

A COMPARISON OF WORK ETHIC DESCRIPTORS AMONG TECHNICAL
COLLEGE ADVISORY COMMITTEE MEMBERS, INSTRUCTORS, AND
STUDENTS

by

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(Under the Direction of JOHN W. SCHELL)

ABSTRACT

The purpose of this study was to identify the perceived importance of work ethic descriptors of technical college advisory committee members, instructors, and students to aid in work ethic curriculum planning and subsequent instruction. Data was collected using the Occupational Work Ethic Inventory (OWEI) with a revised stem. The independent variable for this study was the position of respondents. The dependent variables were the four dimensions of occupational work ethic represented by the subgroups on the OWEI of dependable, considerate, ambitious, and cooperative.

The population for this study consisted of members of a technical college in the South East. A purposive sample was taken from advisory committee members, faculty and students of the selected college, comprising a sample that was believed to be representative of the population.

The methodology used for this research was parameter estimation. This type of research is conducted on samples to estimate the level of one or more population

characteristics. A survey instrument was utilized to obtain the data used in the estimation.

Data analysis involved both descriptive and inferential statistics. Descriptive statistics were used to summarize the demographic data information on the sample. A series of one way analysis of variance procedures were used to determine whether there was a significant difference between the means on the OWEI subscale scores. The Scheffe` post-hoc test was conducted to control for experiment-wise error rate and reveal where group differences fell.

The results indicated a discrepancy between advisory committee members, students, and faculty on all four subgroups of the OWEI. Whereas faculty and students were most aligned in their perceived level on the subscales of dependable, ambitious, and cooperative, they did differ on their perceived level of considerate.

Recommendations for future study include replication of this study utilizing all of the technical colleges within the Georgia Department of Technical and Adult Education. Also, indications were clear that advisory committee members, faculty, and students need to be actively and continuously involved in the work ethic curriculum development process.

INDEX WORDS: Advisory Committee Members, Curriculum Development, Employability skills, Occupational Work Ethic Inventory, Protestant Work Ethic, Work Ethic

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DEDICATION

This study is dedicated to my daughters, Heather Tydings Spivey and Holly Elizabeth Tydings, who are my best teachers. It is through their eyes I see the world the most clearly. They are my biggest source of inspiration and have always been there to provide the drive and desire necessary to bring this dream to fruition. And yes girls, you may now call me Dr. Mom.

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CHAPTER I

INTRODUCTION

Education in America has traditionally taken its direction from the economic and political structure of the time. Today, that direction is requiring occupational educators to continuously modify and update curriculum to keep pace with the growing demands of the workplace. The ever-changing global marketplace is now expecting entry-level employees to possess not only high quality technical skills but also an array of affective employability skills that can be described as work ethic (Lankard, 1990).

Previous research has shown that employers consistently identify the lack of appropriate work attitudes or behavior skills as the major causes of dissatisfaction and or termination of employees (Barton, 1990). Barton stated that employers are looking for empowered employees who can adapt successfully to change, learn new skills on the job, get along well with others, communicate effectively, contribute creative ideas, participate in management decisions, identify and solve problems, and anticipate and prevent problems. Anderson-Yates and Penny (1996) even went so far as to say that the social competencies were what are most desired by employers.

Miles (1994), in viewing work ethic, cited that the abilities to conceptualize, organize, and verbalize thoughts, resolve conflicts, and work in teams is increasingly critical. What most employers appear to really need are employees that have good basic academic skills and basic employability skills.

Economic and technical changes are also increasing the importance of problem-solving and managerial skills. In many job roles, employees must handle a broad range of functions and teamwork skills to interact effectively with other members of the working team (Martin, 1995). The Internet's extraordinary impact on the modern workplace over the past half-decade has most certainly re-shaped social interaction and work ethics.

A report by the U.S. Department of Labor (Secretary's Commission on Achieving Necessary Skills, 1991) stated that more than one-half of our young people leave school without the knowledge or foundation to find and hold a good job. As outlined in SCANS report, the workplace of today requires workers who have a solid foundation in the basic literacy and computational skills, in the thinking skills necessary to put knowledge to work, and in the personal qualities that make workers dedicated and trustworthy, in other words, a strong work ethic.

According to Rosove (1982), work is of central importance to the well being of people in our society. We take a large part of our identification from work and thus form a significant part of our individual self-concept. In *The Working Life: The Promise and Betrayal of Modern Work*, Ciulla (2000) explores ancient and modern history, moral philosophy, religion, economics, and social psychology to tackle the question of do we work to live or live to work. Whatever the answer to this question, the fact remains that we live in a work-oriented society and there is a strong ethical and practical imperative facing all who help prepare people for the labor market to ensure they are well prepared to enter working situations and be successful. Failure to equip students with work ethic skills could have far reaching consequences (Bhaerman & Spill, 1988; Wentling, 1987).

Repeatedly, work ethic is listed by employers as critical for job success and as such, employers are mandating these issues be addressed by educators preparing students for employment (Georgia Department of Technical and Adult Education, 1996a). The challenge facing occupational educators is to find a way to provide students with the technical know how, as well as, the communication, interpersonal and problem-solving skills needed in the current and future world of work (Miller & Brown, 1990).

Work ethics has been described as a cultural norm that places a positive moral value on doing a good job and is based on the belief that work has intrinsic value (Cherrington, 1980; Yankelovich & Immerwahr, 1984). Wayne and Chapman (1992) described work ethic as “an obligation imposed on individuals by society referring to the usefulness, importance, or general worth that these individuals assign some behavior or conception related to work and non-work activities” (p. 128). Miller and Coady (1989) entertained a more global definition of work ethic as an integrated and interactive system of attitudes, values, and beliefs that empower individuals to adapt to and initiate change in order to sustain a long-term harmony with their work environment.

Siegel (1983), when looking at work ethic and productivity, defined work ethic as a system of values or beliefs that guides employees’ attitudes and behaviors. Employees with a positive work ethic relate to work as valued and desirable activities which will produce positive outcomes (Aldag & Brief, 1975). For the purposes of this study, work ethic will be more narrowly defined as the four subscales measured by the Occupational Work Ethic Inventory labeled dependable, considerate, ambitious, and cooperative. The OWEI has been used in previous studies to measure work ethic and has

been shown to provide a clear and accurate measure of these affective employability skills (Hatcher, 1995; Hill, 1992, 1997; Hill & Petty, 1995; Petty, 1991a, 1995a, 1995b).

Theoretical Perspective

The vocational/technical education curriculum as we know it today evolved over the years from a narrow set of disjointed offerings to a comprehensive array of relevant student learning experiences. Several important pieces of federal legislation, including the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 (Perkins II) and the School-to-Work Opportunities Act of 1994, are grounded in the notion that the United States is falling behind other nations in its ability to prepare students to enter and succeed in the workplace (Finch & Crunkilton, 1999).

Both the Perkins II and the School-to-Work Acts philosophically align with the views of John Dewey. It was Dewey's thesis that educational movements are but reflections of larger social movements and the curriculum should be organized around these social problems (Dewey, 1899). Dewey (1929) stated:

With the advent of democracy and modern industrial conditions, it is impossible to foretell definitely just what civilization will be twenty years from now. Hence it is impossible to prepare the child for any precise set of conditions. To prepare him for the future life means to give him command of himself; it means so to train him that he will have the full and ready use of all his capacities; that his eye and ear and hand may be tools ready to command, that his judgment may be capable of grasping the conditions under which it has to work, and the executive forces be trained to act economically and efficiently. (p. 5-6).

Curriculum itself can be defined as the sum of the learning activities and experiences that a student has under the auspices or direction of the school including courses and experiences associated with preparation for life and for earning a living (Finch & Crunkilton, 1999). This definition supports the concept that a curriculum should focus on developing the whole person.

The justification for a vocational/technical curriculum is usually based on identified occupational needs of an area with support for that curriculum coming from employment opportunities for graduates. The curriculum deals directly with helping students develop a broad range of knowledge, skills, attitudes, and values, each of which ultimately contribute to their employability (Finch & Crunkilton, 1999).

The mission of vocational/technical education mandates that the curriculum be responsive to the needs of the community (Finch & Crunkilton, 1999). Saylor, Alexander and Lewis (1981), envisioned persons from the community as helping in four stages of curriculum planning: goal setting, designing, implementing, and evaluating. Employers therefore are often asked to give input and updates on curriculum changes and development.

The partnerships among the community, the college and the students work well when the needs of all these parties are met (Fatt, 1999). Occupational advisory committee members are primarily composed of business and industry representatives from the community that hire program graduates of the college. They also give counsel and guide instructors to maintain quality programs and educational training standards. Instructional advisory committee members provide advice for programs of study and make recommendations for improvement to meet employment standards within the

occupation. These committee members often interview and employ technical college program graduates.

Colleges accredited by the Council on Occupational Education (COE, 2001) are mandated, as part of that accreditation, to maintain occupational advisory committees. These committees are responsible for ensuring that desirable, relevant, and current practices of the occupations are being taught. Curricula change recommendations made by the advisory committee members are forwarded through the Department of Technical and Adult Education state standard revision process.

COE (2001), sets as a criterion of accreditation that each program incorporates current job market requirements in its instruction through involvement of the constituencies served and that competencies are taught with equipment and in settings reflecting current work-place requirements. This review of the curriculum and equipment should take place at least twice a year.

Finch and Crunkilton (1999), stated that the use of data as a basis for curriculum decisions cannot be overemphasized and believe that a static curriculum is a dying curriculum. The concept of data-based curriculum development is also embraced by critical theorists stating that efficient program planning must be characterized by judgments made with a clear understanding of the interaction between political, ethical, and social powers and educational goals (Cervero, 1988).

Cervero and Wilson (1994) believed that responsible educational program planning represented a democratic process that includes as many of the various stakeholder interests as possible. Witkin and Altschuld (1995) agreed that curriculum planning included input from those who have impact on or are impacted by the program.

They defined those stakeholders as: 1) those that benefit directly from the curriculum; 2) those that are providing the instruction; and 3) the social, political, and organizational stakeholders.

Social learning theory is the view that behavior is learned through observation of others as well as through the direct experience of rewards and punishments (Brehm & Kassin, 1990). The social learning theory of Bandura emphasizes the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others.

Bandura (1977) states:

Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do.

Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. (p. 22).

Social learning theory explains human behavior in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences and deals with behaviors that occur as a result of social interaction. Social learning theory generally involves the acquisition of those behavior patterns which society expects from its members (LeFrancois, 1972).

The process of social learning theory is complicated because the desirability of the behaviors varies from culture to culture. Sometimes the behaviors that may be appropriate in one situation may not be acceptable in other situations for the same person in the same culture. Consequently, a great deal of discrimination and generalization is involved in social learning processes (LeFrancois, 1972).

This study is based on the theoretical perspective of Dewey (1899) on the organization of the curriculum, on the theories regarding vocational/technical education curriculum development held by Finch and Crunkilton (1999), and on the concept of social learning theory. These perspectives support the view that behaviors cannot be explained as a single law or principle but rather a multi-method approach to theory and practice should be incorporated. These perspectives support the critical theorist views of understanding and representing all stakeholders impacted by the curriculum. The information provided by advisory committee members, students, and instructors on the level of importance of work ethic descriptors will involve all stakeholders impacted by the work ethic curriculum. This information can be used to determine a recommended level of importance for teaching work ethic descriptors.

Purpose Statement

Workforce development in school should begin with curricula that can provide teachers with the content and context for teaching work ethic skills (Spille, 1994). In order for occupational educators to integrate work ethic training into their curriculum, they need a clear definition of expected work ethic behavior and knowledge of the best way to prepare the adult learner for the workplace (GDTAE, 1996a). The basis for work ethic instruction should be derived from sound research that has examined the characteristics of the real world of work.

Staying abreast of constant changes in a volatile workforce is one of the many obstacles to providing a clear definition of expected work ethic behavior. Hill and Petty (1995) believed the task of addressing work ethic cannot be successfully undertaken without clear objectives to guide instruction. Educators need to have a good

understanding of current knowledge of worker characteristics that contribute to job success (Petty & Campbell, 1988).

The Georgia Department of Technical and Adult Education (GDTAE) recognized work ethic as an important aspect of workforce preparation and in 1991, implemented a statewide program to address this training need. The adopted work ethic training curriculum was based on the belief that students should have an opportunity to practice work ethic in an educational setting under the guidance of instructors before they enter the workplace, and each student should develop a personal “code of ethics” for the workplace.

The purpose of this study was to collect baseline data on advisory committee members, students, and instructor ratings of importance with regard to defined work ethic descriptors. Data were analyzed to determine a recommended level of importance for work ethic descriptors during curriculum planning and subsequent work ethic instruction.

Research Questions

Relative to the importance of the differentiation between perceived and real needs in the development of a work ethic curriculum, the objectives of this study included determination of the importance of work ethic as defined by the Occupational Work Ethic Inventory (Petty, 1991a). Additionally the following questions were used to guide this study:

1. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance of being dependable as measured by the revised OWEI?

2. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being considerate as measured by the revised OWEI?
3. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being ambitious as measured by the revised OWEI?
4. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being cooperative as measured by the revised OWEI?

Delimitations of the Study

The following limitations should be taken into consideration with regards to interpretation of the results of this study:

1. The dimensions of work ethic for this study were limited to those measured by the four OWEI subscales of dependable; considerate; ambitious; and cooperative..
2. The study can be generalized only to the Central Georgia occupational employment region.

Significance of the Study

There is a strong ethical and practical imperative facing all who help prepare people for the labor market to ensure they are well prepared to enter working situations. Based on previous research by Hill and Petty (1995), the task of addressing work ethics cannot be successfully undertaken without clear objectives to guide instruction. Through the examination of the ratings of importance of work ethic descriptors, this study exhibits both practical and theoretical significance.

Practical significance lies in the recommendations that can be made for further curriculum development or modification of work ethic instruction in post-secondary education. Educators involved in the curriculum development process will have more information from which to make clear instructional objectives. This information may also provide future direction for technical education funding in work ethic education, as well as provide a work force with a higher level of work ethic characteristics.

The theoretical significance of this study can be found in expanding the knowledge and research base of work ethic instruction built on a clear understanding of and representation of all stakeholders. Though a considerable amount of literature addresses the need for work ethic instruction in post secondary education, few has focused on including all stakeholders in the curriculum development process.

The findings of this research will be made available to other technical colleges throughout the state of Georgia. Sharing the design and results may provide opportunities for further research through replication studies.

Definition of Terms

Work Ethic

For purposes of this study, the term work ethic is defined as a composite of the four work ethic factors, dependable, considerate, ambitious, and cooperative, as measured by the OWEI (Petty, 1991a).

Occupational Advisory Committee

The OAC is a group of concerned people of similar occupational interests and skills working together to use their expertise, experience, and energy to improve a program, organization, or other entity (Backes, 2000).

Organization of the Study

Chapter I provided a foundation for the study and described the beliefs held by some occupational educators regarding work ethic and the inclusion of work ethic in the curriculum. The purposes, objectives, assumptions and limitations are presented in this chapter.

