THE IMPACT OF VOCATIONAL TRAINING ON EMPLOYMENT RATES AND WAGES FOR RECIPIENTS OF TEMPORARY ASSISTANCE FOR NEEDY FAMILIES

By

LOU ANN HARGRAVE

Bachelor of Science
Oklahoma State University
Stillwater, Oklahoma
1977

Master of Science
Oklahoma State University
Stillwater, Oklahoma
1981

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF EDUCATION
December, 2001

THE IMPACT OF VOCATIONAL TRAINING ON

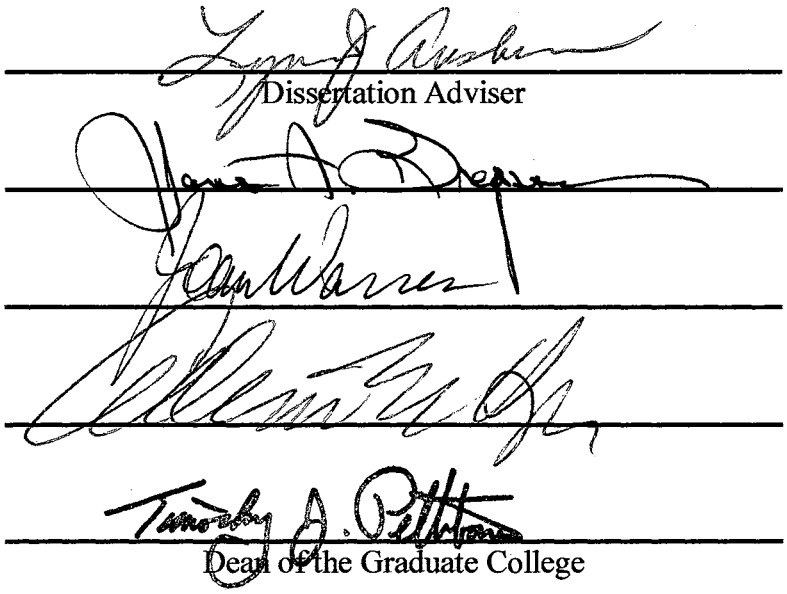
EMPLOYMENT RATES AND WAGES FOR

RECIPIENTS OF TEMPORARY

ASSISTANCE FOR NEEDY

FAMILIES

Thesis Approved:



Dissertation Adviser

Dean of the Graduate College

ACKNOWLEDGMENTS

This dissertation is in memory of Charles E. Hargrave, a vocational agriculture teacher, who taught me how career and technology education could positively transform the livelihoods of families.

It is dedicated to Vivian Hargrave Hanni, who taught me by example that a woman can do anything she puts her mind to with enough will, and to Ralph Hanni, who taught me the value of hard work. All the previously mentioned persons are my parents, whom I dearly love.

I am appreciative of the following committee members for their critique that greatly enhanced the quality of my study: Chair-Dr. James Gregson, Dissertation Adviser-Dr. Lynna Ausburn, Dr. Adrienne Hyle, and Dr. Joan Warren.

Also, I will always be indebted to Dr. Sheila Stone for leading me back to graduate school; Camilla Riley for providing shelter, food, and moral support during school; Dr. Maureen McCarthy for providing me statistical assistance; and Brenda Karns for her computer assistance.

Much gratitude is extended to Laura Fenton and my Aunt Wanda Knapp who provided me with acceptance, encouragement, and emotional support, when I was balancing home renovation, work, and school.

Recognition is due to the staff members of the TANF programs that work with such dedication to ensure that as many lives as possible are improved through quality training and encouraging guidance.

Appreciation is extended to the Oklahoma Department of Human Services for entering into a contractual relationship with the Oklahoma Department of Career and Technology Education that broadened the opportunities for their clients.

Lastly, I would like to acknowledge the greatest educational system in the world. The Oklahoma Department of Career Technology Education has afforded me privilege to understand all aspects of its mission and to be a part of its organization.

TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

Table Page

CHAPTER I

INTRODUCTION OF THE STUDY

Since the enactment of the Smith Hughes Act of 1917, vocational education has evolved to address social issues that impact the economic development of individuals as well as businesses and industries. Ideally the symbiotic relationship between the employee and employers should result in a mutual prosperity. However, this is not always a reality.

The population of the United States has different physical characteristics and ideologies that have triggered discrimination, which often causes poverty. These characteristics are race, national origin, religion, age, disabilities, economic status, and gender. Vocational education has been mandated through direct and indirect legislation to address all of them.

Generally discrimination harms minority groups. The exceptions to this rule are gender and economic status. The economic prosperity is not spread equally among the population. The minority of the population holds the majority of the wealth. This can be demonstrated in the fact that the richest person in the United States at the time of this study was Bill Gates. Furthermore, primarily women receive welfare, yet women narrowly out number men in the total population of the United States.

Since the Smith Hughes Act, the primary goal of vocational education has been to prepare individuals for gainful employment in occupations which requires less than a

four-year college degree. Vocational education's legislative shift towards addressing social disparities is summarized as follows (Murphy, 1990):

> In recent years, Congress has become more concerned about the implementation of vocational education legislation and those not being served by local and state agencies, especially at-risk populations. In 1963, provisions to serve disadvantaged and handicapped populations were included in the law. The 1968 amendments set aside funds for these purposes. Essentially, the same thing happened in regard to serving girls and women in vocational education. The Vocational Amendments of 1976 provided the first set-aside funding to eliminate sex discrimination in vocational education. Progress was so limited and so slow that Congress set aside additional funding for sex equity, homemakers and single parents when it approved the Carl D. Perkins Act of 1984. (p. x)

Although all discrimination is difficult to overcome, especially if an individual has a combination of characteristics that trigger discriminatory behavior (e.g. a Spanish speaking, disabled, Catholic, Mexican, woman), this discussion will focus on legislation that has been enacted to assist females overcome barriers to employment.

Gender Equity Mandates Impact on Vocational Education

The Smith Hughes Act primarily helped males to gain occupational skills necessary to be successful in the workforce. Females were trained to efficiently and economically manage the home and family unit. It was not until the previously mentioned Vocational Amendments of 1976 that vocational educators were forced to take corrective action to overcome the economic disparity caused by gender discrimination. The passage of Title IX of the Education Amendments of 1972 and the Women's Movement were seen as the main instigators of the Vocational Amendments of 1976 and the Carl D. Perkins Act of 1984 (Murphy, 1990). The federal government had delayed issuing the guidelines for the implementation of Title IX three years, which further fueled supporters of the enactment of the 1976 Vocational Amendments.

However, many believe that Congress only became concerned about sex discrimination because it saw how discrimination impacted the national economy. Issues such as unemployment, under-employment, the need for skilled workers in a service oriented economy, and the escalating welfare costs were the real reasons for addressing sex bias and sex stereotyping in vocational education (Murphy, 1990). This belief can be supported by reviewing Congressional hearing testimonies that referenced work, women and families, with the emphasis on work. Employers needed then and need now, female workers who are not absent and who are productive and well trained (Gray & Herr, 1998).

Perhaps it was Congress's intent to improve the economy using the feminist movement as a political fuel or *vice versa*. Either way, vocational education legislation addressed the feminization of poverty for the first time with the enactment of the 1976 Vocational Education Amendments (Murphy, 1990).

With the enactment of the Vocational Education Act (Title II, Education Amendments of 1976, P. L.94-482) came the requirement that states create a full-time coordinator to assist in the elimination of sex bias and discrimination in all vocational programs. A budget to implement the sex equity provision was $50,000, which included the salary and benefits of the coordinator. This position is one that the author held or shared for 14 years at the Oklahoma Department of Career and Technology Education (ODCTE).

This position was expanded with the enactment of the Carl D. Perkins Vocational Education Act of 1984 (P. L. 98-524). This law maintained and strengthened the sex equity provision of the previous law. One of the major differences in this law from P. L.

98-524 was the requirement that the Sex Equity Coordinator administer the program of vocational education for single parents and homemakers and the sex equity program. Congress provided set-sides (8.4% of the federal appropriations) to operate these programs and increased the management budget of the Sex Equity Coordinator to $60,000.

In 1985, a new program was started with these set-asides in Oklahoma called the Careers Unlimited program. Females were required to enter nontraditional, high wage, new and emerging, high demand, and/or high tech training in order to receive free childcare, transportation, and tuition. Seven Careers Unlimited programs were funded at technology centers. Seven programs may sound like a small number, but they either operated in multiple campuses of technology centers in rural and metropolitan communities or they were operated by a technology center with one campus in a highly populated area.

In 1978, the governor's special grants program funded a pilot displaced homemakers program at Moore-Norman Technology Center (Stewart, 1982). Since this was one of the possible partial funding areas under the Comprehensive Employment and Training Act (CETA) funds, the ODCTE became lead agency and service delivery and the State Department of Economic and Community Affairs (DECA) became the coordinating agency (Stewart, 1982). This followed passage of the Displaced Homemakers Act by the legislature in 1978 (Stewart, 1982). The Oklahoma Department of Career and Technology Education (ODCTE) expanded the Displaced Homemakers Program to also serve single parents at almost every technology center across the state. CEDA fell away to the Job Training Partnership Act just as the Displaced Homemakers,

Single Parent Programs and Sex Equity Programs came into existence. Therefore, the ODCTE was able to continue to provide services to the displaced homemakers and single parents with Carl Perkins funds.

In 1990 the Carl D. Perkins Vocational and Applied Technology Act was passed (P.L. 101-392). It maintained the sex equity position along with equity reserves of 10.5 % of the basic grant to operate the Displaced Homemakers, Single Parents, and Single Pregnant Teens program (pregnant teen was added) and the 3% of the basic grant to operate the sex equity programs. Five percent could float between the two categories. In Oklahoma the 5% was used to expand the services provided by the Displaced Homemakers, Single Parent, and Single Pregnant Teen program.

The Sex Equity Coordinator role and responsibility was eventually expanded in two additional laws. The Sex Equity Coordinator was mandated to be the point person in the state in carrying out sex equity activities affecting both the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 and Jobs Training Partnership Act (JTPA) of 1982 through the enactment of the Nontraditional Employment for Women (NEW) Act of 1991 (P.L. 97-300 & P.L 102-235). One of the provisions under the NEW Act stated that the State Job Training Coordinating Council, established under JTPA, was required to consult with the Sex Equity Coordinator in the development of a report that analyzed the results of the state's goals of training and placing women in nontraditional jobs. The Council also was required to obtain from the Sex Equity Coordinator a summary of activities and an analysis of results of training women in nontraditional employment under the Carl Perkins Act. Furthermore, the NEW Act required that the Sex Equity Coordinator be a key player in the coordination between

JTPA and the vocational education systems to maximize resources available for training and placing women in nontraditional employment.

The second law in which the Sex Equity Coordinator's role and responsibility were expanded was the School-To-Work Opportunities Act (STWOA) of 1994, which required the Sex Equity Coordinator to approve the development of the state plan, review local grant applications to ensure they addressed how the applicants planed to ensure opportunities for young women to participate in the STWOA program (P. L. 103-239). This was the final act that would require action from the Sex Equity Coordinator.

In 1995 when Congress was scheduled to reauthorize the Perkins Act, the political climate had dramatically changed. In 1994, the Republican Party had gained the majority control of the House of Representatives and the Senate for the first time in 40 years. They had two initiatives that would impact the reauthorization of the Perkins Act. They wanted to consolidate the many separate programs into one more cohesive, streamlined program and reduce federal requirements by "block granting" the programs and funds to state government (American Vocational Association [AVA], 1998). For a time Congress debated the pros and cons of merging the Perkins Act with the JTPA. However, this merger failed after much controversy (AVA, 1998). In 1998 the Carl D. Perkins Vocational and Technical Education Act passed (P.L. 105-332).

Although this act required a minimum of $60,000 to be "set-aside" for sex equity coordination and the hiring of a coordinator, it did not require states to hire a Sex Equity Coordinator. The set-aside was reduced to at least $60,000 and no more than $150,000 to be spent on activities that encouraged men and women to go into high-skill careers that were traditionally associated with their gender. Although Oklahoma's technology centers

could choose to retain their Displaced Homemakers, Single Parents, and Single Pregnant Women Programs and Careers Unlimited Programs using their local funds and their portion of Carl Perkins' funds, most chose not to do so. Of the Displaced Homemakers, Single Parents, and Single Pregnant Women Programs that were in operation in twenty-seven technology centers in 1996 only nine are operating as of FY 2001. Only two of the seven Careers Unlimited Programs are in service as of FY 2001. Oklahoma has chosen to retain the Sex Equity Coordinator's position, but without the targeted funds excellent programs were terminated.

Other Policy Shifts that Impact the Welfare

It is important to state again that the vast majority of single heads of households are female. Therefore, the following shift in federal laws dramatically impacts the feminization of poverty. The U.S. Departments of Labor, Education, and Health and Human Services have had major policy shifts since the late 1990's with the enactment of the Public Law 105-220, which is entitled Workforce Investment Act (WIA) of 1998.

WIA serves as an umbrella to many federal programs either specifically legislated by it or tied to it through mutual references within federal legislation. Its purpose is to combine, manage and refine employment, training, literacy and vocational rehabilitation programs in the United States and for other purposes (P. L. 105-220). This law that replaced JTPA now contains the funds for displaced homemakers under the provision of dislocated workers. However, many people are unaware that dislocated worker funds may be used for displaced homemakers, because there is very little language within WIA that mentions it. This causes this fact to be lost in the detail of this complicated law.

WIA also has funds to help welfare recipients gain employment and/or improve their skills in order to gain upward mobility in the job market. The state of Oklahoma Department of Human Services has also granted WIA Labor Market Areas Temporary Assistance for Needy Families (TANF) funds to provide additional services and resources to TANF recipients for them to gain employment that will lead to self-sufficiency.

The Welfare to Work Amendments (WtWA) of the Social Security Act of 1997 are administered through WIA Labor Market Areas' Boards (P.L. 106-113). WtWA targets funds to help welfare recipients retain their current job or improve their skills in order to attain a better job while working.

Two years prior to the reauthorization of Carl Perkins Act of 1998 and the enactment of WIA, Congress passed the Personal Responsibility and Work Opportunity Act of 1996. This law dramatically changed welfare from an entitlement program to one of privilege. In other words, welfare assistance was no longer automatic, because an individual with a dependent child or children fit a certain classification of low income and unemployment. Temporary Assistance for Needy Families (TANF), cash assistance program of the Work Opportunity Act, replaced Aid to Families with Dependent Children (AFDC), cash assistance program of the 1988 Family Support Act (P.L. 100-485).

The Work Opportunity Act is a block grant that allows states to make decisions in regards to the methods they chose to meet defined goals. At the time of this study (fiscal year 2000) Oklahoma required applicants for assistance (primarily female single parents) to prove that they were unable to find employment prior to being certified for assistance.

The Work Opportunity Act does require individuals to participate in one of 12 work activities, all of which have to be structured and supervised, in order to earn their assistance checks.

One of the 12 allowable work activities is one year of vocational training. After the passage of the Work Opportunity Act, the ODCTE system underwent a terminology change from "vocational" training to "career," "technical," and/or "technology" training. These terms refer to occupational specific training rather than preparatory. Since the ODCTE has a contract with the ODHS to provide vocational training as allowed in the Work Opportunity Act, the ODCTE TANF programs maintain the usage of the term "vocational training" rather than "career," "technology," and/or "technical" training.

The Job Opportunities and Basic Skills Training Program (JOBS) under the Family Support Act provided education and training, work experience, and assistance in finding unsubsidized work in the regular labor market to persons applying to receive AFDC. It was absorbed in the language of TANF, with more emphasis being placed on work and less emphasis on training.

The major change the Work Opportunity Act mandates is the five years life time limit starting the date the first child's family receives TANF. After five years of assistance is provided to the first child's family, the assistance is discontinued.

Statement of Problem

In 1996, the Oklahoma Department of Career and Technology Education entered into a contractual agreement with the Oklahoma Department of Human Services to expand a program formerly operated with JOBS funds in seven technology centers across the state. Within the next two years, the seven JOBS funded programs grew to become

the 22 Welfare to Employment (TANF) programs located at 22 technology centers throughout the state. The Welfare to Employment (TANF) programs assist TANF recipients through their vocational training by providing them, based on their need, with additional life skills training, remediation, and/or employability training. Following training, the program continues to assist the recipients with job retention services.

All TANF programs are funded through a request for proposal process that requires County DHS directors to mutually agree with the local TANF program's design of training and support services. Because of the "work first" philosophy of WIA and the Work Opportunity Act, often DHS workers discouraged TANF recipients from long term vocational training programs when the recipients were eligible for jobs that only required the "soft skills" learned through the TANF programs remediation, life skills, and/or employability skills training (i.e., the preparatory services component of the TANF programs). Many DHS workers did not want TANF recipients to use up their five years assistance all at once for fear that they would have equal or greater need for it at a later time.

During meetings, conferences, and conversations attended by the researcher, who now serves as the ODCTE TANF coordinator, many employers have stated that they just need employees with good work ethics and basic skills. However, jobs that only need employees with good work ethics and basic skills generally pay minimum wage. TANF recipients cannot afford to enroll in "soft skill" training programs that lead to dead end low paying jobs. Furthermore, research, which will be presented in Chapter II, provides evidence that employers need a more technically skilled worker in order to stay competitive in the future.

This study will not debate the need for the preparatory service component in the TANF programs. However, it will address the efficacy of vocational training by comparing the employment outcomes of TANF students who receive preparatory services only with those who received preparatory services and vocational training. The comparisons will be made at the first point of employment and again sixth months following the first employment. Employment rates and wages will be the two dependent variables measured.

