The Carl D. Perkins Vocational Education Act of 1984 brought the demand and need for vocational education to the forefront. Although there were students in career technical education, demands were still not being met for an educated America nor were they prepared for the workforce.

In 1984, the Carl D. Perkins Legislative Act was introduced ensuring federal funding for Career Technical education in the United States. This act was reauthorized in 2006 and is commonly referred to as the Perkins Act. The sole purpose of the Perkins Act was to provide funding for Career Technical education programs throughout the United States. The Perkins Act provides individuals with the academic and technical skills needed to succeed in knowledge and skills based economy (Perkins Act of 2006, 2006).

Career Technical education prepares students for careers and postsecondary education. Federal funding assists the State and local governments in funding Career Technical education. Career Technical education programs must remain current with the needs of business and industry. State and local funding provides Career Technical teachers, program improvements and support, whereas federal funding ensures that quality programs are offered.

Carl D. Perkins Career and Technical Education Act monies are allocated to school systems within the states that offer Career Technical Education courses. State and local officials delegate the amount of funding and resources based upon the amount of programs offered and the size of the school system. Perkins monies must be divided

between secondary and post-secondary education. Once states make their decision, schools with the most need, as well as the most disadvantaged students, are targeted.

In 2005, the House of Representatives approved an amendment streamlining the Carl D. Perkins Act of 1984. In 1990, the Carl D. Perkins Act was renamed the Carl D. Perkins Vocational and Applied Technology Act. Higher performance standards and equal access to all students was to be provided. The 1990 Act called for national attention to the need and commitment for a prepared workforce (Alabama State Department of Education, 2005). Business and Industry needed skilled workers upon high school graduation.

In 2005, amendments were passed that would further streamline the transition between two year and four year colleges. The Technical Prep program which trains secondary students in the postsecondary arena had been short funded (Pekow, 2005).

To extend Technical Prep funding and prevent shortages, federal legislation allowed combining the Perkins Act monies with the Technical Prep funding. Technical Prep grant money combined with Perkins Grant money allowed states more flexibility in meeting all schools specific needs. These monies were allocated to states based on need and were targeted for articulation. Articulation is the agreement between secondary and post secondary institutions whereas students have course work or skills credit that can be dually accepted. For example, a graduating senior with two years of Career Technical course work may enroll in a post secondary program and receive credit for the programs hours/ credits mastered in secondary education. This type of agreement ensures the student of post secondary enrollment and advanced placement upon high school graduation, as well as the post secondary institution receiving experienced and skilled

students. States receiving Technical Prep funding have advanced benefits over states who do not participate in Technical Prep.

The House of Representatives approved 2005 amendment aligns Technical Prep with the basic federal Perkins Grant. Combining these two programs would ensure that no state would lose their share of Technical Prep money. Programs receiving federal funding must maintain strict guidelines and accountability. Educating and preparing every high school student to the best of their individual ability for America's workforce attributes to accountability. This task is not easily achieved as today's student often carries many social dilemmas (Pekow, 2005). Developing strong programs, providing the latest equipment for students learning, providing career guidance and counseling, all contribute to program accountability and student success.

In Alabama, the Career Technical section of the Alabama State Department of Education devised its own Business and Industry (BIC) certification standards in 1998. The career technical state leaders developed an eight section Business and Industry certification process that all career technical educators must meet every five years. This rigorous process began in 1998 and continues on a rotating cycle every five years. This ensures accountability and alignment of state programs. The classroom textbooks and course of study may change during this time. The standards are rigorous and itemize each departmental area of career technical education. State and federal funds are provided to career technical education; therefore documentation is required to use these funds.

The Alabama Business and Industry certification process provides an avenue for accountability. In the past, states were required to provide annual reports and reports were divided by sections to collect data in specific areas. In 1998, the BIC process

provided further accountability for Alabama's career technical education programs. The annual reports and BIC process have both collected the same data. The BIC process guaranteed the Alabama career technical educator information as it was placed on a five year rotating cycle. To meet the BIC requirements and for certification purposes, career technical educators must compile two areas of information within their specific program areas.

The first information area regards enrollment. Career technical enrollment is the number of students enrolled in career technical courses. These numbers are tallied by career technical subject area and are collected each new school term. Information collected on the enrollment report is used to plan for class size, budget for the fiscal year, plan for textbooks and supplies, and determine classroom allocations from federal funds programs. If a school offers courses each semester, then semester enrollments are calculated by that department (Pekow, 2005).

The second information area refers to the number of career technical course completers. Completers in each program area are calculated the semester after the school year ends. The completer information is collected to determine how many students have not only taken a particular course, but also completed the required service hours and credit for that course. Business and industry certification requires this information to be tallied per year and held on file for three consecutive years (Pekow, 2005).

The enrollment and follow-up reports can be used as indicators for future course offerings, data predictions on our workforce and future patterns of workforce demands. These data findings not only assist educators in planning for course offerings but knowing what trends and needs are in the workforce.



Another section of the BIC process is collaborating with area business and industry providers. These partners are crucial in providing the career technical educator with knowledge of workforce needs. These factors assist the educator with information crucial to a student's ability to learn, knowledge to use their skills and the ability to enter the workforce and succeed. Not only do career technical educators and business and industry partner's work together as a team, but also administrators, counselors, and Boards of Education all benefit from receiving specific information and criteria on how well Alabama's students are preparing for the workforce.

By educating today's students, we are preparing today's and tomorrow's worker. Several factors affect the overall success of the student. Many students do not have parental support, knowledge of careers, steps that must be taken to achieve career success, discipline, school attendance, or the skill required to achieve job placement. A student's amount of office referrals and absences decrease their amount of learning hours possible for success in the classroom.

Regular attendance is an important factor in school success. Students who are chronic non-attendees receive fewer hours of instruction; they often leave education early and are more likely to become long term unemployed, homeless, caught in the poverty trap, dependent on welfare, and involved in the justice system (House of Representatives, 1996). Students who regularly attend school lose valuable instructional time, as the teacher constantly tries to assist students as they return to the classroom. Student absenteeism leads to many other social factors as the student has difficulty becoming part of the class after his lengthy or frequent absences.

School systems have tried many creative programs to assist in developing regular attendance practices. The three areas school systems have found successful were:

- 1) School based intervention programs
- 2) Community based intervention programs
- 3) Law enforcement intervention programs

Each intervention program was equally successful. The idea was for all agencies to work together for the betterment of the student (Gerrard & Owen, 2003). School based intervention programs provided incentives for students who did attend school, programs that resulted in lost credit for excessive absentees, contacting parents on school attendance, assigning a truancy officer to families with attendance policies, conducting family workshops, counseling chronically absent students, making home visits (Gerrard, Burhans, & Fair, 2003).

The community based intervention worked with area agencies on providing adequate programs for youth after school and during the summer. Learning communities were developed involving classroom teachers, which were known as team leaders. These teachers were asked to focus more on learning and activities rather than disciplining and correction (Gerrard, Burhans, & Fair, 2003). Students who misbehaved were immediately moved to a room with a counselor for opportunities to redirect and modify their behavior. Intervention programs were developed to make personal contact by phone or house call when students had not attended a certain amount of days.

The third and most severe intervention approach is the law enforcement or court based intervention. This level of intervention is required once a student reaches a certain

level of uncooperativeness. Some students found that the use of the court system has not been effective in reducing truancy (Epstein & Sheldon, 2002).

Banchey (1985) published a study of Hennepin County practices for a national school conference. Banchey analyzed the effectiveness of court intervention strategies that included: a letter from the County Attorney's office, four hours of work squad service, and placement under court observation for 30 days with warning that further truancy could result in out of home placement (Banchey, 1985).

Nearly half of students who received county attorney letters were never referred to court (Banchey, 1985). In all, court ordered family counseling, probation officers and county attorney letters were found to be the most effective.

As the student continues to be absent from school, he/she continues to become withdrawn and non-communicative with classmates. A good discipline plan, built upon trust and respect, is necessary for helping students limit their own counterproductive behavior (Charles, 1999).

#### Statement of the Problem

There is a lack of research investigating the relationship between a career technical student's number of office referrals and number of absences effect on their overall grade point average and career technical grade point average as reflected in their readiness for job placement and skill level.

#### Purpose of the Research

The purpose of this study was to determine the relationship between a career technical student's number of office referrals and number of absences effect on their overall grade point average and career technical grade point average. Investigating such

relationships yields information that would be beneficial to career technical educators in providing tomorrow's workforce. By fostering and understanding these possible relationships between factors influencing students work performance, provides insight to educators and business and industry on tomorrow's worker. The overall outcome of tomorrow's workforce comes from today's career technical student. The overall performance of each student carries over to the work ethic of our country.

### Collection of Data

A computer software database was used to randomly select and distribute a random sample of students from career technical education courses. The database (STI) Software Technology Incorporated is a computer maintained information center for all Alabama schools. STI stores the demographics of each student, attendance rates, and grades of each course taken, number of office referrals, detailed discipline history and overall credits earned and cumulative grade point average.

### Research Questions

The following questions were investigated in this study:

1. What is the relationship between the number of absences and career technical grade point average?
2. What is the relationship between the overall grade point average and career technical grade point average?
3. What is the relationship between office referrals and the career technical grade point average?

### Significance of the Study

Current and accurate information regarding program outcomes is crucial to knowing a specific programs enrollment. Data obtained from this study will be beneficial to career technical education in strengthening its ability to train today and tomorrow's workforce. The results of this study should be restricted to schools with comprable demographics. The effectiveness of its relationship will be beneficial to guidance counselors and administrators in tailoring services to meet the needs of students who are making the transition from school to work.

### Assumptions of the Study

This study contained the following assumptions:

1. The testing administrator performed in a manner that did not bias the study results.
2. SPSS is a valid software package for assessing data results.
3. The use of STI database provided accurate student demographic information, total attendance, total office referral/ discipline, overall grade point averages of each participant.

### Limitations of the Study

This study contained the following limitations:

1. The study was limited to sample of 175 secondary students enrolled in an East Alabama high school.
2. Students in this study not only attended school daily, but maintained part-time jobs.

3. Reviewing the enrollment and follow-up data per program area is required by the State of Alabama, each school facility varies in the number of participants.

#### Definitions of Terms

For the purpose of this study, the following definitions were used:

1. Articulation- agreement between secondary and post secondary institutions whereas students have course work or skills credit that can be dually accepted.
2. Career Technical Education- formerly known as vocational education. Also referred to as Career Tech Education.
3. Career technical student- student in the career technical department learning skills to work in a specific field or industry. As so referred to as a Career Tech student.
4. Completers- student enrolled in career technical education and completes two or more career technical courses.
5. Enrollments- data collected by each career technical education area on the number of students registered in the course.
6. Grade Point averages- the accumulation of a student's academic performance in a class/course determined on a 4.0 scale.
7. Office referral- the process by which a classroom instructor writes a student's behavior or actions on a disciplinary referral form for the school administrative staff to resolve.
8. Skilled worker- individual who has learned specific trade skill and performs that task well.
9. Student performance- how successful a student performs that is reflective on their academic grade point average.

10. Workforce- persons employed in business and industry who work for a specified amount of time and income.

### Summary

Chapter I introduces the problem to be studied and specifically addresses the statement of the problem, purpose of the research, research questions, significance of the study, assumptions of the study, limitations of the study, and definitions of terms. This chapter includes discussion of the importance of the evaluation system in an attempt to link relative evaluation of future planning of education. The significance and limitations are also reviewed.

In Chapter II the nature and scope of the research problems are presented through a review of literature linking career technical education, enrollment, follow-up, attendance records, discipline referrals and standards which have been met by all Alabama certified educators. Such linkages are critical in career technical education since this field must consistently meet challenges of workforce demands and rapid changes. These rapid changes may include, but are not limited to changing technology, global economic and vocational demands and the future needs of the student population. Chapter III describes the research methods and analyzes data from enrollment reports, follow up reports, attendance records and office referrals. The results obtained from these four reports are presented in Chapter IV. Chapter V includes the conclusion of the study, implications for improved practice and recommendations for future studies.