Chapter II provides a review of literature related to work ethic and the integration of work ethic into the curriculum. Included also are some of the social influences and theories impacting the development and ratings of work ethic in individuals.

Chapter III presents the design of the study including information regarding the validation of the revised survey instrument, how data were collected, and the statistical processes used.

Chapter IV contains the findings of all data collected. The analysis utilizes one way analysis of variance procedures and post-hoc comparisons to further identify group differences. A summary of the demographic data is included.

Chapter V presents the conclusions, recommendations of how the data might be used, and implications of the study. Recommendations for future research are also suggested.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this literature review is to examine the theoretical and historical underpinnings to the study and to present evidence supporting the need for further work ethic curriculum development. The chapter begins with a review of the historical perspective on the American work ethic that has led to the changing nature of work ethic today. The multiple definitions of work ethic are then addressed, followed by a section on social influences and theories that are believed to have an impact on the teaching of employability skills. In the final section, information on measuring work ethic is presented.

Historical Perspective on the American Work Ethic

Human events take place in time, one after the other. In examining an historical perspective we look at the development of an idea over time, and learn how and why it changed. The present is the result of choices that people made and the beliefs they held in the past. Examining the history of work ethic provided a better understanding of the development and change that has occurred with work ethic over time.

History of Work Ethic

Work ethic has been defined as a cultural norm that places a positive moral value on doing a good job and is based on a belief that work has intrinsic value (Lipset, 1992). But this has not always been the belief held toward work ethics and work in general. The socio-historical journey of work has gone from cursed necessity to one's calling and

personal search for meaning (Ciulla, 2000). Hill (1992) cited biblical references where work was not part of God's original plan for mankind, but rather a result of the sin that occurred in the Garden of Eden. The Hebrew faith is shown to have viewed work as a curse and a punishment for disobedience (Cherrington, 1980; Rose, 1985).

The words defining work have long had negative connotations associated. Ciulla (2000) noted in the Biblical Hebrew, the words for work and slavery were identical. The German word for work, *arbeiten*, originally meant pain and trouble; while similarly in the English term for work, labor, has been used to describe the pains of childbirth. The Greek word for work was *ponos*, taken from the Latin *poena*, which meant sorrow (Tilgher, 1930).

Before the emergence of the Roman Empire slaves were used for all manual labor (Lipset, 1992). Agriculture and commercial business became acceptable occupations for free men but the actual work was to be performed by slaves. Tilgher (1930), in examining the works of the Greeks and Hebrews, described work as appropriate only for slaves and was to be conducted under the direction of a master, while free men were to devote their time to warfare, large-scale commerce, or leisure.

Tilgher (1930) also pointed out that not only physical labor was disdainful but mental labor as well. The skilled trades were accepted and recognized as having some social value, but were not regarded as much better than work appropriate for slaves. Hard work, whether due to economic need or under the orders of a master, was looked down on (Hill, 1992).

In the writing of Plato and Aristotle, they made it clear that the purpose for which most men labored was "in order that the minority, the elite, might engage in pure

exercises of the mind-art, philosophy, and politics” (Tilgher, 1930, p.5). The division of labor recognized by Plato included separating individuals first into categories of rich and poor, and then into categories by different kinds of work (Anthony, 1977). Aristotle viewed work as a corrupt waste of time and supported the ownership of private property and wealth (Anthony, 1977).

According to Braude (1975), the Greek believed a person’s prudence, morality, and wisdom was directly proportional to the amount of leisure time that person had. Greek individuals should not work when there was no need to do so, or they would run the risk of blurring the line between master and slave. The Greek state and culture based leadership on the work one did not have to do (Hill, 1992).

During the Middle Ages, work was still believed to be punishment by God for man’s original sin, but was also a means to prevent one from being solely reliant on the charity of others for the physical needs of life (Tilgher, 1930). Work that produced wealth provided individual opportunity to share with those less fortunate making that work more acceptable.

Protestant work ethic. The Protestant work ethic is connected to the Protestant Reformation and has been codified into our current view of work. During the Reformation period Martin Luther taught that work was a calling from God and that one served God best by diligently laboring in one’s daily occupation (Cherrington, 1980). This belief, that suffering was required to redeem our original sin as human beings, became part of their work ethic and is a notion that continues to underlie our attitude towards work today.

Work has long been, if not the foundation of the Protestant Work Ethic, at least the keystone of the economic structure built upon Lutheranism and Calvinism during the last four centuries. It was a foundation stone of the Industrial Revolution (Weber, 1930). The key elements of the Protestant Work Ethic were diligence, punctuality, deferment of gratification, and primacy of the work domain (Rose, 1985). Several authors (Hill, 1992; Jesser, 1991; Jones, 1997) acknowledged Max Weber for secularizing the religious construct into the Protestant Work Ethic.

Todd (1996) believed Weber set out to explain how two seemingly opposite forces in Western history, Christianity and Capitalism, managed to reconcile their differences. He identified the 16th Century Protestant Reformation as the crucial event and the Calvinist vision of God as the crucial doctrine. Calvinism made it possible for Christians to continue their tradition of self-abnegation while succeeding in the material world.

Cherrington (1980) observed that the Protestant Work Ethic encouraged working hard and cultivating the qualities of frugality, industry, diligence, prudence, and honesty as the way to success and wealth. Men were the masters of their own fate through hard work. Some credit Protestant Work Ethic with the success of capitalism in Western society (Hill, 1992; Hill & Petty, 1995; Ludeman, 1989).

Dean (1998) felt that Puritan work ethic is why, in our society today, work is closely related to, and often motivated by guilt. To encourage their concept of work and provide positive motivation, the Puritans believed that honest toil, if persevered, led to spiritual rewards. The modern equivalent of these religious beliefs are, that hard work is

the main causative factor in producing material wealth, and that hard work is character building and morally good (Dean, 1998).

Industrial age. Mass production brought about the ability to overproduce and this changed the role of work ethics by placing the emphasis on success at work (Rodgers, 1978). Pascarella (1984) stated, that Protestant Work Ethic was machined away by advancing industrialization. The new labor movement, Henry Ford's ratings of importance that workers had to spend as well as toil, and the New Deal's "pump priming" all contributed to the development of an "ethic of consumption." Americans were now enjoined as a matter of public policy to spend, enjoy, and fuel the economy (Todd, 1996). Others (Kanter, 1997; McDaniels, 1990; Naylor, Willimon & Osterberg, 1996) concluded that technology, globalism, diversity, and a change in values have eroded the Protestant Work Ethic as the cornerstone of Western capitalism.

Age of entitlement. Samuelson (1995) called the period in U.S. history from the end of World War II to present the Age of Entitlement. During this period our economy has been at an all time strength that has enabled government to work toward the elimination of social problems. As governmental programs have increased, the economy has slowed down and the national debt has reached an unheard of high. However, so many people believe they are entitled to government-financed benefits, that any attempt to lessen what they feel is due them may cause serious social unrest.

Samuelson (1995) believed that the American Dream was transformed into the American fantasy. Most Americans following World War II hoped for a period of prosperity and tranquility. It would represent a break from the turmoil and uncertainty of the past fifteen years. People were tired of the fear and frustration they had endured

during the Depression and WWII. They wanted no obstacles to stand in the way of pursuing their pleasures. They believed in collective action to deal with national problems (Samuelson, 1995).

The ten most influential changes in consumer products and services since WWII included such innovations as: (a) television; (b) jet travel; (c) air-conditioning; (d) long-distance phone service; (e) interstate highways; (f) automatic washers and dryers; (g) antibiotics; (h) social security and private pensions; (i) health insurance; and (j) the birth-control pill (Samuelson, 1995). These changes had a profound impact on how we live and how we think about our life prospects. They also had a huge impact on the social consciousness of America. Many people believed that this period of prosperity would always continue and that government could turn its attention to improving the nation's quality of life. When it did not, many citizens believed that some institution or set of leaders was at fault (Samuelson, 1995).

Work ethic directly reflected this attitude of entitlement among the populace (Samuelson, 1995). Some people believed they were entitled to certain jobs and they did not have to assume the responsibility nor necessarily acquire the right skills to obtain the jobs. The implications for vocational-technical education are apparent when we try to alter the work behavior of someone with this belief. The concept of entitlement may interfere or completely direct the work ethic of some students. Samuelson suggested that an ethic of responsibility needs to replace an expectation of entitlement in government policies and private business (Samuelson, 1995).

Information age. Wattenberg (1984) believed that during the period now known as the Information Age, jobs provided greater opportunities for self-expression by workers

and people began to find more self-fulfillment in their work. Work was perceived as good and rewarding in and of itself. Most workers were satisfied with their work and wanted to be successful in their jobs. However Dean (1998), cited that we still had a view of work as atonement. We had the idea that we should enjoy our work, or at least try to look as if we're enjoying it, and that by happily accepting our punishment of daily hard work, we demonstrate our moral fiber.

While the current era may be considered the information age, today's workers continue to cling to the attitudes of a mechanical-industrial culture steeped in Puritan ethic (Dean, 1998). The futurist dream is that technology will eventually free people from the necessity of hard work (Dean, 1998). Dean suggested that we are nowhere near manifesting such a dream has more to do with our attitude and beliefs than with the current state of technology. Currently, there are alternatives to the nine-to-five work culture such as job sharing and tele-working that is forward-looking but still rare. Dean contended that this is because the hard work ethic has conditioned us to see happiness as something that must be earned through toil.

The Changing Nature of Work Ethic

Changing conceptions of the place of humankind in the world have led to changes in the value attributed to particular occupations and to work in general. Changing fashions and motivations in work and workers arise out of the changing purposes of and for work (Braude, 1975). Hill (1992) described changes in jobs, level of education required for many jobs, and the level of empowerment given to workers. Many technological advances have combined to impact on our society and the way that workers work.

Technological Change

Developing technology and the emerging global marketplace has been responsible for extensive personal and societal change (Leth, 1995; Yankelovich, 1981). The telecommunications industry is going to see more technological change in the next five years than it has seen in the past 95 years (Molitor, 2001). Five vital technologies contributing to these monumental changes are: (a) optical transmission; (b) satellite communications; (c) wireless and mobile communications devices; (d) broadband digital technologies; and (e) Internet resources. Each of these enhanced communications capabilities creates enormous opportunity and improvements in cost, speed, quality, and convenience for consumers and could contribute significantly to our quality of life (Molitor, 2001).

Many social scientists have sought to investigate the manner in which technological change affects the work process. Boyette and Conn (1991) have seen a changing workforce that includes more frequent job changes, frequent retraining, and changes in the demands and expectations of workers. Davis and Miller (1996) suggested that the workplace is undergoing a change resulting from restructuring, re-engineering, workforce diversity, and teamwork. Bridges (1994) and Kanter (1997) agreed that the transformation of the workplace may require employees to have basic workplace skills that include a good work ethic. Work is becoming faster paced, more team-oriented, and less supervised.

Hodgson (1999) argued that technological change has increased the amount of tacit knowledge held by certain workers changing employment relations, thereby fundamentally altering the labor contract that typically defines capitalist employment.

We have historically had an economic system characterized by private or corporate ownership of capital goods and knowledge. It is Hodgson's view that the very existence of capitalism may be threatened by the constantly increasing technological change. In contrast, Bell and Henry (2001) did not believe technological change has produced any fundamental change in employment relations but has redefined employment arrangements. The new arrangements are more contractual in nature with workers engaging in the sale of labor power. This applies to part-time workers, temps, and other forms of contingent workers as well as tele-workers and independent contractors.

More workers in the Information Age will need to become experts and innovators in accessing electronic information. The types of skill that will make people successful in this new electronic environment will be different from the factors that create success in current organizations. People who can make use of large amounts of information in a short time, and make use of it in a given situation, will be successful. People who struggle with this and want to have time to learn and adapt to new situations could face problems (Larsson & Lundberg, 1998).

Defining Work Ethic

Secretary's Commission on Achieving Necessary Skills

With the changes that have occurred in culture and in the workplace, and the importance being placed on job training, a new working definition is now needed for employability skills/work ethics. In 1990, Elizabeth Dole, then secretary of the Department of Labor, established the Secretary's Commission on Achieving Necessary Skills (SCANS). Its task was to try and define what skills were needed to prepare workers for today's workplace (Whetzel, 1992).

The SCANS group started with a four-step process by first formulating its approach to identifying employability skills: (a) asking SCANS committee members for their comments and suggestions; (b) visiting successful corporations that stress high-level employee skills, and (c) reviewing recent research and discussing skills with researchers and analysts. Next, a panel of experts reviewed the research and suggested a draft set of initial skills (Whetzel, 1992).

The second step was to define the set of initial skills. The SCANS commissioners reviewed the literature from psychological, educational, and business databases. The definitions developed by SCANS included a description of the skill itself and an illustration of a worker competently using the skill (Whetzel, 1992).

In the third stage, SCANS worked with research and business experts to review the skills and definitions to determine whether anything was missing in any domain. These experts also reviewed some examples of how workers might use the skills (Whetzel, 1992).

Fourth, SCANS analyzed jobs in various areas of the economy to see how the skills applied. SCANS chose a sample of 50 jobs to represent the various employment sectors identified by the Department of Labor. These 50 jobs were part of a meaningful career path, were expected to make up a large proportion of jobs in the future economy, and collectively called on diverse skills. For this job analysis, SCANS asked job experts to review the skill definitions and to rate how critical each skill was to the job. For any skill that the experts considered highly critical, SCANS asked them to detail a task requiring a worker to use that skill. SCANS used the data collected from the job analysis

to evaluate how clear and comprehensive job experts found the skill definitions, and to estimate how critical the skills were across a range of jobs (Whetzel, 1992).

The SCANS (1991) report was divided into two categories: foundation skills and competencies. The foundation skills consist of three components: (a) basic skills, (reading, writing, arithmetic, listening, and speaking); (b) thinking skills, (creative thinking, decision making, problem solving, seeing things in the mind's eye, knowing how to learn and reasoning); and (c) personal qualities (skills concerning responsibility, self-esteem, sociability, self-management and integrity/honesty). The competencies were composed of five components: (a) resources (wisely uses time, money, materials and facilities, and human resources); (b) interpersonal skills (includes team member participation, teaching others, exercising leadership, negotiating, and working with diversity); (c) information (consists of acquiring and evaluating information, organizing and maintaining information, interpreting and communicating information, and using computers to process information); (d) systems (understanding systems, monitoring and correcting performance, and improving and designing systems); and (e) technology (stresses selecting appropriate technology for a task, applying technology, and maintaining and troubleshooting technology).

The SCANS report described work as involving a complex interplay among the five competencies and the three elements of the foundation skills. The competencies were characterized as the hallmark of the expert worker (Poole & Zahn, 1993).

According to the SCANS report (1991), the expert worker of tomorrow will not be able to simply pick-up these competencies. Their acquisition must begin in the schools and be

refined through on-the-job experience and further training. Teaching and learning the competencies must become the tasks of our schools and students.