TANF recipients are highly publicized, politicized, stereotyped, and examined through multiple lenses. The detail characteristics of TANF recipients are provided in Chapter II. Detail characteristics of the TANF students studied are also made available in Chapter IV. However, the TANF students' characteristics reported in Chapter IV were not analyzed. The purpose of sharing these characteristics is to provide a better understanding of this population.

Research Questions and Hypotheses

The following four research questions provided the parameters of this study:

1. Will the TANF students who received both preparatory services and vocational training have a higher rate of employment than the TANF students who received only preparatory services?

2. Will the TANF students who received both preparatory services and vocational training, have a higher rate of employment at the sixth month point in time following their first employment date than the TANF students who received only preparatory services?

3. Will the TANF students who received both preparatory services and vocational training have higher average wages than the TANF students who received only preparatory services?

4. Will the TANF students who received both preparatory services and vocational training have higher average wages than the TANF students who received only preparatory services sixth month following their first date of employment?

These four questions will be addressed through quantitative research. What prompted this researcher to conduct a quantitative study versus a qualitative study is past experience as the ODCTE Equity Coordinator. Although the Displaced Homemaker, Single Parent, and Single Pregnant Women program and the Careers Unlimited Program kept complete student accounting records following the Vocational Enrollment Data System guidelines, the General Accounting Office (GAO) never instructed states to collect such detailed information. GAO only asked that states collect the total numbers served with the two gender equity reserves. There was no uniform method of reporting outcomes of programs even when states elected to provide such performance outcomes. As a result, numerous studies reported that there was lack of evidence that the gender equity programs were effective. Had all states developed a uniform data collecting process that measured outcomes of students who were served by these two reserves and had researchers and policy makers had access to this information, the gender equity programs may have continued in the 1998 Carl Perkins Act. This experience has caused the researcher to create a TANF student information system that measures program outcomes as well as student characteristics.

The research questions will be addressed by statistically testing the following hypotheses:

- H_{o1} -- Initial employment rates do not differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_1 -- Initial employment rates differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_{o2} -- Employment rates do not differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.
- H_2 -- Employment rates differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.
- H_{o3} -- There is no difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_3 -- There is a difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_{o4} --There is no difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.

- H_4 -- There is a difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.

Hypotheses one and two will be tested using chi-square, while hypotheses three and four will be tested with related sample *t*-tests.

Significance of the Study

State and federal legislatures are adopting business administration techniques to create improved laws and to discontinue or fund legislation. Although hearings are conducted to listen to the stories of those in need, legislatures are more swayed by facts and figures which demonstrate that a program is cost effective.

Although much of the content of this dissertation provides the reader with the challenges that face the TANF recipient, the actual research design is intended to quantify the TANF program's ability to assist TANF vocational student completers find and retain employment in an occupation that provides a better wage than a TANF student who does not receive vocational training.

This study's results will be used to demonstrate the value of vocational training to policy makers. Also, it will be used to improve existing ODCTE TANF programs and provide rationale for their continuation or discontinuation. More questions will evolve from this study and others related to it, which will need to be answered. If such research is ignored, the resulting social injustice could seriously impact our nation's economics and moral obligation.

Definition of Terms

1. Basic Academic Education: Instruction that teaches fundamental and essential academic curriculum such as reading, writing, math, and science (Welfare to Employment Vocational Training Program Guide).

2. Displaced Homemakers: An individual who—

   (A)(i) has worked as an adult primarily without remuneration to care for the home and family, and for that reason has diminished marketable skills;
   (ii) has been dependent on income of another family but is no longer supported by such income; or
   (iii) is a parent whose youngest dependent child will become ineligible to receive assistance under part A of title IV of the Social Security Act (42 U.S.C. 601 et seq.) not later than 2 years after the date on which the parent applies for assistance under this title;
   (B) is unemployed or underemployed and is experiencing difficulty in obtaining or upgrading employment (P. L. 105-332, § 3).

3. Employability Skills: Job readiness competencies, which teach job search skills, application completion skills, resume writing, interview techniques, and employment retention (Welfare to Employment Vocational Training Program Guide).

4. Individual with Limited English Proficiency: The term means –

   a secondary school student, and adult, or an out-school youth, who has limited ability in speaking, reading, writing, or understanding the English language, and –
   (A) whose native language is a language other than English; or
   (B) who lives in a family or community environment in which a language other than English is the dominant language (P. L. 105-332, § 3).

5. Individual with a Disability: The term means an individual with any disability (as defined in the Americans with Disabilities Act of 1990 (42 U.S.C. 12102) (P. L. 105-332, § 3).

6. Life Skills: Skills necessary to balance home and work (i.e., home management, time management, consumer science, budgeting, nutrition, family relations, parenting skills, professional dress, personal hygiene, decision making skills, anger management) (Welfare to Employment Vocational Training Program Guide).

7. Preparatory Services: The term means—

   (A) Services, programs, or activities designed to assist individuals who are not enrolled in vocational education programs in the selection of, or preparation for participation in, an appropriate vocational education or training program, such as –
   (B) services, programs, or activities related to outreach to or recruitment of potential vocational students;
   (C) career counseling and personal counseling
   (D) vocational assessment and testing; and other appropriate services, programs, or activities such as basic academic education, life skills, and employability skills (P. L. 101-392, § 521).

8. Single Parent: Individual who—

   (A) is unmarried or legally separated from a spouse; and
   (B) (i) has minor child or children for which the parent has either custody or joint custody; or
   (ii) is pregnant (P. L. 101-392, § 521).

9. Single Pregnant Women: Individual who is pregnant.

10. Soft Skills: In this study soft skills are incorporated in preparatory services definition (i.e. life skills, basic academic education, employability skills).

11. TANF Recipient: Term used to describe individuals who receive Temporary Assistance for Needy Families.

12. Technology Center: An area vocational and technical education school in Oklahoma that serves both secondary and postsecondary students. The term area vocational and technical education school means—

   (A) a specialized public secondary school used exclusively or principally for the provision of vocational and technical education to individuals

who are available for study in preparation for entering the labor market;

(B) the department of a public secondary school exclusively or principally used for providing vocational and technical education in not fewer than five different occupational fields to individuals who are available for study in preparation for entering the labor market;

(C) a public or nonprofit technical institution or vocational education school used exclusively or principally for the provision of vocational and technical education to individuals who have completed or left secondary school and who are available for study in preparation for entering the labor market, if the institution or school admits as regular students both individuals who completed secondary school and individual who left secondary school (P. L. 105-332, § 3).

13. Vocational and Technical Education: The term means organized educational activities that—

(A) offer a sequence of courses that provides individuals with the academic and technical knowledge and skills the individuals need to prepare for further education and for careers (other than careers requiring a baccalaureate, master's, or doctoral degree) in current or emerging employment sectors; and

(B) include competency-based learning that contributes to the academic knowledge, higher order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, of an individual (P. L. 105-332 , § 3).

Limitations of the Study

1. There was a large attrition rate among TANF students from the first month of employment to the sixth month of employment, due primarily to of the difficulty associated with the follow-up process. Had all or at least ninety percent the completers been found, all hypotheses may have been supported.

2. Incomplete data per TANF student was also a limitation of the study. Had all or at least 90 percent of the follow-up information been complete, all hypotheses may have been supported.

Even with these two limitations, the sample size was larger and the data content was more complete than many studies.

CHAPTER II

REVIEW OF LITERATURE

Since the enactment of the *Personal Responsibility and Work Opportunity Reconciliation Act of 1996,* millions of former welfare recipients have joined the ranks of working Americans. Yet, most have become the working poor. The average woman leaving welfare still struggles to support her children with a job that pays less than $7 an hour (Carnevale, Reich, Johnson, & Sylkvester, 2000).

Most Americans do not care if welfare recipients who find employment remain in poverty or find dignity. They want them working! This shift in philosophy can be tracked from the 1930s when Social Security provided for families whose fathers were deceased. This federal support legislation later became known as Aid to Families with Dependent Children (AFDC). Helping husbandless mothers with children became muddled as a result of the following changing economic and social factors (Nightingale & Haveman, 1994):

- Increasing number of women, including mothers, entered the workforce.
- Transportation technology made it easier for people to change job and employment conditions.
- Out-of wedlock childbearing increased.
- Traditional two-parent families with children declined as more households were headed by divorced and never-married women.
- The structure of the labor market changed dramatically in the 1970s and early 1980s, with a decrease in fairly well-paid manufacturing jobs and increase in service sector jobs, many of which paid low wages. (p. 3)

Most working Americans do not want to support families created out of wed-lock or by divorce. And at the same time, American businesses and industries have had an increased demand for employees in the low paying service sector. In fact, many employers have stated that they need employees with basic skills and good work ethics rather than technically trained employees (Gray & Herr, 1998).

Before the selection of which philosophical schools of thought would help welfare recipients to become productive citizens and workers can be determined, it is important to understand how and why welfare evolved. Characteristics of current and former welfare recipients need to be considered before selections of philosophical schools of thought are made. Lastly, it is critical to include curriculum components beyond occupational training that will be essential to TANF recipients' employment success.

History of Welfare

"Welfare" in the United States started in 1911 with the "grandmother" of AFDC, the "mother's pension" or "widow's pension" (Skocpol, Abend-Wein, Howard, & Lehmann, 1993). These programs were state-level and enabled statutes to authorize local governmental authorities to make regular payments directly to impoverished mothers (mostly war widows) of dependent children.

Just after the turn of the twentieth century, voluntary associations consisting of highly educated women grew in most states. Since women could not vote, they sought to influence policy in other ways (Skocpol *et al*, 1993). These organizations were developed to express the concerns of mothers, children and families in a new industrial economy

(Baker, 1984). They created alliances with the American Federation of Labor and politicians like Theodore Roosevelt and Robert LaFollette and helped form a consensus (Teles, 1998) that there was a need to increase relief to the poor on a state level.

The states varied widely on the amount of the benefit and the breadth of coverage according to Teles (1998). States under-funded the pensions to the point that benefits fell far below reasonable standard of needs (Skocpol, 1992).

The Aid to Dependent Children (ADC) program replaced mother's pensions. ADC was a federal mandated program created as a response to the Great Depression, while Mother's pensions were state policies (Kickham, Harnden, Sasser, Effendi, & Bently, 2000).

The Social Security Act of 1935 was signed by President Franklin Roosevelt in order to respond to widespread poverty among the elderly. This act contained the ADC program to assist children who were victims of the agriculture disaster and the economic collapse (Kickham, *et al.*, 2000). States were permitted to set their own benefit levels, which caused national concern for decades that followed. The inequities led the way to the 1962 Social Security Act Amendments, which strengthed ADC and changed it name to Aid to Families with Dependent Children (AFDC) (Kickham, *et al.*, 2000).

By the 1960's, poverty was viewed as "a permanent structural problem—not just a result of a collapsed economy, but the result of the capitalistic system itself" (Cammisa, 1998, p. 101). Eligibility requirements became more liberal, because of the rising affluence between 1967 and 1972 (Teles, 1998).

The late 1960's saw a surge in welfare dependency, which stucturalists blamed on capitalism's exclusions of minorities from the economy (Kickham, *et al.*, 2000).

However, this viewpoint was later turned against minorities through the writing of Charles Murray and William Wilson. Both men wrote books describing the dependence fostered by AFDC and the decline of personal and family responsibilities. These views allowed both liberals and conservatives to unite to create the latest welfare reform initiative (Kickham, *et al.*, 2000). Thus, they were able to ignore the real issues causing minorities to be trapped in poverty, such as urban flight and discriminatory hiring practices by focusing on "family values" (Kickham, *et al.*, 2000).

The 1996 reform altered public assistance programs. Under prior law, the Aid to Families with Dependent Children program (AFDC) provided income support to families with children deprived of parental support. The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 combined the old public assistance function of AFDC, Emergency Assistance (EA), and the training/employment function into a single block grant to states called Temporary Assistance for Needy Families (TANF) (P. L. 104-193). The TANF program has a lifetime five-year assistance limit and a strong work requirement. The following four themes are found within PRWORA (Kickham, *et al.*, 2000):

1. Welfare reform should make work pay.
2. Welfare reform should strengthen families and assure child support.
3. Welfare reform should stress community initiative and empower the poor, not the social service providers.
4. Welfare reform should support America's value of personal responsibility.

The TANF block grant is a fixed annual appropriation of funds from the federal government to each state. Under TANF states receive a finite amount of federal welfare dollars, whereas previously federal dollars were uncapped, which allowed states to meet unanticipated need. Persons who met the federally prescribed eligibility criteria having to

do with income were legally entitled to AFDC benefits. Although states established their own benefit levels, they could not withhold the benefit from an eligible claimant (Kickham, *et al.*, 2000). Under AFDC, individuals were entitled to assistance when eligibility criteria (primarily income) were met. Benefits were guaranteed even in recessions and fiscal downturns. These entitlements vanished with the 1996 reform, ending previous welfare programs that had been in operation since 1935 (Kickham, *et al.*, May, 2000).

TANF ended the individual entitlement to public assistance. States had to develop plans reflecting Congress's intent that welfare should be a short-term, transitional experience, but not a way of life. States now have the responsibility of developing criteria for benefits and eligibility. Policy makers appear to be convinced that state-level flexibility is one answer to the problems associated with entitlement to individual income assistance (Teles, 1998).

They also agree that work is the primary answer to welfare dependency. The Work Incentive (WIN) program, established in 1967, was the first major effort to stimulate work by welfare recipients through economic incentives combined with varying degrees of coercion (Ostow & Dutka, 1975). It changed the formula for calculating AFDC benefits, permitting recipients to keep a higher percentage of their earning if they found a job. This amendment instituted counseling and training programs to help recipients with older children find private jobs. The end result was that very small percentages of the caseload actually were referred to the program even though the federal government attempted to require the local welfare agencies to do so. However, the experience served to refine the expectation of the reform (Nightingale & Haven, 1994).

According to Gary Burtless, author of chapter four of *The Work Alternative*, President Ronald Reagan and the U.S. Congress authorized states to experiment with tougher work and training obligations than the ones that had been permitted under WIN (i.e. mandatory work experience) (Nightingale & Haven, 1994). In 1988 they further strengthened the assistance recipients' obligations to search or train for work with passage of the Family Support Act. The Family Support Act required states to transform AFDC from an income maintenance program to a jobs program. Under this act, if a job could not be readily obtained the recipients were required to enroll in education or job training programs. Even with $3.3 billion available for five years for training, transportation, and child care assistance, most of these dollars were unspent. Burtless believed that state agencies were too slow to implement this act, because the numbers of families collecting AFDC rose from 3.7 million to 4.8 million from 1988 to 1992. These statistics made PRWORA one of the more popular legislative mandates passed by President Bill Clinton and the U.S. Congress (Nightingale & Haven, 1994).

Oklahoma

Oklahoma reported its highest AFDC caseload in 1992. Since then, the caseload has decreased over 70 percent, with the implementation of welfare reform. The caseload was at 34,827 in October of 1996. As of June 2000, the caseload dropped to 13,591, a 61 percent decrease from 1996 (Kickham, Harnden, Sasser, Effendi & Bentley, 2000).

There are two reasons for Oklahoma's Department of Human Services (ODHS) caseload reduction. Oklahoma is enjoying a healthy economy. In 1998, one-third of the clients found employment (Hinton, 1999). However, the factor least celebrated, which

has had a major impact on the decline of TANF, is work sanctions. Oklahoma is one of 12 states to terminate the TANF grant upon the first instance of noncompliance (Gallagerm, Gallagher, Perese, Schreiber, and Watson, 1998).

Federal and state policy has historically been set by the legislature's perceptions of welfare recipients' characteristics. These perceptions are heavily influenced by the general public's stereotypes of welfare recipients. Since states receive their federal welfare funds through block grants, which provide great latitude in policy development and implementation, it is critical that states study the characteristics of the welfare recipients in order to best meet TANF recipients' needs rather than implement policy based on false stereotypes. To do otherwise will only perpetuate poverty. The ODHS has conducted such studies. The following is a summation of these studies.

Oklahoma TANF Recipient Characteristics

TANF Recipients General Characteristics

One could conclude that TANF recipients with the highest potential for employability have already discontinued the use of financial assistance, thereby leaving clients with the lowest potential for employability on the active caseload. Oklahoma's caseload consists primarily of individuals with characteristics that make employment very difficult (Keesee, 1998). The following presents an overall profile of Oklahoma's TANF population considered to be the most challenged in terms of achieving employment and lifetime self-sufficiency (Keesee & William, 1997).

- In general, multi-challenged TANF payees tend to be older than payees in the general TANF population. There are significantly less multi-challenged participants in the 19 and under and 20-29 age

categories and significantly more-challenged participants in the 40-49 age category when compared to participants in the general TANF population.

- Females comprise the overwhelming majority of the multi-challenged and the general TANF population. Although there are slightly more payees in the multi-challenged population than the total population, the difference in not significant.

- White payees continue to represent the largest proportion of payees in both the multi-challenged and the general populations. However, the proportion of White and Native American recipients in the multi-challenged population is significantly less than the proportion of these same groups in the general TANF population. Conversely, African Americans represent a significantly greater portion of the multi-challenged caseload than their counterparts in the general TANF population.

- In general, the majority of multi-challenged and general TANF recipients have attained at least a high school education, GED, or vocational training. However, multi-challenged payees are significantly less likely to have attained a high school diploma and more likely to have obtained a GED and to have less than 12 years of education than payees in the general TANF population. Note: educational level not routinely updated.

- In comparison, multi-challenged payees are significantly less likely to be married or separated and are more likely to be divorced and single. Note: marital status not routinely updated.

- The average age at which the mother in the multi-challenged population first started receiving benefits is 25.26 year.

- Using both the mother and father's past history of welfare dependence, 33.4% of the multi-challenged cases were shown to have intergenerational links. This compares to 28.6% of the long-term AFDC population using only mother's history.