## CHAPTER II

### LITERATURE REVIEW

The purpose of this study was to examine the relationship between a Career Technical student's number of office referrals and number of absences in regard to their skill level and job placement as measured by the overall grade point average and career technical grade point average. This chapter has three sections: career technical education, discipline in a school environment and workforce education. The first section defines and provides a historical overview of career and technical education, federal legislation of career technical education and characteristics of career technical students. The second section overviews discipline in a school environment and absenteeism in secondary education. The third section provides an overview of workforce education research which includes: job placement rates of students, employers and SCANS skills, enrollment of career technical students and follow up rates of career technical students.

#### Career Technical Education

Career technical education typically refers to programs and services offered to secondary students to prepare them for future employment and/or trade skills. Career technical education began as vocational education with a powerful movement for federal funding in 1910. The American Federation of Labor (AFL) who had long opposed vocational education, lent its approval to the National Association of Manufacturers (NAM) for promotion of trade instruction in schools. Formed in 1895, one of NAM's



first projects was to investigate how education might provide a more effective means to help American manufacturer's compete in expanding international markets. Their findings proved phenomenal as they joined the vocational reform movement to help protect working class interests and help them develop policy. The strength of the combined lobby was such that in 1914 Congress authorized President Woodrow Wilson to appoint a commission to study whether federal aid to vocational education was warranted (Margison-Hyslop, 2001).

The commission found that vocational education was the best available way to help non-academic students secure employment after completing school. In the final report, the commission chairman, Georgia Senator Hoke Smith declared it an urgent social and educational need for vocational training in public schools. On February 23, 1917 President Wilson signed the Smith-Hughes Act into law, and federal funding for vocational education was established. The Smith-Hughes Act specified particular vocational programs, created administrative procedures, and prescribed skills based training programs for instruction in agriculture, trade and industries, and home economics (Margison-Hyslop, 2001).

Legislation aligned the vocational education reform with the specific needs of the labor force considered. Students who were not academically focused were trained for specific labor needs identified by industry. This concerned many Americans that students would be narrowly focused and trained to fill a void in labor rather than benefiting the students overall career potential. John Dewey advocated that vocational education should be included as part of a comprehensive curriculum to help students develop a greater

range of personal capacities that expanded, rather than limited, their future occupational options.

After World War II our country experienced another labor crisis. In 1943, the National Education Association featured vocational education at the national convention. The focus was vocational programs for all American youth. The emphasis again was employing youth to fill a labor gap. Once again, vocational education rescued an American economy struggling with the postwar aftermath.

Congress significantly helped vocational education by introducing the Vocational Education Act of 1963. This act introduced broader vocational education programs and provided federal financial support to larger training programs. This was the first big step since the Smith-Hughes Act of 1917. President Lyndon B. Johnson signed the Vocational Education Act of 1963. With the president's endorsement, economic and social anxiety was suppressed.

Vocational education has a long history of employing our nation's workforce and meeting the need of the American economy. In 1984, Congress visited vocational education again by authorizing the Carl D. Perkins Career and Technical Education Act. The purpose of the Perkins Act was to provide individuals with the academic and technical skills needed to succeed in knowledge and skills based economy. Perkins supports career and technical education that prepares students both for postsecondary education and the careers of their choice (Perkins Act of 2006, 2006).

Most recently the Perkins Act was reauthorized in 2006 granting states the federal funding and support to continue career and technical education. Although federal legislation to support career and technical education is great, there are many challenges as

well. In the past, accountability measures were focused on state and federal governments. The new reauthorized Carl D. Perkins Career and Technical Education Act of 2006 places accountability measures on the state as well as local programs.

The Carl D. Perkins Career and Technical Education Act of 2006 requires state and local programs to measure and report on separate core performance indicators for secondary and postsecondary students. State and local programs that fail to meet at least 90 percent of any performance measure for any core performance indicator must successfully implement an improvement plan within a year or risk losing their Federal Perkins funds (Turner, 2006c).

Local and state leaders must align their implementation plans in order to meet these strict guidelines. The new law will better align the Perkins Act and its academic measures toward the No Child Left Behind Act of 2001. The concern with aligning the No Child Left Behind Act with the Perkins Act is that most career and technical students begin in the 10<sup>th</sup> grade. The No Child Left Behind Act only requires schools to report test scores once for the high school students, therefore most test scores come from third grade through eighth grade. This excludes career and technical student's achievements as they have not yet entered career technical courses to be evaluated. Therefore, the focus of career and technical education must reach elementary and middle grade students. If not, career and technical education will have a difficult time surviving these mandates. Another approach that career and technical educators have envisioned is tracking students from secondary career and technical schools, to postsecondary education, work or military placement. States that are able to complete this type of data will be better suited to forecast career and technical education and its vitality (Turner, 2006a).

The Carl D. Perkins Career and Technical Education Improvement Act of 2006 reaffirmed Congress's ongoing support for career and technical education. The reauthorization saw three top priorities of career and technical education become reality. Those three priorities were updating the terminology from vocational education to career and technical education; maintaining state administrative funding at five percent of a state's allocation; and keeping funding for the Technical Prep program separate from the funding for the Perkins Basic State Grants (Turner, 2006b).

Although these priorities have been met, the mandates in the new law are effective. State and local school districts must develop and implement plans outlining goals for career and technical education with priorities and performance standards clearly stated. These standards must keep career and technical education vital while incorporating secondary and post secondary standards to include academic with career and technical programs of study.

Without Perkins money many states would not have career and technical programs within their school districts. The Carl D. Perkins Career and Technical Education Act provides federal funding to maintain high quality programs. The Perkins Act also contains two other provisions. First, the law requires that states continue to invest as many resources in career and technical education as they have in the past, as long as federal appropriation stays level or increases (Margison-Hyslop, 2001).

A second provision requires that states match dollar for dollar federal funding that is available for administrative expenses at the state level (Margison-Hyslop, 2001). This forces the state governments to provide support to local career and technical education programs within their state.

The disappearance of Perkins money would further cripple career and technical education as the states maintain their programs and support local districts. The Perkins Act provides many facets of career and technical education. Some of these are often forgotten, but include professional development, student support through career and technical student organizations, and career pathways for student career placement.

Career and technical education is vital to the economy as well as a student's career path. In Alabama, all career and technical programs are funded by the Perkins Act and the state match for administrative funds. Ann Gilmore, Alabama Career and Technical Executive Director explains that “ without Perkins funding, the state would lose all of it's program specialists and state staff, further decimating local career and technical programs that would also lose funding” (Hyslop, 2006, p. 15).

Career and technical educators are preparing students to further their education, pursue careers and become productive members of society within their communities. Career and technical educators together are working to protect and promote the programs.

The Association for Career and Technical Education has lobbied for decades on funding for career and technical education under the Perkins Act. Members have been encouraged to continue this pressure as the No Child Left Behind act is nearing reauthorization. Educators have been encouraged to work with legislators to not only produce a new No Child Left Behind law, but align it with the Perkins Career and Technical Education Act.

Career and technical education advocates have been wonderfully active in protecting funding for Perkins and communicating with legislators about the appropriate policies with respect to that law. We must also be engaged in conversation about other

laws such as No Child Left Behind that will undoubtedly have an effect on career and technical education students and education as a whole (DeWitt, 2007).

Linking career and technical education with the No Child Left Behind act would draw that local, state and federal attention to our workforce future. Not all of the attention has been positive, but it certainly has made educators more accountable in their daily practices of teaching resulting in better outcomes of students. Career and technical education focuses on the student and developing their skills to be placed in jobs. What better way to combat two problems by realigning the No Child Left Behind to include career and technical education.

The Center on Education Policy (CEP), an independent nonprofit research and advocacy organization based in Washington, conducted a comprehensive review of No Child Left Behind since its induction (DeWitt, 2007). They identified ten factors of the effects of No Child Left Behind. Career and technical education is in alignment with the goals and outcomes of all ten factors identified. They are as follows:

1. State and district officials report student achievement on state tests rising.
2. Schools are paying more attention to alignment of curriculum and instruction.
3. Analyzing test score data closely.
4. Low performing schools are undergoing makeovers of methods.
5. Schools and teachers have made considerable progress in demonstrating that teachers meet the law's academic qualifications.
6. Students are taking a lot more tests.
7. Schools focus more on achievement gaps and learning needs of particular groups of students.

8. Schools on state needs improvement lists have been steady, but not growing.
9. Federal government plays a bigger role in education.
10. No Child Left Behind requirements have meant that state governments and school districts also have expanded roles in school operations, but often without adequate federal funds to carry out their duties (DeWitt, 2007, p. 13).

Each of these citations coincides with the role and purpose of career and technical education. By including the Perkins Act and Career and Technical Education Act in the No Child Left Behind, educators will be able to close the gaps between the achievement and learning of students and job placement. Students will be a better prepared workforce. Failure is not an option in career and technical education. With continued Congressional support, career and technical educators focus on the 21<sup>st</sup> century and strengthening the American high school. Increased funding demands will integrate more academic and career and technical education programs. With educators working together to provide postsecondary students and workforce supply, project linking will become a necessity. Organization is the key to success of any venture. Organizing schools to provide educators teaming together for project-based learning with common planning. Academic instructors teaming with career and technical educators not only provide power, but a student who can link high level academic content to real world problems. Academic instructors in math and science will make greater use of career and technical applied learning and using real world problems to engage students in a challenging content (Bottoms, 2006).

Employers want workers to be literate in their field of work. Career and technical educators will use literacy strategies to better enable a career and technical student to

learn his skill and read and write. With increased funding demands and state's accountability standards to meet the law, certification within trades will be critical. Certification or completion requirements will assess a student's ability based on the performance level of skills achieved within the career and technical program. Assessing a student's ability will become more difficult in addition to academic standards to be met. Students may attend postsecondary schools or go to work. Assessing a student's ability through certification will ensure whether that student attends postsecondary institutions and is skilled for an employer's certification. If a student cannot achieve certification they may continue learning in the workplace (Bottoms, 2006).

Career and technical educators reaching to elementary and middle grade students will assist future career and technical students on career planning. Students planning particular careers from early ages will work toward those goals and achieve success over a student who begins career planning in ninth grade (Bottoms, 2006).

Rather than students viewing school as a process they will view it as a link to their future. Students with this perspective study better, plan better and know their future as a result of their studies.

### Discipline in a School Environment

Discipline in a school environment typically refers to a student's behavior within the school and their lack of respect for the discipline code of conduct. Students face many pressures today and the demands of family, health, home and part-time jobs escalates. Oftentimes, students do not do their homework, which leads to poor learning and grades. Homework is designed to assist the student in continuing their studies from school to home. A process of this nature works great when a child has a lifestyle conducive to their



learning and overall well-being. A large number of students do not know how to do their homework which results in a two-fold problem (Darling-Hammond & Ifill-Lynch, 2006).

This type of student has many obstacles to overcome. Several reasons a student may fail to do homework may include: 1) students who do not know how to do the homework, 2) did not have the time, 3) needed to schedule time and not work every afternoon after-school, and 4) those who did not plan for homework (Darling-Hammond & Ifill-Lynch, 2006).

Each of these are very good reasons, but each can lead to despair. Despair in a student can lead them to not doing their work. Circumstances at home can lead to despair. Such factors a student experiences may be a student who has an overcrowded home, inadequate shelter, lack of good nutrition and health or parents who are under great stress. These problems are often combined with overcrowded classrooms at school, poor teaching and learning conditions. Combined, these factors may convince a struggling student to develop a don't care or I am stupid attitude. Rather than educators making note of this behavior and seeking ways to help these kids, they want to teach them a lesson with failing grades or no work or poor work comments (Darling-Hammond & Ifill-Lynch, 2006).

“Regular attendance is an important factor in school success.