The employability skill inventories developed by the American Society for Training and Development and the Secretary's Commission on Achieving Necessary Skills have similarities including reading, writing, computation, speaking, and listening. Differences in skill lists are in the areas of teamwork, leadership, and organizational effectiveness (Spille, 1994).

The National Consortium for Product Quality in Vocational Education National Task Force (1993) (The NCPQVE is a project funded by the National Center for Research in Vocational Education, and directed by the Center on Education and Work, University of Wisconsin-Madison) contrasted the SCANS report to eight national skill reports developed by national governmental agencies or appointed commissions that were published between 1988 to 1992. The eight national studies chosen for review were: (a) Workplace Basics, 1988; (b) Workforce 2000, 1988; (c) Building a Quality Workforce, 1988; (d) America's Choice: High Skills or Low Wages, 1990; (e) America 2000, 1991; (f) Education Counts, 1991; (g) America and the Economy, 1991; and (h) National Education Goals, 1991.

The results of this comparative report were: (a) SCANS Foundation Skills (i.e., basic skills) are either explicitly mentioned or implied in all eight studies, and (b) the eight national studies generally include the majority of SCANS competencies. According to this report, the SCANS skills and competencies presented a relatively complete framework in which educators can cross-reference their curricular skills and

competencies to the skills and competencies demanded by SCANS, and theoretically, by the workplace (NCPQVE, 1993).

Most of the listings of the subject areas of employability skills focus on the topics of personal image, attitudes, habits, and behaviors; techniques of communication, problem solving, and decision making; and management and organizational processes. Gainer (1988) grouped these skills as follows: (a) individual competence: communication skills, comprehension, computation, and culture; (b) personal reliability skills: personal management, ethics, and vocational maturity; (c) economic adaptability skills: problem solving, learning, employability, and career development; (d) group and organizational effectiveness skills: interpersonal skills, organizational skills, and skills in negotiation, creativity, and leadership.

The work maturity skills identified by Lankard (1987) listed seven categories of employability skills and suggest training modules for each. The categories were: (a) present a positive image; (b) exhibit positive work attitudes; (c) practice good work habits; (d) practice ethical behavior; (e) communicate effectively; (f) accept responsibility; and (g) cooperate with others. Wentling (1987) referenced several studies that cited the reason most people lose their jobs was not because of content knowledge or technical skills, but rather those attitudes and behaviors that result in poor interpersonal skills, poor attitudes, poor judgment, and a lack of flexibility.

Scott (1996) wrote of manufacturing companies identifying poor employee work ethics as rampant. Marshall and Tucker (1992) said that building a smarter workforce involves teaching employability skills and a strong work ethic. Flynn (1994) identified

the ability to communicate as critical and much needed by employees as a workplace skill in the 21st century.

A survey sponsored by the National Association of Manufacturers (Barton, 1990), found that employers want schools to take more responsibility for students' employability skill development. Employers said that they want schools to teach both general and specific employability skills, including attendance, punctuality, and good work attitudes.

Bush and Barrick (1987) categorized employability skills by the following competency areas: personal values, problem solving and decision-making skills, relations with other people, communication skills, task-related skills, maturity, health and safety habits, and commitment to the job. The Parker Project (Oinonen, 1981-85), which asked business representatives what they wanted, expected, and found lacking in entry level employees, identified the following characteristics as most needed for job success: (a) getting along with others; (b) giving a full day's work for a full day's pay; (c) job-seeking and job-getting skills; (d) dependability; and (e) showing pride in work.

Taylor (1989) characterized effective workers as workers who simplify the task, use short cuts, and develop least-effort strategies, when necessary. They redefine externally defined problems into flexible strategies as they depart from the literal framework and reorganize the assigned task to fit with the available social, symbolic, technical, and material resources at their disposal. Effective workers also develop tentative gap-closing or intermediate solutions and produce accurate task completion solutions. Also, effective workers continue to develop competence and make use of generalized thinking and problem solving skills they put into play when specialized knowledge no longer is sufficient (Glaser, 1987).

In a report for the Panel on Secondary School Education for the Changing Workplace (1984), ten core competencies were listed. Of the ten, several directly related to employability skills: interpersonal relationships, personal work habits and attitudes, oral communication, and reasoning and problem solving.

Throughout all of the studies that were conducted with the purpose of defining the employability skills needed for job success, similar types of characteristics continued to appear even though they may use different words and systems of organizations to define them. While there is no one “correct” system to use, it is important that some system be used to organize the facilitation and integration of employability content into the curriculum (Poole & Zahn, 1993). The consensus of employers in these and similar studies remains consistent, employability skills are important on the job and must be taught in the schools (Lankard, 1990).

In general, despite the variety of organizational systems, the employability skills literature in this area has identified the basic, underlying skills that are regarded by employers as important to success in the workplace. Such findings are driving competing schools and workers to adopt curricula aimed at developing these essential skills.

Teaching Work Ethic

Much debate has focused around how vocational education should be formulated to meet the needs of individuals preparing for work. Given the evidence about learning acquisition and the effective use of job knowledge to produce competent performance, many questions have arisen. Dewey (1929) commented that “all principles by themselves are abstract. They become concrete only in the consequences which result

from their application” (p.20). Included in this section is a review of current thoughts and concepts regarding work ethic instruction.

Miller and Coady (1989) stated that one of the purposes of vocational education is to provide students with a framework for recognizing and resolving ethical conflicts within themselves and their work context in such a way as to encourage individual job satisfaction and continuous productive employment. They believed that students should be exposed to and given the opportunity to develop a good work ethics.

Naylor (1988) described two basic strategies for teaching work ethic. First was the hidden curriculum, whereby the student learns best by modeling the behavior of the instructors. Second was the overt curriculum that emphasized mediation skills, assertiveness, empathetic learning, principled negotiation, risk taking, and decision making carried out in traditional pedagogical format. Parnell (1985) said, “Students must see connectedness between what they do and the larger whole-between education and the rest of the world” (p.173).

In research conducted by Gregson (1991), he identified two teaching strategies, democracy, and indoctrination, used by vocational instructors to teach work values and attitudes. The democratic strategies included group discussion, one-on-one counseling, role- playing, team building, problem solving, and individualized instruction. The indoctrination strategies included reward structure, role modeling, guest speakers, lectures, and rote learning.

Douthitt (1990) supported the idea that vocational education should adopt more business world practices that involve teaching by contract, building a quality circle, mentoring, and peer teaching. He cited teamwork as being essential to success in the

workplace and that more teamwork on projects in school should be encouraged to promote this concept. Douthitt (1990) stated that creativeness, enthusiasm, and a good work ethic of the instructors are crucial.

Research conducted by Ford and Herron (1995) regarding practices of work program coordinators in Georgia cited cognitive apprenticeship strategies embedded in the classroom context. They list the strategies of modeling, coaching, scaffolding, fading, articulation, reflection, and exploration for incorporating work ethics into instruction. Modeling is a performance by an expert allowing students to learn how the task can correctly be accomplished. In coaching, the teacher observes the student performing a task and provides useful feedback. Scaffolding involves support for the students in carrying out task. Fading is the gradual removal of support so that students begin to shape the task independently. Articulation allows students to explain their reasons for taking certain actions. Reflection is the process that allows students to compare their performance with that of an expert. Exploration is any method that encourages a student to begin problem solving.

The responsibilities of the instructors using a cognitive apprenticeship model are defined as strategic teaching and include facilitating and mediating student learning to solve real life problems (Jones, Palincsar, Ogle, & Carr, 1987). The development of curriculum and lesson flow must be continually monitored and updated to allow for student progress during the learning process (Rojewski & Schell, 1994).

Critical theorists, Shor and Freire (1987), prescribed an agenda for critical education that is comprised of a nine-point program. These nine points are: (a) participatory-students should immediately do something active in the classroom; (b)

critical- students should have a critical attitude toward social issues and toward the course itself; (c) situated- the way students respond to the subject matter indicates how the inquiry should be situated in their learning process; (d) dialogic- a mutual exchange between teacher and students; (e) de-socializing- to transform passivity into involvement; (f) de-condition- to take students out of their role as passive learners; (g) democratic- works toward reconciling student and teacher differences and equalizing resources; (h) interdisciplinary- do not accept academic limits; (i) activist orientation- orient student attention to political activity in society. Critical education can be the common ground for teacher and students to examine subject areas for deeper understanding (Shor, 1988).

Georgia Department of Technical and Adult Education

The Georgia Department of Adult and Technical Education is made up of 34 Technical Colleges which are divided into six regional consortia: Northwest, Northeast, West Central, East Central, Southeast, and Southwest. The total enrollment for the State of Georgia during the fiscal year of 2000 was 112,041 in credit programs. Curriculum standards for all programs have been developed with direct involvement of business and industry. These standards serve as the industry-validated specifications for each occupational program addressing employability skills (GDTAE, 1996b).

The Georgia Department of Technical and Adult Education recognized employability skills as an important aspect of workforce preparation. In 1991, they implemented statewide program standards to address employability skills for job acquisition, job retention and advancement, and adopted a work ethics educational program in all technical colleges. The work ethic education program adopted was based on the belief that students should have an educational opportunity to practice

employability skills in an educational setting under the guidance of instructors before they enter the workplace, and each student should develop a personal code of ethics for the workplace.

In addition to the grade that is given for work ethic, diploma students at GDTAE institutions take a course that focuses on employability skills. Like a performance evaluation, the program stresses positive work habits and penalizes excessive absenteeism, tardiness, or other behaviors deemed inappropriate to the workplace.

The GDTAE have instituted a systematic process for monitoring and updating all curriculums, including work ethic education. Instructional environments are designed to be as authentic as possible to facilitate a cognitive apprenticeship approach to instruction.

In 1996 the President's Council of GDTAE was asked by Commissioner Ken Breeden to reevaluate and report on the status of the department's work ethics program in the technical colleges. An ad hoc committee directed this task. A survey was designed and administered at each of the colleges with a statewide total of nearly one thousand respondents. Five different surveys were constructed for each of the following groups, shown together with the number of persons within each group to be surveyed at each of the state's 33 technical colleges: Registrars, 1; Job Placement Directors, 1; Employers, 10; Students, 10; and Instructors, 10.

As a result of the 1996 GDTAE survey Commissioner Breeden, established a committee to implement findings and recommendations. The findings included: (a) To continue the program and reinvigorate it; (b) to raise employer's awareness of the program; (c) to raise students awareness of their grades on their transcripts; (d) to broaden the enthusiasm of administrators and instructors; to give more guidance on work

behaviors to be measured and shaped; and (e) to rewrite/sharpen the focus of GDTAE standards/policies/criteria for work ethic education.

The revised GDTAE curriculum for work ethic education now is comprised of ten desired work characteristics. These included: (a) attendance; (b) character; (c) teamwork; (d) appearance; (e) attitude; (f) productivity; (g) organization; (h) communication; (i) cooperation; and (j) respect.

The Importance of Advisory Committees in Career and Technical Education

The Carl D. Perkins Vocational and Applied Technology Amendments of 1998 required that vocational and technical programs have functioning advisory committees. Backes (2000) defined an advisory committee as a group of concerned people working together to use their expertise, experience, and energy to improve a program, organization, or other entity. These program committees can be effective tools for advising about and recommending curriculum content and revision.

The Council on Occupational Education (2001), as part of their criteria for accreditation, requires occupational education programs to have their objectives evaluated annually by advisory committee members. Advisory committee members review each educational program and recommend admission requirements, program content, program length, program objectives, competency tests, instructional materials, equipment, method of evaluation, and level of skills and or proficiency required for completion, and appropriateness of the delivery mode for the program. Occupational advisory committees are used to ensure that desirable, relevant, and current practices of the occupations are being taught. Each committee is composed of at least three members

external to the institution, meets at least twice annually, and keeps minutes of each meeting to document their activities and recommendations.

Social Influences and Theories on Work Ethics

Good practice in curriculum development allows for choices to be made among alternatives (Merriam & Caffarella, 1991). Examining what one believes regarding the people, the learners, and how learning takes place is part of what distinguishes informed educators from pure technicians. Having knowledge of the social influences and theories that impact the development and ratings of work ethic in individuals is critical to the understanding of work ethic curriculum development.

The study of complex human functioning has produced a plethora of psychological and sociological theories that are designed to aid in its understanding.

Manicas and Second (1983) expressed their view:

specific behaviors, like most events in the world, cannot be explained as the simple manifestation of some single law or principle. What we have is interacting levels of stratification. Indeed, the acts of persons are open-systemic events in which a wide variety of systems and structures are involved, systems that are physical, biological, psychological, and sociological. Thus the explanation of behavior is properly a multi-disciplinary effort and, though based on the behavioral sciences, necessarily transcends them to involve both biological and the social sciences (p. 399).

Polkinghorne (1984), agreeing with the eclectic view, made a case for the adoption of a multi-system, multi-method approach to development of theory and practice in applied research. It was his belief that the use of a single logic for

investigating the character of human beings, who are both complex and historical in character, was costly because it imposed severe restrictions on the search for useful knowledge that can guide us in our task of helping people manage their lives. This same idea should also be inherent in curriculum development.

According to a report prepared and presented by the National Council on Vocational Education, the most desirable and successful employees were those who could be described as having a positive attitude toward work- a strong work ethic. As they examined definitions of work ethic, they realized that most people with a strong work ethic shared another common personal characteristic of positive self-esteem (National Council on Vocational Education, 1991).

A person's self-esteem and work ethic impact each other in subtle ways. The existence of a strong work ethic can go a long way toward raising a person's self-esteem. On the other hand, people who feel good about themselves are likely to have a stronger work ethic than people whose feelings of self-worth are low (National Council on Vocational Education, 1991).

A negative self-esteem can cause low job satisfaction and inadequate motivation that will likely have a negative impact on individual work ethic. One's self-esteem can be viewed as situational or global. People tend to have an overall sense of their self-worth that they carry with them at all times. Yet, in certain situations, their level of self-esteem is likely to fluctuate, depending on one's level of familiarity, comfort, and training (National Council on Vocational Education, 1991).

Psychological factors related to ability to learn and to benefit from an educational program include individual differences in ability, pre-training expectations, and

motivation. Motivation can be influenced by the trainee's level of job involvement, by an internal or external locus of control and by the level of self-efficacy (Schultz & Schultz, 1991).

Organizational behavior is defined as the study of human behavior, attitudes, expectations, and performance within an organizational setting (Donnelly, Ivancevich, & Gibson, 1985). The belief is that the behavior of the individual is shaped by the organization. The field is built on the disciplines of psychology, sociology, economics, and anthropology and concerns theories, methods, and principles associated with the behavior of individuals, individuals within groups, and individuals functioning within organizations, as well as intergroup behavior (Donnelly, Ivancevich, & Gibson, 1985).

Braude, (1975) also felt that the socialization and behavior occurring in the workplace can be instrumental in shaping one's work attitude and can have a significant impact on someone's individual belief system. Society (in the form of employers, business, and industry) has identified skills seen as necessary for success in the workplace. If students are to be successfully trained for the changing workplace, educational systems should try to meet these societal expectations and pressures by adopting these identified skills as part of the standard curriculum. Table 1 summarizes some of the sociological theories found to be relevant to the study of work ethic.