- Overall, about one-third of the multi-challenged population appear to have some form of Child Welfare involvement in their cases, ranging from allegations of neglect from a grandmother seeking custody to substantiated findings of child molestation. Of these, 55.56% of the cases were already opened prior to Child Welfare involvement. These data suggest that preventative efforts many need to target high-risk families in the TANF population.

- The most commonly assigned work activity is some form of Job Search—Structured, Self Directed or Intensive. Over one-half (54.2%) of the cases reviewed were assigned at least once to this type of activity.

- The most commonly occurring challenges facing the multi-challenged population include: clients' refusal to cooperate with work activities and/or child support enforcement in establishing paternity (37.9%); Child Welfare Services involvement in the case (35.7%); spouse/partner with criminal records (25.8%); current illness (24%); lack of reliable transportation (21.5%); lack of education and training (18.7%); spousal assault (17.7%); lack of desire to work (15.1%); chemical dependency of payee (14.3%); chemical dependency of payee's spouse/partner (13.4%); mental health problems of payee (13%); payee caring for a disabled family member (12.3%); and payee's criminal record (10.2%).

- Further analysis of the data reveals that the majority of multi-challenged clients face an average of 2.74 of these challenges to employment and self-sufficiency. (pp. 1-3)

TANF Clients Versus General Population

The ODHS conducted a study in which they compared the difference between Oklahoma's TANF clients' characteristics to Oklahoma's general population. The main difference between the TANF stayer and leaver populations as compared with the general population was the high rate of single head of households found in the TANF population as compared to the general population (Kickham, *et al.*, 2000). Although the study tried to make an issue of this finding, this should have been no surprise to ODHS. The TANF eligibility requirements only provide for children of single parents, unless one or both have health reasons that prevent them from working. Table 1 summarizes the characteristics of households of TANF recipients (Kickham, *et al.*, 2000, p.11).

TABLE 1

CHARACTERISTICS OF HOUSEHOLDS

Group Characteristics	General Population	TANF Stayer	TANF Leavers
Sample size (households)	222	354	483
Average size of households	3.83	3.75	3.37
% married	58.1	18.1	20.7
% living as married	5.9	1.7	5
% never married	5.9	28.8	28.2
% divorced/separated	24.8	45.5	41.6
% African-American	11.3	37.6	25.9
% Native American	11.7	14.1	11.8
% Hispanic/Latino	1.8	2.8	3.7
% female-headed	36.5	79.4	76.8

TANF Recipients Educational Characteristics

The ODHS study further found that of those sampled, the educational attainment was much higher for non-TANF respondents. However, the group differences with respect to vocational or trade school were small. The most prominent differentiating characteristic is the college degree group characteristics. The group rate of bachelor's degree earned by low-income heads of household in the general population was more than twice the rate of TANF stayers and leavers. The some college group comparison revealed that TANF stayers and leavers rates were a little less than half as compared to the general population. Table 2 summarizes these findings (Kickham, *et al.*, 2000, pp. 11-12). The graduate school degree continues to support the concept that college attendance is a deterrent to staying on TANF or never receiving assistance at all.

TABLE 2

EDUCATIONAL ATTAINMENT
BY RESPONDENT GROUP

Educational attainment	Stayers	Leavers	General Population<200%
No High School Diploma	35.9%	30.6%	20.3%
High School Diploma	58.5%	62.7%	76.6%
Some College	25.2%	28.4%	42.3%
Vo-Tech or Trade School	4.3%	6.0%	2.7%
College Degree	4.5%	5.6%	11.3%
Graduate School Degree	0.6%	1.7%	2.3%
Sample Size	354	483	222

Educational Attainment by Race/Ethnicity

The ODHS study examined the relationship between race/ethnicity and education. The following table shows their findings regarding this connection. They found no significant difference between whites and non-whites, African-Americans and non-African-Americans, or between Native Americans and respondents of other ethnicities who had no high school diploma. However, whites were more likely than non-whites to attain each educational level by a significantly ($p<.05$) higher rate than for non-whites. Therefore, whites tended to be more educated, and thus less likely to need assistance (Kickham, *et al.*, 2000 p.12).

TABLE 3

EDUCATIONAL ATTAINMENT
BY RACE/ETHNICITY

Educational attainment	Full sample	White	African American	Native American
No HS Diploma	24.3%	23.2%	26%	24.7%
HS Diploma	70.5%	72.0%	67.8%	68.1%
Some College	38.8%	41.2%	28.9%	39.2%
2 year degree	20.4%	24.5%	9.0%	15.7%
4 year degree	15.5%	19.7%	5.1%	7.2%
Graduate School	5.9%	7.7%	1.6%	2.4%
Graduate Degree	5.4%	7.1%	1.3%	2.4%

It should not be a surprise that TANF recipients are generally female heads of households with a low level of education, of which a significant portion consist of minorities. When one factor in the multi-challenges most of the remaining TANF recipients face, it is understandable why they remain on assistance. TANF stayers without high school diplomas have the highest average dependence on financial assistance (85.3%), as compared with the 45.9% leavers without high school diplomas. The following table shows that the dependence levels drop significantly for both stayers and leavers with higher educational attainments (Kickham, *et al.*, 2000, p. 19):

TABLE 4

DEPENDANCE BY EDUCATIONAL ATTAINMENT

Respondent Group	No H.S. Diploma	H.S. Diploma	Bachelor's
Stayers	85.3%	73.8%	56%*
Leavers	45.9	37.5	22.2*
General Population<200% of Poverty	20.8	17.4	13.4

*Significant at .10 level relative to "No H.S. diploma" category

Oklahoma's TANF Leavers Continued Dependence

TANF leavers are more successful than current TANF clients, but they lag behind other households. TANF stayers rely on TANF and other benefits at a higher proportion of total household income. More than 85% of the current TANF households receive at least 25% their household income from welfare programs. The 48.8% of the leavers receive 25% of their income from welfare programs. Among the general population, only 24% of the low-income families receive more than a quarter of their household income from public assistance. The following table demonstrates the exact percentages and sample sizes (Kickham, *et al.*, 2000, pp. 16-17).

TABLE 5

WELFARE DEPENDENCE: STAYERS, LEAVERS,
AND THE GENERAL POPULATION

Variables	Stayers	Leavers	General Population < 200%
0-25%	14.1%	52.2%	76.0%
25%-50%	9.3%	15.3%	8.8%
50%-75%	7.0%	3.1%	4.4%
Over 75%	69.6%	29.4%	10.8%
Mean Degree of Dependence	79.2%	39.1%	17.4%
% of Households Over 50% Dependent	76.7%	32.5%	15.2%
Sample Size	313	385	204

Education, Employment and Earnings

Even when education levels of TANF leavers are compared with their earnings, there is strong support for education. Yet, very little education is allowed under the PRWORA. The following table shows the direct impact education has on earnings and continued dependence (Kickham, *et al.*, 2000, p. 20).

TABLE 6

EDUCATION, EMPLOYMENT AND EARNINGS

Educational Attainment	Percent Employed	Mean Household Earnings	Mean Degree of dependence
No H.S. Diploma	53.4%	$612	45.9
H.S. Diploma	65.7%	830	37.5
Vo-tech/Trade	72.4%	1,159	28.2
Associate's	80.4%	1,158	20.8
Bachelor's	77.8%	1,127	22.2

Note: Degree of dependence is the "public assistance" percent of total income.

Although the highest levels of employment are found among respondents with Associates (80.4%) and Bachelor's (77.8%) degrees, vocational training and trade schools were a close third at 72.4%. However, vocational training and trade schools completers' earnings were the highest.

Higher levels of education lead to higher levels of employment. However, higher levels of employment do not lead to improvement in family health and well-being according to *Leaving Welfare Behind: The Oklahoma TANF Leavers Report* (Kickham, *et al.*, 2000). Among respondents employed full time, 29% leavers experience "food insecurity with hunger," which is significantly higher than that of stayers (18.1%) and low-income general population respondents (8.7%). Leavers are falling through the cracks when it comes to health care coverage. Only 22.4% of the leavers receive health insurance, while only 26.3% of the leavers are on Medicaid. Over 40 % of the leavers have no health insurance (Kickham, *et al.*, 2000).

The following quote is from the final remarks found in *Leaving Welfare Behind: The Oklahoma TANF Leavers Report* (Kickham, *et al.*, 2000):

> Our results show that falling caseloads are probably not the result of altered incentives. Leavers, who typically incur expenses associated with employment, are watching their total resources shrink after leaving TANF. This is troubling because the logic of the "work first" movement assumes that leaving welfare improves a family's situation. If the improvement does not materialize, the logic of reform falls apart. As people shift from admittedly bad situations to more challenging employment situations, we are likely to find an erosion of faith in the labor market among these economically marginal parents. Although it is beyond the scope of ODHS authority, adequate wages and benefits, particularly health insurance, would enhance the attractiveness of employment. Ultimately, labor market realities will determine the success or failure of welfare reform. (p. 40)

Because of these findings, the ODHS eliminated the philosophy of work first during FY2001. By the end of FY 2002, the ODHS will provide intensive treatment and services to TANF recipients based on complete assessments of their needs. Assessments will include, but will not be limited to, substance abuse, domestic violence, mental health, aptitude, and career interest. By addressing TANF recipients' challenges upfront, the ODHS plans to improve the economic self-sufficiency of the TANF leavers. The ODHS will continue to provide transitional services (e.g., Medicaid, childcare, food stamps) to low paid TANF leavers.

The troubling fact is that the ultimate fate of most TANF leavers is based upon the economy. States have limited control of their economy and are often at the mercy of local, state, federal, and global economies. Thus, a critical question is how state educational systems can partner with state welfare systems to prepare TANF recipients for sustainable work. By understanding different educational philosophies, educators and their welfare administrator partners can adopt educational models that best meet TANF recipients' needs

Philosophical Approaches to Education and Training

Capitalist Philosophy

The failure of the workforce education profession to reach a unifying philosophy flows from a basic disunity between two social systems, democracy and capitalism. Democracy values egalitarianism, equal access to opportunity, the common welfare, and equal distribution of wealth. Capitalism values efficiency, competition, and meritocracy, relying on the philosophy of Darwinism to rationalize the inevitable unequal distribution of wealth that results (Gray & Herr, 1998).

Charles Prosser promoted industrial education and believed that the most humane and socially efficient way to serve youth and ensure prosperity was by including a curriculum that prepared youth for work. Dewey believed that this approach was undemocratic and limited student opportunities (Gray & Herr, 1998). Kenneth Gray and Edwin Herr take the position that there are two missions for workforce education. One is to promote individual opportunity; the other is to promote economic growth by solving human performance problems and thereby increasing productivity (Gray & Herr, 1998).

No matter which educational philosophies are adopted by educators, they must realize that they are preparing their students to work in a capitalistic society. In order for educators to succeed in helping their students succeed in today's workforce, they must listen to employers with a critical ear. Employers may want good work ethics and basic skills in employees, but can welfare recipients move from the working poor class to the middle class with only these skills? According to economic theory, it is not in the best interest of employers to provide training that will appeal to other employers. Expensive training provides transferable skills that can make it easier for employees to look for

another job that pays higher wages, which makes it hard for employers to recoup their training investments in higher productivity or quality (Klerman & Karoly, 1995).

Capitalism's mission is to produce goods and services in order to maximize profit. Edmund F. Bryne (1990) concisely describes the issues:

> To overcome its skills of the workforce, management has responded by drawing as much of its workforce as possible from the cheapest labor that can provide the needed skills; automating as many jobs as possible, while keeping automation-tending assignments as simple as possible; cutting taxes, to bear more of the cost of the benefits; assigning as many jobs as possible, whatever their degree of complexity, to nonemployee workers, who are not eligible for employer-paid fringes; exploiting the skills of their downsized workforce by assigning them larger portions of "meaningful work"; using bankruptcy, plan relocation, and other devices that undercut the leverage of workers who are unionized or have union-avoiding benefits or have skills not easily duplicated, to force them, as a group, to outdo other groups or workers in job-saving concessions; and emphasizing the importance of maintaining an educated workforce, thereby transforming education into limited-skilled acquisitions and putting most of the burden of acquisitions on the workers themselves, through tuition and taxes. (p. 279)

The four reasons for the worsening distribution of wealth are: 1) foreign trade, 2) displacement of workers by technology, 3) decline of labor unions, and 4) increased immigration. The displacement of workers by technology is the one that is of most importance to workforce education (Gray & Herr, 1998).

Capitalism rewards management for displacing workers through automation. According to Edmund Byrne (1990), project Dehumanization has been planned and publicly declared for at least two hundred years with very little opposition except from those most immediately affected at the time. This plan is to replace humans with machines. Its four interdependent goals are:

1. The financial goal of cutting the costs of production.
2. The managerial goal of controlling production by deskilling workers.
3. The strategic goal of remaining competitive in the market.

4. The ontological goal of totally dehumanizing production.

Fredrick Taylor echoed the above strategic plan when he said that "manufacturing systems would fulfill their economizing potential, only when machines in the shop are run by men who are of smaller caliber and attainments and therefore cheaper than those required under the old system" (Byrne, 1990, p. 194). Deskilling is a term used by Kincheloe, Dippo, Schenke, and Simon, which describes how technology will impact the skill level necessary for employment (Kincheloe, 1999; Dippo, Schendke, & Simon, 1991). This Taylorism philosophy in today's standard is just good business (Byrne, 1990). In the words of a Marxist slogan, capitalism is striving for "domination of dead labor (machinery) over living (workers) (Bryne, 1990, p. 199)."

A mismatch has developed between the kinds of jobs that are available and the educational preparation needed to fill them. This is a direct result of automation. Data from the Bureau of Labor Statistics indicate that as of the year 2000, 15% of all jobs will be unskilled; 20% will require a professional degree, and more than 65% of all jobs will require specific skills demanding specialized education—that is, more than a high school diploma but less than a four year college degree (Brustein & Mahler, 1994).

The following table shows the number and percentage distribution of education and training needed for the total job openings between 1998 and 2008, which supports the above projections (Bureau of Labor Statistics, 2000).

TABLE 7

1998-2008 EMPLOYMENT AND TOTAL JOB OPENINGS BY EDUCATION AND TRAINING CATEGORY

Education & Training	# in 2008 Employed	Increase # from 1998	Increase % from 1998	Total job openings and net replaced
Total	160,795	20,281	14.4	55,008
1st professional degree	2,215	308	16.1	617
Doctoral	1,228	232	23.3	502
Masters	1,115	174	18.6	374
Work experience + degree	11,276	1,680	17.5	3,372
Bachelors	21,596	4,217	24.3	7,822
Associate	6,467	1,537	31.2	2,422
Postsecondary Voc.	5,151	643	14.3	1,680
Work experience in related occupation	12,490	1,316	11.8	3,699
Long-term OJT	14,604	1,168	8.7	4,411
Moderate-term OJT	21,952	1,430	7	6,218
Short-term OJT	62,701	7,576	13.7	23,890

[Numbers in thousands of jobs]

The following table is a projection of the top ten growing occupations reported by total numbers and change in numbers and percents (Bureau of Labor Statistics, 2000).

TABLE 8

THE TEN OCCUPATIONS WITH
THE LARGEST JOB GROWTH
FOR 1998-2008

Occupation	Employment 1998	Employment 2008	Change Number	Change Percent
Systems analyst	617	1,194	577	94
Retail sales	4,056	4,620	563	14
Cashier	3,198	3,754	556	17
General manager	3,362	3,913	551	16
Truck Driver	2,970	3,463	493	17
Office clerk, general	3,021	3,484	463	15
Registered nurse	2,079	2,530	451	22
Computer support specialist	429	869	439	102
Personal care & home health aid	746	1,179	433	58
Teacher assistant	1,192	1,567	375	31

[Numbers in thousands of jobs]

As long as our country supports a capitalist society, our educational institutions will have to accommodate the supply and demand of the labor market. In the 21st century, many U.S. workers face part-time, temporary, and contingent jobs which are counted by statisticians as if they were full-time (Yates, 1994). These workers are considered "disposable" meaning dismissable without fear of legal ramification, and not surprisingly, a very high percentage of these ancillary workers are women (Bryne, 1990). Most often these are the jobs TANF leavers find.

Investors and owners of businesses and industries receive dividends or profits which are the measures of success and cause businesses not to consider employees' circumstances when making decisions (Bryne, 1990). However, all Americans, including

business and industry leaders, should care about those who live in poverty for two reasons. First, the more individuals earn, the more they can buy the goods and services produced. Secondly, the more they can earn, the less chance they will become dependent on costly government assistance.

Radical and Marxist Philosophy

Paulo Freire taught literacy to adults and developed programs to combat their poverty. Through participatory education, learners co-investigate themes, codify these themes into curriculum materials, explore the themes through dialogue, and develop an action plan for social change, according to Auerbach's (1990) understanding of Freire pedagogy. This process is cyclical and recurring, because new themes and issues constantly emerge. Valli (1986) stated that students begin to experience the potential of their collective strength when they discuss workplace issues, share problems, ideas, and insights.

This pedagogy could help improve welfare recipients' feeling of being powerless, but it would have to stop there. Once it moved beyond this to other forms of radical education, such as anarchist, socialist, and Freudian left, it is unlikely that it would be supported by government (Elias & Merriam, 1995). According to Francisco Ferrer and Max Sterner, anarchists opposed national systems of education because of their conviction that education in the hands of the state would serve the political interests of those in control (Elias & Merriam, 1995). Leo Tolstoi wanted to protect students from education compulsion that would shape students' values by allowing the students to regulate the curriculum of the course (Tolstoy, 1967).

George Count advocated Marxist principles as a radical approach to education during the backdrop of the Depression. He and Theodore Brameld believed that students should be taught the evils of capitalism and the social values upon which it was founded through our educational systems (Elias & Merriam, 1995). It was hoped that with their understanding of such evils, students would be motivated to create a socialist state. Instead of overthrowing capitalism, Franklin Roosevelt institutionalized several forms of social institutions, such as the beginnings of welfare as previously discussed.