Students who are chronic non-attenders receive fewer hours of instruction; they often leave education early and are more likely to become long term unemployed, homeless, caught in the poverty trap, dependent on welfare, and involved in the justice system” (Rothman, 1999, p. 1).

Once an educator takes this approach, they confirm the students' belief that they cannot succeed. Struggling students know what the experience is like and have survived this routine (Darling-Hammond & Ifill-Lynch, 2006).

“A European perspective on student absences was provided in a study of absenteeism in 36 high schools in four Dutch cities. TjBos, Ruijters and Visscher (1992) examined aspects of absences for individual classes over three school days, a Monday, Wednesday and Friday, covering a total of 8,990 lessons. They varied from truancy (which was a disallowed absence without reason and allowed absence which was valid by the school.) They found variation by school in the determination of a truancy, but calculated overall absence rates of 9.1%, comprising a 4.4% truancy rate and a 4.7% allowed absence rate. Truancy rates were lower in pre-university tracks than vocational education tracks, highest on Fridays, and tended to be higher later in the school day. Whole day truancy occurred more frequently on Mondays. The proportion of “non-Dutch” students in the school accounted for 42% of the variance in school truancy rate” (Rothman, 1999, p. 2).

An effective approach is to create a strong academic culture that changes a student's beliefs and behaviors, convincing them that they will succeed. The six steps to succeed in this method are: 1) assign work that is worthy of effort; 2) make the work doable; 3) find out what students need; 4) create space and time for homework; 5) make the work public; 6) collaboration is key. First, assign homework that is worthy of effort.

Examine the purpose behind the homework, do students have adequate resources and support for completing the project. A few questions to ask are –Does this make sense? Is it necessary? Is it useful, given the circumstances under which it is carried out at home? (Darling-Hammond & Ifill-Lynch, 2006).

Throughout the 1970's, American high school principals consistently identified poor attendance as the major problem facing secondary school administrators. But rather than define poor attendance, studies concentrated on examining factors associated with it. In a study, secondary school data was analyzed in Virginia, surveying school on their attendance rates and aspects of the curriculum, organization and staff. They found statistically significant differences by location: urban schools had the lowest attendance rates, then suburban schools; schools in other areas had the highest attendance rates. Within these geographical groupings, different factors were related to attendance rates, including subject offerings, electives, work programs for school credit, and age of the teaching staff (Wright, 1978).

Career technical educators have realized the profound learning tool of project based homework. Students are engaged in the assignment and complete the project through personal interest rather than just avoiding a zero grade. According to Sylvia Rabiner of Landmark High School, New York “students respond best when working on longer class projects in which they become deeply involved. Kids who routinely neglected homework behave differently when working on final projects. Teachers report kids coming to school early, staying late, and even asking to complete their projects after the school year has ended ” (Darling-Hammond & Ifill-Lynch, 2006, p. 10).

Educators working together can share project ideas, what types of projects work best with students, projects that are feasible and experiences in which the students really learned. Marion Moguleson, former co-director of New York City's Vanguard High School recalls that even routine homework tasks can be meaningful if they are related to authentic classroom learning. As she states, "there are times when homework is not fabulously creative and unusual, there are times we all have to stuff envelopes, but if the focus is project-based, or inquiry based, or part of what the class is actively engaged in, the follow-up outside of class will have more meaning" (Darling-Hammond & Ifill-Lynch, 2006, p. 10).

Cunningham observes that "students are most likely to complete the homework when homework is actually used the next day in class. For instance, if students have to read a passage in a book and highlight or underline selections to share with their classmates the next day, they tend to put in the effort" (Darling-Hammond & Ifill-Lynch, 2006, p.10). Teachers can further involve students by drawing on their ideas for class assignments.

Second factor is to make the work doable. According to principal Sylvia Rabiner, Landmark High School, even if the work is engaging, students will not do it if they do not know how. Rabiner suggests teachers ask themselves: Are the directions clear? Is the homework doable without any assistance? How does it relate to the lesson? Is it being collected and returned or reviewed in class the next day so that students are getting immediate feedback? What kind of comments is the teacher writing on the homework? Can homework be started in class so that the teacher may observe and see where the problems for students arise? (Darling-Hammond & Ifill-Lynch, 2006).

Students must have a clear continuation of homework from the classroom, home, and back to the classroom in order for them to have a clear understanding and connection. Students who have parents at home to assist them have a great advantage over students who have no one at home or no one that can understand the assignment. Teachers at Middle College High School presented the student portfolio assignments to each other to see if their peers could navigate the assignments. What a profound experience this turned out to be. According to former principal Cece Cunningham “being confronted by the difficulties their fellow teachers experienced in deciphering their assignments gave teachers insight into similar challenges faced by their students. Sharing projects with one another, across disciplines, created opportunities for collective revision of individual teacher assignments. It was key in refining teacher skill in developing and fashioning assignments of high intellectual quality nested in language and scaffolding that were accessible to students” (Darling-Hammond & Ifill-Lynch, 2006).

A teacher can also confirm that homework is doable if it starts at school. At a school led study hall, a teacher can assess whether or not the homework assignment is of value and promotes students learning. Although homework may be engaging, students must be motivated and organized to do it. Ancess (2006), sought to provide strong relationships and intellectual experiences for students. She noted, “a good strategy is to help make the kids part of the solution rather than part of the problem” (Darling-Hammond & Ifill-Lynch, 2006, p. 11). Teachers can meet alone or as a team with individual kids, discuss their strengths with them, where they have succeeded, then ask the kids what would be necessary for them to complete the homework and the assignment. This has to be a positive intervention with no sneak attack. The teachers must

seek from the students or suggest one or two specific strategies for one problem at a time (Darling-Hammond & Ifill-Lynch, 2006).

For example, they may agree that the student will tell his advisor or particular teacher what he has to do to complete the assignment, how he plans to do it, when it is due, and what he needs help with. The teacher or advisor will assess what help the student needs to complete the assignment. The teacher and student should write this down together, so that success becomes inevitable. (Darling-Hammond & Ifill-Lynch, 2006). As Ancess states, “it is better for the student to learn that is feels better to succeed than to fail” (Darling-Hammond & Ifill-Lynch, 2006, p.11).

Teachers who collaborate with one another make this mode of homework manageable for them. The goal is to make the process of doing the homework concrete, manageable and as simple as possible. This needs to work for the student as well as the educator. Teachers who work in teams and collaborate can better understand why particular students have problems and why they do not learn or cannot learn specific tasks or methods.

Fourth, create space and time for homework. Teachers oftentimes allow students to stay in their classroom and complete assignments during this quiet time, during the school day and under the watchful eye of the teacher. This is great however, teacher nor student have a break or downtime during the rigorous school day. Many schools have transitioned to block scheduling which builds in time for teachers to allow instructional time, as well as, begin homework or project assignments. Being well and great, this still may not meet the needs of every student. Some students have a lack of support at home and yearn for that teachers’ undivided attention and quiet time. Many students fall in this

category resulting in schools opening programs such as “Drop-In” (Darling-Hammond and Ifill-Lynch, 2006).

“Drop-In provides what many of us experienced at home when we were young students. Our parents would insist that we sit at the kitchen or dining room table and just do our work. We developed the habit of sitting and completing school tasks. Many students have not had this experience” (Darling-Hammond & Ifill-Lynch, 2006, p. 12). In one instance, a student who was also a young mother, took advantage of the program to allow her the ability to complete her studies quietly with support so that when she did go home she could fulfill her obligations and responsibilities with her baby. Programs such as these, not only have a school attitude of getting it done but, hold all students to high standards of quality in their work (Darling-Hammond & Ifill-Lynch, 2006).

The fifth goal is to make the work public. “Struggling learners benefit when learning goals and the desired quality of learning products are public and explicit. As research has shown, student’s who do best in school are often those most adept at figuring out what the teacher wants “(Darling-Hammond & Ifill-Lynch, 2006, p. 13). Schools who have a going public policy allow students to view assignments, what they are currently studying, where they were in that study, list of projects students were required to demonstrate learning, and completed student projects were shown. This allowed students the ability to know what was expected, how to complete the tasks and to better plan their use of time to gain the skills and complete their projects (Darling-Hammond & Ifill-Lynch, 2006). “This practice gave students the opportunity to examine in-depth models for their own academic work” (Darling-Hammond & Ifill-Lynch, 2006, p. 10).

The sixth factor is collaboration. Educators must have time to meet and share problems, needs, deficiencies and successes. According to Darling-Hammond and Ifill-Lynch (2006), “ Schools that are organized as supportive learning communities with opportunities for collegial problem solving can better support their students in developing the practices and habits essential to doing schoolwork” (Darling-Hammond & Ifill-Lynch, 2006, p. 13).

As far back as 1923, researchers have attempted to examine the influence of attendance on academic achievement. In 1923, Odell reported small, non-significant correlations between attendance and academic achievement or intellectual development, but significant correlations between attendance and grades awarded by teachers for class work. Finch and Nemzek (1935) reported that school grades were related to student attendance for the 1934 graduating class at one high school in Minneapolis, Minnesota. Kersting, 1967, compared attendance records for the 100 highest achieving and 100 lowest achieving students in the junior high school where he was teaching. Comparing these extreme groups, he found significant differences in attendance. These studies show that while there may be a relationship between attendance and achievement, it is very poor attenders whose achievement is low, but no threshold absence rate is defined.

As we strive to improve high school achievement, we must not forget the increasing number of students who fail to graduate. The dropout rate continues to climb and lose ground within our American students. The U. S. Census data showed that the national high school completion rate was nearing 90 percent, a goal set at the first National Education Summit in Charlottesville, Virginia in 1989 (Barton, 2006). Under the U.S. Department of Education requirements of No Child Left Behind, each state must



submit their annual drop out rate to the federal government. What became so puzzling and ever present, were the figures being submitted by state education entities that did not meet or near the U.S. Census data results.

The well-publicized contradictions of official estimates led to a minor political explosion, particularly after the Education Trust of 2003 attacked the accuracy of the state's report to the Department of Education (Barton, 2006). A task force was developed to look at the problem and propose a plan for how each state could develop a high-quality, comparable high school graduation measure.

Barton (2006) conducted research and used two variables. The first being the graduates age of 17 or 18, and how many high school diplomas were reported each year. His findings showed that 69.6% of youth who were of graduating age had received diplomas in 2000. Each state's report varies greatly and how they handle failing a grade and dropping out. For example, one school system had enrolled more students in ninth grade than had been enrolled in eighth grade the prior year. There is definitely an association between that school's failing a grade and dropping out. (Barton, 2006).

One factor that arose is the U.S. Census Bureau lumped regular high school diplomas with the GED recipients. GED is the well-respected substitute, but it is not a regular diploma earned after completing four years of high school. GED recipients tend to fare better than dropouts, but not as well as graduates with diplomas. (Boesel, Alsalam, & Smith, 1998). Although combining these two categories justifies some confusion, it does not account for all. Other factors that need to be considered in the last decade count are more single parent families, 9<sup>th</sup> grade increase (retention), and higher standards for graduation (Barton, 2006).

In the past few years, the economic position of the United States has deteriorated. Labor market hopes and dreams of dropouts is becoming dire. “In 2003, 1.1 million 16-19 year olds did not have a high school diploma and were not enrolled in school. In the landscape of the economy, these dropouts are often lost travelers without a map. Only 4 in 10 of the 16-19 year olds are employed, as are fewer than 6 in 10 of 20-24 year old dropouts. Black and Latino are doing considerably less well than others” (Barton, 2006, p.16).

To further complicate the situation, dropouts earning power has dropped. A male 25 to 34 years old who drops out manages to work full time, with an average annual salary which dropped from \$35,087 in 1971 to \$22,903 in 2002, a decline of 35 percent (Barton 2006). The comparable annual earnings for a female without a diploma were \$19,888 in 1971 to \$17, 114 in 2002 (Barton, 2006). Even when these dropouts work full time their earnings are barely above the poverty level. The earnings of high school graduates has declined since 1971, but not as severely as the income earnings of drop outs.