Theory of Reasoned Action

Several researchers have argued that intentions to perform behaviors can be predicted not only from attitudes and subjective norms as Fishbein (1980) suggested, but also from previous behavior. Fishbein and Ajzen's (1975) theory of reasoned action has been used to predict intentions and behaviors from the measurement of attitudes and

norms. Bright and Manfreda (1995) investigated the influence of such factors as personal importance, manner of attitude formation, and frequency of expression on the likelihood that behavioral intentions can be predicted from attitudes.

Table 1.

Sociological Theories Relevant to the Study of Work Ethic

Theory	Theorist	Year
Theory of Reasoned Action	Fishbein & Ajzen	1975
Motivational Theories:		
Hierarchy of Need Theory	Maslow	1954
Two Factor Theory	Herzberg	1959
Expectancy Theory	Vroom	1964
Reinforcement Theory	Skinner	1974
Self-Ratings of importance Theory	Bem	1967
Social Learning Theory	Bandura	1977
Attribution Theory	Heider	1944

Motivational Theories

Motives can be explained as internal factors that influence observable acts or work behaviors (Szilagyi & Wallace, 1990). Motives take many forms. Some are physiological and others are more psychological. Motives cannot be observed directly, and their presence must be inferred from observed behavior (Szilagyi & Wallace, 1990). Many theorists have attempted to define motivation in terms relative to work attitudes. The Occupational Work Ethic Inventory instrument, utilized in this study, focused on behavioral factors and motivation of workers (Petty, 1991a).

Content motivation theories focus on the factors within the person that start, arouse, energize, or stop behavior. The two most researched content theories of motivation are Maslow's need hierarchy and Herzberg's two-factor theory (Donnelly, et. al., 1985).

Maslow's (1954) need hierarchy theory stated that individuals are motivated to perform by a desire to satisfy a set of internal needs. Maslow's framework is based on three fundamental assumptions: (a) People are "wanting" beings whose needs can influence their behavior. Only unsatisfied needs can influence behavior; satisfied needs do not act as motivators. (b) A person's needs are arranged in an order of importance, or hierarchy from the basic to the complex. And (c) the person advances to the next level of the hierarchy, or from basic to complex needs, only when the lower need is at least minimally satisfied.

Maslow, with his theory of a hierarchy of needs, proposed what has become the definitive model of self-actualization. It is based heavily on individualistic ideals of personal growth in self-actualization (Hanley & Abell, 2002). Self-actualization refers to the highest form of psychological health; the development of one's true self, the development of one's existing or latent potential. Other applicable terms are fully functioning, fully human, the development of one's fullest capacities, self-fulfilled, self-development, and full-valued personality (Cangemi, 1984). This theory provided viable support for including work ethic development in the curriculum (Farmer, 1984).

Kiel (1999), proposed that Maslow's hierarchy of needs theory be updated to reflect that self-actualization is never ending. He suggested that the top of the triangle no longer be closed but open, showing the evolving process of human development. In the

new open triangle model, the boundlessness of self-actualization is evident, depicting lifelong learning.

Herzberg's (Herzberg, Mausner & Snyderman, 1959) two factor theory or the motivation-hygiene theory identifies two basic factors, hygiene and motivators. Hygiene factors (e.g., pay, job security, working conditions and so on) decrease dissatisfaction but are not motivational. Motivators (e.g., challenging job, personal growth, recognition, and so on) increase satisfaction and hence affect motivation. Herzberg's approach does assume individual employees will be similar in their responses to the work environment and does not account for differences in individuals.

Process theories of motivation are concerned not only with what energizes behavior, but also the direction of motivated behavior. Process models address the how of motivation and help to understand the process by which people behave and perform in the way they do. They are concerned with those factors that provide choice in and direction to motivated behavior (Baum & Singh, 1994).

In research conducted by Schell and Black (1995), the importance of understanding how the expectations of learners shape how the learner chooses to interact with and learn within the environment emerged. The motivation for learners occurred when the individuals empowered themselves within the learning process. The learner played an active role in the direction of learning and teaching.

In Vroom's expectancy theory (1994), he stated that an individual will select an outcome based on how this choice is related to second-order outcomes or rewards. The choice of behavior acts is based on the strength or value of the outcome and the perceived probability between first and second level outcomes.

The foundation of expectancy theory is the perceived relationship between effort, performance, and the reward received for performance. Vroom expressed expectancy theory in the equation: $\text{Motivation} = \text{expectancy} \times \text{instrumentality} \times \text{valence}$. Expectancy theory asks three basic questions to determine motivated behavior: Can I do the assigned work? What will I receive for doing the work? Do I value the reward for doing the work? (Vroom, 1994).

Expectancy theory supports the notion that a worker has an expectancy or belief that a probability exists that a certain effort will lead to a certain level of performance expectancy and in turn that performance will lead to certain outcomes (Vroom, 1994). Expectancy theory weighs the pressure and direction of all the forces acting on an individual. Two factors to consider are: Effort-performance expectancy, which is the individual's ratings of importance of the difficulty and probability of achieving a task; and performance-outcome expectancy, which is the individual's ratings of importance about outcomes such as pay, promotion, and other rewards or even penalties (Donnelly, et. al., 1985).

Reinforcement theory, based largely on the works of Skinner (1974), is a motivation approach that examines factors that act to energize, direct, and sustain behavior. Some of the findings from reinforcement research indicate that the reinforcement of the relationship between behavior and rewards is very important for maintaining motivated behavior. Employers react positively when they perceive that rewards are contingent on good performance, but react negatively when rewards are not contingent on performance (Schnake, 1986).

Self-Ratings of importance Theory

Self-ratings of importance is the mental image one has of one's self (Bem, 1967). We have a self, perceive that self, and respond to the environment in relation to those ratings of importance. Bem's theory of self-ratings of importance stated, when a person's attitudes pertaining to a particular subject or behavior are weak, an individual will recall how they behaved in the past, under unbiased circumstances, and thus infer their true attitude. Bandler, Madaras, and Bem (1968) conducted a study that suggested we do indeed infer attitudes based on our behavior which supported Bem's original theory.

Fitts (1971) stated, each individual whatever status, perceives the world in relationship to their self. The self is the most prominent aspect of the perceptual field of an individual and the perceptual field changes as a person's concept of self changes. One's interactions with the world cannot be separated from interactions with one's own vital being.

Kiesler, Nisbett, and Zanna (1969) also conducted experiments in support of self-ratings of importance. These researchers theorized that while individuals infer attitudes from their behavior, this occurs only if they assume that a link exists between their behavior and their beliefs.

When examining levels of importance of work ethic descriptors for employees in the workplace, it is important to understand that self-ratings of importance will play a role in the responses given by subjects. Subjects will respond to the work ethic descriptors based on their individual self-ratings of importance.

Social Learning Theory

The study of social cognition is concerned with how we perceive, interpret, and predict social behavior. Social psychologist Heider (1944) noted that when we engage in social attribution we determine the extent to which a person's behavior (whether our own or someone else's) is caused by the person or by the person's circumstances. When you decide that the person is primarily responsible for one's behavior, you are making a dispositional attribution. When you decide that a person's circumstances are primarily responsible for his or her behavior you are making a situational attribution.

A social schema is a cognitive structure comprising the presumed characteristics of a role, event, person, or group (Sdorow, 1993). Social schemas bring order to what might otherwise be a chaotic social world by permitting us to interpret and predict the behavior of others. When we revise a schema to make it agree with new, incongruent information, we engage in accommodation. Our social schemas can resist change due to assimilation, the process by which we make new information fit an existing schema (Sdorow, 1993). Accommodation and assimilation are also concepts in Jean Piaget's (1952) theory of cognitive development. A social schema can have powerful effects on social ratings of importance (Sdorow, 1993).

The groups to which one belongs can also influence our behavior in ways that range from subtle prodding to direct demanding. Among the most important kinds of group influence are conformity, compliance, and obedience (Larsen, 1990). Groups also may affect task performance through social facilitation, which is the improvement of performance caused by the presence of other people, and social inhibition, which is the impairment of performance caused by the presence of other people. Performance may

also be affected by social loafing, which is the tendency of individuals to exert less effort when performing in groups, i.e. teamwork (Hardy & Latane, 1988).

Social attitudes are evaluations of ideas, events, objects, or people. Attitudes have emotional, cognitive, and behavioral components (Breckler, 1984). According to social learning theory, many attitudes are learned through observing others, particularly parents, peers, and role models being punished or positively reinforced for expressing particular behaviors (Kanekar, 1976).

The social learning theory of Bandura (1977) emphasized the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others. Social learning theory explained human behavior in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences

Bandura's and Walter's (1963) social learning theory is based upon the model of operant conditioning. It deals with reinforcement and imitation as they relate to the control of behavior. They felt much human learning is a function of observing the behavior of others. Individuals learn to imitate through being reinforced for utilizing specific behaviors. Consistent reinforcement of these behaviors both maintains these behaviors and strengthens the imitative process.

LeFrancois (1972) defined social learning theory as behavior that occurs as a result of social interaction. Social learning theory generally involves the acquisition of those behavior patterns which society expects from its members and usually have the following characteristics: (a) they vary from culture to culture, (b) they vary from person to person within the same culture, (c) they are attached to the roles people play in society, (d) they tend to vary from different age groups, and (e) they are partly determined by

situations. He believed the foundation of social learning is: social learning involves more than learning behaviors that are acceptable, but also involves leaning under the appropriate conditions in which the behaviors are acceptable.

Rotter (1954) developed a social learning theory as an attempt to apply a learning theory to complex social behavior of human beings. He referred to it as expectancy-reinforcement theory. Rotter's social learning theory stresses that major basic modes of behaving are learned in social situations and are inextricably fused with needs, requiring the mediation of other persons.

Levy (1970) stated that social learning theory should be thought of as an ideological umbrella which has gathered theorists whose major concern is the learning of socially relevant behaviors in a social context. He further goes on to say that social learning theory is less a specific kind of theory but rather a declaration of the interest of the theorist and a reflection of the context in which he gathers his data.

Social Cognitive Theory

According to Bandura's (1986) social cognitive theory, individuals possess a self-system that enables them to exercise a measure of control over their thoughts, feelings, motivation, and actions. This self- system provides reference mechanisms and a set of sub-functions for perceiving, regulating, and evaluating behavior, which results from the interplay between the system and environmental sources of influence. This serves a self-regulatory function by providing individuals with the capability to influence their own cognitive process and actions and thus alter their environments.

How people interpret the results of their own performance attainments informs and alters their environments and their self-beliefs that, in turn, inform and alter

subsequent performance. This is the foundation of Bandura's (1986) conception of reciprocal determinism, the view that personal factors in the form of cognition, affect, and biological events, behavior, and environmental influences create interactions that result in a triadic reciprocity. In general, Bandura provided a view of human behavior in which the beliefs people have about themselves are key elements in the exercise of control and personal agency and in which individuals are viewed both as products and as producers of their own environments and of their social system.

Work ethic instruction in all technical colleges in Georgia follows the general standards and guides as set forth in the Georgia Work Ethic Manual (Georgia Department of Technical and Adult Education, 1991). The methods and techniques used in program implementation include general discussion, problem solving, modeling, and structured pedagogical instruction which are consistent with those recommended in social learning theory.

Bandura's social learning theory (1977) is a theory that assumes people learn social behaviors mainly through observation and mental processing of information. Bandura (1977) identified four factors that account for observational learning: (a) You must pay attention to the model's actions, (b) You must remember the model's actions, (c) You must have the ability to produce the actions, and (d) You must be motivated to perform the action.

In attempting to explain how an individual's control over behavior shifts from external sources to the individual, Bandura (1977) used the concepts of self-regulation and self-efficacy. Bandura felt that self-efficacy was a major determinant of self-regulation. According to self-efficacy theory, people develop domain-specific beliefs

about their own abilities and characteristics that guide their behavior by determining what they try to achieve and how much effort they put into their performance in that particular situation. These self-ratings of importances determine how or whether individuals put into action the knowledge they have. Beliefs about self-efficacy arise from the individual's history of achievement in a domain, from observations of what others are able to accomplish, from attempts of others to mold feelings of self-efficacy through persuasion, and from consideration of one's own physiological state during a task as a reflection of personal capabilities and limitations.

Bandura (1986) argued that behavior, the environment, and cognition, as well as other personal factors operate as interacting determinants that have a bi-directional influence on each other. Environmental events in the form of modeling, instruction, and social persuasion affect the person, and the person in turn evokes different reactions from the environment depending on his/her personality and physical features. Behavior determines aspects of the environment to which the individual is exposed, and behavior is, in turn, modified by that environment. Competencies, self-efficacy beliefs, and self-regulatory capacities are acquired through experience, but they in turn determine the individual's experience in such a way that they are maintained.

The four composite characteristics of a worker, based on the four subscales of the Occupational Work Ethic Inventory: dependable, considerate, ambitious, and cooperative, can all be considered social behaviors. According to Bandura's (1977) social learning theory these behaviors would best be taught through observation and modeling. In this view, learning would not simply be a matter of reacting to stimuli, but rather, people applying cognitive processes that give meaning to the situation they

encounter and thus construct reality, putting personal labels on situations, evaluating their own performance, and rewarding or punishing themselves.

Attribution Theory

Attribution theory is the successor of social ratings of importance research and attempts to offer a theory of the cognitive processes that individuals use to explain and interpret behavior of people and events. The need to explain events is a natural one for humans and attribution theory functions as an explanation of past events as well as a predictor of future ones (Hewstone, 1989). The starting point is usually taken to be the work of Heider (1944, 1958 a,b) who was concerned with how the psychologist came to know and understand the causes of action in order that they could make the world more predictable and hence controllable. But its prominence developed as a result of the work of Weiner and his colleagues in the early 1970's (Graham & Folkes, 1990). Weiner asserted that one of the major tenets of attribution theory is that motivation and achievement are influenced by individual beliefs regarding the causes of their success or failure at given tasks.

The four attributions commonly associated with this theory are ability, effort, task difficulty, and luck. The attributes of ability and effort are classified as internal and are assumed to originate from the person, while task difficulty and luck are considered to be external because they are perceived to be events happening outside of the individual's control. Attribution theory also has a stability or time dimension that is considered to be either stable or unstable. The causal attributions of ability and effort are considered to be internal-stable and internal-unstable respectively, while task difficulty is considered external-stable and luck is considered external-unstable (Weiner, 1972, 1979). Weiner

and his colleagues were primarily concerned with self-attributions, that is, how one evaluates one's own performance (Weiner, Frieze, Kukla, Reed, Rest & Rosenbaum, 1971).