The Freudian Left realized that there is no guarantee that students would be compelled to reform society after they had been enlightened about the evils of capitalism. Through sexual freedom, changes in family organization, and the libertarian methods of childrearing and education, it was hoped that society could be reformed according to followers of the Freudian Left such as Wilhelm Reich and A. S. Neil (Elias & Merriam, 1995).

Portions of radical educational methodology can and should be adopted into the curriculum of today in order to eliminate the indoctrination of groups of people into the following specific attitudes and behaviors (Elias & Merriam, 1995):

- Women accepting their inferior role.
- The poor blaming themselves for their poverty.
- The unemployed seeing themselves as deficient.
- The masses of people accepting arbitrary religious authorities.

Critical Theory

Critical theory provides an alternative way to describe how adult and vocational education should address social change. Avoiding the negativism and pessimism found in the postmodern theory, critical theorists like Collins (1991) believe that education should

provide the context where shared commitments, a socially more free, just and rational society will coalesce. Gregson (1994), author of Chapter 10 of *Critical Education for Work*, stated, "Critical empowerment should assist learners in shaping a cultural politics of work, so that by acting together workers may achieve some measure of personal dignity as well as social responsibility for fashioning democratic workplaces and participatory citizens" (p.178).

In addition, Gregson (1994) explained that there is a general consensus that the American educational system does a good job educating the top 20 percent of its students, but the forgotten half needs to integrate their own experiences into the learning process in order to become active learners. They also need to acquire communication, mathematical, scientific, technical, and critical thinking skills that can empower them to succeed.

Critical education stops short of the anarchism promoted by radical education and embraces the ideology of empowering the oppressed. Gregson provided the following critical education guidelines for vocational education

- Critical Vocational Education Should be Participatory.

  Cooperative problem solving and decision making encourages students to value collective learning and decision making. When groups are composed of diverse groups, cooperative learning can diminish stereotyping. The result is that students can become empowered and serve as agents for social change.

- Critical Vocational Education Should Take Students from the Known to the Larger Context.

  Learning activities are designed to expand beyond the classroom walls to create learning experiences that address community issues.

- Critical Vocational Education Should be Placed in a Historical Context.

History, like science, math, and communication skills, should be applied in a vocational context.

- Critical Vocational Education Should Engage Students in Liberatory Dialogue.

Through described dialogue, students reflect on their experiences and begin to propose possible strategies to promote more democratic experiences in school and work.

- Critical Vocational Education Should Make Learning Experiences Relevant.

Content needs to connect with students' lives in a meaningful way.

- Critical Vocational Education Should Promote Active Citizenship.

Through community service students can learn to contribute to their community and their classroom.

- Critical Vocational Education Should Make Topics Problematic.

Reflective thinking is created from a confused state, which helps individual solve problems.

- Critical Vocational Education Should Encourage Reflective Thinking.

Students conscious can be raised by inductive questioning.

Gregson (1994) outlined four reasons for vocational educators to move away from theoretical frameworks to a critical one. They are as follows:

1. Critical pedagogy can enhance student motivation and learning because it requires active participation from the student.
2. It is imperative that students acquire communication, mathematical, scientific, technical, and critical thinking skills that can empower them to confront, impact on, and succeed in the new world of work that offers low-skill, low-pay jobs (below poverty wages) of the service sector.
3. Vocational education needs to encourage democratic attitudes and participation so that students can learn to become active citizens and empowered workers.
4. By critically examining practices associated with particular occupations, industry, and society, students begin to reflect on their own values, attitudes, and practices.

Critical education embraces the positive concepts of radical education that Freire advocated. It offers opportunities for the analysis of workplace issues as part of a broader cultural project that involves the learners in the resolution of inequality and injustice in our social institutions. Through emancipatory work education, learners are enabled to participate in the democratic movement toward social transformation of the workplace (Lake, 1994).

Feminist Theory

Women in the world make up half the population and do two-thirds of the work, yet they earn one-tenth of the world's wages and own one-hundredth of the world's wealth (Taking Liberties Collective, 1989). Traditional male skills are rewarded with higher wages than those given to traditional female skills. Furthermore, access to skill education, fair hiring practices, on-the-job training, and opportunities for advancement are mitigated by patriarchal considerations of gender, race, ethnicity, class, age, disability, and sexual orientation (Lake, 1994).

The 1978 release of *Social Indicators of Equalities and Women,* written by the U.S. Commission on Civil Rights, offers the following comment on the disadvantages faced by women:

> Lack of equivalent returns for educational achievement in terms of occupational opportunities and earnings; discrepancies in access to jobs, particularly those having greater than average stability, prestige and monetary returns; inequality of income, relatively lower earnings for equal work, and diminished changes for salary and a wage increases; a higher likelihood of being in poverty; and proportionately higher expenditures for housing, less desirable borrowing conditions, restricted freedom of choice in selecting location in which to live, and greater difficulty in attaining home ownership. (p. 3)

Capitalism has profited from its alliance with patriarchal philosophy, which fosters females' willingness to accept lower-paying jobs which are more compatible with their family responsibilities (Lake, 1994). It was not until M. K. Aring reminded educators, business, and industry leaders that craft workers would be retiring in masses and employers in a number of industrial settings were facing an alarming shortage of new skilled workers, that women were encouraged to consider nontraditional training (Lake, 1994). The main benefit women can gain from such occupational training is higher wages. However, the women who choose nontraditional training and employment can expect to be treated inequitably (i.e. wages decline as more women are employed in an occupation) and to endure sexual harassment along the way (Lake, 1994).

Burge and Culver outline the following strategies for overcoming barriers in vocational education and the workplace: 1) recruitment of nontraditionals, 2) elimination of harassment, 3) improving teacher and student interactions, 4) enhancing individual autonomy, 5) practice working together, and 6) teachers as change agents (Lake, 1994). The first two are self-explanatory. However, the last two need more explanation.

Although curriculum and structure of course work can cause a gender bias in the classroom, the most significant gender bias stems from the teaching act, when males receive much more attention from teachers than females. Teachers can empower girls and women by: 1) allowing them more time for answers, 2) directing harder questions to them, and 3) giving them more praise and criticism (Sadker & Sadker, 1990).

Fear of failure prevents most women from entering nontraditional careers (Yuen, 1983). Yet women who do enter nontraditional careers have higher self-esteem than those who enter traditional careers (Culver & Burge, 1985). The need to enhance individual

autonomy is especially true of welfare recipients. All TANF program coordinators and Displaced Homemakers, Single Parent, Single Pregnant Women program coordinators have stated during program reviews conducted by the researcher that most have very low self-esteems and yet they could benefit the most from the financial rewards of nontraditional careers. All preparatory portions of TANF vocational training should include or integrate components of self-esteem building activities and nontraditional career awareness.

Creating a collaborative working environment enhances learning for females. This is accomplished by decreasing competition and creating cooperative study methods (American Association of University Women, 1992). Males benefit from this environment as well.

Teachers need to accept the responsibility of developing and implementing preservice and inservice instructional programs that include a gender equity component. Bayne and Robertson (1989) reported that intense training has been extremely effective in assisting teachers to reduce sex bias in their classroom.

Although the above focuses on gender equity issues, this does not mean that the feminist theory only addresses gender biases. Elias and Merriam define feminist theory as the comprehensive philosophical perspective that seeks to explain the nature of unequal power relations based on gender, race, and class (Elias & Merriam, 1993). The liberation models of feminist pedagogy are concerned with the structured nature of power relations and systems of oppression based on gender, race, and class that are reinforced through education (Maher, 1987). The gender models of feminist pedagogy are concerned with those aspects of female identity that come from women's socialization as nurturers

(Maher, 1987). Feminist theory has it roots in radical philosophy of education as well as critical theory and humanistic pedagogy.

Progressivism Theory

Progressivism advocates needs assessments, integrated curriculum, and problem solving experiences that lead to practical knowledge. Like humanists, progressives believe in student (child) centered education. The teacher is considered to be a co-learner who guides the interactions between persons and the environment. Child centered education liberates the talents and gifts of the child as theorized by Rousseau, Pestalozzi, and Froebel, which complimented Charles Darwin's theory that a child is a developing and evolving organism (Elias & Merriam, 1995).

John Dewey promoted progressivism's highest ideal, which was education for democracy (Elias & Merriam, 1995). Herbert Spencer was attracted to progressivism because of its practical, utilitarian use (Spencer, 1860).

Like behaviorists, progressives emphasize problem solving, experimentation, and the scientific method, but they stop short of desiring to control human behavior. The philosophical basis of progressivism is pragmatism, which is the acceptance of the methods of science for understanding human dimensions and solving human problems. William James followed Charles Peirce's contribution to pragmatism (i.e., ideas are hypotheses until they are proven through experience), when he defined the role of educators (Elias & Merriam, 1995). James thought educators' roles were to attend to habit formation of students, since once they were formed the students had an opportunity for freedom, creativity, and progressive thought (James, 1909). The practicality of

Lindeman's belief that information from different spheres of knowledge should be used to solve problems rather than for accumulation is appealing to many educators (Lindeman, 1956).

Dewey believed that educational experiences were likely to happen in situations where teacher-guided interactions occurred between people and the environment. He fostered education that incorporated critical and controlled type of learning and avoided the extremes of child-centered and social action themes of early progressivism. Teachers should guide interaction between students and the environment, as explained by Dewey's broadened view of progressivism (Dewey, 1938). They should not be considered the sole source of knowledge. Knowles described the role of educators by characterizing educators as helpers, guides, encouragers, consultants, and resources, not as transmitters, disciplinarians, judges and authorities (Knowles, 1970).

Dewey criticized extreme progressivism because it lacked discipline; focused on trivial problems; paid little attention to subject matter; fostered anti-intellectualism; and had no clear definition of the teacher's role. Dewey believed that educators should be student-centered facilitators of learning by introducing practical, pragmatic, utilitarian, and vocationally oriented dimensions into the curriculum (Dewey, 1938).

Although teachers are responsible for the organization, stimulation, instigation, and evaluation of highly complex process of education, Dewey believed that students have to learn for themselves (Dewey, 1938). Teachers set conducive environments for learning and in the process become learners with the students. Dewey advocated that learning was based on personal experiences of the student and that teachers should guide, direct, and evaluate the experiences in terms of their educational component and share

their own experiences (Dewey, 1938). Educators should facilitate learning by creating environments conducive to learning and developing curriculum that provides learning experiences that require students to integrate and apply their knowledge from different subjects. This type of instruction empowers students to learn, retain knowledge, and improves the chances that they want to continue to learn on their own. Research has shown that adults of all ages are capable of learning and do learn in a multitude of settings and programs (Elias & Merriam, 1995).

Still there is another type of philosophy that can be blended into the educational philosophical mix that will benefit the TANF recipients' educational experiences. The behaviorist methodology can enhance the educational experience, provided that it is student centered and facilitated by the instructor rather than lectured.

Behaviorist Theory

Vocational education across the nation has typically been competency based, which has strong ties to Behaviorist theory and practice. Preparing for a vocation of necessity means that skills needed to perform an occupation must be identified, taught, and learned to a standard of performance. These competencies must be systematically validated and objectively measured (Elias & Merriam, 1995).

The Adult Performance Level Study (APL, March 1975) helped spread competency-based high school and curriculum in adult basic education across America. This study identified five general knowledge areas (Consumer Economics, Occupational Knowledge, Community Resources, Government, and Law) as necessary for adequate functioning in society. Also, computation, problem solving, and interpersonal relations

were identified. These competencies have formed the basis for assessment procedures and curriculum development in adult basic education.

The Carl D. Perkins Vocational Acts required clearly specified provisions that were to be implemented by state vocational education agencies and by individual programs. Each state vocational education system was required to develop and establish a statewide system that includes two major parts dealing with learner competency attainment (*Measuring Learning Gains with Pretest/Postest*, 1998):

1. Measures of learning and competency gains, including progress in basic and more advanced academic skill.
2. One or more measures of performance.

The Oklahoma Department of Career and Technology Education, (ODCTE) created a system of standards and measures for both learning gain and competency attainment. These standards and measures were claimed to fit with "best practices" in competency-based education and sound instructional management. Their purpose was to ensure the following (*Measuring Learning Gains with Pretest/Postest*, 1998):

- Vocational programs are based on clearly specified learner outcomes and objectives.
- These objectives integrate basic and more advanced academic skills and occupational preparation.
- Vocational students are achieving stated program objectives, including job skill attainment.

The Behaviorist based instructional model underpinning the ODCTE response to the Perkins requirements is well represented by the model proposed by Ralph Taylor as reported by Elias and Merriam (1995):

1. Define program purpose.
2. Write specific objectives.
3. Create learning experiences that are continuous, sequential, and integrated, which facilitate obtaining the objectives.
4. Evaluate.

5. Replan and redevelop based on evaluation.

Work First Philosohy Shift

As previously mentioned, the "work first" philosophy of the Oklahoma Department of Human Services (ODHS) has changed. The ODHS recognizes the importance of preparing individuals for work and no longer requires individuals to job search before providing assistance. However, the "work first" philosophy of the *Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), Welfare to Work Act (WtWA),* and the *Workforce Investment Act (WIA)* has caused those with minimum barriers to employment to find work. However, Carnevale *et al.* (2000) report three major studies in 1999 which demonstrated that most of those succeeding in leaving welfare are not succeeding in leaving poverty. These studies are:

1. A study by the Urban Institute titled *Families Who Left Welfare: Who Are They, and How Are They Doing?* which reported that average wage of welfare leavers is only $6.61 an hour;
2. A General Accounting Office report titled *Welfare Reform: Information on Former Recipients' Status* which found that most of the former welfare recipients are working in low-wage occupations at an average wage range from $5.67 in Tennessee to $8.09 in Washington state; and
3. Center on Budget and Policy Priorities report titled *The Initial Impacts of Welfare Reform on the Incomes of Single-Mother Families* that found that the incomes of single mothers fell between 1995 and 1997. A drop in means-tested benefits caused the decline. This benefits decline was much more rapid than the drop in poverty among single female headed households. Welfare rolls dropped 22 percent between 1995 and 1997, but poverty among single female-headed households only dropped by 5 percent. (p. 13)

Further doubt about the efficacy of rushing welfare recipients into low-wage jobs is raised in *Leaving Welfare Behind: The Oklahoma TANF Leaver Report* prepared by the ODHS (Kickham, *et al.*, 2000):

> Pushing TANF clients into the first available job appears to have had an unintended consequence; leavers who work full time generally do not have very good jobs. Leavers rank lowest among the three groups in earnings, income, health care coverage is perhaps the most troubling threat to leaver self-sufficiency. Most of these however, can be traced back to educational attainment. Employment, earnings and dependence are significantly associated with education across groups. The data suggest the need for rethinking the value of post-secondary education in the context of reform objectives. (p. 26)

Educational and Curriculum Issues In Wages and Employment

Education still remains the best way for the poor to gain higher wages. The dilemma is what curriculum or what combination of curricula to adopt to promote learning and employment. Gray and Herr (1998, pp. 73-74) described a hierarchy of skills essential to employment:

> Level I--Work Ethics Skills in professional occupations refer to behaviors that are consistent with the points of the profession. In nonprofessional occupations the term is typically used to refer to a group of behaviors and attitudes that are appropriate in the workplace (i.e. punctuality, good attendance, appropriate appearance, friendliness, honesty, dependability, cooperativeness).
>
> Level II--Academic Skills refers to the ability to read with comprehension, mathematics, science, and both written and oral communications.
>
> Level III--Occupational and Advanced Workplace Literacy Skills are those unique psychomotor, analytical, and in some cases, specialized behavioral skills that are specific to an occupation.

The lower the skill level achieved, the lower the wage. Since the mission of welfare reform is to remove TANF recipients from public assistance to work, it would seem that all TANF recipients would have to gain Level III. Any lower level would doom them to poverty wages. By embracing curriculum guided by pragmatism philosophy and focused on the practical consideration of what is observable and essential to achieve

ethical and instructional objectives, educators can assist the poor in succeeding in the workplace (Gray & Herr, 1998).

Taylor (1997, p. 16) describes the skills needed to enter, stay and advance in the low-skill labor market:

TABLE 9

TIERS NEEDED IN THE LABOR MARKET

TIER ONE JOBS: NO SPECIFIC SKILLS REQUIRED	
Entry-level soft skills	Basic work discipline (e.g., regular attendance and timeliness); ability to take directions from a supervisor; social skills to avoid disruptive conflict with co-workers and possibly customers.
Workplace tasks and processes	Training provided by the employer on the job; training not transferable to other employers.
TIER TWO JOBS: SOME SPECIFIC SKILLS, KNOWLEDGE OR EXPERIENCE REQUIRED (in one or more of these categories)	
Literacy/More advanced academic skills and content knowledge	The ability to read and possibly write prose and documents and perform arithmetic operations needed in entry-level jobs.
Technical skills and knowledge	Transferable abilities and information frequently acquired from a formal training program; sometimes credentialed.
Tier Two soft skills	More advanced soft skills, both cognitive ("higher order" thinking skills such as problem solving) and social/interactive (such as teamwork).
Career advancement; broad-based knowledge of company/occupation/industry	Skills and knowledge not directly related to the completion of work tasks, but that provide an enhanced context for understanding one's job, making contributions to the firm, and advancing one's career

Tier One jobs can be performed without any formal education and/or experience other than on-the-job training, whereas Tier Two jobs require more formal education and/or experience. The difference is earned income. Tier One employees can expect to earn minimum wage. Tier Two can earn $8 or $9 per hour, unless the local economy only provides minimum wage (Taylor, 1997).