Educators should be concerned about what factors effect the dropout rate. Students are our future and their learning potential and ability greatly effects our country and the viability of America. A 2002 report by the U.S. General Accounting office summarized several factors that correlated with low completion rates. These factors were low income or single parent families, getting low grades in school, being absent frequently, and changing schools. These factors vary by state as do high school completion rates (Barton, 2006).

A state can predict or calculate their completion rate by looking at the overall state averages of average socioeconomic characteristics (family income, education and occupation); percentages of two-parent families; and the rate at which students change schools. These factors may predict the correlation between state differences and factors greatly affecting our nations high dropout rate.

Many factors effect America's children as we have learned, which complicates the problem further. Another factor that may not be as readily considered as family status, education level, income or desire is the excessive mobility. Excessive mobility hurts schools and students alike. This is often referred to as the revolving door classroom. Most recently Hurricanes Katrina, Rita, and Wilma forced tens of thousands of K-12 school children to suddenly change schools, when they hit the Gulf Coast region states of Alabama, Mississippi and Louisiana. Some of the new schools were close to the children's home while others were far away (Hartman, 2006).

Changing schools before the school began was not as detrimental as doing so after the school year started. However, no disruption would have been preferred. Any change is disturbing for students and presents a serious problem to teachers and administrators. In a 1994 study by the U.S. General Accounting office, by the end of 3<sup>rd</sup> grade, one in three children in the U.S. had attended three or more schools (Hartman, 2006). According to this data, during a four-year period, the proportion of students who remain in school for the full year can fall below 50 percent in many schools (Hartman, 2006).

These detrimental impacts are not limited to students caught in the revolving door, but to those relatively stable students. Teachers must slow down the pace of the curriculum and deal with the emotional disturbances of a sudden student disappearance.

Excessive mobility is also a burden at the school and district level. Administrators need to transfer records of outgoing students, often not knowing where they have gone, and procure health and curriculum records for newly arriving registrants. These demands influence decisions relating to staffing and resource use, reducing per-pupil resources and slowing school improvement and community-building efforts (Hartman, 2006).

Although high mobility rates have dilemmas in several school districts, there are education reforms that have instituted some positive measure. One of these measures is helping the homeless. The federal McKinney-Vent Homeless Assistance Act, updated in No Child Left Behind, “establishes homeless children’s right to remain in their home school, regardless of the location of their homeless shelter. It also eases documentation requirements and obligates school districts to provide any needed transportation. The Act mandates appointment of a Homeless Education liason to advocate for homeless students at the school, community, and state levels and to monitor school district performances” (Hartman, 2006, p. 22).

Another measure addresses children of the road, for the children of migrant workers. The federal Migrant Education Program has established an electronic interstate record transfer system, national distance-learning programs, and a laptop computer project for secondary school migrant youth that enables them to take advantage of online mentoring. Key factors with migrant children are records transfer, curriculum consistency, and fulfillment of graduation requirements. This act addresses each of these dilemmas (Hartman, 2006).

Another program, Think Twice About Moving allows Chicago Public School children the ability to remain in their original school—elementary to secondary—if they

move across town. This allows the student to remain in the same school, teacher, principal, and friends. It eliminates the school district having to transfer records, adjust student counts and change programs. Chicago Board of Education advertises that there may not be bus service available with a move, which is minor in the overall effect of changing schools.

Department of Defense operates many schools in and around military bases, has an excellent track record with regard to student mobility. The Department of Defense carries out a timely transfer of records, employs efficient record keeping, and has clearly specified course of transfer agreements and clearly articulated graduation requirements. Teachers, principals, and counselors in Department of Defense schools are trained to meet the special needs of incoming and departing students. One particularly sensitive policy is to allow a family to remain at the duty assignment for an extra year if the student is entering his or her senior year of high school, the worst time to uproot a teenager (Smrekar & Owens, 2003).

From all these reviews, the common link seems to be communication. Communication between school personnel, parents, and resources available to assist schools in efficient recording and transfers. Schools should focus on creating school communities that parents and students value and would think twice about leaving. Schools should also empathetically offer transportation assistance to students who move a short distance and to homeless students if it would enable them to stay in their original school district, at least until the end of the academic year (Hartman, 2006).

Other contributing factors to consider would be allowing foster children to stay in their school throughout the school year, eviction notices given only when lives of

children and reason warrant understanding and safe housing for single parent families to feel secure. All of these factors contribute to mobility and the downfall of our children's education.

In today's society of mobility and less than standard housing arrangements, teachers often become bearers of hope. Teachers must believe in kids above everything else they do. Compassion, flexibility and unflinching expectations are qualities which are a must for educators working with poor and homeless students (Landsman, 2006).

Landsman found several strategies for teaching economically struggling students. These factors encompass the whole learning experience of the child. They are as follows:

1. Assume that all students can learn complex and creative material.
2. Create a classroom that gives students as much control as possible while maintaining safety and structure.
3. Do not assume common behaviors or states of mind for all low-income students or parents.
4. Focus on the assets that students bring to the classroom: resiliency, perseverance, flexibility, compassion and hope.
5. Understand that you cannot change the world, but that you can work within your classroom and community to effect change. Advocate for small class size.
6. Build a network of colleagues who are finding ways to challenge low income students. Meet in the media center on Fridays to talk about "what went right this week."
7. Maintain your 'other life' so that you can go into the classroom ready to meet kids wholeheartedly and without resentment.

8. Find ways to provide the necessities, such as winter coats, art materials, and a place to wash clothes. Look to the community for resources –for example, a place for students to do homework.
9. Find respectful ways to survey students about their home situations. Make yourself available for students to talk with you. Refer them to help when they share serious problems or speak of a lack of basic needs at home.
10. Ask students to do jobs for you to help them feel important and in control of something in their lives.
11. Do not single out kids or indicate in front of others that you know they are homeless or poor.
12. “Cut deals” with students, helping them find realistic ways to meet work requirements.
13. Convince students that “I believe you can learn and I will listen to you and give you meaningful work to do”(Landsman, 2006, p. 30).

### Workforce Education

Sixteen years ago, the Commission on the Skills of the American workforce met in New York City. The commission understood that the economy was becoming globalized and in order for the U.S. to compete, standards would have to be established for workers to meet. Anyone who did not meet these standards, would be considered a low skill worker and receive low wages. If the U.S. wanted to continue to compete in that market; it would look forward to a continued decline in wages and very long working hours. It could abandon low-skill work and concentrate on competing in the worldwide

market for high value added products and services. To do that, it would have to adopt internationally benchmarked standards for educating its students and its workers, because only countries with highly skilled workforces could successfully compete in that market (Tough Choices or Tough Times, 2007).

The Association for Career and Technical Education has recognized the need for postsecondary reform. Throughout the United States and in each individual community, education leaders must ensure that all students exiting high school receive some level of postsecondary education and training. Those adults who have already exited the education pipeline must receive additional education and training to ensure continued career advancement and success (Hyslop, 2007).

All public schools are required to meet Adequate Yearly Progress under the No Child Left Behind Act. This must be achieved annually to avoid stiffer penalties for schools, which presents a unique challenge for comprehensive career technical schools (Pundt, Beiter, & Dolak, 2007).

The emphasis is on career technical education path that students want to pursue, however academic areas must be mastered with proficiency in order for a school to be successful. For a career technical education school to survive it must have a sustainable teaching model that aligns and integrates career and technical skills with math and reading core.

In Erie, Pennsylvania, Central Tech is a comprehensive career and technical school which has a working model for achieving this integration. For each Central Tech student, daily instruction includes English, Science, Social Studies, and Mathematics in addition to the career technical courses. Traditional career and technical education



students have not had academic success, but this education model has changed that perception (Pundt, Beiter, & Dolak, 2007).

In 2003, Central Tech student scores reflected 19 percent proficiency in math out of 36 percent required and 30 percent reading proficiency with 45 percent required proficient. The school was considered failing in the eyes of the Pennsylvania Department of Education. The Central Tech administration, staff and students set out to make changes in the schools performance. The first step was to form a support team of teachers and administrators. Through this team, improvements were made and academic improvement achieved. As part of the Perkins Act, which provides federal funding for career technical education, the federal government requires career technical schools integrate academic standards into career technical curriculum (Pundt, Beiter, Dolk, 2007). In 2004, Central Tech doubled their scores in math and reading. In 2006, they achieved annual yearly progress. The teachers and administrators wanted to continue their success by improving the model.

If we continue on the current course, the number of nations outpacing the United States in the education race continues to grow. At its current rate, the American standard of living will steadily fall relative to those nations, rich and poor, that are doing a better job. If the gap continues to maintain or widen, the world's investors will decide they can get a greater return on their money elsewhere. It is possible to construct another model, but the change is that it will fall for most Americans (Tough Choices or Tough Times, 2007).

A recent study of 400 leading American corporations by the Partnership for 21<sup>st</sup> Century Skills notes that managers consider 70 percent of high school graduates lacking

professionalism and work ethic skills. A 2005 survey by the American Society for Training and Development reached similar conclusions. (Bronson, 2007).

Since the inception of the SCANS skills by the education secretary's commission on achieving necessary skills in 1992, American corporations have been imploring schools to better prepare graduates for the world of work. Along with the obvious need for a solid foundation in SCANS skills such as core academics, the need for good interpersonal and personal skills such as responsibility, self esteem and integrity were all emphasized. "Soft" skills which encompasses self esteem and integrity are difficult to scientifically measure and are believed to be even trickier to teach"(Bronson, 2007, p. 30).

"The Association of Experiential Education offers useful educational insights and research about how to constructively nourish such student learning through direct experience and focused reflection. Career technical educators use direct, hands-on experience to increase learning. The degree to which a career technical student focuses on reflection, or clarifies values varies by individual. How to teach students to be on time, be cooperative or honest is difficult to guide and handle without routine workplace challenges. It is a must for career technical educators to develop transferable skills and teach hands-on experiences" (Bronson, 2007, p. 30).

The major problem is that our education and training systems were built for another era. An era where most workers needed only rudimentary education, it is not possible to get to where we need to be by patching that system. There is not enough

money available to fix that system and get us where we need to be. We must change the system itself. In the Executive Summary of the first Commission on the Skills of the American Workforce, several facts were addressed. These criteria have developed over time and gotten us where we are currently. (Tough Choices or Tough Times, 2007, pg XIX). They are as follows:

1. We recruit a disproportionate share of teachers from among the less able of the high school students who go to college.
2. We tolerate an enormous amount of waste in the system.
3. This inefficient system has progressively become more inefficient over time.
4. The growing inequality in family incomes is contributing heavily to the growing disparities in student achievement.
5. We have failed to motivate most of our students to take tough courses and work hard.
6. Our teacher compensation system is designed to reward of service, rather than to attract the best and brightest of our college students and reward the best of our teachers.
7. Testing system rewards students who will be good at routine work, while not providing opportunities for students to display creative and innovative thinking and analysis.
8. We have built a bureaucracy in our schools where the people who have the responsibility do not have the power and the people who have the power do not have the responsibility.

9. Most people who will be in our workforce are already in it, and if they cannot master the new literacy at high levels, it will not matter what we do in our schools.
10. Although we have elaborate funding mechanism to provide funds to send young people to college and university to launch them in the careers of their choice, we have done a very poor job of making it possible for adults who have full-time jobs and family responsibilities to get the continuing education and training they need to survive in the world.

These parameters were designed for a different era. The commission had developed new skills, which must be met for our U. S. economy to stay vital in the ever-changing global world. The ten steps will require change within our workers and those responsible for educating the next generation. The college readiness wall needs to be replaced by a lifelong learning and work continuum wall. It is imperative for students to develop a lifelong learning plan to move them through this continuum.