Attribution theory explains how people perceive and make judgments about stimuli (Cohen, Fink, Gadon & Willits, 1995; Weiner, 1979). According to Gilbert and Malone (1995), correspondence bias can occur when people perceive and make judgments and this bias can be described as having four distinct causes. Observers may make errors in dispositional inferences because (a) they lack awareness of the person's situation, (b) they have inappropriate expectations for how a person will behave in such a situation, (c) their awareness of the person's situation has led to an inaccurate ratings of importance of the person's behavior, or (d) they lack either the motivation or the capacity to correct the trait inferences they may have spontaneously and effortlessly made. Ross and Nisbett (1991) emphasized perceptual reasons as the most important correspondence bias. Hirschfeld (1996) has shown correspondence bias in the assumptions that members of other groups are fundamentally and irreducibly, and possibly biologically, different from members of one's own group.

Harre and Secord (1972) conceptualized attribution theory in that individuals perceive social situations differently in terms of socialization and expectations of behavior in those situations. The expectations that individuals bring to situations inevitably affect their attributions. Alexander and Sagatun (1973) showed subjects experimental responses were often determined by their ratings of importance and expectations of the experimenter and the experimental norms and demands. Argyle, Furnham & Graham (1981) proposed that a number of components make up social

situations, many of which are directly relevant to the attributional process. These components included: The goal structure of the situation; the rules of the situation; the role relationships in the situation; and the situational concepts and constructs.

Most social situations have a complex goal structure developed within a sub-culture to satisfy certain needs (Graham, Argyle, & Furnham, 1980). Where the goals of two people in a situation are in conflict, attributions are likely to be disputed or negotiated (Berger & Luckmann, 1973). Formal and informal situations are rule-bound to the extent that people are aware of the appropriateness of certain types of behavior (Collett, 1977). Situational rules may determine the length or content of an attribution (Marsh, Harre, & Rosser, 1978).

The nature of the role relationship and status difference between people can greatly affect the type of attribution made. Attribution from a low status group member to a high status group member is likely to be different from those of a high to a low status member. Demographic variables that are salient to the social situation in which attributions are made might effect these attributions. Hinde (1979) suggested such factors as intimacy and commitments in social relationships affect the nature of the attributions within those relationships. The research participants in this study are from different and varying status groups and therefore it could affect the type of attribution they make toward their ratings of importance for work ethic descriptors.

Measuring Work Ethic

All research studies involve data collection and most studies use some sort of data collection instrument to gather this data (Gay, 1996). Selection of an instrument for a particular research purpose involves identification and selection of the most appropriate

one from among the alternatives. Therefore, in order to appropriately select an instrument, the researcher must be familiar with a wide variety of instruments that exist and also knowledgeable of the criteria which should be applied in making the best selection.

Validity of an Instrument

In 1985, Standards for Educational and Psychological Testing defined validity as the appropriateness, meaningfulness, and usefulness of the specific inferences made from test scores. This definition highlights the fact that test scores are neither valid nor invalid. It is the inferences that we make from the scores that are either valid or invalid (Gall, Borg, & Gall, 1996). The Standards recognized four types of evidence for demonstrating the validity of test score inferences: (a) Construct-related evidence of validity; (b) Content-related evidence of validity; (c) Prediction evidence of validity; and (d) Concurrent evidence of validity. These are not four types of validity but rather different ways to gather evidence about the validity of test score inferences.

Construct validity. Construct validity is the extent to which a particular test can be shown to access the construct that it purports to measure (Gall et. al., 1996). A construct is a non-observable trait, such as intelligence, which explains behavior. You cannot see a construct, you can only observe its effect. In fact constructs were invented to explain behavior. Other constructs that have been hypothesized to exist, and for which test have been developed, include anxiety, creativity, and curiosity. Research studies that involve a construct, either as an independent or a dependent variable, are only valid to the extent that the measure of the construct is valid. When selecting a test of a given

construct, the researcher must look for and critically evaluate evidence presented related to the construct validity of the instrument (Gay, 1996).

A measurement that has good construct validity is expected to relate highly with measures of other variables that the theory says should be related and, in addition, to not relate to variables that should be unrelated. This is known as convergent (measures that should be related converge on the same behaviors) and divergent (a variable should discriminate its behaviors from others that it is not expected to measure) (Lehman, 1991). Validating a test of a construct involves testing hypotheses derived from a theory concerning the construct. Generally, a number of independent studies are required to establish the credibility of a test of construct, and can often only be determined after years of experience of the instrument being in use (Litwin, 1995).

Content validity. Content validity is the degree to which a test measures an intended content area and requires both item validity and sampling validity (Gay, 1996). Item validity is concerned with whether the test items represent measurement in the intended content area, and sampling validity is concerned with how well the test samples the total content area. A test with good content validity adequately samples the appropriate content area. Waltz, Strickland, and Lenz (1991) believed content validity should be a prerequisite for other types of validity and should receive the highest priority during instrument development. Content validity is determined by expert judgment. When selecting a test for a research study, the researcher plays the role of expert and determines whether the test is content valid for the study (Gay, 1996).

Face validity. The term face validity can also be used in describing tests of measurement. Face validity refers to the degree to which a test appears to measure what

it purports to measure. Face validity is sometimes used as the initial screening procedure in test selection but is not the most psychometrically sound way of estimating validity (Gay, 1996). Face validity is simply having someone besides the researcher examine the instrument, perform a cursory review and offer an opinion as to whether the instrument appears to be a usable document (Litwin, 1995).

Predictive validity. The predictive validity of a test is determined by establishing the relationship between scores on the test and some measure of success in the subject or area. The test used to predict success is referred to as the predictor, and the behavior predicted is referred to as the criterion. In establishing the predictive validity of a test, the first step is to identify and carefully define the criterion. The criterion selected must be a valid measure of the behavior to be predicted (Gay, 1996).

According to Gay (1996), once the criterion has been identified and defined, the procedure for determining predictive validity is as follows: (a) Administer the test, the predictor variable, to a group; (b) Wait until the behavior to be predicted, the criterion variable, occurs; (c) Obtain measures of the criterion for the same group; (d) Correlate the two sets of scores; and (e) Evaluate the results. The resulting number, or validity coefficient, indicates the predictive validity of the test; if the coefficient is high, the test has good predictive validity.

Reliability. Reliability, with respect to measurement, is the degree to which a test consistently measures whatever it measures. The more reliable a test is, the more confident one can be that the scores obtained from the administration of the test would be essentially the same scores if the test were re-administered (Gay, 1996). If a test is

unreliable then scores for a given sample could be different every time the test is administered.

Reliability is expressed numerically, usually as a coefficient; a high coefficient indicates high reliability. If a test were perfectly reliable, the coefficient would be 1.00; this would mean that a student's score perfectly reflected their true status with respect to the variable being measured (Gay, 1996). High reliability indicates minimum error variance. Errors of measurement affect scores in a random fashion; some scores may be increased while others are decreased. According to Gay, errors of measurement can be caused by: (a) Characteristics of the test itself; (b) Conditions of administration; (c) The current status of the persons taking the test; and (d) A combination of any of the above.

There are a number of different types of reliability; each determined in a different manner and each involving a different kind of consistency. Test-retest, equivalent-forms, and split-half reliability are all determined through correlations; rationale equivalence reliability is established by determining how each item on a test relates to all other items in the test and to the total test. Split-half reliability and rationale equivalence reliability are types of internal consistence reliability that is based on the internal consistency of the test. Test-retest reliability and equivalent-forms reliability require a group to take two tests, either the same test twice, or two forms of the same test (Gay, 1996).

An acceptable level of reliability is generally a coefficient over .90. When tests are developed in new areas, usually the reliability will initially be lower. If a test is composed of several sub-tests, the reliability of each sub-test must be evaluated, not just the reliability of the total test (Gay, 1996).

Instruments measuring work ethic

Working Instrument. The Working Instrument, developed by Miles and Grummon (Miles, 1994), is a self-assessment of workplace skills comprised of nine scales which include: (a) Taking responsibility; (b) Working in teams; (c) Persisting; (d) A sense of quality; (e) Life-long learning; (f) Adapting to change; (g) Permanent problem solving; (h) Information processing; and (i) Systems thinking. In creating this instrument, national and state level surveys of workplace skills and a variety of books and articles were reviewed to determine the skill areas identified as most critical by employers (Carnevale, Gainer, & Meltzer, 1991; Michigan Employability Skills Task Force, 1987; Miles, 1994). A matrix of 24 potential competency areas that might be included in a self-assessment was developed and reviewed by a panel of experts. Based on this analysis, the list of 24 potential competency areas was reduced into the nine scales that currently comprise the instrument (Maduschke & Grummon, 1996).

Coefficient alphas for the scale items of the Working instrument range from a low of .52 to a high of .75. The initial validation of the instrument looked at the relationship between teachers' and students' ratings of importance of their skills; students' level of experience and their responses on the instrument; and students' grade point averages, and their responses. There were no significant differences in years of work experience between the men and women in the study. There was also no statistically significant difference between women and men's GPA (Maduschke & Grummon, 1996).

The predictive validity of the Working Instrument has not been determined at this time. The instrument was originally designed for the purpose of assessing the competence of trainees and employees in order to identify the areas wherein further

training and skill-building are needed. Given the lack of information on predictive validity and the paucity of other reliability and validity studies, the accuracy of the Working Instrument for this study was uncertain and therefore not the best choice.

Instruments Developed to Measure Weber's Work Ethic Construct. Miller, Woehr, and Hudspeth (2002), list seven work ethic measures that were all developed to measure Weber's work ethic construct. These include: (a) Protestant Ethic Scale (Goldstein & Eichorn, 1961); (b) Pro-Protestant Ethic Scale (Blood, 1969); (c) Protestant Work Ethic Scale (Mirels & Garrett, 1971); (d) Spirit of Capitalism Scale (Hammond & Williams, 1976); (e) Work and Leisure Ethic Scales (Buchholz, 1978); (f) Eclectic Protestant Ethic Scale (Ray, 1982); and Australian Work Ethic Scale (Ho & Lloyd, 1984). These measures were found to be lacking in measuring the multidimensionality of work ethic and rather focused on a unidimensional construct of work ethic (Miller, Woehr, & Hudspeth, 2002).

Occupational Work Ethic Inventory. The Occupational Work Ethic Inventory (OWEI) developed by Petty (1991), has been shown to provide a measure of work ethics. The OWEI was designed to measure affective competencies of work ethic univariately and focuses on those measures directly related to a person's work (Petty, 1991). The OWEI has been used in research to measure work attitudes and has maintained consistently high validity and reliability (Hill, 1992; 1997; Hill & Petty, 1995; Petty, 1995a; 1995b).

Affective characteristics considered desirable in the workforce have been identified in past research. Beech, Kazanas, Sapko, Sisson and List (1978) identified 63 affective work competencies and clustered them into 15 categories. Petty (1991), further

defining past research, identified 50 work ethic descriptors for the development of the OWEI. The instrument used a stem of “At work I can describe myself as”, followed by the scale for rating their standards for each item: 1=Never; 2=Almost Never; 3=Seldom; 4=Sometimes; 5=Usually; 6=Almost Always; and 7= Always. Eleven of the items were reversed and all items were assigned a random order in the design of the instrument

The OWEI centers on the characteristics or outcomes expected of a person who embraces the work ethic. According to Hill and Petty (1995), the items that serve as a basis for the OWEI would likely be desirable personal traits in any circumstance, but the instrument provides a clear connection between the items and work, making it useful in measuring employability skills.

In summary, work ethic has a long historical perspective that has developed and changed over time. These changes have been impacted by many societal influences and sociological theories. Understanding the changes that have helped to shape work ethic and being aware of current thoughts and concepts regarding work ethic instruction is vital to the development of the work ethic curriculum.

CHAPTER III

METHOD

This chapter provides a description of the population and sample selected for the study. The research design, instrument development and how it was utilized, procedures followed in collecting data, and the methods for analysis are also described.

Statement of Purpose

Repeatedly employers list work ethic and employability skills among the most important skills for job success. Employers expect these issues to be addressed by occupational educators as they prepare students for employment (Georgia Department of Adult and Technical Education, 1996a). The challenge facing educators today is to find a way to provide students with the technical know how, as well as, the communication, interpersonal and problem-solving skills needed in the current and future world of work (Miller & Brown, 1990). Spille (1994) believed that workforce development needs to begin in school with curricula that provides teachers with the content and context to teach the entry-level generic employability skills.

In order for technical colleges to integrate work ethic education into their curriculum, they need to have a clear definition of how employers define work ethic, the level that students possess these skills, and knowledge of the best way to prepare the adult learner with these skills (Georgia Department of Adult and Technical Education, 1996a).

This study provided data on advisory committee member, student and instructors ratings of importance placed on a variety of work ethic descriptors. Participants in the study were from a mid-sized technical college in the southeast United States. Data were analyzed to determine a recommended level of importance for work ethic descriptors during curriculum planning and subsequent work ethic instruction.

Research Questions

Research questions were formulated to assist in the gathering and analysis of data for this study. The following questions were used to guide the study:

1. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance of being dependable as measured by the revised OWEI?
2. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being considerate as measured by the revised OWEI?
3. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being ambitious as measured by the revised OWEI?
4. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being cooperative as measured by the revised OWEI?

Sample and Population

Population. A population is a group of individuals, persons, objects, or items from which samples are taken for measurement (Patton, 1990). Kingery, Bryant, Palmer,

and Araghi, (1989) explained the importance of sample population and size, and the impact it has on the ability to generalize the results of the study to the target population.

The population for this study is a regionally accredited technical college located in central Georgia and a member of the Georgia Department of Technical and Adult Education system. The student body exceeds 4000 students per quarter with a full time instructional staff of 86 and an advisory council of 348 members.

The purpose of selecting a sample is to gain information concerning a population. Stratified purposeful sampling illustrates characteristics of particular subscales of interest and facilitates comparisons between the different subscales (Patton, 1990). The stratified purposeful sample for this study consisted of all college advisory committee members, all college full-time instructors and college students enrolled in English courses during the fall quarter of 2000 from one technical college within the Georgia Department of Technical and Adult Education.

The college English courses were selected based on the English requirement for all diploma and degree students enrolled in the college. This course was thought to provide the most representative sample of the student population.

Purposeful sampling or judgment sampling involves selecting a sample that is believed to be representative of a given population. It is recognized that gathering data from a single institute eliminates the ability to generalize the study to a larger population (Patton, 1990).

Research Design

Scientific studies can be divided into two major categories of observational studies and true experiments (Pagano, 1986). This study fell into the observational

studies category that includes correlational parameter estimation, and naturalistic observation studies. Parameter estimation research is conducted on samples to estimate the level of one or more population characteristics. For the purposes of this study, a survey instrument was utilized in order to obtain the parameter estimation. Standardized, quantifiable information was needed from the sample.

The purposive sample of advisory committee members, instructors, and students completed the survey instrument and descriptive data was used to describe the groups and for comparative purposes. Borg and Gall (1989) defined descriptive studies as being primarily concerned with finding out “what is” and believed they are an effective tool to study relationships, effects of treatments, longitudinal changes, and comparisons between groups. Survey research has a long historical tradition as a systematic means of data collection. Because a survey can be used to make comparisons, measure ratings of importance, and is an accepted way to gather data from groups, it was chosen for this study.