The educational steppingstones for welfare recipients to higher wage jobs are literacy/basic academic skills, technical skills, life skills, and employability skills. College is not a possibility for most of the remaining welfare recipients. They face multiple issues such as lack of skills or work history, substance abuse, domestic violence, health or mental health issues, and/or difficult family problems (Tweedie, Christian, Grogninsky, Rechert, & Brown, 1998). They may be able to transition from Tier One to Tier Two by participating in one of the following 12 allowable work activities as defined in the TANF block grant of the Personal Responsibility and Work Opportunity Act of 1996:

1. unsubsidized employment
2. subsidized private sector employment
3. subsidized public sector employment
4. work experience if sufficient private sector employment is not available
5. on-the-job training
6. job search and job readiness assistance
7. community service programs
8. vocational education training (up to one year)
9. job skills training directly related to employment
10. education directly related to employment, in the case of a recipient who has not received a high school diploma or a certificate of high school equivalency
11. satisfactory attendance at secondary school or in a course of study leading to certificate of general equivalence, in the case of recipient who has not completed secondary school or received such a certificate
12. the provision of child care services to an individual who is participating in community service program.

College course work that leads to degrees is not on the above list of TANF work activity options. However, states can adjust or remove the work requirement to allow some combination of work and school or full-time school. In 1999, twelve states allowed participation for up to twelve months in two-year colleges, twenty-two states did allow participation for more than 12 months in two-year colleges, while thirteen states did not allow participation in two-year or four-year degree programs (Golonka & Mitus-Grossman, 2001).

Still, college course work can be paid through WtWA , which requires the welfare recipient to be employed. Working and attending school is difficult enough for individuals with minimal educational barriers, but for those with multiple barriers success is almost impossible. Even so, it has provided opportunities to those who were successful in transitioning from Tier One to Tier Two skills and have the drive to further their economic status and social standing.

Most welfare recipients need to participate in an allowable work activity that teaches literacy/basic academics, vocational and technical skills, life skills, and employability skills in order to find entry-level employment, which will allow them to access further training through WtWA. This may be their only chance for maximizing their earning potential. Most TANF students who had the "soft skills," education, and/or technical skill were rapidly employed after the passage of the PRWORA (Carnevale, *et al*, 2000). Those who remain are missing competencies in one or more of the following components necessary for them to gain employment.

Life Skills

Often life skills are termed "soft skills," but both terms mean the same thing. They include the ability to report for work regularly and on time, follow relatively complex directions from supervisors or co-workers, and interact with other employees and external contacts in ways that minimize disruptive conflict (Taylor, 1997).

Life skill curriculum contains instructional modules that lead to competencies in the knowledge areas of parenting, interpersonal relations, nutrition, consumer economics, community resources, health, work attire, and government and law. These are skills that fall within level one of tier one in Table 9. Consumer economics, community resources, health, and government and law have been identified as the five general knowledge area in the *Adult Performance Level (APL) Study* conducted by the University of Texas. This study defined adult literacy in terms of the competencies needed to function successfully in today's society. It also identified interpersonal relations as one of the four skills needed to function in society (Elias & Merriam, 1995).

Employability Skills

Sometimes referred to as job readiness, employability skills include the ability to obtain and use career information, seek mentors, develop and use networks, engage in informational interviews, etc. Certain skills taught in employability skills class may overlap with those taught in a life skills class. The primary difference is that the employability classes teach job search techniques (research using want ads, internet, public and private job postings, etc.) interviewing skills, application completion, and resume writing.

Employability skills are extremely important to most of the remaining welfare recipients. Eighty percent of the 1991 caseload reported had less than two years of work experience (Taylor, 1997).

Adult Basic Education

Tier Two jobs require English literacy and the ability to compute simple math (Taylor, 1997). Although Graff, Hull, and others would argue that the need for literacy is not founded in research (Lake, 1994), most states allow some educational opportunities, but they fall under some or all of the following categories: adult basic education, high school completion or preparation for the high school equivalency test or General Education Diploma (GED), English as a second language (ESL), and short term post-secondary education (Tweedie *et al.*, 1998).

Caseload data from 1991 revealed that 11% of welfare mothers had an eighth-grade education or less; 35% had one to three years of high school; and 41% had four years of high school (Taylor, 1997). There was a decline in educational status among longer-term recipients: 63% of those who have receive AFDC for 60 or more months in 1995 had less than a high school education, compared with 46% overall (Taylor, 1997). The Child Trends, Inc. study found that more than one-half of the surveyed welfare recipients had reading and math levels below the seventh-grade level (Taylor, 1997).

According to Amy Brown, welfare to work programs have responded to the main challenge of incorporating basic education activities. She found that programs have responded using the following strategies (Tweedie *et al.*, 1998):

- Closely monitoring education activities and reassigning individuals who are not attending regularly or making progress.

- Using short-term programs and programs that integrate education with skills training, have high completion rates, and prepare students for fields with a significant number of job openings.
- Encouraging participants to combine education with employment, either by allowing participants to meet program requirements with a combination of school and work-study or part-time work, or by coordinating with education providers to offer classes in the evening or flexible hours for those who work.
- Using performance-based contracting to focus education providers on outcomes.
- Providing opportunities for individuals who have left welfare for work to further their education so that they can move to better jobs, by working with community colleges to offer more evening classes and by subsidizing tuition and after-hour child care costs for former recipients. (p. 29)

However, research has shown that a major cause of illiteracy is undiagnosed or ineffectively remediated learning disabilities, largely due to gender bias. For years there has been a widely held belief that boys are more likely to have a learning disability (LD) than girls. Now research findings indicate that more boys are identified as having learning disabilities by teachers in school because of their tendency to be more rowdy and active than girls (Lyon, 1996). Research indicates that identified LD females are significantly lower in intelligence, more severely impaired, and have a greater aptitude achievement discrepancy than their male counterpart (Vogel, 1990). In 1992, the U.S. Department of Health and Human Services issued a report titled *Functional Impairments of AFDC Clients*. It stated that many AFDC (welfare) clients do not have a high school diploma and equivalent diploma, which can be attributed to the widespread existence of learning disabilities. It further stated that many clients were never identified as learning disabled, never received special education, and most were not even aware of their problem.

Glenn Young, Disabilities and Adult Education Specialist with the U.S. Department of Education, stated that schools are identifying about five percent of students with learning disabilities. Yet, 15% to 20% of adults are estimated to have learning disabilities, and 30% to 70% of the adult education and literacy programs have been estimated to have learning disabilities. Still, only one percent of the adults with learning disabilities have proper documentation according to Young.

Identifying TANF recipients with LD is the "right thing to do," and it is more than ever the "required thing to do." Lawsuits have been filed against several states, including Massachusetts, alleging failure to make reasonable accommodation for persons with learning disabilities who receive services funded under TANF. The following laws demonstrate the evolution of legislation intended to protect and assist individuals with disabilities:

- United States Civil Rights Act of 1964, Title VI
- Rehabilitation Act of 1973, Section 504
- American with Disabilities Act of 1990, Title II
- Workforce Investment Act of 1998 (Public Law 105-220), Section 188
- 29 Code of Federal Regulation 37.35 and 37.8, Implementation of the Nondiscrimination and Equal Opportunity Provision of the Workforce Investment Act, revised July 1, 2000
- Department of Health and Human Services, Office of Civil Rights, Summary of Policy Guidance entitled, "Prohibition Against Discrimination on the Basis of Disability in the Administration of Temporary Assistance for Needy Families," and issued January 19, 2001
- Department of Health and Human Services, Office of Civil Rights, Decision Against Massachusetts Department o Transitional Assistance regarding Office of Civil Rights Complaint Number 01-98-3055, and issued January 19, 2001

Limited English proficiency is another characteristic of many TANF recipients, which limits their ability to learn and find sustainable employment. Several laws address this issue, including the following:

- United States Civil Rights Act of 1964, Title VI
- 29 Code of Federal Regulation 37.35 and 37.8, Implementation of the nondiscrimination and Equal Opportunity Provision of the Workforce Investment Act, revised July 1, 2000
- Department of Health and Human Services, Office of Civil Rights, Policy Guidance, entitled "Title VI's Prohibition Against National Origin Discrimination as It Affects Limited Proficiency Person," and issued August 30, 2000

Vocational and Technical Training

The term "technical skills" generally refers to skills that are specific and involve interaction with technology, such as computer programming versus reading (Taylor, 1997). The term "vocational training" refers to a type of education that prepares one to practice a given trade, craft, occupation or profession (Howard & Scheffler, 1995). Today, these two terms describe the type of training needed for most of the jobs that are in demand in the labor force. K. Gray believed that one reason for the renewed interest in vocational education is the nation's new economic agenda, where the shortage of technical workers is addressed (Lake, 1994).

There is limited data available that measures the amount of technical skills welfare recipients have, although data on education and work experience suggests that the majority of them have low levels of technical skills (Taylor, 1997). In order for welfare recipients to reach Tier One and beyond, they will need vocational technical education. However, vocational and technical training programs must meet the demands of the labor force and apply the following principles in order to benefit the majority of welfare recipients (Tweedie *et al.*, 1998):

- Training programs that admit students continuously or start new classes frequently reduce the time that welfare recipients must wait to begin the training activities.
- Training programs that simulate a work environment—terms of hours, skills and expectations—teach participants basic work habits as well as job skills.
- Programs without entry requirements, such as high school diploma or GED, will be able to serve a broader segment of welfare caseload. Some programs could integrate basic skills with training, addressing any educational weakness in terms of the skills needed in the particular occupations.
- Programs with strong job placement records can help ensure that participants who complete training become employed. (p. 31)

The following recommendations for redesigning programs and curricula to meet the needs of TANF recipients were developed by a wide range of policy makers and administrators from welfare, workforce development, and postsecondary education agencies with national researchers, community colleges administrators, and foundation officers (Golonka & Matus-Grossman, 2001):

1. Implementation of flexible scheduling and "chunk" programs (shorter courses that result in credits): Modules can be offered in a number of schedule formats including traditional quarters as well as intense, condensed periods (such as 70 hours over a consecutive two-week period). Students can progress to the next module in an open entry-open exit format.
2. Providing short-term training: Some colleges offer short-term, vocation-oriented programs that provide an entry-level job placement in a particular occupation.
3. Developing Career Pathways: Short-term training courses are connected to career pathways and longer-term educational training options that eventually lead to a certificate or two- or four-year degree.
4. Offering distance learning: Distance learning has shown hope as a strategy that can provide training through a modularized curriculum, which allow students to receive instruction at their convenience, and overcome childcare, scheduling, access, and distance barriers.
5. Creating skills-based credentials: By receiving credentials for skills and competencies gained on the job or through the workplace training programs, individuals can more quickly earned a certificate or degree.

Through personal experience, the researcher knows ODCTE TANF programs have implemented all of the five strategies above in one form or another since their inception. This is because Oklahoma's technology centers have designed their training programs to be competency based, which is generally recognized as the essential element necessary to create flexible "chunk" programs. The competency design allows students to gain certification in multiple occupations in a career cluster. All technology centers have strived to gain cooperative agreements with colleges in order for their students to gain college credit without retaking course work. Short-term training courses are often sequenced so that students can gain all of the competencies offered in a full-time training program.

The researcher has reviewed TANF programs that report that TANF students receive work experience through many forms of work based training. Such training is either connected to an occupational training program offered to all students or one that has been developed specifically for them (e.g., individualized training, worksite training, and niche market training).

Conclusion and Observations

Welfare recipients should be taught how to transition from welfare to work without being trapped at the poverty level. The only tool left to them is education. Yet the education they are allowed to receive has been limited to adult basic education (reading, writing, and computing), vocational and technical education, life skills, and employability skills, unless they are willing and able to work fist.

Most of the time, vocational and technical education is only an option after welfare recipients have achieved minimum levels of adult basic skills and life skills. Once they have met entry-level requirements and have proven themselves to have sufficient life skills that allow them to balance their home and school responsibilities, they are admitted into vocational and technical training. This sequence was intended to increase positive outcomes. However, this researcher believes like the authors of the Carl Perkins Acts and John Dewey, that integration of basic academics with technical training best meets the needs of the learner (Lake, 1994). Integration also reduces the time it takes to learn both. Because of the five-year life time limit of welfare assistance and the one-year vocational training limit, time is critical to welfare recipients' ability to rise above poverty.

Educators are asked to design education that will lead to the five following competency areas as outlined in the U.S. Department of Labor's *Secretary's Commission on Achieving Necessary Sills* (SCANS, 1992):

1. Resources—understanding how to allocate time, money, materials, space and staff.
2. Interpersonal skills—working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds.
3. Information—acquiring and communicating information, and using computers to process information.
4. System—understanding social, organizational, and technological systems; monitoring and correcting performance; and designing or improving systems.
5. Technology—selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies.

Even more important, however, than the preparation of students to become instruments of the economy, vocational education should "empower students to enter their vocations with critical thought and action" (Rehm, 1989, p. 121). When viewed

merely as an instrument in the economy, vocational education becomes "too limiting, too mean, for a participatory democracy" (Kazemek, 1991, p. 51). Welfare recipients need to learn how to be in charge of their destiny rather than be directed into dead end jobs with little hope of achieving economic prosperity or escaping poverty. With the appropriate mix of critical, theory, progressivist, and behaviorism philosophies with a conservative amount of feminist radicalism educational philosophy, this researcher believes that TANF recipients will have a greater chance of being in charge of their destiny.

CHAPTER III

METHODOLOGY

The March 2000 edition of *Technique* magazine featured an article titled "Back on Track," which highlighted a program that provides one year of vocational training to welfare recipients.This program is part of a statewide system that has been funded through a contract between the Oklahoma Department of Human Services (ODHS) and the Oklahoma Department of Career and Technology Education (ODCTE). The contract outlined partnership parameters, which were initiated as a result of the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P. L. 104-193)

The major differences between the Work Opportunity Act and the previous act that governed federal welfare programs are: 1) Time limits, 2) Work requirements and 3) Caps. The Work Opportunity Act limits the number of years Temporary Assistance to Needy Families (TANF) recipients can receive financial assistance to five years in their lifetime. The TANF section of the act replaced the Aid to Families with Dependent Children (AFDC) section. TANF is a privilege, while AFDC was considered an entitlement. All TANF recipients who are able to work have to participate in work activity (i.e. job search, work experience program, job readiness class) for 30 hours per week. They can no longer stay at home and receive benefits unless they have a physical reason or an infant at home. The educational work activity allowed is one year of

vocational education. If states are unable to reach their TANF recipients' participation minimum rates, they are penalized by reductions of their annual federal funds. If they are able to meet federal caps (minimum allowable participation rates) they receive additional federal funds.

DHS realized that many of the TANF recipients were unprepared for work. Even with the vibrant economy Oklahoma was currently experiencing, many jobs demanded skills that TANF recipients lacked. However, DHS knew from experience that TANF recipients sent to training most often failed due to lack of support. After all, many TANF recipients were school dropouts. ODHS administration was concerned that sending them back to a school environment without the necessary support systems in place would result in a high rate of failure. Therefore, the ODHS and ODCTE entered into a contract that has been annually renewed since fiscal year 1996. The annual contracts outline components that would provide recipient support, which in turn would improve the rate of success.

The ODCTE, through a request for proposal (RFP) process, funded programs, which were annually renewed by a continuation application process. Although the funding process has changed as required by the terms of the renewed state contracts, during fiscal year 2000 the contract provided approximately $4,810, 000 to fund 22 technology centers. ODHS provided $4,000,000, and the ODCTE, through state appropriations, provided $810,000, which is a 20% match. The grant amounts ranged from approximately $110,000 to $200,000 depending on the projections of number of recipients to be served.

Approximately 40% of the TANF grants were earned through performance payments. For every student employed two months from date of completion, the program would collect $1,700. If students were employed sixth months from the time of their first placement date, their programs would receive an additional $1,000. The payments collected had to be expended to meet TANF students' needs, because it is against federal law for public institutions, such as technology centers, to profit from federal grants. The largest portion of the grants awarded to technology centers' TANF programs came from such federal funds.

The performance payments were a compromise between the ODCTE and ODHS. Originally, ODHS offered an increment pay system that would cause technology centers to collect many more dollars from ODHS than in previous years. The ODCTE countered with a performance payment funding system, where the grant would be reduced by forty percent and TANF programs had to earn the reduced amount through performance payments. This created a tangible motivation for TANF programs to conduct thorough student six-months follow-ups.

Ultimately, the state contract provided that all TANF recipients would be assessed to determine their aptitudes, interests, and educational levels. Afterward, they would be assisted in the development of individual student strategy plans (ISSP) during joint staffing meetings with pertinent community partners (i.e. ODHS, technology center, colleges, labor market area of the Workforce Investment Act, Welfare to Work, Employment Security Commission, and community based organizations). Recipients were to be advised that their ISSP is a long-term plan that could lead them through a lifetime of education and career advancements of which vocational training may just be

one step. Their plans could change depending on their needs. TANF recipients could become TANF program students through this joint staffing process.

Technology centers' TANF programs were required to provide assessments (unless another community partner was under contract to provide assessments); participate in joint staffings with community partners; and provide life skills training, employability skills training, academic remediation, vocational training, job search services, and employment follow-up retention services. According to the ODCTE, the purpose of the TANF programs is to provide vocational training that enables TANF recipients to receive the necessary skills training that leads to quality occupations (Welfare to Employment Vocational Training Program Planning Guide, 2001). However, the other previously mentioned requirements are considered by the ODCTE and the ODHS to be essential components necessary for most TANF recipients to complete in order for them to be successful in their vocational training and employment. The actual progression through these components was to be based on individual needs. No students were to be required to enter any component in which they were already proficient.