This simulation reminds us of career technical education and although the what, why and how of career technical education seem to be the same, the answers are indeed different as we move forward and continue to advance by experience. Interest in career technical education is growing, however policymakers, parents, employer's, and the community at large continue to view career technical education as a second tier program. As educators continue to work developing new program designs, they are changing the perception and implications for all students in all high schools. Those that view career technical education as a second tier program will change that perception to a first tier program.

“Our sense is that Career Technical educators potential will best be realized by creating program designs that are a good deal “edgier” than prevailing practice and even some currently proposed innovations.

Innovations may require Career Technical mainstreaming. Innovations that are absolutely essential if 21<sup>st</sup> century career technical education is to serve larger numbers of students and help them achieve success as a citizen, parent and worker”(Mojkowski & Washor, 2007, p. 34).

Six steps to achieve this first tier career technical education program are: 1) create comprehensive and coherent programs of applied study, 2) personalize and customize student programs of study, 3) strengthen real world learning, 4) viewing career technical education system as a seamless pathway from high school to college, 5) expand the range of options for engaging students in real world learning and work, 6) employ performance demonstrations for assessing student mastery of the integrated program of study (Mojkowski & Washor, 2007).

To achieve these goals students may have to engage in authentic projects within a business to enable them to address a problem. Locating career technical education programs within a business or non-school organization, connect learners and mentors through online networks to achieve real-world career guidance. Another indicator may be teacher’s working with students for several years enabling them to know them as individuals and learners. This type of relationship would best place a student in his career choice and be prepared. Teachers following student’s postsecondary learning and the workplace to continue the support and guidance. This level of support would ensure student success in his studies as well as his abilities in the workplace (Mojkowski &

Washor, 2007). To prepare students for careers is a challenge, but one that will ensure their competitiveness in the workforce and the ability to make decisions to enable them follow a program of study for a productive career.

### Summary

The review of literature addressed career technical education, discipline in a school environment and workforce education. Additionally, the review of literature addressed a historical review of career technical education, federal legislation for career and technical education, and characteristics of career technical students. This section concluded with job placement rates of students, employers and SCANS skills and the enrollment and follow-up rates of career technical students.

Career and technical education typically refers to programs and services offered to secondary students to prepare them for future employment and/or trade skills. Vocational education has a long history of employing our nations workforce and meeting the need of the American economy. In 1984, Congress visited vocational education again by authorizing the Carl D. Perkins Career and Technical Education Act. The purpose of the Perkins Act was to provide individuals with the academic and technical skills needed to succeed in knowledge and skills based economy.

Many factors contribute to children missing school and therefore gaining educational opportunities is limited. In reviewing the literature, these factors became evident. Some of them are single parents, mobility of the family from transfers, eviction notices, divorced parents and job loss. Each of these is a detriment to a student's learning

ability while at school and maintaining a consistent learning environment.

## CHAPTER III

### METHODS

#### Introduction

The purpose of this study was to examine the relationship between a career technical students number of office referrals and number of absences in regard to their skill level and job placement as measured by the overall grade point average and career technical grade point average.

This chapter has three sections: purpose and design of the study, sample of population and data collection and procedures. The first section lists the research questions and intent of the study. The second section describes the population sample and detailed description. The third section provides data collection and procedures.

The existing data collected from students in each career technical course area included their absences for one school year, number of office referrals for one school year and overall academic grade point average for one school year. The results collected were coded and analyzed using SPSS. The data were examined as to the number of absences and the number of office referrals (independent variables) as predictors of the students overall grade point average (dependent variable).

#### Purpose and Design of the Study

The intent of this study was to address the following research questions:



1. What is the relationship between the number of absences and career technical grade point average?
2. What is the relationship between overall grade point average and career technical grade point average?
3. What is the relationship between office referrals and the career technical grade point average?

The purpose of this study was to determine the relationship between a career technical student's number of office referrals and number of absences effect on their overall grade point average and career technical grade point average. Investigating such relationships yields information that would be beneficial to career tech educators in providing tomorrow's workforce. By fostering and understanding these possible relationships between factors influencing students work performance, provides insight to educators and business and industry on tomorrow's worker. The overall outcome of tomorrow's worker comes from today's career technical student. The overall performance of each student carries over to the work ethic of our country.

### Sample

The Alabama State Department of Education indicates that all students will attend school 180 days per school year. Student grades are calculated on a 4.0 scale with 4.0 equal to an "A", a 3.0 equal to a "B" average, 2.0 equal to a "C" average, and below 1.0 or F, failure to succeed. Career Technical grades are expressed as a percent of skill level accomplished. The high school is the only public high school within city limits for students to attend. The city population is 50,085. The total high school population is 1,450 with the racial make-up 59% black, 40% white, and 1% Hispanic or other. Of the

total school population, 875 students are enrolled in career technical courses. Students who are enrolled in a career technical course work part-time after school or during the school day.

The career technical class size is 29, which is the Alabama State Department of Education maximum limit. Courses are full with a student class count of 25, at the high school researched. There are 334 students in the Tenth grade, 348 students in the Eleventh grade, and 266 students in the Twelfth grade. Ninth graders are not permitted to take all career technical courses. Total school population is 1,450 for the current school year. The research was accomplished using a convenience random sample of the total population in each career technical cluster area (Cosmetology, Teacher Academy, Auto Body, Welding, Business, Healthcare, and Culinary Arts). The data collected on 175 students consisted of three grade levels of career technical students identified as: 1) Tenth grade students, 2) Eleventh grade students, 3) Twelfth grade students. The mean grade level of the population is Eleventh grade with an overall range of Tenth through Twelfth grades. The study included 100 females and 75 male students.

Each career technical cluster area has male and female students. Some career technical cluster areas are more gender specific than others. For example, Auto Body has more male students than female students overall. Cosmetology is a career technical cluster area that traditionally has more female students than male students. Career technical cluster areas are open to all students. Student's interest determines what area they most participate and succeed.

Completer is a term that the Alabama State Department of Education defines as a career technical student who has taken two or more career technical courses. The two

courses can be in more than one career technical area of expertise. The data collected from each career technical cluster area were randomly selected. The enrollment report and follow-up/ completer report was used to obtain student information. From each career technical cluster area, for an overall total of 175 students data.

The data maintained by the school software program, STI, provides a cumulative record of each student's information. The database STI, Software Technology Incorporated, is a computer maintained information center for all Alabama schools. STI stores the demographic information of each student, attendance rates, academic grades of each course completed, number of office referrals, detailed discipline history and overall credits earned and cumulative grade point average. The existing data collected from 175 students included their discipline referrals for one school year, number of office referrals for one school year and overall academic grade point average for one school year.

The results collected were coded and analyzed using SPSS. The data attributes the number of absentees and the number of office referrals (independent variables) as predictors of the students overall grade point average (dependent variable).

#### Data Collection and Procedures

The purpose of this study was to determine the relationship between a career technical student's number of office referrals and number of absences effect on their overall grade point average and career technical grade point average. Instructors were contacted by the researchers through the career technical director's approval to determine if they would allow their classroom data to be collected (see Appendix A). Permission was also obtained through the Institutional Review Board (IRB) at Auburn University (see Appendix B).

Data were collected during the school year over two consecutive semesters. Career technical program areas included were Cosmetology, Teacher Academy, Auto Body, Welding, Business, Health Care and Culinary Arts. Cumulative grade point average records, career technical grade point average records, office referral reports, absentee reports and career technical credits earned reports were collected on 175 students. Twenty-five students were randomly selected from each career technical course area. The multiple regression technique was used to analyze data. Descriptive data were also compiled and reported.

### Summary

This chapter addressed the purpose of the study, in addition to identifying the research questions, purpose and design, population and sample, data collection and procedure. Data was collected in accordance with the research guidelines set by the Auburn University Institutional Research Board and the collection of the data was outlined. The consent form and letter are included in the appendices. Statistical procedures for data analysis included multiple regression.

Existing data was collected from students in each career technical course area included their absences for one school year, number of office referrals for one school year and overall academic grade point average for one school year. The results collected were coded and analyzed using SPSS. The data were examined as to the number of absences and the number of office referrals (independent variables) as predictors of the students overall grade point average (dependent variable).

Investigating such relationships yields information that would be beneficial to career tech educators in providing tomorrow's workforce. By fostering and understanding these possible relationships between factors influencing students work performance, provides insight to educators and business and industry on tomorrow's worker. The overall outcome of tomorrow's worker comes from today's career technical student. The overall performance of each student carries over to the work ethic of our country.

## CHAPTER IV

### RESULTS

#### Introduction

The purpose of this study was to determine the relationship between a career technical student's number of office referrals and number of absences effect on their overall grade point average and career technical grade point average. Chapter III described the method for the study, which included details on the population and sample, research design, instrumentation, and data analysis. Chapter IV presents an analysis of the data gathered randomly from the database (STI) computer maintained information center for Alabama schools. STI stores demographics of each student, attendance rates, and grades of each course taken, number of office referrals, detailed discipline history and overall credits earned and cumulative grade point average. In addition, research questions posed by this study were:

1. What is the relationship between the absences and career technical grade point average?
2. What is the relationship between overall grade point average and career technical grade point average?
3. What is the relationship between office referrals and the career technical grade point average?

The data collected from 175 students included their absences, amount of office referrals, academic grade point average and career technical grade point average. The statistical procedure used in this study was the multiple regression analysis. Descriptive statistics used in this study included the means, standard deviations, and correlations. The analysis of data was performed through the use of the Statistical Package for the Social Sciences (SPSS). Involvement in the study was accomplished by using a purposive random sample. The data attributes the number of absentees and number of office referrals (independent variables) as predictors of the students overall grade point average (dependent variable). The data collected on student's absences, office referrals, and overall grade point average are listed by career technical departments in Tables 1-7.

Table 1

*Data collected on number of Office Referrals, Absentees, Grade Point Average and Career Technical Grade Point Average of Cosmetology students.*

Cosmetology Student #	Grade Point Average	CU's earned	CTE Grade Point Average	Amount of Office Referrals	Amount of Absentees
1	2.5	1	76	26	10
2	2.8	1	92	6	4
3	1.8	1	77	10	24
4	2.5	1	82	0	6
5	3.0	1	90	0	1
6	1.5	1	87	5	16
7	2.0	1	72	12	11
8	3.0	1	78	8	7
9	1.8	1	81	2	0
10	2.0	1	70	42	2
11	2.0	1	81	20	9
12	1.8	1	76	11	9
13	2.5	1	85	13	7
14	2.7	1	79	11	7
15	2.0	1	71	24	13
16	2.3	1	88	8	14
17	2.4	1	84	11	7
18	2.2	1	86	16	15
19	2.3	1	83	9	7
20	2.3	1	78	6	0
21	1.8	1	77	12	0
22	2.8	1	94	0	12
23	2.0	1	85	4	3
24	2.8	1	86	3	3
25	3.3	1	89	0	1



Table 2

*Data collected on number of Office Referrals, Absentees, Grade Point Average and Career Technical Grade Point Average of Teacher Academy students.*

Teacher Academy Student #	Grade Point Average	CU's earned	CTE Grade Point Average	Amount of Office Referrals	Amount of Absentees
1	2.3	0	0	0	1
2	2.5	1	68	14	5
3	3.8	1	92	0	15
4	3.3	1	87	1	7
5	2.8	0	0	0	12
6	1.8	0	56	11	13
7	2.0	1	68	38	8
8	2.1	1	66	16	33
9	1.5	0	58	0	9
10	1.8	1	64	13	21
11	2.3	1	87	8	11
12	3.3	0	0	1	7
13	3.5	0	0	42	24
14	1.8	0	0	15	15
15	2.3	1	92	4	8
16	2.8	0	0	24	4
17	1.4	1	70	2	0
18	3.0	1	86	0	7
19	2.1	0	0	20	29
20	2.8	1	89	0	4
21	1.3	1	75	39	2
22	1.8	1	83	42	12
23	2.0	0	0	24	17
24	2.5	1	72	1	5
25	2.5	1	85	11	5