Instrumentation

Occupational Work Ethic Inventory.

The instrument selected for this study was a revised version of the Occupational Work Ethic Inventory (OWEI) developed by Petty (1991). The OWEI stem was revised to ask participants to indicate their level of importance of work ethic descriptors for employees in the work place. This differed from the original version of the instrument in that participants were asked to describe their own level on each of the work ethic descriptors.

Petty developed the instrument using methods similar to those of Kazanas (1978) in his development of the Affective Work Competencies Inventory and reported by Petty and others (Petty, Kazanas, & Eastman, 1981). Permission was granted from Petty to use the OWEI with a revised stem for the purposes of this research (appendix A).

The OWEI was chosen due to the specific advantages it has over other instruments. The OWEI was designed to be concise and easy to understand. Minimal instructions need to be provided to the participants and the instrument can be completed quickly. This is an important factor when working with potential employers, instructors, and students, so that utilization of their time is maximized. The OWEI has been used in research to measure work attitudes that are considered to be important employability skills and has maintained consistently high validity and reliability (Hill, 1992; 1997; Hill & Petty, 1995; Petty, 1995a; 1995b).

Petty, prior to developing the OWEI, conducted a search of the literature to identify terms used to describe and define work ethic attitudes and characteristics of the workplace (Hill, 1992). Work ethic descriptors determined from this review were placed into a list for semantic analysis (Petty & Hill, 1994). A list of descriptors was compiled by the researchers and reviewed by a panel of experts to make further refinements on the items (Hill, 1992). The panel recommended additions and modifications to the original items with 50 items being retained. After all items were selected, they were listed alphabetically and a random number table was used to arrange the items in random order (Petty & Hill, 1994).

To allow for discrimination between the dimensions of the work ethic measured by the OWEI, subscales were developed using a content analysis and another panel of

experts (Petty & Hill, 1994). The subscales were labeled as: dependable; ambitious; considerate; and cooperative. Individual instrument items were left as single words or simple two item statements so they could be more easily understood (Petty & Hill, 1994).

Table 2 indicates the items listed in each of the OWEI subscales.

Table 2.

Occupational Work Ethic Inventory Subscales

Dependable	Considerate	Ambitious	Cooperative
Accurate	Appreciative	Ambitious	Adaptable
Careful	Cheerful	Apathetic*	Careless*
Dedicated	Considerate	Conscientious	Cooperative
Dependable	Courteous	Enthusiastic	Following regulations
Depressed*	Devious*	Hard working	Following directions
Devoted	Friendly	Independent	Orderly
Effective	Helpful	Initiating	Perceptive
Efficient	Hostile*	Irresponsible	Stubborn*
Emotionally stable	Likeable	Negligent	
Honest	Modest	Persevering	
Loyal	Pleasant	Persistent	
Patient	Rude*	Resourceful	
Productive	Selfish*		
Punctual	Well Groomed		
Reliable			
Tardy*			

*These items reversed

For the purposes of this research the OWEI was used with a revised stem. The overriding question guiding instrument selection, was, “what do employees, employers, and instructors feel is an important level of work ethic in the workplace for employees”. It was established from previous research (Petty & Hill, 1994) that the 50 items contained on the OWEI represented key work ethic and work attitude concepts. These 50 items were grouped into the four subscales of dependable, considerate, ambitious and cooperative prior to the development of the stem. The original instrument used a stem of “At work I can describe myself as:” followed by the following scale for rating their standards for each item: 1=Never; 2=Almost Never; 3=Seldom; 4=Sometimes; 5=Usually; 6=Almost Always; and 7= Always.

As a result of wanting to identify desirable work ethic attributes as opposed to the ratings of importance of ones own work ethic, the original OWEI stem was changed and revised stems were developed. The revised instrument for use with advisory committee members used a stem of “as a potential employer, I want workers who can be described as.” Instructors and students were given an instrument with a revised stem of “I believe the level of importance for workers in the workplace is.” The same Likert-type scale was used to rank the same descriptors as the original OWEI.

In work that has taken place since the original development of the OWEI, subscales were developed using factor analysis procedures and datasets representative of a cross-section of contemporary working adults. These subscales, consisting of dependability, initiative, and interpersonal skills, have been used extensively in the work of Hill (1996, 1997), Hill and Rojewski (1999), Hill and Womble (1997), and Petty and Hill (1995). For purposes of the present study, these subscales were determined to be

inappropriate due to the revision of the OWEI stem. Preliminary statistical tests using data from the modified instruments also revealed that the subscale structure, and corresponding validity, for the revised subscales did not hold up.

The subscales of dependable, considerate, ambitious, and cooperative were developed prior to the actual construction of the OWEI (Petty, 1993). The associations between each of these labels and the collection of instrument items forming corresponding subscales were based on meaning of the items and not related to a stem or question on an instrument. For this reason, these subscales were determined to be most appropriate for use with the revised versions of the OWEI developed for use in this study.

Instrument Reliability

According to Borg and Gall (1989) reliability may be defined as the level of internal consistency or stability of the measuring device over time. The question is whether the measuring device will return relatively the same results each time it is administered. They indicated that reliability could be computed several ways but that most involve “computing a correlation coefficient between two sets of similar measurements” (p.257).

Independent and Dependent Variables

An independent variable is the variable we change, or look at the difference, to see what will happen or how much difference exists (Pagano, 1998). The independent variable for this study was the respondent’s position on the ratings of work ethic descriptors.

The dependent variable in an experiment is the variable that the investigator measures to determine the effect of the independent variable (Pagano, 1998). The

dependent variables for this study were the four dimensions of occupational work ethic represented by the subscales of the OWEI. The subscales measured were dependable, considerate, ambitious, and cooperative.

Institutional Review Board

Permission was requested, and granted, from the University of Georgia's Institutional Review Board to survey human subjects. A statement regarding the University's IRB policy was included on the cover letter. Individual participation results are confidential and were not released in any individual identifiable form without the participant's prior consent, unless otherwise required by law

Data Collection

The measurements that are made on the subjects of an experiment are called data. Usually data consist of the measurement of the dependent variable. The data as originally measured are often referred to as raw or original scores (Pagano, 1998).

In November of 2000, survey instruments, consent forms, and demographic data sheets were administered to the advisory committee members, instructors and selected students. Every instrument was accompanied by a cover letter that explained what was being asked of the respondent and the purpose of the study along with a statement regarding the Institutional Review Board policy to survey human subjects.

The revised Occupational Work Ethic Inventory and demographic data sheet were given to all advisory committee members who were in attendance at the school wide advisory committee meeting. Participants were asked to complete the instrument at that time and return it to the researcher. There were a total of 348 college advisory committee members with 291 actively participating. This provided a response rate of 84 percent.

All instructors employed at the college were asked to participate in the research project. The revised Occupational Work Ethic Inventory instrument, cover letter, and demographic data sheet were placed in each of the instructor mailboxes, with directions for completion, and a requested return date. Completed surveys were returned to the researcher via inter school mail. At the time the research was conducted there were 86 full time instructors on staff, out of which, 78 returned the completed instrument and demographic data sheet. This produced a high response rate of 91 percent.

All college English students, during the fall quarter, were asked to complete the revised OWEI survey and demographic data sheet during their class time and return the instrument to their instructors at the end of the class period. Surveys were collected and returned to the researcher by each English instructor. For any students absent on the initial collection date, instructors administered the instrument to the students when they returned to class. There were a total of 94 students listed on the freshmen English class rosters for fall quarter. There were 88 students who completed the instrument to produce a response rate of 94 percent.

Data Analysis

For the purposes of this study, data analysis involved both descriptive and inferential statistics. Descriptive statistics describe data in quantitative form or describe the characteristics of the data. Descriptive statistics were used to summarize the demographic data information collected. The descriptive statistics of mean, which is the average score of each group on a measure, and the standard deviation, which is a measure of spread, are presented in table format for comparison between and among the three groups of advisory committee members, instructors, and students.

Inferential statistics are used to draw inferences about a population from a sample (Gay, 1996). In the case of this research, inferential statistics would predict whether there would be differences among the sample and the chance that the predication is accurate and can be replicated.

The Occupational Work Ethic Inventory uses a set of responses that are ordered so that one response is greater than another. This type of scale is referred to as a “Likert-type” scale, named after the inventor, Rensis Likert (Gay, 1996). According to Gall, Borg and Gall (1996), questionnaires using “Likert-type” scales are effective in gathering attitudinal data. When a “Likert-type” scale is used as a dependent variable in an analysis, normal theory statistics can be applied. Therefore, a series of one way analysis of variance procedures were used to determine whether there was a significant difference between the means, on the subscale scores of the OWEI, at the .05 level of significance.

The post-hoc Scheffe` test was used to control the experiment-wise error rate and reveal group differences or exactly which means or sets of means are different from each other at a statistically significant level (Freed, Hess, & Ryan, 2002). The Scheffe` test is appropriate for use with unequal sample sizes when there are more than two levels of the independent variable and when there is a significant difference in the ANOVA (Gay, 1996).

Summary

Chapter III describes the research design for this study. The purpose of this study was to provide information on advisory committee, instructors, and student, levels of importance of work ethic descriptors needed in the workplace. To do this, differences and similarities in work ethic level of importance of descriptors of advisory committee

members, instructors and students were analyzed. The advisory committee members in this study were members of an Occupational Advisory Committee of a selected college in the southeast. Instructors were all full-time instructors employed by the same college. The student sample consisted of students enrolled in freshmen English during the fall quarter, 2000 at the same selected college. They were asked to complete the revised Occupational Work Ethic Inventory and a demographic data sheet. Data analysis included both inferential and descriptive statistics.

CHAPTER IV

FINDINGS OF THE STUDY

This chapter is organized to present the findings resulting from the analysis of data in this study. First will be a summary of the demographic data of the sample. Next will be a discussion of the data analysis procedures followed by a presentation of the results of the data analysis of each research question. The last section of this chapter is a summary of the findings.

The purpose of this study was to compare data on employers, students and instructors rated level of importance of work ethic descriptors in order to determine a recommended level of importance during curriculum planning and subsequent instruction. The research questions that guided the study were:

1. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance of being dependable as measured by the revised OWEI?
2. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being considerate as measured by the revised OWEI?
3. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being ambitious as measured by the revised OWEI?

4. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being cooperative as measured by the revised OWEI?

Sample Demographics

A total of 457 subjects participated in this study; 78 instructors, 88 students, and 291 advisory committee members. All participants are affiliated with a technical college in the southeastern United States. For descriptive purposes, demographic data were also collected on all subjects for the descriptors of age, gender, years of work experience, and ethnic background. Mean ages, distribution of gender, mean years of work experiences and ethnic distribution were calculated.

Transformation of these variables into equivalent groups was performed based on descriptive statistical values and frequencies. The group categorization consisted of: Age groups 15-18, 18-22, 22-26, 26-32, 32-36, and 36 and above; gender, male or female; years of work experience, below 1, 1-5, 6-10, 11-15, 16-20, and over 20 years; ethnic background included, Caucasian, Native American, Hispanic, African American, Asian and Other. The results of this summary are presented in the Appendix F: Demographic Data.

The advisory committee respondents varied in age from 18 to above 36 years, with the largest percentage, 72.89%, being in the 36 and above category. Also, a higher percentage of the advisory committee groups were male, 63.57%, while 36.43% were female.

The largest ethnic background group of the advisory committee members was Caucasian, 79.29%, with the next largest ethnic background being African American,

18.21%. The majority of the advisory committee members had over twenty years of work experience, 58.89%

Instructors member respondents ranged in age from 22 to 36 and above, with the majority falling in the 36 and above classification. There were more female instructors members, 60.26% as compared to 39.74% being male.

The majority of instructor respondents were Caucasian, 83.3% with 16.67% being African American. Native Americans, Asians and people of Hispanic origins were not represented in the sample for this group. Years of work experience for instructors primarily fell in the over 20 category with 51.28%. The majority of student respondents fell in the age range of 18-26 with 63.95% being female and 36.05% being male. The largest percentage was African American, 54.22%, with the next largest group being Caucasian, 37.35%. Student's years of work experience were primarily in the 1-5 year range. Only 6.98% of the students had over 20 years of work experience as compared to 58.89% and 51.28% respectively of advisory committee members and instructors.

Data Analysis Procedures

Data analysis results from the measurement of one or more variables (Gay, 1992). For the purposes of this study, data analysis was performed using Statistical Package for the Social Sciences (SPSS, 1997). A correlational coefficient was used to test the relationship among the subscales, while a comparison of each group's mean difference in variance was conducted to test for homogeneity of variance.

An analysis of variance (ANOVA) was used to compare between groups and within groups differences in scores on the subscales of dependable, considerate, ambitious and cooperative (Petty, 1991). ANOVA is a procedure in which the variability

in scores on the dependent variable is analyzed and separated into several parts (Keppel, 1991). Part of the total variability is attributed to individual differences that include measurement errors and chance factors. Part of the total variability is also attributed to group membership.

When the ANOVA was significant, a post-hoc test was used to determine which pair of means accounted for the difference. The Scheffe` post hoc test was selected for use due to its appropriateness with unequal sample groups. It is considered to be a very conservative test (Gay, 1996). Scheffe` contrasts were used to determine exactly which mean or set of means were different from each other at a statistically significant level (Freed, Hess, & Ryan, 2002). The critical value for the Scheffe` test is the degrees of freedom for the between variance times the critical value for the one-way ANOVA. The critical value is thus inflated, making this a conservative but versatile test (Freed, Hess, & Ryan, 2002).

Summary of Responses

Each of the groups, advisory committee members, students, and instructors members completed the OWEI with a revised stem asking them to choose the response which most accurately described what they believed to be the level of importance for employees work ethic in the workplace. The instrument consisted of 50 work ethic descriptors with a Likert-type scale rating. Instructions asked participants to respond to each of the items on a scannable response sheet.

A correlational score on the Likert-type scale for each descriptor related to the sub-scale for dependable, considerate, ambitious or cooperative was determined. (For a

more detailed discussion of the OWEI instrument see Chapter III). A correlation coefficient expresses quantitatively the magnitude and direction of the relationship.

Nunnally and Bernstein (1994) provided guidance in the interpretation of the reliability coefficient by stating that a value of .70 is sufficient for early stages of research, but that basic research should require test scores to have a reliability coefficient of .80 or higher. Patton (1997) stated that while an instrument with a reliability coefficient below .70 is inadequate for describing the performance of an individual, the instrument may be serviceable for describing the performance of groups. The reason for this is that measurement errors tend to cancel one another out when one averages scores for a number of individuals. In practical terms measures with reliabilities as low as .50 can be used to describe the performance of class groups, those having 25 or more in a group (Patton, 1997). The reliability coefficients for each of the sub-scales by groups are presented in table 3.