Statement of the Problem

In order to attend a technology center, a TANF recipient's ISSP must include vocational training. Students' progress is tracked by the local program staff member(s) and reported to the ODCTE. In turn, the ODCTE provides state summary reports to the ODHS. The ODCTE measures program recipients' completion, retention, and employment rates. Additionally, the ODCTE monitors the wages of TANF students who secure employment. While ODHS is not apprehensive when TANF students find

employment without gaining vocational training, the ODCTE considers such employment outcomes as indicators that programs need to improve their educational processes. ODHS is more concerned about TANF students' using their five-year life time limit before they are able to find employment. The ODCTE believes that although the other components such as life skills and remediation are necessary to assist TANF students' success in vocational training and employment search, they should not be the end result. The ODCTE administration believes that recipients who receive one year of vocational training will have higher placement rates and higher wages rather than those who only complete preparatory services (employment, life skills, and remediation components). This belief is be tested through the present research.

Oklahoma, like the rest of the nation, has been experiencing a strong economy. Because of the aging workforce and the reduced population pool from which labor is left to draw, business and industry leaders have told educators to teach students employability skills and they would train students for specific jobs (Thomas, 1989; Bishop, 1995). This philosophy has created the question of whether or not vocational education is necessary to improve students' opportunity for employment and higher wages.

Many employers and social agencies commonly believe that preparatory skills (basic academic skills, employability skills, life skills) are sufficient in order to gain and retain quality occupations. However, in a 1987 survey by the National Federation of Independent Business, six ability groups were considered for hiring. The academic group was rated last, while the highest rated group had prior occupational skills (Bishop, 1995). Furthermore, the best individual to teach academics was the occupational instructor or trainer (Gray & Herr, 1998). Both preparatory services and vocational training are

important. However, preparatory services alone most often will not satisfy the majority of employers' expectations or lead TANF recipients to quality occupations.

Research Question

This research addressed the following question: Are vocationally trained TANF students' measurable outcomes (employment rates and wages) significantly higher than the outcomes of TANF students who only receive preparatory services at the time of first employment and at the six month follow-up point in time? This question was answered by testing the following hypotheses:

Research Hypotheses

- H_{o1} - Initial employment rates do not differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_1 - Initial employment rates differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_{o2} - Employment rates do not differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.
- H_2 - Employment rates differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.

- H_{o3} - There is no difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_3 - There is a difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_{o4} - There is no difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.
- H_4 - There is a difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.

Hypotheses 1 and 2 were tested with chi square tests, while hypotheses 3 and 4 were tested with *t*-tests for independent samples. Descriptive statistics were also calculated for several demographic variables in the samples.

Type of Study

The primary decision made at the beginning of the study was whether the study would be quantitative or qualitative. The variables and the data to be analyzed guided this decision. Quantitative data are numerical data, whereas qualitative data can be categorical or attribute in nature. Qualitative variables are almost always defined in verbal terms that comprise mutually exclusive and exhaustive subclasses. Quantitative variable are variables whose properties are determined by counting or measuring (Shavelson, 1996).

Sample for Study

Not all of the student accounting information is reported to the ODCTE for each TANF student or can be collected for various reasons (i.e. student can not be located; student and/or employers refuses to disclose certain information; and/or partnering agencies are unaware that records of mutual clients may be shared without breaching confidentiality laws). The researcher used all the available student accounting data reported from the 21 ODCTE TANF programs. Therefore the collected data were treated as two large convenience samples rather than as populations. The following table provides the sample size and the number of incomplete student records for the hypotheses:

TABLE 10

SAMPLE SIZE AND INCLOMPLETE RECORDS

Hypothesis Number	Sample Size / Complete Records	Number of Incomplete Student Records
1	734	213
2	478	469
3	624	323
4	343	604

It is also important to note that this study only compared TANF students' employment rates and wages for those who found employment related to their training to the employment rates and wages of TANF students who only receive preparatory

services. This means that there is another group of students served by the TANF program whose personal characteristics, services received, employment rates, and wages are reported to the ODCTE, but are not included in this study. The researcher did not want to skew the results of the study by adding performance outcomes of those who chose to accept employment in occupations unrelated to their training. For example, a TANF student, who completed a drafting vocational training program but found work as an accountant did not gain a job related to his or her training.

Data Collection Process

All twenty-one technology centers' TANF programs provide student accounting information to the ODCTE monthly. A data collection system has been created that electronically receives student records through the Internet from each TANF program.

The information collected for students enrolled in TANF programs during fiscal year 2000 was used to test the hypotheses for the study. Collected information consists of descriptive statistics profiling each TANF students' personal characteristics, which may enhance or cause challenges to their training, as well as first employment information, first earnings, sixth month employment information, sixth month earnings, and other pertinent employment information (benefits, employer's name, address, telephone, etc.). In addition, the electronic data collecting instrument documents the types of preparatory services the TANF recipients receives. All data used in this study were obtained from this ODCTE data collection system.

Research Design

The design that most resembles the type of research needed to properly analyze the TANF data was the *ex post facto* design. *Ex post facto* designs are most commonly used to describe relationships between two variables. They are called such because the researcher arrives at the scene after the treatment has been administered (Shavelson, 1996).

The TANF program employment rate and wage data were reported after the TANF students had or had not received vocational training. The researcher waited until the end of treatment to collect and analyze. The sample that received vocational training was compared to the sample that had not received vocational training.

Data Analysis and Variables of the Study

In order to analyze the data, it was critical to identify the variables and select the appropriate statistical tests to determine whether or not measured differences occurred by chance. The dependent variables for the study were employment status and wage. The independent variable was type of training. Two levels of training were present for the independent variable: vocational training plus preparatory services and preparatory training only.

Inferential Statistics.

Inferential statistics are used when researchers are generalizing characteristics of a small group to a larger group unmeasured by the researcher (Shavelson, 1996). In using inferential statistics, samples are taken from the population; appropriate tests are

administered; and the significance level is selected in order to determine whether to reject or accept a hypothesis and generalize sample results to the population.

This study was examined with dual significance levels: .05 and .01. The researcher recognizes that policy makers (legislators and agency administrators) make decisions based on concrete performance measures, which generally is a balance of cost and desired results. This study provides the .05 alpha level results to meet the needs of the most conservative policy maker.

However, most educators realize, that for programs like the TANF program, there are often more humanistic results (quality of life) that cannot be measured quantitatively or upon the completion of the program. Many TANF students will leave the program with knowledge and skills they may cognitively understand, but they later will internalize and integrate them in their life. Therefore a .10 alpha level has also been provided.

Lastly, fellow researchers should realize that there are appropriate times to use .01, .05, and .10 alpha levels. There is a difference between the results of a medication study and the results of a social program study. It makes common sense that the more life threatening a study is, the lower the alpha level needs to be. To judge a social program like the TANF program a failure because it was not 99% or 95% effective could result in the closure of the most effective programs.

Two-Way Chi-square Test

Chi-square was used to test hypotheses 1 and 2. The purpose of a chi square test is to determine whether the observed frequencies differ systematically from the theoretically expected frequencies, or whether the differences are due to chance

(Shavelson, 1996). Thus, in this study, chi square validates a difference in the employment frequency from one sample (preparatory services) to another sample (vocational and technical training plus preparatory services), and determined if that difference was due to chance. Although there were two levels of the independent variable, there was a nominal dependent variable (employment status), which further demonstrates the need to use chi-square test. In a chi-square test for a two-way design, there must be two variables, each with two or more levels (Shavelson, 1996).

The following were the assumptions and requirements of a two-way chi square test (Shavelson, 1996) met by the variables in this study for hypotheses 1 and 2:

1. Each observation fell in one and only one cell of the design.
2. Each observation was independent of every other observation.
3. The observations were measured as frequencies.
4. The expected frequency for any cell was not less than 10 for $df = 1$.
5. The observed values of chi-square with 1 degree of freedom (i.e., a 2 X 2 contingency stable) were corrected for continuity.

t-test for Two Independent Means

The researcher had access to data for two groups of students, all of whom were TANF recipients and had participated in a TANF training program at one of 21 funded technology centers. Therefore, the *t*-test for two independent means was the appropriate statistical test for hypotheses 3 and 4. The *t*-test was used to help the researcher decide whether the observed difference between the two sample means arose by chance or represents a true difference between populations.

The *t*-test for two independent means provides data on whether two means are drawn from identical populations or from different populations. The following were the design requirements for the use of the *t*-test met by the variables in this study for hypotheses 3 and 4 (Shavelson, 1996):

1. There was one independent variable with two levels (i.e., groups).
2. Each subject appeared in one and only one of the two groups.
3. The levels of the independent variable differed from one another quantitatively.

Ethics

It is unethical to identify a TANF student to his or her peers, teachers, business and industry partner, or any other person. Because of this ethical consideration, programs used pseudonyms for students to hide their TANF connection. Technical centers' staff members were instructed to keep TANF students' information confidential. However, as mentioned earlier, the researcher's position as state TANF coordinator allowed access to this information. As long as the information was presented in aggregate forms, no known privacy laws were violated by this study.

CHAPTER IV

FINDINGS

The purpose of the study was to determine the effectiveness of the ODCTE TANF program. Chi square was used to ascertain whether the rates of placements were significantly less for TANF students who had received preparatory services only versus those who received both preparatory services and vocational training. The *t*-test was applied to establish whether wages were significantly higher for TANF students who received vocational training in addition to their preparatory services than TANF students who only received preparatory services.

As stated in Chapter III, the employment rate sample is larger (n= 734), than the wage sample (n= 478), because wage data was not reported for in all cases. Amount of earnings is a sensitive subject to many people regardless of their social economic status. Descriptive statistics pertaining to the larger employment rate sample presented last.

Historically, age, gender, race, disabilities, limited English proficiency, level of education, and/or number of dependent children have hindered educational achievement and employment. Policy makers and educators who study outcomes of federal and state programs often consider these and other factors that might impact findings pertaining to studies of programs. That is why, with the exception of number of children, this information is often collected by educational institutions. The ODCTE annually collects and reports race, disabilities, limited English proficiency, and level of education for all

students enrolled in career and technology education. The TANF program, the Careers Unlimited program, and the Displaced Homemakers, Single Parents, and Single Pregnant Women program are the only programs for which the ODVTE collects information pertaining to number of dependent children.

After the descriptive characteristics are reported, rates of employment at the initial employment date are reported and are followed by the findings of the rates of employment sixth month from the first employment date. Wage findings for initial employment and the sixth month point in time follow the findings of the employment rate variables.

Descriptive Data

In addition to the hypotheses tested, descriptive data was also tabulated to help interpret the nature of the samples at first employment and at six-month employment point. The following characteristics were not further analyzed.

First Employment of TANF Students

Gender Descriptive Characteristics

Since most TANF recipients are female single heads of home, it was expected to find very low numbers of males reported in every employment status of Table 11. However, males from both categories (preparatory services only and vocational training) had higher rates of employment than their female counterparts.

TABLE 11

FIRST EMPLOYMENT STATUS BY GENDER

	Gender		
Vocational Training	Female	Male	Total
Number	363	16	379
% Employed	95.8%	4.2%	100.0%
Proportional % by Gender	71.9%	80.0%	72.2%
Preparatory Services Only			
Number	131	4	135
% Employed	97.0%	3.0%	100.0%
Proportional % by Gender	64.2%	80.0%	64.6%

Race Descriptive Characteristics

White Americans have had a history of less employment discrimination than minorities and American Indians. Yet, Table 12 documents that the Hispanics followed by Whites led all other races in related employment rates in the category of vocational trained, while Blacks followed by Hispanics led all other reported races in the preparatory services only category.

TABLE 12

FIRST EMPLOYMENT STATUS BY RACE

	Race				
Vocational Training	American Indian	Black	Hispanic	White	Asian
Number	40	97	22	217	3
% Employed	10.6%	25.6%	5.8%	57.3%	.8%
Proportional % by Race	66.7%	69.3%	91.7%	72.8%	100.0%
Preparatory Services Only					
Number	9	38	7	81	0
% Employed	6.7%	28.1%	5.2%	60.0%	
Proportional % by Race	50.0%	77.6%	70.0%	61.4%	

Disabilities Descriptive Characteristics

The largest category of the TANF students with disabilities who received vocational training and preparatory services was the Other Health Impairments category. There was reported to be only 11 in this category for TANF students who received vocational training and 17 for those who receive preparatory services (see Table 13). The total numbers of all TANF students reported in all other categories of students with disabilities ranged from 0 to 5.

TABLE 13

FIRST EMPLOYEMENT BY DISABILITY

	Not Disabled	Hearing Impaired	Visually Impaired	Seriously Emotionally Disturbed	Orthopedic-ally Impaired	Other Health Impair.	Specific Learning Disabilities	Total
Vocational Training								
Number	355		5	1	2	11	5	379
% Employed	93.7%		1.3%	.3%	.5%	2.9%	1.3%	100.0%
Proportional % by Disabilities	72.4%		83.3%	100.0%	40.0%	64.7%	100.0%	72.2%
Preparatory Services Only								
Number	113			1	1	17	2	134
% Employed	84.3%			.7%	.7%	12.7%	1.5%	100.0%
Proportional % by Disabilities	68.1%			100.0%	100.0%	48.6%	40.0%	64.4%

Limited English Proficiency Characteristics

Just as there were low numbers of TANF students reporting disabilities, the same was true for TANF students who were reported to be limited English proficient. Of the total number of TANF students who received vocational training only 1 was reported to be limited English proficient (see Table 14). Three TANF students who received just preparatory were limited English proficient, but they are not shown in the Table 14, because they were unemployed.

TABLE 14

FIRST EMPLOYMENT STATUS BY
LIMITED ENGLISH PROFICIENCY (LEP)

	LEP		
Vocational Training	No	Yes	Total
Numbers	379		379
% Employed	100.0%		100.0%
Proportional % by LEP Status	72.3%		72.2%
Preparatory Services Only			
Numbers	134	1	135
% Employed	99.3%	.7%	100.0%
Proportional % by LEP Status	65.0%	33.3%	64.6%

Dependent Children Characteristics

There is a myth that TANF recipients have large numbers of dependent children. However, the three largest groups of number of dependent children for both preparatory and vocational training were one child, two children, and three children as reported in Table 15. Over half of the students had one to two children in all employment status levels reported.

TABLE 15

FIRST EMPLOYMENT STATUS BY
NUMBER OF DEPENDENTS

	Number of Dependents								Total
Vocational Training	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Number	1	123	120	88	27	11	6	3	379
% Employed	.3%	32.5%	31.7%	23.2%	7.1%	2.9%	1.6%	.8%	100.0%
Proportional % by Dependent #	50.0%	71.5%	71.9%	73.3%	71.1%	78.6%	75.0%	100.0%	72.2%
Preparatory Services Only									
Number	1	48	48	27	9	2			135
% Employed	.7%	35.6%	35.6%	20.0%	6.7%	1.5%			100.0%
Proportional % by Dependent #	100.0%	70.6%	61.5%	62.8%	69.2%	40.0%			64.6%

Secondary Education Descriptive Characteristics

There were three categories of secondary educational levels reported (high school, General Equivalency Diplomas, and less than a high school diploma). The average employment rate for TANF students were higher for those who received vocational training when they had a high school diploma or at least a GED than those who had less than a high school diploma (see Table 16). Non-vocationally trained students with less than a high school diploma or a high school diploma found employment at a greater rate than those who received General Equivalency Diplomas.

TABLE 16

FIRST EMPLOYMENT STATUS BY
SECONDARY EDUCATION

	Educational Level of Completion			Total
Vocational Training	High School	GED	< High School	
Number	212	102	65	379
% Employed	55.9%	26.9%	17.2%	100.0%
Proportional % by Level of Education	74.1%	78.5%	59.6%	72.2%
Preparatory Services				
Number	55	27	53	135
% Employed	40.7%	20.0%	39.3%	100.0%
Proportional % by Level of Education	73.3%	61.4%	58.9%	64.6%

Postsecondary Descriptive Characteristics

Most TANF students did not have any postsecondary education. Of the TANF students who received vocational training 68% never received educational credits from a postsecondary education credit (see Table 17). Seventy-five percent of the TANF students who only received preparatory services reported no postsecondary education. Of the TANF students who only received preparatory services and those who received vocational training, less than 2% attained an associate or bachelors degree.

TABLE 17

FIRST EMPLOYMENT STATUS BY
POSTSECONDARY EDUCATION LEVEL

	Postsecondary Education Level				
Vocational Training	None	Some	Associate	Bachelors	Total
Number	257	119	2	1	379
% Employed	67.8%	31.4%	.5%	.3%	100.0%
Proportional % by Ed. Level	71.0%	75.3%	66.7%	50.0%	72.2%
Preparatory Services Only					
Number	101	28	3	3	135
% Employed	74.8%	20.7%	2.2%	2.2%	100.0%
Proportional % by Ed. Level	63.5%	65.1%	75.0%	100.0%	64.6%

Age Descriptive Characteristics

The mean age of all TANF students within the employed and unemployed status of both the preparatory only and the vocational training groups was ranged from 27.69 to 28.60. The standard deviation ranged from 6.50 to 8.59 (see Table 18).

TABLE 18

FIRST EMPLOYMENT BY AGE

Vocational Training	Mean	N	Std. Deviation	Minimum	Maximum	Range	Median
Employed	28.60	379	7.37	17	52	35	27.00
Unemployed	28.20	146	7.38	18	50	32	26.00
Preparatory Services Only							
Employed	28.44	135	8.59	16	48	32	26.00
Unemployed	27.69	74	6.50	17	46	29	27.00

Sixth Month Employment of TANF Students

Of the 734 TANF students, who reported first employment results, only 478 reported employment sixth months from their first employment date. Even though there were financial incentives for TANF programs to collect follow-up information, it was difficult to find all past TANF program participants. The first month employment information was not reported for 213 former TANF students, while the sixth month employment information was not reported for 469 former TANF students.