Table 3

*Data collected on number of Office Referrals, Absentees, Grade Point Average and Career Technical Grade Point Average of Auto Body students.*

Auto Body Student #	Grade Point Average	CU's earned	CTE Grade Point Average	Amount of Office Referrals	Amount of Absentees
1	1.5	0	24	60	3
2	2.3	1	88	2	0
3	2.0	1	84	24	5
4	1.5	1	72	2	23
5	2.5	1	87	17	2
6	1.8	1	73	19	11
7	2.3	1	88	14	8
8	2.9	1	91	9	1
9	2.3	1	91	6	0
10	2.3	1	87	5	12
11	2.7	1	83	4	11
12	2.6	1	95	0	12
13	2.4	1	80	16	14
14	1.7	1	75	56	3
15	2.3	1	90	10	1
16	1.4	1	71	52	6
17	2.0	1	87	17	4
18	2.5	1	93	2	2
19	2.6	1	83	23	0
20	3.3	1	82	30	18
21	1.5	1	70	30	8
22	1.5	1	88	0	2
23	2.3	1	78	37	8
24	2.3	1	95	1	1
25	2.0	1	84	22	17

Table 4

*Data collected on number of Office Referrals, Absentees, Grade Point Average and Career Technical Grade Point Average of Welding students.*

Welding Student #	Grade Point Average	CU's earned	CTE Grade Point Average	Amount of Office Referrals	Amount of Absentees
1	2.1	1	82	7	17
2	1.7	1	84	0	24
3	1.5	1	79	0	10
4	2.0	1	82	16	13
5	2.7	1	93	6	7
6	0	0	2	5	0
7	1.8	1	86	14	22
8	1.8	1	79	24	7
9	2.8	1	77	0	2
10	2.5	1	82	51	1
11	1.6	1	82	23	4
12	3.8	1	91	0	2
13	3.1	1	84	0	6
14	3.3	1	95	6	4
15	1.8	1	68	0	21
16	2.5	1	88	23	16
17	2.8	1	83	7	6
18	2.4	1	81	4	1
19	2.7	1	82	0	4
20	2.1	1	88	18	8
21	1.0	0	8	13	21
22	3.9	1	94	1	3
23	2.0	1	86	0	0
24	2.4	1	82	3	2
25	2.3	1	83	2	1

Table 5

*Data collected on number of Office Referrals, Absentees, Grade Point Average and Career Technical Grade Point Average of Business students.*

Business Student #	Grade Point Average	CU's earned	CTE Grade Point Average	Amount of Office Referrals	Amount of Absentees
1	2.6	1	84	7	42
2	3.6	1	92	1	2
3	2.5	1	71	0	11
4	3.7	1	96	0	1
5	2.7	1	80	1	8
6	2.7	1	77	7	8
7	2.7	1	73	2	8
8	2.7	0	0	0	49
9	3.1	1	71	3	1
10	3.7	1	92	6	18
11	3.2	1	92	0	3
12	3.0	1	95	12	29
13	3.8	1	100	0	1
14	1.8	1	70	18	16
15	3.2	1	95	38	18
16	1.8	1	77	8	6
17	3.1	1	87	0	1
18	1.7	1	70	6	11
19	2.4	1	87	6	12
20	2.5	1	69	5	8
21	2.8	1	92	3	12
22	1.4	1	68	0	2
23	2.7	1	92	2	12
24	2.1	1	90	10	7
25	2.7	1	70	0	12

Table 6.

*Data collected on number of Office Referrals, Absentees, Grade Point Average and Career Technical Grade Point Average of Health Care students.*

Health Care Student #	Grade Point Average	CU's earned	CTE Grade Point Average	Amount of Office Referrals	Amount of Absentees
1	3.4	2	91	3	7
2	3.4	2	94	4	7
3	2.8	2	88	0	5
4	2.3	2	67	12	36
5	2.8	2	77	14	18
6	1.9	0	0	8	37
7	2.9	1	93	9	17
8	2.8	1	89	7	1
9	1.8	1	79	11	16
10	3.5	2	81	4	7
11	2.2	2	82	4	8
12	2.0	2	74	15	13
13	3.5	2	90	3	11
14	2.6	2	85	1	1
15	2.2	2	62	25	13
16	3.4	2	92	6	16
17	3.3	2	95	1	4
18	3.0	2	88	5	6
19	2.8	2	86	0	1
20	3.9	2	92	0	1
21	1.7	2	71	11	13
22	2.0	1	69	3	1
23	1.6	1	70	0	8
24	3.3	1	86	0	0
25	4.0	1	95	2	2

Table 7

*Data collected on number of Office Referrals, Absentees, Grade Point Average and*

*Career Technical Grade Point Average of Culinary Arts students.*

Culinary Arts Student #	Grade Point Average	CU's earned	CTE Grade Point Average	Amount of Office Referrals	Amount of Absentees
1	3.2	1	76	0	0
2	3.1	1	92	3	6
3	3.7	1	77	3	5
4	3.5	1	82	5	8
5	2.9	1	89	0	4
6	1.9	1	87	2	3
7	3.2	1	72	13	15
8	1.4	1	78	7	20
9	1.6	1	81	1	2
10	3.5	1	70	0	4
11	2.9	1	81	13	5
12	3.1	1	76	7	10
13	1.8	1	85	7	9
14	3.5	1	79	1	1
15	3.0	1	71	5	29
16	2.5	1	88	5	10
17	2.8	1	84	0	3
18	1.7	1	86	11	12
19	2.3	1	83	9	1
20	2.4	1	78	5	10
21	3.3	1	77	6	0
22	2.4	1	94	3	11
23	1.5	1	85	7	4
24	1.8	1	86	14	12
25	2.3	1	89	11	8

## Demographic Profile

The sample for this study consisted of 175 secondary students enrolled for the school year in career technical courses. Student grades were calculated on a 4.0 scale with 4.0 equal to a “A” average, a 3.0 equal to a “B” average, 2.0 equal to a “C” average, and below 1.0 or F, failure to succeed. This specific high school is the only public high school within city limits for students to attend. The city population is 50,085. The total high school population is 1,450 with the racial make-up of 59% black, 40% white, and 1% Hispanic or other. Of the total school population, 875 students are enrolled in career technical courses. Students who are enrolled in career technical courses work part-time after school or during the school day.

### Gender

The participants in this study were predominantly females with 58% participating and with males comprising 42% of the sample population. This is indicative of the higher percentage of females enrolled in career technical courses in which the data were collected. Subtest means and standard deviations by gender are provided in Table 8.

Table 8

#### *Distribution of Student Participants by Gender*

Gender	n	%
Male	74	42
Female	101	58

*N*=175

## Ethnicity

There were 59% participants who were black, 40% white and 1% Hispanic or other. Other was classified as no single group was significantly represented within the sample. Gregorc Style Delineator subtest means and standard deviations by ethnicity are in Table 9.

Table 9

### *Distribution of Study Participants by Race/ Ethnicity*

Race/ Ethnicity	n	%
African American	90	59
Caucasian	82	40
Other	3	1

*N*=175

## Research Questions

This study explored four research questions to investigate the relationship between the amount of office referrals and absentees on a career technical student's grade point average:

1. What is the relationship between the number of absences and career technical grade point average?

This question was answered by the overall number of absences. Students overall grade point averages were lower due to decreased participation in the classroom and disruptive behavior.



The table of correlations (Table 10) is useful in determining the relationship between the dependent variable (grade point average) and each of the predictor variables as well as the relationship among the predictor variables. All of the correlations between the predictors (number of absences and number of office referrals) are negative.

2. What is the relationship between overall grade point average and career technical grade point average?

The strongest of these is between absences, reported at  $-.929$ . This correlation indicates that those students who have a high number of absences, have a lower grade point average, as you would expect. The second strongest relationship is with office referrals (OFF. REFE) at a  $-.922$ . This correlation indicates that students who have a high number of office referrals have a lower grade point average.

The correlation between ABSENTEE and OFF. REFE is reported as  $-.922$  and  $-.929$ , indicating that the more a student is absent or the more times they have office referrals, the more it effects the grade point average. There are very high correlations with them averaging higher than  $(r > .80)$  with  $.929$  being the highest correlation.

Table 10

*Correlations of Student Grade Point Average, Office Referrals, and Absentees.*

		GPA	OFF.REFE	ABSENTEE
Pearson Correlation	GPA	1.000	-.922	-.929
	OFF.REFE	-.922	1.000	.825
	ABSENTEE	-.929	.825	1.000
Sig. (1-tailed)	GPA	.	.000	.000
	OFF.REFE	.000	.	.000
	ABSENTEE	.000	.000	.
N	GPA	25	25	25
	OFF.REFE	25	25	25
	ABSENTEE	25	25	25

3. What is the relationship between office referrals and career technical grade point average?

The higher the career technical grade point average, the higher the skill level of that student. Students must be focused and attentive to learn. Skills are learned by doing. Therefore, those students who are more active in the career technical courses will be more skilled. They have high attendance rates, low office referrals and better grade point averages.

In Table 11, the descriptive information is summarized such as the mean, standard deviations and correlations for independent variables in the multiple regression equation.

Our analysis included 175 students who had valid responses to each of the variables we selected for the regression analysis. The results were: the average number of office referrals is 3.04, the average number of student absences is 5.68, the average grade point average (GPA) is 2.5, and career technical course average is 76.4 or 76%. The average number of office referrals was close to 10 (9.6), while the average number of absences was nine. The multiple regression analysis indicates that the number of student absences and number of office referrals are significant factors on a student's career technical grade point average ( $R^2 = .94$ ,  $F(2, 22) = 171.14$ ,  $p < .01$ ). The  $R^2$  indicates the percent of variance in grade point average that can be accounted for by the linear relationship with skill level.

The equation is an excellent predictor model of GPA. For every office referral, on the average, there is a 2.17 point decrease in GPA,  $Beta = - 5.25$ ,  $p < .01$  and for every absence, there is a decrease of 1.26 in GPA,  $Beta = - 5.69$ ,  $p < .01$ .

Table 11

*Means and Standard Deviations for Independent Variables in the Regression Equation.*

Variable	Mean	Standard Deviation	N
Office Referrals	9.6	2.7	175
Absences	9.0	1.8	175
Grade Point Average	2.5	.6	175
Career Tech Grade Point Average	76.4	3.7	175

## Summary

The purpose of this research was to determine the relationship between a career technical student's number of office referrals and number of absences effect on their overall grade point average and career technical grade point average. One hundred and seventy five career technical students were used in this study. Collected data included the student's gender, grade point average, career technical grade point average, number of office referrals and number of absences.

Based on the analysis of the data from this study, the data suggests that a significant relationship exists between the amount of office referrals and absences on a career technical student's grade point average. There was no significance found between gender, grade point average or any of the demographic variables. In the next chapter, a summary of the study will be presented. In addition, the results of this chapter will be discussed and recommendations for future research will be suggested.

## CHAPTER V

### CONCLUSIONS, DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

#### Conclusions

This study was designed to investigate the relationships between a career technical students number of office referrals and number of absences effect on their overall grade point average and career technical grade point average as reflected in their readiness for job placement and skill level. Chapter I introduced the study. Chapter II reviewed the literature related to career technical education, discipline in a school environment and workforce education. Chapter III presented the method for the study and the results of the data were presented in Chapter IV. The final chapter of this study will offer a summary of the study and offer its major conclusions. Finally, some recommendations for practice and future research will be presented.

Investigating these relationships yielded information beneficial to career technical educators in providing tomorrow's workforce. By fostering and understanding these possible relationships between factors influencing students work performance, provides valuable insight to educators and business and industry on tomorrow's worker. The overall outcome of tomorrow's workforce comes from today's career technical student. The overall performance of each student carries over to the work ethic of our country. The data were collected through a computer software database which randomly selected and distributed a random sample of students from career technical education courses.