Table 3

Reliability Coefficients Alpha

	Advisory Committee		Instructors		Students	
	N	Alpha	N	Alpha	N	Alpha
Dependable	290	.91	76	.82	85	.84
Considerate	287	.85	77	.80	86	.80
Ambitious	287	.69	76	.76	87	.64
Cooperative	290	.66	77	.66	87	.64

The analysis of variance assumes homogeneity of variance (Pagano, 1998).

These assumptions infer the populations from which the samples were taken are normally distributed and that the samples were drawn from the populations of equal variance (Pagano, 1998).

The Levene statistic for homogeneity of variance indicated scores were sufficiently homogeneous across groups to meet the assumptions for proper use of analysis of variance tests. Table 4 indicates results for the Levene statistic.

Table 4.

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
1	.174	2	451	.840
2	.150	2	450	.861
3	.289	2	450	.750
4	1.870	2	454	.155

The OWEI subscales were (1) dependable, (2) considerate, (3) ambitious, (4) cooperative.

When analyzing data, two types of error must be considered. A Type I error is defined as a conclusion or decision to reject the null hypothesis when the null hypothesis is true. A Type II error is defined as a decision to retain the null hypothesis when the null hypothesis is false (Pagano, 1998). The analysis of variance procedure was used to determine whether there was a significant difference between the means on the four subscale scores of the revised OWEI. In order to detect any reasonable statistically significant difference and concern for reducing the chance of a Type II error, the .05 level

of significance was selected (Keppel, 1991). Results were examined to determine if any differences existed across groups on the subscales of dependable, considerate, ambitious, and cooperative (Petty & Hill, 1994). Results are presented in Table 5.

Table 5.

One-way ANOVA results for each dimension of the four OWEI subscales

	sum of squares	df	mean	F	sig.
Between Groups					
1	6.976	2	3.488	12.654	.0005
2	43.205	2	21.603	59.756	.0005
3	11.054	2	5.527	17.983	.0005
4	9.513	2	4.757	17.525	.0005
Within Groups					
1	124.317	451	.276		
2	162.682	450	.362		
3	138.299	450	.307		
4	123.227	454	.271		

* => .05

(a) The OWEI subscales were (1) dependable, (2) considerate, (3) ambitious, (4) cooperative.

The one-way ANOVA results determined significant differences for each dimension of the four OWEI subscales. A post-hoc test was used to tell where the differences occurred.

The Scheffe` post-hoc test was conducted to control for experiment-wise error rate and to also reveal group differences. The experiment-wise error rate is defined as the probability of making one or more Type I errors for the full set of possible comparisons

in an experiment (Pagano, 1988). The Scheffe` test adjusted for the unequal N and accurately describes the difference in variance among the groups. Means for the homogenous subsets are displayed in Table 6, 7, 8, and 9.

Table 6.

Scheffe` Test Results for the OWEI Dependable Subscale

Group Membership	N	Subset for alpha = .05	
		1	2
Instructors	77	5.8117	
Students	86	5.9520	
Advisors	291		6.1289
Sig.		.149	1.000

Results of the Scheffe` post-hoc analysis for the OWEI dependable subscale indicate instructors and students were significantly alike with regard to the level of importance they placed on the work ethic descriptors for dependable. Advisors were significantly different from instructors and students with their ratings on the dependable subscale of the OWEI.

Results of the Scheffe` analysis indicated instructors, students, and advisory committee members all differed on their ratings on the OWEI considerate subscale. This was the only subscale on which faculty and students differed.

Table 7.

Scheffe` Test Results for the OWEI Considerate Subscale

Group Membership	N	Subset for alpha = .05		
		1	2	3
Instructors	78	4.7408		
Students	87		5.1585	
Advisors	288			5.5471
Sig.		1.000	1.000	1.000

Table 8.

Scheffe` Test Results for the OWEI Ambitious Subscale

Group Membership	N	Subset for alpha = .05	
		1	2
Instructors	77	5.1418	
Students	88	5.2689	
Advisors	288		5.5243
Sig.		.243	1.000

The Scheffe` contrasts determined that the instructors and students differed from the advisory committee members on the OWEI ambitious subscale. The advisory committee member means were different at a statistically significant level.

With regard to the OWEI cooperative subscale, Scheffe` results again indicated instructors and students were significantly alike. Instructors and students differed from

advisory committee members on their ratings of cooperative. Advisory committee members differed from instructors and students on all four of the OWEI subscales.

Table 9.

Scheffe` Test Results for the OWEI Cooperative Subscale

Group Membership	N	Subset for alpha = .05	
		1	2
Instructors	78	5.3958	
Students	88	5.5668	
Advisors	291		5.7668
Sig.		.055	1.000

Summary of Findings

In this section, the results of the statistical analysis are provided. The first research question was: Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance of being dependable as measured by the revised OWEI? The descriptors for dependable included accurate, careful, dedicated, dependable, depressed, devoted, effective, efficient, emotionally stable, honest, loyal, patient, productive, punctual, reliable and tardy (Petty, 1991). The results of this analysis indicate that instructors and students were significantly alike on the subscale of dependable. Advisory committee members were significantly different from instructors and students on the subscale of dependable.

The second research question asked if there is a significant difference among the subject groups on ratings of importance of being considerate as measured by the revised OWEI. Considerate descriptors included appreciative, cheerful, considerate, courteous,

devious, friendly, helpful, hostile, likeable, modest, pleasant, rude, selfish, and well groomed (Petty, 1991). Results indicate instructors, students and advisory committee members had significant differences on their ratings on the considerate subscale.

The third research question asked if there is a significant difference among the subject groups on ratings of importance of ambitious as measured by the revised OWEI. The ambitious sub-scale included the descriptors, ambitious, apathetic, conscientious, enthusiastic, hard working, and independent, initiating, irresponsible, negligent, persevering, persistent, and resourceful (Petty, 1991). Results showed instructors and students were not significantly different from each other but were significantly different than advisory committee members on the ambitious subscale.

The fourth research question asked if there is a significant difference among the subject groups on ratings of importance of cooperative as measured by the revised OWEI. The cooperative subscale included the descriptors, adaptable, careless, and cooperative, following regulations, following directions, orderly, perceptive, and stubborn (Petty, 1991). Results again revealed instructors and students to not be significantly different from each other but were significantly different than advisory committee members on the cooperative subscale.

Discussion

For the most part these data reflected findings that were consistent with similar research. Previous research by Petty and Campbell (1988) revealed that practitioners often have significantly different work attitudes than do teachers of a particular trade. This research may also suggest such a misfit. The results of this research also found a discrepancy between advisory committee members and instructors ratings on all four

subscales of the OWEI. These results further indicate that instructors and students were more aligned in their ratings of importance on the subscales of dependable, ambitious, and cooperative. However they did differ on their ratings of considerate.

Research results further revealed that advisory committee members and students were not closely aligned on their views of work ethic. These findings may support previous research conducted by Sheehy (1990), who found college workers to have poor habits regarding work, a lack of sensitivity to the needs of business, and expectations that are unrealistic about the attributes needed for workplace success. Hill (1996) reported that employers have observed that new hires fresh out of college appear to be there only to collect the paycheck, with no loyalty to the company or real interest in getting involved in the goals and strategic planning for the company's future. He concluded that if new college graduates who enter the working world do not understand and appreciate the significance of work ethic and the expectations of employers, outcomes will be less than harmonious. Advisory committee members are perspective employers and students hopefully will be their future employees. Their lack of agreement could produce problems in the work place.

Summary of Chapter

Chapter IV presents a summary of the findings of the study. Data analysis procedures were provided on employers, students, and instructors levels of importance of work ethic descriptors for the OWEI subscales of dependable, considerate, ambitious, and cooperative. Demographics of the sample were provided for descriptive and comparative purposes.

CHAPTER V

DISCUSSION

In this chapter the rationale and theoretical framework for this study will be reviewed, the purpose and research questions will be restated, and the methods used will again be briefly described. Following the summary of the study, a discussion of the findings, conclusions, and implications of the study, are presented. Recommendations for future research on work ethic are also made.

It is the mission of technical education within the state of Georgia to provide comprehensive academic and technical education for students in order that they may be successful contributing members in the workplace. Employers continue to list work ethic as critical to success in the workplace. Therefore it is imperative for educators, employers and students to all have the same definition of work ethics. Petty and Campbell (1988) recognized that educators must have a good understanding of what it takes to be successful within the workplace before they can effectively develop and teach the curriculum.

Critical theorists support the view that all stake holders must be represented when curriculum is being developed or refined (Finch & Crunkilton, 1999). John Dewey the philosopher, held as his belief that education was best achieved through democratic program planning. The stakeholders in work ethic curriculum development and education are the instructors, the employers and the students. Therefore, identification of

the ratings of work ethic descriptors by instructors, employers, and students, should be of primary importance in planning curriculum and instruction of work ethic.

It is the view of critical theorist Ira Shor (1988), that teachers should transform traditional approaches to teaching and learning into empowering ones. In order for this transformation to occur a model for co-developing the curriculum should be present. The critical theorist concept of stakeholder representation during curriculum development is validated by the outcome of this study. Each of the groups surveyed displayed slightly different aspects of their perceived importance to defined work ethic descriptors. This data provided more in depth knowledge for efficient program planning.

According to Shor and Freire (1987), the teacher selecting objects of study knows them better than the students as the course begins, but the teacher re-learns the objects through studying them with the students. This study provided data from both the student and advisory committee perspective giving the instructors the opportunity to remake their understanding of their knowledge prior to the class starting.

The rationale and theoretical framework for this study are rooted in the theoretical perspective of John Dewey (1899), on the organizational curriculum beliefs of Finch and Crunkilton (1999), and on the theory of social learning. Social learning theory is the view that behavior is learned through observation of others as well as through the direct experience of rewards and punishments (Brehm & Kassin, 1990). The social learning theory of Bandura emphasizes the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others.

These perspectives of social learning theory and educational curriculum theory are based on the belief that understanding and representation of all stakeholders impacted

by the curriculum is critical to curriculum development. This concept is known as data-based curriculum development and is held by critical theorists who believe curriculum planning must be characterized by sound judgment made with thorough understanding of political, ethical, social and educational goals (Cervero, 1988).

Statement of Purpose and Research Questions

The purpose of this study was to collect baseline data on advisory committee members, students, and instructor ratings of importance with regard to defined work ethic descriptors. Data were analyzed to determine a recommended level of importance for work ethic descriptors during curriculum planning and subsequent curriculum development.

Relative to the importance of the differentiation between perceived and real needs in the development of a work ethic curriculum, the objectives of this study included examining the ratings of work ethic as defined by the Occupational Work Ethic Inventory (Petty, 1991a). Additionally the following questions were used to guide this study:

1. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance of being dependable as measured by the revised OWEI?
2. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being considerate as measured by the revised OWEI?
3. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being ambitious as measured by the revised OWEI?

4. Is there a significant difference among the students, instructors, and advisory committee members on ratings of importance on being cooperative as measured by the revised OWEI?

Research Results

The population in this study consisted of a purposive sample of all advisory committee members, all instructors, and selected English students from one technical college that is a member of the Georgia Department of Technical and Adult Education. A total of 457 subjects participated in the study; 78 instructors, 88 students, and 291 advisory committee members. For descriptive purposes, demographic data was also collected on all subjects for the descriptors of age, gender, years of work experience and ethnic distribution.

The advisory committee respondents varied in age from 18 to above 36 years, with the largest percentage, 72.89%, being in the 36 and above category. Also, a higher percentage of the advisory committee groups were male, 63.57%, while 36.43% were female.

The largest ethnic background group of the advisory committee members was Caucasian, 79.29%, with the next largest ethnic background being African American, 18.21%. The majority of the advisory committee members had over twenty years of work experience, 58.89%

Instructor respondents ranged in age from 22 to 36 and above, with the majority falling in the 36 and above classification. There were more female instructors, 60.26% as compared to 39.74% being male.

The majority of instructor respondents were Caucasian, 83.3% with 16.67% being African American. Native Americans, Asians and people of Hispanic origins were not represented in the sample for this group. Years of work experience for instructors primarily fell in the over 20 category with 51.28%.

The majority of student respondents fell in the age range of 18-26 with 63.95% being female and 36.05% being male. The largest percentage was African American, 54.22%, with the next largest group being Caucasian, 37.35%. Student's years of work experience were primarily in the 1-5 year range. Only 6.98% of the students had over 20 years of work experience as compared to 58.89% and 51.28% respectively of advisory committee members and instructors.

After the data was collected using the revised OWEI, it was compiled and analyzed using the Statistical Package for the Social Sciences (SPSS, 1997). An analysis of variance was used to statistically compare between and within group scores on the OWEI subscales of dependable, considerate, ambitious, and cooperative. As a result of the ANOVA being significant, the Scheffe` post-hoc test was used to determine where the difference resided. This test was conducted due to the unequal sample size of the subscales.

The results indicated that instructors and students were significantly alike on the ratings of the subscales dependable, ambitious, and cooperative. Instructors and students were significantly different from advisory committee members on the subscales of dependable, ambitious, and cooperative. However on the subscale of considerate instructors, students, and advisory committee members were all significantly different on their ratings.

Braude (1975) believed society in the form of potential employers, has identified skills seen as necessary for success in the workplace. These necessary skills may not be the same as those identified by educators and students. The results of this research corroborate previous research conducted by Petty and Campbell (1988) in that instructors and students did not rate the work ethic descriptors with the same level of importance as the advisory committee members therefore giving merit to the concept of work ethic curriculum reform. Petty and Campbell showed that instructors often had a different work attitude than those employed in the field.

Previous research has also indicated new hires directly out of college and current college students appear to have poor work related habits and a lack of sensitivity to the needs of business and industry (Hill, 1996; Sheehy, 1990). The results of this study could possibly support this belief and find justification for believing students were influenced by their instructor's perceptions of work ethic since instructors and students were significantly alike in the ratings of work ethic descriptors.

Implications for Practice and Research

Although this study generates many questions for future exploration, it also contributes to the current body of research literature in several aspects. The results of this study have implications for future curriculum development in the area of work ethic but should be limited to the respondents of this study and not generalized beyond the instructors, advisory committee members, and students of the selected technical college. Advisory committee members, instructors, and students need to be more involved in the process of work ethic curriculum development. This study also provides research literature relative for instructors to understand and emphasize the same rating value for

work ethic skills as do advisory committee members, who will ultimately become student employers.

Previous research in the field of work ethic has demonstrated that worker self rating of importance is a determinant of occupational work ethic (Abu-Saad & Isralowitz, 1997; Hill, 1993; Wentworth & Chell, 1997). Because work ethic rating of importance varies from person to person, understanding work ethic as a concept is important (Hollingsworth, Brewer, & Petty, 2002). This research has helped to add to the larger body of knowledge regarding the concept of work ethic.

Perhaps the most exciting part of this study's contributions is found in its practical application. The rating of importance of work ethic descriptors provided by this study has helped shape the work ethics curriculum at the selected technical college. Instructors are more aware of the importance placed on the work ethic subscale descriptors of dependable, considerate, ambitious, and cooperative by prospective student employers. Having this knowledge in hand can better prepare instructors to model, demonstrate and reinforce these concepts within the classroom, supporting the belief held by Douthitt (1990), that creativeness, enthusiasm and a good work ethic of the instructors is crucial to teaching work ethic. Students exposed to the work ethic curriculum in this manner will be more likely to acquire what it takes to be successful in their chosen career, above and beyond the occupational specific skills they have trained for. By developing the individual, developing the person as a whole, you are in turn developing the workforce.