Gender Descriptive Characteristics

The sixth month employment rates for males were less than females for both the preparatory services and the vocational training categories, which was not true for the first employment rates reported for males and females (see Table 19).

TABLE 19

SIXTH MONTH EMPLOYMENT STATUS BY GENDER

	Gender		
Vocational Training	F	M	Total
Number	193	7	200
% Employed	96.5%	3.5%	100.0%
Proportional % by Gender	57.4%	53.8%	57.3%
Preparatory Services Only			
Number	72	2	74
% Employed	97.3%	2.7%	100.0%
Proportional % by Gender	57.6%	50.0%	57.4%

Race Descriptive Characteristics

Just as reported in the first employment, Table 20 shows Hispanics followed by whites led all other races in related employment for those who received vocational training by race employment percentages. However whites followed by American Indians lead all races at the sixth month point of employment by race employment percentages.

TABLE 20

EMPLOYMENT STATUS BY RACE FOR
SIXTH MONTH EMPLOYMENT

	Race					
Vocational Training	American Indian	Black	Hispanic	White	Asian	Total
Number	21	44	13	121	1	200
% Employed	10.5%	22.0%	6.5%	60.5%	.5%	100.0%
Proportional % by Race	51.2%	53.0%	81.3%	58.2%	100.0%	57.3%
Preparatory Services Only						
Number	4	17	2	51		74
% Employed	5.4%	23.0%	2.7%	68.9%		100.0%
Proportional % by Race	57.1%	54.8%	33.3%	60.0%		57.4%

Disability Descriptive Characteristics

The sixth month employment characteristics for TANF students with disabilities were almost proportional to those reported for the first month employment (see Table 21). The largest numbers of those with disabilities were found under the category of Other Health Impairments for both groups (vocational trained and preparatory services

only). Of the vocational trained students 3.0 % were reported under the category of Other Health Impairments, and 14.9% were reported under this category for preparatory services only.

TABLE 21

SIXTH MONTH EMPLOYMENT
BY DISABILITY

Vocational Training	Not Disabled	Hearing Impaired	Visually Impaired	Seriously Emotionally Disturbed	Orthopedically Impaired	Other Health Impairments	Specific Learning Disability	Total
Number	189		1		1	6	3	200
% Employed	94.5%		.5%		.5%	3.0%	1.5%	100.0%
Proportional % by Disability	58.5%		20.0%		50.0%	50.0%	60.0%	57.3%
Preparatory Services Only								
Number	61		1			11	1	74
% Employed	82.4%		1.4%			14.9%	1.4%	100.0%
Proportional % by Disability	57.0%		100.0%			64.7%	33.3%	57.8%

Limited English Proficiency Characteristics

There was only 1 LEP TANF student who received vocational training and 3 who received only preparatory service, but none of them were employed. Table 22 shows no LEP students employed regardless of their educational attainment category. It is important to remember that all TANF recipients have twelve different work activities that they may be placed. The technology centers' TANF program is only one. Apparently, the

vast majority of TANF LEP recipients are being referred to other work activities other than vocational training or there are very few of them receiving TANF.

TABLE 22

SIXTH MONTH EMPLOYMENT BY
LIMITED ENGLISH PROFICIENCY

	LEP		
Vocational Training	No	Yes	Total
Number	200		200
% Employed	100.0%		100.0%
Proportional % by LEP Status	57.3%		57.3%
Preparatory Services Only			
Number	74		74
% Employed	100.0%		100.0%
Proportional % by LEP Status	57.8%		57.4%

Sixth Month Employment Status by Number of Dependents

Most of the TANF students who were employed the sixth month had from 1 to 3 dependent children (see Table 23). There was not a trend that would indicate that the number of children made a difference in the rate of employment for those who received vocational training or those who only received preparatory services.

TABLE 23

SIXTH MONTH EMPLOYMENT BY STATUS
BY NUMBER OF DEPENDENTS

	Number of Dependents							Total
Vocational Training	1	2	3	4	5	6	7	
Number	68	61	50	13	7		1	200
% Employed	34.0%	30.5%	25.0%	6.5%	3.5%		.5%	100.0%
Proportional % by # Dep.	63.0%	54.5%	58.1%	48.1%	58.3%		100.0%	57.3%
Preparatory Services Only								
Number	33	23	10	6	2			74
% Employed	44.6%	31.1%	13.5%	8.1%	2.7%			100.0%
Proportional % by # Dep.	71.7%	54.8%	34.5%	66.7%	100.0%			57.4%

Secondary Education Descriptive Characteristics

The highest rate of TANF students reported to be working at the sixth month point were those with high school diplomas (see Table 24). However, the next highest employment rate was found for TANF students who had attained GEDs and received vocational training, while the next employment rate for TANF students who had received only preparatory services were for those who had less than a high school diploma.

TABLE 24

SIXTH MONTH EMPLOYMENT STATUS
BY SECONDARY EDUCATION

	Educational Level of Completion			Total
Vocational Training	High School	GED	< High School	
Number	121	44	35	200
% Employed	60.5%	22.0%	17.5%	100.0%
Proportional % by Educational Level	62.4%	54.3%	47.3%	57.3%
Preparatory Services Only				
Number	42	11	21	74
% Employed	56.8%	14.9%	28.4%	100.0%
Proportional % by Educational Level	75.0%	40.7%	45.7%	57.4%

Postsecondary Descriptive Characteristics

When the postsecondary levels (some, associate, bachelors) of attainment for TANF students were compared by employment statuses for those who received vocational training and those who only received preparatory services, a higher rate of post secondary education was found for those who receive vocational training (see Table 25).

TABLE 25

SIXTH MONTH EMPLOYMENT STATUS BY
POSTSECONDARY EDUCATION LEVEL

	Postsecondary Education Level				
Vocational Training	None	Some	Associate	Bachelors	Total
Number	130	68	1	1	200
% Employed	65.0%	34.0%	.5%	.5%	100.0%
Proportional % by Ed. Level	55.6%	60.2%	100.0%	100.0%	57.3%
Preparatory Services Only					
Number	55	14	3	2	74
% Employed	74.3%	18.9%	4.1%	2.7%	100.0%
Proportional % by Ed. Level	57.9%	50.0%	100.0%	66.7%	57.4%

Age Descriptive Characteristics

The mean age of all TANF Students within the employed and unemployed status of preparatory only and vocational training groups ranged from 27.69 to 28.60. The standard deviation ranged from 7.09 to 8.59 (see Table 26).

TABLE 26

SIXTH MONTH EMPLOYMENT STATUS BY
POSTSECONDARY EDUCATION LEVEL

	Employment Status	Mean	N	Std. Deviation	Minimum	Maximum	Range	Median
Vocational Training	Employed	28.86	200	7.52	18	50	32	27.00
	Unemployed	27.49	149	6.94	18	49	31	26.00
	Total	28.28	349	7.30	18	50	32	27.00
Preparatory Services	Employed	30.18	74	8.98	18	48	30	30.50
	Unemployed	27.22	55	7.72	16	47	31	25.00
	Total	28.91	129	8.56	16	48	32	27.00
Total	Employed	29.22	274	7.94	18	50	32	28.00
	Unemployed	27.42	204	7.14	16	49	33	26.00
	Total	28.45	478	7.66	16	50	34	27.00

First Placement Rates of TANF Students

Hypothesis 1

It was hypothesized that there would be a difference in initial placement rates between TANF students who had only preparatory services versus those who also received vocational training.

As reported in Table 27, the total employment rate sample (N = 947) was grouped by level of training received (i.e. vocational education and non-vocational education). Of the total sample, 213 subjects had missing information, leaving 734 (77.5%) valid subjects to be included in the analysis. There were 525 subjects that received vocational training and 209 subjects that received no vocational training.

A chi-square analysis did not reveal significant differences between these two types of training (see Table 28) at the .05 alpha level, but it did at the .10 alpha level. Therefore, the null hypothesis was not rejected at the .05 alpha level when χ^2

(1,N=734)=3.76 and p=053. Yet, it was accepted at the .10 alpha level. The near miss at the .05 alpha level set for this study was due to the fact that the observed value of chi-square with 1 degree of freedom had to be corrected for continuity. If the Yate's correction for continuity had not been used, the null hypothesis would have been rejected at .05 with χ^2 (1,N=734) =4.11, and p .043. The .10 alpha level is a reasonable probability level in the context of humanistic outcomes (i.e., Head Start program's long-term impact, WtW program's performance rates), versus a probability level of .05 or .01, which are often required for more clinical studies (i.e., medication, brake performance).

TABLE 27

HYPOTHESIS 1 EMPLOYMENT
CROSS TABULATION

	Employment Status Dependent Variables		
	Employed	Unemployed	Total
Vocational Training Completers	379	146	525
Percentage of total	51.6%	19.9%	71.5%
Preparatory Services Only Completers	135	74	209
Percentage of total	18.4%	10.1%	28.5%
Total	514	220	734
Percentage of total	70.0%	30.0%	100.0%

TABLE 28

HYPOTHESIS 1 CHI-SQUARE TESTS

	Value	df	p for 2-tailed test
Pearson Chi-Square	4.111[b]	1	.043
Continuity Correction [a]	3.757	1	.053
N of Valid Cases	734		

a. Computed only for a 2X2 table

b. 0 Cells (.0%) have expected count less than 5. The minimum expected count is 62.64.

Sixth Month Placement Rates of TANF Students

Hypothesis 2

It was hypothesized that there would be a difference in the six month placement rates between TANF students who had only preparatory services versus those who also received vocational training.

The total sample number (N = 947) was grouped by level of training received (i.e. vocational education and non vocational education). Of the total sample 469 subjects had missing information, leaving 478 (50.5%) valid subjects to be included in the analysis. This percentage of valid subjects (50.5%) was considerably lower than the 77.5% for the initial employment variable. There were 349 subjects that received vocational training and 129 subjects that received no vocational training.

A Pearson chi-square analysis did not reveal significant differences between these two types of training at .05 alpha level, or .10 alpha level. A Yate's Correction for

Continuity was used because this was a two by two design. However, without the Yates, the null hypothesis had to be retained at both .05 and .10 alphas.

TABLE 29

HYPOTHESIS 2 SIX-MONTH EMPLOYMENT CROSS TABULATION

	Employment Status Dependent Variables		Total
	Employed	Unemployed	
Vocational Completers	200	149	349
Percentage of total	41.8%	31.2%	73.0%
Preparatory Services Only Completers	74	55	129
Percentage of total	15.5%	11.5%	27.0%
Total	274	204	478

TABLE 30

HYPOTHESIS 2 CHI-SQUARE TESTS

	Value	df	p for 2-tailed test
Pearson Chi-Square	.000[b]	1	.991
Continuity Correction[a]	.000	1	1.000
N of Valid Cases	478		

a. Computed only for a 2X2 table

b. 0 Cells (.0%) have expected count less than 5. The minimum expected count is 62.64.

First Employment Wages of TANF Students

Hypothesis 3

It was hypothesized that there would be a difference in wages between TANF students who only had preparatory services versus those who also received vocational training. Tables 31 and 32 report findings relevant to this hypothesis.

TABLE 31

FIRST EMPLOYMENT WAGE
GROUP DESCRIPTIVE
STATISTICS

	N	Mean	Standard Deviation	Standard Error Mean
Vocational Training Hourly	478	$7.3613	$1.8311	$.0838
Preparatory Services Only Hourly	146	$6.1775	$1.8086	$.1497

TABLE 32

HYPOTHESIS 3 INDEPENDENT SAMPLES T-TEST

							95% Confidence Interval of the Difference	
	F	t	df	p (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
For Wage	7.056	6.856	622	.0001	$1.1837	$.1727	$.8447	$1.5228

An independent samples t-test was conducted to compare the initial wages of TANF students who only received preparatory services with those who also received vocational training. There was a significant difference in wages between vocational trained students ($\bar{x}$ = $7.36, SD =$1.83) and students who only received preparatory services [$\bar{x}$=$6.18, SD=$1.81; t (622) = 6.85, p= 0.0001]. The magnitude of the differences in the means was moderate (eta squared = .07).

Sixth Month Employment Wages of TANF Students

Hypothesis 4

It was hypothesized that there would be a difference in wages reported at the sixth month between TANF students who only had preparatory services versus those who also received vocational training. Tables 33 and 34 report findings relevant to this hypothesis.

TABLE 33

SIXTH MONTH WAGE GROUP DESCRIPTIVE STATISTICS

	N	Mean	Std. Deviation	Std. Error Mean
Vocational Training Hourly Wages	265	$7.8662	$2.2774	$.1399
Preparatory Services Hourly Wages	78	$6.6132	$2.1356	$.2418

TABLE 34

SIXTH MONTH WAGE
INDEPENDENT SAMPLES
T-TEST

	F	t	df	Sig. (2-tailed)	Mean Differ-ence	Std. Error Differ-ence	95% Confidence Interval of the Difference	
							Lower	Upper
For Wage	4.154	4.330	341	.0001	$1.2529	$.2893	$.6838	$1.8221

An independent samples t-test was conducted to compare the wages of TANF students who only received preparatory services with those who also received vocational training as reported six months from their initial employment date. There was a significant difference in wages between vocational trained students ($\bar{x}$ = $7.87, SD= $2.28) and students who only received preparatory services [$\bar{x}$=$6.61, SD =$2.14; t (341) = 4.33, p= 0.0001]. The magnitude of the differences in the means fell between a small to moderate effect (eta squared = .03).

CHAPTER V

CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

Summary

Since the beginning of the development of ODCTE TANF programs, there has not been a study to determine the effectiveness of the ODCTE TANF programs other than internal inquiries that were based on incomplete years of operation. This is because most of the follow-up data was collected within fiscal year 2001, although the TANF students completed the program during FY 2000. Fiscal year 2000 was the first year that the TANF program collected follow-up information for sixth months.

This study proved the value of vocational training by: a) comparing placement rates at the first point of employment and again at the sixth month point of employment using chi-square analyses; b) comparing wage rates at the first point of employment and again at the sixth month point of employment using *t*-test analyses.

Although preparatory services is important, TANF student completers of vocational training have a significantly higher rate of employment at the .10 alpha level at the first point of employment (.053 alpha level finding). There was no significance found between the two groups' rates of employment at the sixth month point (1.0 alpha level of finding) at either .05 or .10 alpha levels. Even using .05 alpha level rates of

wages at first point of employment (.0001alpha level finding) and sixth month of employment (.001 alpha level finding) were significant.

Furthermore, the rates of wages at the first (.0001alpha level) and sixth month of employment (.0001 alpha level) were significant at the .05 alpha level. This demonstrates an even stronger justification for vocational training.

This study's quantitative approach is the first of many planned analyses of the TANF programs' effectiveness. Although quantitative research does not account for the total value of a program's impact on individual lives, it is the type of research that many legislators and policy makers depend upon when making critical financial decisions.

This is why it is so important that the limitations of this study be identified and considered along with its conclusions. It is also vital that the need for further studies, both quantitative and qualitative, be substantiated. Otherwise readers of this study may reach critical conclusions based on incomplete information. It is critical for all information to be carefully scrutinized, because the lives of TANF recipients and their dependent children are at stake.

The following conclusions and related limitations of the study are based on the findings of this study plus multiple visits to TANF programs where TANF program staff members, DHS caseworkers, TANF students, and other community partners explained TANF students' barriers to education and employment.

Conclusions and Relevant Limitations of the Study

Initial Employment Rates

The first hypothesis tested in this study was:

- H_{o1} - Initial employment rates do not differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_1 - Initial employment rates differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only.

This hypothesis was tested with a chi-square analysis.

Significant difference was not found at the .05 alpha level between initial employment rates of TANF students who received vocational training plus preparatory services and those who received only preparatory services. However, a significant difference was found at the .10 alpha level, which is a more reasonable probability level for this type of study. The probability alpha level of .10 is more than sufficient, because the program should not be considered a failure based on a standard of a rigid 95% (.05 alpha level) or 99% (.01 alpha level) when we are not conducting a study about life-threatening materials or actions.

Still, there are several factors that may have impacted this finding and should be considered in drawing conclusions about the effect of vocational training in TANF programs. At the time of this study Oklahoma's unemployment rate was 3 % according to the Economic Research Service of the U.S. Department of Agriculture. The lure of employment was attractive to TANF students who were struggling to exist on TANF, so many quit school for employment according to TANF program coordinators.

This action was even supported by many ODHS caseworkers as discussed in Chapter II. Since the implementation of the Work Opportunity Act, the ODHS had

adopted a "work first" philosophy (Kickham, *et al*, 2000). This caused many TANF recipients to take jobs when offered regardless of their educational plans according to on-site TANF review reports written jointly by a review team representing ODHS and ODCTE.

The Welfare to Work Act was supposed to help them continue their education in order to upgrade their skills. This concept seems reasonable until one realizes that TANF recipients have extreme numbers of barriers (e.g. transportation, nontraditional daycare), which hinder job retention and much less support continuing education while working. These same barriers were listed in all confidential Joint TANF WIA Review reports conducted by the ODCTE, ODHS, OESC, WIA, WtW, and Oklahoma Regents for Higher Education during fiscal year 2001.

Furthermore, the ODHS and the ODCTE contract stipulated a performance payment of $1,700 per TANF student's employment. It did not stipulate that the employment had to be related to training or that the TANF student had to have received vocational training at all. Funded technology centers could be paid $1,700 for the employment of individuals who only received preparatory services. Therefore, there were no economic incentives for any institution to encourage TANF students to complete vocational training and gain related employment. In fact, performance payments made it possible for technology centers to have a quicker return on their investments by placing students in jobs after preparatory services, without having them enroll in the more costly vocational training component of the TANF program. Even with this economic incentive, most technology centers' staff members encouraged and assisted TANF students to continue their education after completing their vocational training component of the

TANF program even when they knew they would not be able to collect the $1700 initial employment payment.