The database (STI) is a computer maintained information center for all Alabama schools. STI stores the demographics of each student, attendance rates and grades of each course taken, number of office referrals, detailed discipline history and overall credit earned and cumulative grade point average. Data obtained was beneficial to career technical education in strengthening its ability to train today and tomorrow's workforce.

The study was comprised of 175 secondary students enrolled in an East Alabama high school. Students in the study not only attended school daily, but maintained part-time jobs. This particular high school is the only public high school within the city limits for students to attend. The total high school population is 1,450 with the racial make-up of 59% black, 40% white, and 1% Hispanic or other. Of the total school population, 875 students are enrolled in career technical courses. The career technical class size is 29. There were 334 students in the Tenth Grade, 348 Eleventh Grade and 266 students in the Twelfth Grade. Ninth graders were not permitted to take all career technical courses.

The research was accomplished using purposive random sample of the total population in each career technical cluster area (Healthcare, Teacher Academy, Business, Culinary Arts, Cosmetology, Auto Body, Carpentry, and Welding). Each career technical cluster area has male and female students. Some career technical cluster areas are more gender specific than others. Auto Body has more male students than Cosmetology, which has primarily female students. From each area, 25 students were randomly selected from this school year.

## Discussion

The average grade point average (GPA) was 2.45 and average career technical grade point average (GPA) was 76.38% or 76%. The average number of office referrals was close to 10 while the average number of absentees was nine.

Depending on the students, the career technical grade point average is a good predictor of a student's knowledge and skill level in career technical coursework. An employer who hires skilled workers looks at the grade point average, as a reflection of their ability. The overall grade point average does not always reflect a skilled worker's ability. Career technical skilled students are hands-on learners, therefore score better in these courses. Applied courses such as Math and English do not appeal to this type of learner reflecting in lower grades. The analysis is a good predictor that the value of student success depends on the attendance and behavior that a student displays.

## Implications

From the research, educators will be enabled to plan and prepare tomorrow's workforce with today's students. Studies show that student's high absentee rate results in a lower grade point average.

Educators must plan and prepare for project based learning in order for students to become fully engaged. When a student has ownership of a project and works to complete such a task, it builds their self-esteem. Increased self-esteem and pride will encourage that student to attend school and learn. They must attend school to complete their project and once this is achieved they will continue to learn, have better grades and attendance will increase. The end result is a student with increased self-esteem and good work ethic.

Career and technical education provided training and knowledge to develop skilled workers. Each Career Technical area specializes in a specific skill or task. For example, Welding, Cosmetology, Healthcare, Business and Finance, Family and Consumer Sciences, Masonry, and Culinary Arts each have specialized skills differing from the other. An attempt was made to enhance a student's marketability by combining their school schedule with Math, Science, and English, but Career Technical skills courses as well. Upon graduation, a student would have increased experience for job placement as well as curriculum-based knowledge.

By fostering and understanding these possible relationships between factors influencing students work performance, provides insight to educators and business and industry on tomorrow's worker. The overall outcome of tomorrow's workforce comes from today's career technical student. The overall performance of each student carries over to the work ethic of our country.

For local education associations this would mean a better educated and trained workforce for the community. When communities become strong and are providing productive citizens they lead to a better state, which is a better nation. Working together for a better tomorrow by growing today's student builds a better nation. Each level of education: local, state and federal work together to meet the needs of tomorrow's workforce by providing today's student the education, training and skills needed for the workforce.



## Recommendations

The purpose of this study was to investigate the relationship between the amount of office referrals and absentees on a career technical student's grade point average.

Based on the findings from this study, future research might:

1. Engage students in classroom participation, which would decrease disruptive behavior.
2. Improving student attendance rates would assist them in becoming productive citizens and better workers.
3. Explore skills learned-by-doing. Students who are focused are more attentive to learn. Increased activities in the career technical courses develops more skill as students are engaged.
4. Depending on the students, the career technical grade point average is a good predictor of a student's knowledge and skill level in career technical coursework. An employer who hires skilled workers looks closely at this number as it reflects their ability.

The overall grade point average does not always reflect a skilled worker's ability. Career technical students are hands-on learners, therefore better scores in these courses is better job placement. Increased projects that incorporate core courses will better develop the overall knowledge of a career technical student in English, Math and Career Technical courses. This does not mean that a student cannot learn the material. It is their interest that results in lower achievement. No significant effects were founds between gender, grade point average or demographic variables. Students with higher grade point averages had a higher employability rate. Based on the findings of this research and

review of literature, schools should re-examine their commitment to those they serve and assess their responsibility for providing skills to develop programs for today's students for a better workforce tomorrow.

### Summary

Current and accurate information regarding program outcomes is crucial to knowing a specific programs enrollment. Data obtained from this study will be beneficial to career technical education in strengthening it's ability to train today and tomorrow's workforce

The effectiveness of its relationship will be beneficial to guidance counselors and administrators in tailoring services to meet the needs of students who are making the transition from school to work. These findings will provide a baseline for future studies analyzing career technical completer's employment and retention.

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## APPENDICES

APPENDIX A

CENTRAL HIGH SCHOOL LETTER





DAVID S. WILSON  
PRINCIPAL

## Central High School

2400 DOBBS DRIVE  
PHENIX CITY, ALABAMA 36870  
TELEPHONE (334) 298-3626 • FAX (334) 298-0970

ASSISTANT PRINCIPALS  
LISA B. COLEMAN  
LARRY D. McQUISTON  
TOMMY VICKERS

June 22, 2007

To Whom It May Concern:

The Career Technical department of Central High School, Phenix City, Alabama gives permission to Brindlea Wilson Griffin to use grade point averages, office referrals and absences data collected by the STI system for preparation of a Doctoral Dissertation. This data is released on condition that it is used only for statistical purposes.

As Director of the Career Technical Center of Central High School, Phenix City I have the authority to release this data for research purposes.

Sincerely,

Lisa B. Coleman  
Director of Career Technical Center  
Assistant Principal  
Central High School

APPENDIX B

INSTITUTIONAL REVIEW BOARD (IRB)

AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS  
**RESEARCH PROTOCOL REVIEW FORM**

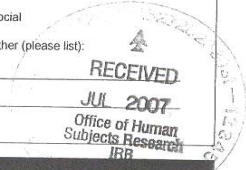
For information or help completing this form, contact: THE OFFICE OF HUMAN SUBJECTS RESEARCH, 307 Samford Hall,  
 Phone: 334-844-5966 e-mail: hsubject@auburn.edu Web Address: http://www.auburn.edu/research/vpr/ohs/index.htm

Complete this form using Adobe Acrobat Writer (versions 5.0 and greater).

1. PROPOSED DATES OF STUDY: FROM: 09/01/2007 TO: 08/01/2008
- REVIEW TYPE (Check one):  FULL BOARD  EXPEDITED  EXEMPT
2. PROJECT TITLE: An Investigation of the Effects of Office Referrals and Absentees on the Grade Point Average of Career Technical Students
3. Brindlea Wilson Griffin Doctoral Student EFLT 334-298-03 wilsob1@auburn.edu  
 PRINCIPAL INVESTIGATOR TITLE DEPT PHONE E-MAIL  
3207 12th Avenue, Phenix City, Alabama 36867 334-298-2148  
 ADDRESS FOR CORRESPONDENCE FAX
4. SOURCE OF FUNDING SUPPORT:  Not Applicable  Internal  External (External Agency): \_\_\_\_\_
5. STATUS OF FUNDING SUPPORT:  Not Applicable  Approved  Pending  Received
6. GENERAL RESEARCH PROJECT CHARACTERISTICS

A. Research Content Area	B. Research Methodology
Please check all descriptors that best apply to this proposed research project. <input type="checkbox"/> Anthropology <input type="checkbox"/> Anthropometry <input type="checkbox"/> Biological Sciences <input type="checkbox"/> Behavioral Sciences <input checked="" type="checkbox"/> Education <input type="checkbox"/> English <input type="checkbox"/> History <input type="checkbox"/> Journalism <input type="checkbox"/> Medical <input type="checkbox"/> Physiology <input type="checkbox"/> Other (Please list): _____ Please list 3 or 4 keywords to identify this research project: <u>Grade Point Average, Amount of Office Referrals and Absentees</u>	Please check all descriptors that best apply to the research methodology. Data collection will be: <input type="checkbox"/> Prospective <input checked="" type="checkbox"/> Retrospective <input type="checkbox"/> Both Data will be recorded so that participants can be directly or indirectly identified: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Data collection will involve the use of: <input type="checkbox"/> Educational Tests (cognitive, diagnostic, aptitude, achievement) <input type="checkbox"/> Surveys / Questionnaires <input checked="" type="checkbox"/> Private Records / Files <input type="checkbox"/> Interview / Observation <input type="checkbox"/> Audiotaping and / or Videotaping <input type="checkbox"/> Physical / Physiologic Measurements or Specimens
C. Participant Information	D. Risks to Participants
Please check all descriptors that apply to the participant population. <input checked="" type="checkbox"/> Males <input checked="" type="checkbox"/> Females Vulnerable Populations <input type="checkbox"/> Pregnant Women <input type="checkbox"/> Children <input type="checkbox"/> Prisoners <input checked="" type="checkbox"/> Adolescents <input type="checkbox"/> Elderly <input type="checkbox"/> Physically Challenged <input type="checkbox"/> Economically Challenged <input type="checkbox"/> Mentally Challenged Do you plan to recruit Auburn University Students? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Do you plan to compensate your participants? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Please identify all risks that may reasonably be expected as a result of participating in this research. <input type="checkbox"/> Breach of Confidentiality <input type="checkbox"/> Coercion <input type="checkbox"/> Deception <input type="checkbox"/> Physical <input type="checkbox"/> Psychological <input type="checkbox"/> Social <input checked="" type="checkbox"/> None <input type="checkbox"/> Other (please list): _____

The Auburn University Institutional Review Board has approved this document for use from 7/20/07 to 7/19/08 Protocol # 07-157 EX 0707



**For OHSR Office Use Only**

DATE RECEIVED IN OHSR: 7/26/07 by SKD PROTOCOL # 07-157 EX 0707

DATE OF OHSR CONTENT REVIEW: \_\_\_\_\_ by \_\_\_\_\_ DATE ASSIGNED IRB REVIEW: \_\_\_\_\_ by \_\_\_\_\_

DATE OF IRB REVIEW: 7/20/07 by \_\_\_\_\_ DATE IRB APPROVAL: 7/20/07 by IRB procedure

INTERVAL FOR CONTINUING REVIEW: 1 year - expires 45 CFR 46.101 (b) (4)

original received 7/11/07  
 final clarification rec'd 7/30/07

7. PROJECT ASSURANCES

PROJECT TITLE: An Investigation of the Effects of Office Referrals and Absentees on the Grade Point Average of Career Technical Students

A. PRINCIPAL INVESTIGATOR'S ASSURANCE

- 1. I certify that all information provided in this application is complete and correct.
2. I understand that, as Principal Investigator, I have ultimate responsibility for the conduct of this study, the ethical performance this project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by the Auburn University IRB.
3. I certify that all individuals involved with the conduct of this project are qualified to carry out their specified roles and responsibilities and are in compliance with Auburn University policies regarding the collection and analysis of the research data.
4. I agree to comply with all Auburn policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of human subjects, including, but not limited to the following:
a. Conducting the project by qualified personnel according to the approved protocol
b. Implementing no changes in the approved protocol or consent form without prior approval from the Office of Human Subjects Research (except in an emergency, if necessary to safeguard the well-being of human subjects)
c. Obtaining the legally effective informed consent from each participant or their legally responsible representative prior to their participation in this project using only the currently approved, stamped consent form
d. Promptly reporting significant adverse events and/or effects to the Office of Human Subjects Research in writing within 5 working days of the occurrence.
5. If I will be unavailable to direct this research personally, I will arrange for a co-investigator to assume direct responsibility in my absence. This person has been named as co-investigator in this application, or I will advise OHSR, by letter, in advance of such arrangements.
6. I agree to conduct this study only during the period approved by the Auburn University IRB.
7. I will prepare and submit a renewal request and supply all supporting documents to the Office of Human Subjects Research before the approval period has expired if it is necessary to continue the research project beyond the time period approved by the Auburn University IRB.
8. I will prepare and submit a final report upon completion of this research project.