Based on the findings and conclusions of this study recommendation for further research is presented. Possible explanations and causes for the difference in ratings of work ethic descriptors between instructors, students and advisory committee members

should be explored with further research. In subsequent studies it would be interesting to further break down more precisely the age demographic data. This could aid in distinguishing among those who may vary on the dependent variables as a function of advancing age. Individuals in their pre retirement years may view work ethic differently than those in the beginning stages of their career.

The researcher also recommends that future studies might examine differences in work ethic ratings based on occupational categories. Differences in work ethic ratings may vary across occupational work groups. This study did not include occupational categories as one of the demographic variables studied however the population did represent a wide range of occupational work groups.

In a study conducted by Hollingsworth, Brewer, and Petty (2002) the relationship between leadership orientation and work ethic was examined. The findings revealed a significant relationship between leadership orientation and work ethic. In further work ethic studies utilizing instructors, advisory committee members and students, it might be good to include an assessment of their leadership orientation and determine if a significant relationship exists.

This study should be replicated utilizing all of the technical colleges within the Georgia Department of Technical and Adult Education thereby providing data that would generalize across the state and help further refine the work ethic curriculum state standards. Replication in other states would also provide data to compare and contrast findings of this research.

This study clearly indicates the importance of work ethic instruction and that work ethic in the work place and in the educational arena is constantly evolving and

changing. Further research on work ethic and the concepts on how and if work ethic can be taught in the classroom is warranted and would continue to refine and enhance the current curriculum for work ethic instruction.

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APPENDICES

APPENDIX A
PERMISSION TO USE OWEI

Subject: Permission to use OWEI

Dr. Schell,

Consider this permission for Ms. Flora Tydings to use the OWEI in her dissertation. Please send me a copy of the data and/or final study via email for my records.

Good luck to you and Ms Tydings.

Sincerely yours,

Gregory C. Petty, Ph.D.
Professor
Educational Administration and Policy Studies
A318 Claxton Complex
The University of Tennessee
Knoxville, TN 37996
865-974-4663
865-974-6146 FAX

APPENDIX B
COVER LETTER



TECHNICAL COLLEGE

3300 Macon Tech Drive Macon, GA 31206

Melton Palmer, Jr., Ed.D
President

TO: Advisory Committee Members, Instructors and Selected Students:

Repeatedly, work ethics and employability skills are listed by employers as critical for job success, and employers expect these issues to be addressed by occupational educators preparing students for employment. The challenge facing educators today is to find a way to provide students with the technical know-how, as well as the communication, interpersonal, and problem-solving skills needed in the current and future world of work.

Flora Tydings, Vice President of Instructional Services at Central Georgia Technical College and a Doctoral student at The University of Georgia, is conducting research under the direction of Dr. John Schell to provide data on work ethic curriculum development. The research instrument utilized in this study will be the Occupational Work Ethic Inventory.

As a member of either the Central Georgia Technical College advisory committee, instructional staff or student body, you are being asked to participate in this study by completing the attached survey. Collected data will be analyzed to determine what differences and similarities exist in work ethic expectations of employers, instructors, and students, with regard to desired employee work ethic affective attributes.

Your participation in this study is greatly appreciated. The results of this participation will be confidential and will not be released in any individual identifiable form without the participant's prior consent, unless otherwise required by law. If you have additional questions, please call Mrs. Tydings at 912-757-3510.

Sincerely,

A handwritten signature in cursive script that reads 'Melton Palmer, Jr.'.

Melton Palmer, Jr.

A handwritten signature in cursive script that reads 'Flora W. Tydings'.

Flora W. Tydings

Research at the University of Georgia, which involves human participants, is carried out under the oversight of the Institutional Review Board. Questions or problems regarding your rights as a participant should be addressed to Heidi L. Roof, M.S., Institutional Review Board; Office of V.P. for Research; The University of Georgia, 604A Graduate Studies Research Center; Athens, Georgia 30602-7411; Telephone (706) 542-6514.

APPENDIX C

OCCUPATIONAL WORK ETHIC INVENTORY (REVISED FORMAT)

- 7. Following Regulations
- 8. Following Directions
- 9. Independent
- 10. Ambitious
- 11. Effective
- 12. Reliable
- 13. Tardy
- 14. Initiating
- 15. Perceptive
- 16. Honest
- 17. Irresponsible
- 18. Efficient
- 19. Adaptable
- 20. Careful
- 21. Appreciative
- 22. Accurate
- 23. Emotionally Stable
- 24. Conscientious
- 25. Depressed
- 26. Patient
- 27. Punctual
- 28. Devious
- 29. Selfish
- 30. Negligent
- 31. Persevering

	Never	Almost Never	Seldom	Sometimes	Usually	Almost Always	Always
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APPENDIX D

OCCUPATIONAL WORK ETHIC INVENTORY (ORIGINAL FORMAT)

Code Number _____

OCCUPATIONAL WORK ETHIC INVENTORY

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The purpose of this inventory is to obtain information about desirable characteristics of working individuals. Your responses will be kept strictly confidential and your name is not required on this form. It is important for you to answer each item as truthfully as possible.



DIRECTIONS:

For each work ethic descriptor listed below, **CIRCLE THE NUMBER** that most accurately describes your standards for that item. There are seven possible choices for each item:

Never Almost Never Seldom Sometimes Usually Almost Always Always
1 2 3 4 5 6 7

THERE ARE NO RIGHT OR WRONG ANSWERS. There also is no time limit, but you should work as rapidly as possible. Please respond to every item on the list.

At work I can describe myself as:

Descriptors	Never							Always
	1	2	3	4	5	6	7	
1. dependable	1	2	3	4	5	6	7	
2. stubborn	1	2	3	4	5	6	7	
3. following regulations	1	2	3	4	5	6	7	
4. following directions	1	2	3	4	5	6	7	
5. independent	1	2	3	4	5	6	7	
6. ambitious	1	2	3	4	5	6	7	
7. effective	1	2	3	4	5	6	7	
8. reliable	1	2	3	4	5	6	7	
9. tardy	1	2	3	4	5	6	7	
10. initiating	1	2	3	4	5	6	7	
11. perceptive	1	2	3	4	5	6	7	
12. honest	1	2	3	4	5	6	7	
13. irresponsible	1	2	3	4	5	6	7	
14. efficient	1	2	3	4	5	6	7	
15. adaptable	1	2	3	4	5	6	7	
16. careful	1	2	3	4	5	6	7	
17. appreciative	1	2	3	4	5	6	7	
18. accurate	1	2	3	4	5	6	7	
19. emotionally stable	1	2	3	4	5	6	7	
20. conscientious	1	2	3	4	5	6	7	

At work I can describe myself as:

Descriptors	<i>Never</i>							<i>Always</i>						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
21. depressed	1	2	3	4	5	6	7							
22. patient	1	2	3	4	5	6	7							
23. punctual	1	2	3	4	5	6	7							
24. devious	1	2	3	4	5	6	7							
25. selfish	1	2	3	4	5	6	7							
26. negligent	1	2	3	4	5	6	7							
27. persevering	1	2	3	4	5	6	7							
28. likeable	1	2	3	4	5	6	7							
29. helpful	1	2	3	4	5	6	7							
30. apathetic	1	2	3	4	5	6	7							
31. pleasant	1	2	3	4	5	6	7							
32. cooperative	1	2	3	4	5	6	7							
33. hard working	1	2	3	4	5	6	7							
34. rude	1	2	3	4	5	6	7							
35. orderly	1	2	3	4	5	6	7							
36. enthusiastic	1	2	3	4	5	6	7							
37. cheerful	1	2	3	4	5	6	7							
38. persistent	1	2	3	4	5	6	7							
39. hostile	1	2	3	4	5	6	7							
40. dedicated	1	2	3	4	5	6	7							
41. devoted	1	2	3	4	5	6	7							
42. courteous	1	2	3	4	5	6	7							
43. considerate	1	2	3	4	5	6	7							
44. careless	1	2	3	4	5	6	7							
45. productive	1	2	3	4	5	6	7							
46. well groomed	1	2	3	4	5	6	7							
47. friendly	1	2	3	4	5	6	7							
48. loyal	1	2	3	4	5	6	7							
49. resourceful	1	2	3	4	5	6	7							
50. modest	1	2	3	4	5	6	7							

(OVER PLEASE)

BACKGROUND INFORMATION

DIRECTIONS:

Please check the appropriate response for each item. Completion of this inventory acknowledges your understanding that this data will be used for research purposes only and will be kept completely confidential.

1) Job Title: _____

2) Category your occupation best fits:

- administrative, engineering, scientific, teaching, and related occupations, including creative artists
- technical, clerical, sales, and related occupations
- service occupations, including military occupations
- farming, forestry, fishing, and hunting occupations
- precision production, craft and repair
- operators, fabricators, and laborers

3) Are you an owner or part owner of a business?

- yes
- no

4) Do you supervise other workers?

- yes
- no

5) Years of full-time work experience:

- less than 2 yr.
- 2 - 8 yr.
- more than 8 yr.

6) Sex:

- female
- male

7) Level of education:

- less than high school diploma
- high school degree or GED
- 2 years of college or Associate's degree
- a Bachelor's Degree
- some Graduate work

8) Age:

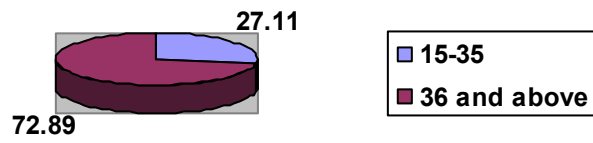
- 19 or under
- 20 - 26
- 27-35
- 36-55
- over 55

9) Country of citizenship: _____

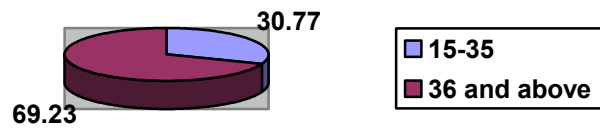
APPENDIX E
DEMOGRAPHIC DATA

AGE

Age of Advisory Committee Members



Age of Faculty Members

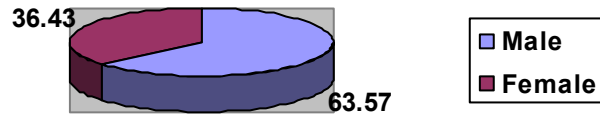


Age of Students

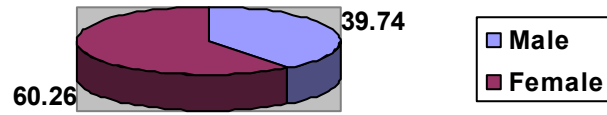


GENDER

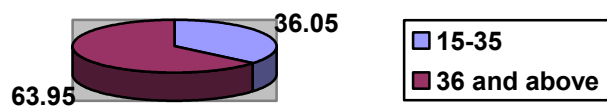
Gender of Advisory Committee Members



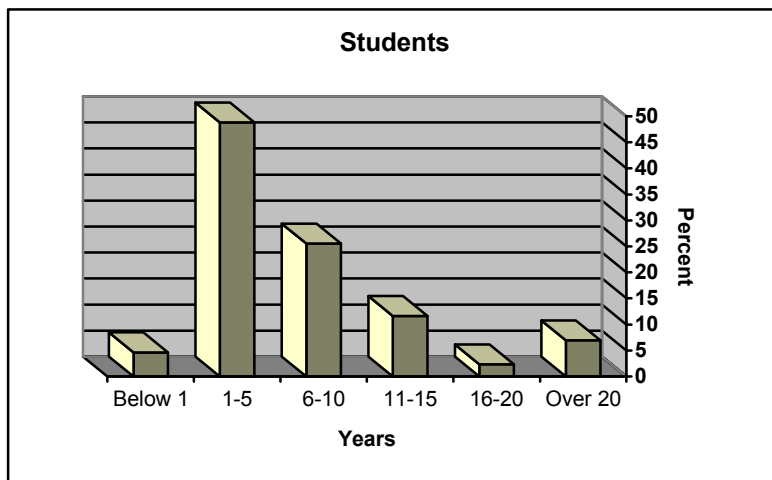
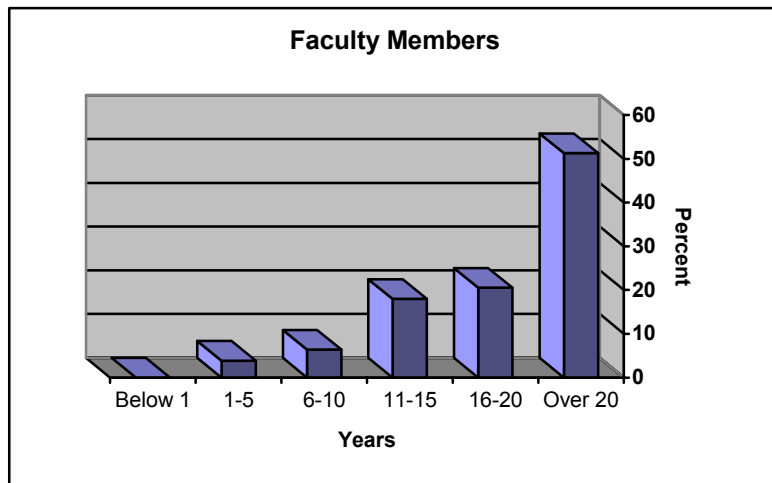
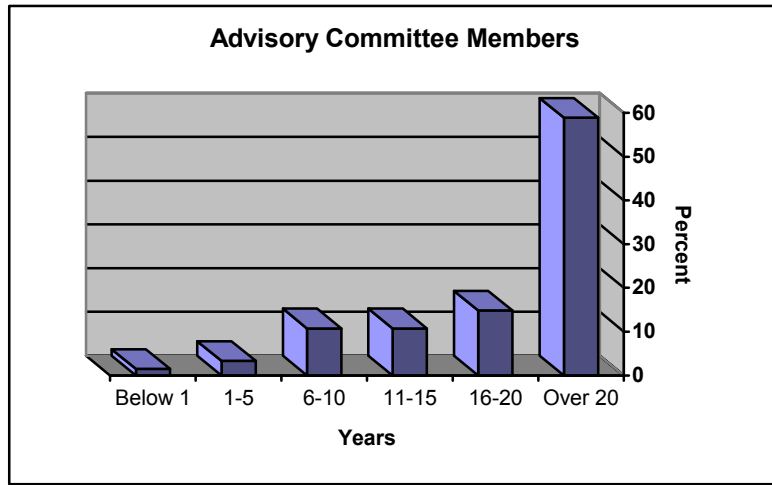
Gender of Faculty Members



Gender of Students



YEARS OF WORK EXPERIENCE



ETHNIC BACKGROUND