Brindlea Wilson Griffin
Principal Investigator (Please Print)

Brindlea Wilson Griffin
Principal Investigator's Signature
7/26/07
Date

B. FACULTY SPONSOR'S ASSURANCE

- 1. By my signature as sponsor on this research application, I certify that the student or guest investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
2. I certify that the project will be performed by qualified personnel according to the approved protocol using conventional or experimental methodology.
3. I agree to meet with the investigator on a regular basis to monitor study progress.
4. Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them.
5. I assure that the investigator will promptly report significant adverse events and/or effects to the OHSR in writing within 5 working days of the occurrence.
6. If I will be unavailable, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the OHSR by letter of such arrangements.
7. I have read the protocol submitted for this project for content, clarity, and methodology.

Dr. James E. Witte
Faculty Sponsor (Please Print)

Dr. James E. Witte
Faculty Sponsor's Signature
8/15/07
Date

C. DEPARTMENT HEAD'S ASSURANCE

By my signature as department head, I certify that every member of my department involved with the conduct of this research project will abide by all Auburn University policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection and ethical treatment of human participants.

Jose R. Gomez
Department Head (Please Print)

Jose R. Gomez
Department Head's Signature
8/15/07
Date

8. **PROJECT ABSTRACT:** Prepare an abstract (400-word maximum) that includes: I.) A summary of relevant research findings leading to this research proposal; II.) A concise purpose statement; III.) A brief description of the methodology; IV.) Expected and/or possible outcomes, and V.) A statement regarding the potential significance of this research project. *Please cite relevant sources and include a "Reference List" as Appendix A.*

The purpose of the study is to see if there are any statistically significant relationships in the Career Tech students grade point averages due to the amount of office referrals and absentees. Career Tech students are tenth grade thru twelfth grade, ages 16-19, race (black, white, or other), and gender (male and female). Students are from seven Career Technical education departments: Cosmetology, Teacher Academy, Auto Body, Welding, Business, Health Care, and Culinary Arts. Students took courses over a two-year span at a public high school in East Alabama. Students took courses as part of their Alabama high school diploma plan or elective. The total high school enrollment is 1,450 students with Career Technical enrollment at 875 students.

Students earn a Career Technical course average and an overall grade point average. Four research questions have been developed to see if the amount of office referrals and absentees effect a Career Tech students grade point average or their skill level in the Career Tech course area. Both cumulative grade point average and the Career Tech course grade point average will be researched from the data collected.

Students are placed in jobs based on their Career Tech skills attained in the course. Employers often request a students grades when many times they do not reflect the true ability of that student. This research will reflect whether their career technical ability is from the motivation to learn a skill or as a result of the effects of the amount of office referrals and absentee rate.

9. **PURPOSE & SIGNIFICANCE.**

- a. Clearly state all of the objectives, goals, or aims of this project.

The purpose of this research is to determine if there are any statistical differences in the grade point averages of Career Tech students that might be attributable to skill level, office referrals or absentees.

- b. How will the results of this project be used? (e.g., Presentation? Publication? Thesis? Dissertation?)

The results of this project will be published as a dissertation.

10. KEY PERSONNEL INVOLVED WITH DATA COLLECTION. Identify each individual involved with the conduct of this project and describe his or her roles and responsibilities related to this project. Be as specific as possible.

Individual: Brindlea Wilson Griffin Title: Doctoral Student Dept/ Affiliation: EFLT  
Roles / Responsibilities:

I (Brindlea Wilson Griffin) am the principal investigator for this project. My role the collection and analysis of the research data necessary for conducting this study.

Individual: James E. Witte Title: Assoc. Professor Dept/ Affiliation: EFLT  
Roles / Responsibilities:

Dr. Witte is the investigator faculty sponsor. His role is to meet investigator on a regular basis to monitor research progress, and should the need arise, supervise the investigator in solving them.

Individual: \_\_\_\_\_ Title: \_\_\_\_\_ Dept/ Affiliation: \_\_\_\_\_  
Roles / Responsibilities:

Individual: \_\_\_\_\_ Title: \_\_\_\_\_ Dept/ Affiliation: \_\_\_\_\_  
Roles / Responsibilities:

Individual: \_\_\_\_\_ Title: \_\_\_\_\_ Dept/ Affiliation: \_\_\_\_\_  
Roles / Responsibilities:

11. LOCATION OF RESEARCH. List all locations where data collection will take place. Be as specific as possible.

Data were collected by the Career Technical department at Central High School in Phenix City, Alabama. The grade point averages were collected in each Career Technical department. Data was randomly collected from each department and has no information that identifies the students identification.

12. PARTICIPANTS.

- a. Describe the participant population you have chosen for this project.

Students from the ages of 16-19.

What is the minimum number of participants you need to validate the study? 100

What is the maximum number of participants you will include in the study? 175

- b. Describe the criteria established for participant selection. (If the participants can be classified as a "vulnerable" population, please describe additional safeguards that you will use to assure the ethical treatment of these individuals.)

All students who took each of the seven Career Tech courses were tenth grade thru twelfth grade, ages 16-19 at a high school in East Alabama. Twenty five students from each area were randomly selected for a total sample of 175.

- c. Describe all procedures you will use to recruit participants. *Please include a copy of all flyers, advertisements, and scripts and label as Appendix B.*

Not applicable.

What is the maximum number of potential participants you plan to recruit? n/a

- d. Describe how you will determine group assignments (e.g., random assignment, independent characteristics, etc.).

Students were categorized by their respective Career Tech department.

- e. Describe the type and amount and method of compensation for participants.

None.

---

13. **PROJECT DESIGN & METHODS.** Describe the procedures you will plan to use in order to address the aims of this study. (NOTE: Use language that would be understandable to a layperson. Without a complete description of all procedures, the Auburn University IRB will not be able to review protocol. If additional space is needed for #13, part b, save the information as a .pdf file and insert after page 6 of this form. )

a. **Project overview.** (Briefly describe the scientific design.)

The data collected will be provided by each department instructor without any personal identifiers. There are over 800 Career Tech students collected from this school year. The data collected will be converted into an Excel file and then into SPSS file. None of the data can be attributed to a specific individual.

b. **Describe all procedures and methods used to address the purpose.**

1. Permission has been granted to the researcher by Central High School to use the student data.
2. Central High School will provide hard copy records of the data to the researcher. All identifiers will have been omitted.
3. Students from seven Career Technical departments will be analyzed including Cosmetology, Teacher Academy, Auto Body, Welding, Business, Health Care, and Culinary Arts.
4. Student information in the data set will include absentee rate, amount of office referrals, cumulative grade point average, career technical grade point average, and amount of credits in career technical education.



- 
- c. List all instruments used in data collection. (e.g., surveys, questionnaires, educational tests, data collection sheets, outline of interviews, scripts, audio and/or video methods etc.) *Please include a copy of all data collection instruments that will be used in this project and label as Appendix C.*

STI ( school database management system) will provide student data information.

- d. Data Analysis: Explain how the data will be analyzed.

Data will be analyzed using multiple regression methods in SPSS.

14. RISKS & DISCOMFORTS: List and describe all of the reasonable risks that participants might encounter if they decide to participate in this research. *If you are using deception in this study, please justify the use of deception and be sure to attach a copy of the debriefing form you plan to use and label as Appendix D.*

Breach of confidentiality.

15. **PRECAUTIONS.** Describe all precautions you have taken to eliminate or reduce risks that were listed in #14.

1. School will provide a de-identified data set.
2. Findings will be reported to the school upon completion of the research.

16. **BENEFITS.**

a. List all realistic benefits participants can expect by participating in this study.

These students will receive no benefits.

b. List all realistic benefits for the general population that may be generated from this study.

Employers and Department of Education need to be aware that the current practice of placing Career Tech students based on cumulative grade point average may convert to using the Career Tech course skill grade point average for placement.

17. PROTECTION OF DATA.

a. Will data be collected as anonymous?  Yes  No *If "YES", go to part "g".*

b. Will data be collected as confidential?  Yes  No

c. If data is collected as confidential, how will the participants' data be coded or linked to identifying information?

Not applicable.

d. Justify your need to code participants' data or link the data with identifying information.

Not applicable.

e. Where will code lists be stored?

Not applicable.

f. Will data collected as "confidential" be recorded and analyzed as "anonymous"?  Yes  No

g. Describe how the data will be stored (e.g., hard copy, audio cassette, electronic data, etc.), where the data will be stored, and how the location where data is stored will be secured in your absence.

Data will be provided by Central High School as a hard copy with all identifiers omitted. A copy of the data set will be given to my advisor. My copy is located in my study area at home. The house is locked and has a security system activated in my absence.

h. Who will have access to participants' data?

The principle investigator and advisor.

i. When is the latest date that the data will be retained?

Upon completion of dissertation. Approximately one year.

j. How will the data be destroyed? (NOTE: Data recorded and analyzed as "anonymous" may be retained indefinitely.)

Not applicable.

## PROTOCOL REVIEW CHECKLIST

All protocols must include the following items:

- 1. Research Protocol Review Form (All signatures included and all sections completed)
- 2. Consent Form or Information Letter (examples are found on the OHSR website)
- 3. Appendix A "Reference List"
- 4. Appendix B if flyers, advertisements, generalized announcements or scripts are used to recruit participants.
- 5. Appendix C if data collection sheets, surveys, tests, or other recording instruments will be used for data collection. Be sure to mark each of the data collection instruments as they are identified in section # 13, part c.
- 6. Appendix D if a debriefing form will be used.
- 7. If research is being conducted at sites other than Auburn University or in cooperation with other entities, a letter from the site / program director must be included indicating their cooperation or involvement in the project. NOTE: If the proposed research is a multi-site project, involving investigators or participants at other academic institutions, hospitals or private research organizations, a letter of IRB approval from each entity is required prior to initiating the project.
- 8. Written evidence of acceptance by the host country if research is conducted outside the United States.



**AUBURN**  
UNIVERSITY

Office of Human Subjects Research  
307 Sanford Hall  
Auburn University, AL 36849

Telephone: 334-844-5966  
Fax: 334-844-4391  
hsubjec@auburn.edu

July 30, 2007

MEMORANDUM TO: Brindlea Wilson Griffin  
Education, Foundations, Leadership & Technology

PROTOCOL TITLE: "An Investigation of the Effects of Office Referrals and Absentees on the Grade Point Average of Career Technical Students"

IRB FILE NO.: 07-157 EX 0707

APPROVAL DATE: July 20, 2007  
EXPIRATION DATE: July 19, 2008

The referenced protocol was approved "Exempt" from further review by IRB procedure on July 20, 2007 under 45 CFR 46.101 (b) (4):

"Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects."

You should retain this letter in your files, along with a copy of the revised protocol and other pertinent information concerning your study. If you should anticipate a change in any of the procedures authorized in this protocol, you must request and receive IRB approval prior to implementation of any revision. Please reference the above IRB file number in any correspondence regarding this project.

If you will be unable to file a Final Report on your project before July 19, 2008, you must submit a request for an extension of approval to the IRB no later than July 5, 2008. If your IRB authorization expires and/or you have not received written notice that a request for an extension has been approved prior to July 19, 2008, you must suspend the project immediately and contact the Office of Human Subjects Research for assistance.

A Final Report will be required to close your IRB project file.

If you have any questions concerning this Board action, please contact the Office of Human Subjects Research at 844-5966.

Sincerely,

Niki L. Johnson, JD, MBA, Director  
Office of Human Subjects Research  
Research Compliance Auburn University

cc: Dr. Jose R. Llanes  
Dr. James E. Witte