Finally, educational barriers cause many TANF students to quit and find employment. Attendance policies, ability to benefit requirements, and/or adult student anxieties stop many from reaching the vocational training component of their education according to TANF On-Site Visitation reports.

After most TANF students were assessed to determine their aptitude, career interest, and learning style, it became apparent that they needed to complete a huge amount of remediation before they even would be admitted into their chosen vocational training program. Table 2 of this study reported more than one-third of the TANF stayers and leavers had no high school diploma. It is understandable that some felt overwhelmed and decided to find employment with the completion of the minimum competencies provided in the preparatory services component of the TANF program.

The federal government has determined that there has been gender bias in the policy and procedures for identifying learning disabilities throughout the nation as reported in Chapter 2. Significant portions of the TANF population have learning disabilities that have been either ignored or not diagnosed because of this bias. For this reason, the characteristic of those reported to have disabilities in this study have a high probability of being significantly under represented.

All TANF students had their own set of reasons for choosing to work with just preparatory services rather than completing their vocational training. Most often reasons were either valid at the time or unwise, although understandable. TANF coordinators report that many TANF students have more expenses that can be possible paid by all the

state and federal assistance programs put together. As the *Leaving Welfare Behind: The Oklahoma TANF Leavers Report* (2000) maintains, TANF leavers live from one month to another, deciding which bills they will pay this month and which ones they will pay the next. The TANF Coordinators report that many TANF students want more for their children and themselves so they elect to take any job rather than stay on assistance, even though they would have a greater earning potential if they completed their vocational education.

Others have barriers to attending school (e.g., reliable transportation, reliable child care, ill children, personal illness). All technology centers have attendance policies, which TANF students have difficulty following because of the previously listed barriers.

According many TANF Program On-site Visitation Reports and WIA TANF Joint Review reports, the main hindrances to employment for both TANF students who elected to attain vocational training and TANF students who received only preparatory services were poor or no work histories, relocation costs, lack of reliable transportation, lack of responsible childcare providers, substance abuse issues, mental and physical health issues, and domestic violence.

Poor work history may seemed not to be a huge problem when viewing Table 7, where it projects that there will be 62,701,000 jobs that will only require short term on-the-job training (OJT). There may be plenty of job opportunities for those who are just starting to seek employment. However, most jobs (65%) require more than a high school diploma but less than a four-year degree as discussed in Chapter II (Brustein & Mahler, 1994).

Even with the multiple challenges of TANF students, the TANF program has a minimum standard of 75% related to training employment rate. Statewide, the TANF program barely missed this standard by 7.2% during FY 2001. Still, the statewide minimum standard for a full-time vocational training program is only 55%. The reason the TANF program standard is so much higher is that these programs cannot afford to fail. In many cases they are the last opportunity TANF recipients will ever have for an education.

Sixth Month Employment Rates

The second hypothesis tested in this study was:

- H_{o2} - Employment rates do not differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.
- H_2 - Employment rates differ between TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.

This hypothesis was tested with a chi-square analysis.

Significance difference was not found between employment rates of TANF students who received vocational training plus preparatory services and those who received only preparatory services six months after their first employment.

Employment retention rates were almost equal for TANF students who received vocational training plus preparatory services (57.3%) and those who received preparatory services six month after their first employment (57.4%). This is probably because both groups still had life circumstances that were briefly explained in the previous section of

this chapter and more thoroughly discussed in Chapter 2, which caused the high rate of unemployment.

Similar to the first employment payment incentives provided by the contract between the ODHS and the ODCTE, programs received $1,000 per student if the TANF students was still employed six month from the initial date of employment regardless of whether the student received preparatory services only or vocational training. These payments were to encourage TANF programs to continue to provide retention services to TANF recipients.

However, the follow-up process presented many problems that could account for the high mortality rate (high numbers of incomplete follow-up records or lack of records at all), which posed a threat to the validity of the study. The following are examples of these problems:

1. A few TANF programs were asked by employers not to call their employee at work.
2. Many former TANF students did not have telephones.
3. Many former TANF students moved without forwarding addresses or telephone numbers.
4. Several former TANF students did not want to be reminded that they had been on public assistance.
5. Many DHS workers and other agency partners wrongly thought that it was illegal to provide TANF program staff members information that would assist them with their follow-up once a TANF student was no longer in the TANF program, because of federal confidentiality laws and state policies.

6. Many DHS workers and other agency partners found it to be too time consuming to provide TANF program staff members information that would assist them in follow-up process.

All of the above factors caused the sixth month follow-up process to be a challenge to the TANF program staff. More than a loss of money was at stake. The greater loss was the retention assistance that could have been provided to the former TANF student had they been found, whether the assistance was in the form of more employability or vocational skills and/or support services.

Initial Employment Wage

The first hypothesis tested in this study was:

- H_{o3} - There is no difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only.
- H_3 - There is a difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only.

This hypothesis was tested with a *t*-test analysis.

Significant difference was found between initial employment wages of TANF students who received vocational training plus preparatory services and those who received only preparatory services. However, the magnitude of this difference was disappointing, because it was only a $1.28.

There are three major reasons that limit the career choices of TANF students. They are gender stereotyping, basic academic preparation, and traditional values. Most of

the vocational training programs offered throughout the state provide a much higher wage than minimum wage if they are male dominated occupations, high demand, new and emerging, and/or high tech.

Several factors prevent TANF recipients from considering nontraditional occupations because most are female. Many feel more comfortable in settings where other women are present, because of domestic violence issues and/or low self-esteem. Domestic violence was well documented in the *Profile of Multi-Challenged TANF Recipients and Challenges They face in Achieving Lifetime Self-Sufficiency* (1997) reviewed in Chapter II.

In most cases they do not want their femininity to be questioned. Often they will use the excuse that the high-demand traditional male construction jobs are dirty, smelly, and either too hot or cold according to counselors' comments made during civil rights review conducted for the ODCTE by the researcher. Yet they will take minimum wage jobs that require them to lift heavy patients, clean feces, urine, and other dangerous blood born pathogens.

More technical occupations that lead to high wages of above $18 per hour are resisted because of the required math and science academic preparation. Many TANF recipients fear occupations that have a high math and science foundation because they do not believe in themselves, even when they successfully complete their GED and/or have high math and science assessment scores according to the TANF program coordinators.

Lastly, traditional values TANF students have learned from their family, chosen religious doctrine, culture, and society have reinforced their identity as mother first rather than providers as discussed in Chapter II. Even after TANF students complete their

preparatory services component, where they learn about the importance and dignity of work, several have stated to their TANF program coordinators and to this researcher, during program visits, that they would quit their jobs to rear their children when they found the right man to support them. In fact, most are angry because their husbands and/or significant others never provided for them and their children like " they were suppose to."

The liberation models of the feminist pedagogy, which are concerned with the structured nature of power relations and systems of oppression based on gender, race, and class that are reinforced through education should be understood by all core partners (DHS, ODCTE, OESC, WIA, WtW, and OSRHE) (Maher, 1987). Action should be taken to remove such discriminatory structure and replace it with a collaborative working environment free of gender bias and stereotyping (American Association of University Women, 1992).

Wages, according to Gray and Herr's (1998) hierarchy of skills, increase with levels of skills. Level I include life skills and employability skills; Level II includes academic skills; and Level III include vocational (occupational) training and advanced workplace literacy skills. The higher the level is the higher the wage will be. This is confirmed by this study. TANF students that reach the highest level (vocational training and employability skills) earned the highest wages.

Sixth Month Employment Wage

The last hypothesis tested in this study was:

- Ho4 - There is no difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.
- H_4 - There is a difference between the wages of TANF students who received vocational training plus preparatory services and those who received preparatory services only at the sixth month point of time.

This hypothesis was tested with a *t*-test analysis.

Significant difference was found between sixth month employment wages of TANF students who received vocational training plus preparatory services and those who received only preparatory services. Even though there was significance difference at the sixth month point in time, the difference was again disappointing in magnitude. There was a difference of only a $1.26, which was three cents less than the initial employment wage.

The reasons for the small difference in wages are the same reasons discussed in the previous section. This just further justifies the need to encourage TANF recipients to enroll in nontraditional, high demand, new and emerging, and/or high tech training programs.

At the very least, TANF students should reach the maximum Tier possible as described by Taylor (1997). Skills listed under Tiers One and Two describe the skills needed to enter, stay, and advance in the low-skill market. The wage may be capped at 8

to 9 dollars per hour at Tier Two, but at least it is higher than minimum wage, which may be the best for which most preparatory services only completers can hope.

Recommendation for Practice

Career Technology Centers

In order to better serve the TANF population as well as all adults, the technology centers need to implement open-entry/open-exit training programs in every full-time program they offer. TANF recipients do not have the luxury of time to wait for entrance dates in order to enroll into vocational training programs, since they have a five-year life time limit to receive TANF benefits. The number of TANF recipients who left the TANF program to find employment with only preparatory services demonstrates the pressure they are under to find immediate employment.

In order to have open-entry/open-exit vocational training programs, it is imperative to use individualized learning activity packets (LAPs). This would also benefit individuals who have different learning styles and/or disabilities, because the LAPs would be tailored to their needs. Achievement standards of LAPs should be documented by measures of competency gains and measures of performance (*Measuring Learning Gains with Pretest/Postest*, 1998), which meet the criteria of the behaviorist model as described in Chapter II.

Chapter II also discussed radical education, which encourages the learners to be active learners and challenge social issues such as poverty and discrimination. However, this form of educational pedagogy should be abandoned for the critical pedagogy. Critical pedagogy enhances student motivation and learning because of the required active

participation of the students; requires students attainment of Tier III education skills; and empowers students as citizens and workers (Lake, 1994). This type of curriculum instruction and content can mesh with the behaviorist pedagogy. Critical pedagogy should enhance the TANF students' ability to learn by allowing them to see the connection between their learning and their empowerment to change their environment. Such connection could lead to a higher rate of competers from vocational training, as well as employment retention and advancement.

Jim Adams (2000) conducted a qualitative study of TANF students participating in the vocational training programs at the two-year colleges and the technology centers to determine the TANF students' views pertaining to the quality of work. TANF students believed that a "good job" had to meet the needs of their dependents at the very least. Most could barely afford to exist, much less survive comfortably on minimum wage. Many were fearful of leaving welfare for jobs that paid more than minimum wage but did not offer benefits, because they did not want to jeopardize state health benefits for their family. Adams' study reaffirmed the need for educators to embrace Dewey's (1916) assertion that "it is the aim of progressive education to take part in correcting unfair privileged and unfair deprivation, not to perpetuate them" (p.13). Thus, educators should take a stronger lead in career guidance to assure that all the support services are made available to the TANF students to ensure their employment success in a "good job."

Attendance policies for adults should not have the same restrictions as they do for secondary students. Since the majority of TANF students have children who periodically become ill, the TANF student misses school more than the secondary student. This has impacted a number of TANF students' ability to fully complete their vocational training

programs, which often decreases their chances to find employment or gain the earnings they might have received if they had been able to complete their training.

Many TANF recipients do not relocate for better jobs because of fear of loss of support from family and/or friends. TANF program staff members need to incorporate relocation strategies into the preparatory service component of the program. In many cases, the low wages and sometimes no wages of completers of vocational training are the result of the TANF recipient's refusal or inability (financial cost) to relocate.

The Partnership

DHS is aware that many of the remaining TANF recipients have either one or a combination of the following barriers:

1. Learning Disabilities (many of which are undiagnosed)
2. Domestic Violence
3. Substance Abuse
4. Mental Health Issues

As a result, ODHS will assess all TANF recipients to identify the above barriers within the first month of their eligibility. TANF recipients with issues that can be addressed through mental health agencies will be treated prior to enrolling them into a technology center or a two-year college TANF program. Such service(s) may continue after their enrollment for the purpose of maintenance and improvement. This should greatly improve their rates of retention in school and continued employment, since so many of them find it difficult to concentrate during classes and at work because of the above issues.

It is up to TANF programs and other partners to ensure that accommodations and transitional services are made for TANF students with disabilities. This will require all partners to receive training to be able to properly assist TANF students with disabilities.

All TANF recipients should participate in joint staffing after complete assessments to determine their participant-centered plans (individual student services strategy plan and career plan) with agency partners (Oklahoma Employment Service Commission [OESC], WIA, WtW, DHS, technology center's TANF program, two-year college's TANF program, community-based organization and/or agencies). TANF recipients should understand the wage, supply and demand of the career path they choose. Nontraditional, new and emerging, high tech, and high demand employment benefits should be explained before the TANF recipients design their plan. The low wages associated with the completers of vocational training can be directly correlated to their traditional career choices (i.e. certified nurses aide, secretaries).

All appropriate partners should "case staff" TANF recipients throughout their vocational training program in order for them to improve their rates of vocational completion to enhance their earning potential.

Once TANF recipients have found employment, all partners should work together through case management to ensure that the TANF recipients do not lose their job because of barriers (lack of nontraditional day care, lack of daycare for sick children, lack of transportation, domestic violence, substance abuse, etc.) Retention and upward mobility services strategy plans should be developed for each newly employed TANF student. This strategy may improve the student's rate of continued employment and wage.

Partnerships need to have a thorough understanding of the privacy laws, such as the Hatch Act and the Family Educational Right and Privacy Act. This will allow them to understand that agencies can share information thereby increasing the rate at which the TANF programs can provide complete follow-up information. If this cooperation had been received prior to this study, there is a possibility that all the hypotheses would have been found significant.

Recommendations for Further Study

Although this study did report age, gender, race, disabilities, limited English proficiency, level of education, and numbers of dependents as characteristics of the TANF students studied, it did not analyze them. Such studies should be completed to determine if one or all of these characteristics hinder educational achievement, employment, and wage of TANF recipients.

Studies also need to be continuously conducted to determine to what extent domestic violence and substance abuse hinder educational achievement, employment, and income of TANF recipients. Model programs that address these issues should be studied to determine effective practices that could be replicated.

The self-esteem of TANF recipients is damaged because of poverty, disabilities, substance abuse, and domestic violence. More studies of these issues need to be conducted to identify methods that could restore the damaged self-esteems of TANF recipients, because self-esteem has been linked by research to the success of individuals.

Local community partners throughout the state and the nation have already identified childcare and transportation as barriers to employment. Still, research needs to

be conducted to determine best methods to ensure access to transportation in both rural and metropolitan areas that are both economical and customer friendly.

The TANF population has been negatively stereotyped in our society and more importantly in the world of business and industry. The severity and effects of this stereotyping need to be investigated and reported to policy makers.

Most TANF recipients who find employment remain in "dead end" jobs that only pay minimum wages. Reasons why TANF students do and do not enroll in nontraditional, new emerging, high tech, and/or high demand needs to be researched. These findings need to be shared with community partners to create effective ways to strongly encourage TANF recipients to enroll in these types of training programs, because of their high wage potential outcomes.

This study did not analyze the performance outcomes (e.g., employment rate and wages) of those who received vocational training but did not gain employment related to their training. It is recommended that further studies be conducted to compare the outcomes of TANF recipients who received vocational training but did not gain related employment with those who did find related employment and those who only received preparatory training.

Earning and continued employment status should be analyzed each month for the first six months or longer to determine if performance measures improved, remained the same, declined, or even have a correlation at all based on the related placement status, unrelated placements status, or preparatory services only status of TANF students.

The impact of the "work first" requirement and other mandated provisions on TANF recipients' economic self-sufficiency which was dictated by federal laws and/or

state policies (e.g., Work Opportunity Act, Welfare to Work, and Workforce Investment Act) needs to be analyzed and reported to state and federal policy makers. These finding should also be reported to local community agency partners as well as community based organizations.

Local labor market areas' service providers collaborative efforts need to be analyzed to determine if they are meeting the needs and performance outcomes (i.e. economic self-sufficiency through training and/or employment) of their customers, including TANF recipients. This study of partner collaborations should include state, federal, county, and local governmental agencies, as well as local community based organizations, businesses, and industries.

Oklahoma's technology centers need to be reviewed to determine if their culture, policies, and procedures are conducive to the needs of TANF recipients and other at-risk populations, including adult and secondary students. Infrequently TANF students complain about their treatment based on their adult and/or TANF status.

The success rate as measured by completion, related employment, and earnings of TANF recipients that receive services from TANF programs in technology centers and those who do not should be compared to determine the value of the TANF program. In order for such a study to be valid, it is imperative that the samples have comparable identified barriers to training and employment.

It is further recommended that a comparison study be conducted between TANF programs in Oklahoma's two-year colleges and those programs in Oklahoma's technology centers to determine if either type of educational system achieves

significantly higher rates of performance outcomes. If differences are found, the reasons for the differences should be studied.

Finally a comparison should be carried out to determine if TANF training programs located in metropolitan areas have better performance outcomes than those in rural areas based on the availability of local resources, services, and economies.

REFERENCES

Adams, J. (2000). *Going to work: Examination of the meaning of work and welfare to work.* Unpublished doctoral dissertation, Oklahoma State University, Stillwater, Oklahoma.

American Association of University Women. (1992). *How schools shortchange girls.* Washington, D.C.: Author.

Americans with Disabilities Act of 1990, Pub. L. No. 101-336.

Adult Performance Level Study. (1975). *Adult Functional Competency: A Summary.* Austin, T.X.: University of Texas.

Auerbach, E. (1990). Toward a transformative model of worker education: A Freirean perspective. In S. H. London, E. R. Tarr & J. F. Wilson (Eds.), *The re-education of the American working class* (pp. 225-238). N.Y.: Greenwood Press.

Baker, P. (1984). "The Demonstration of Politics: Women and American Political Society, 1980-1920." *American Historical Review* 89:620-47.

Bayne, G. D., & Robertson, M. (1989). Unconscious sex bias in vocational education: Is there hope? *Journal of Studies in Technical Careers*, 9(1), 1-7.

Bishop, J. (1995). Expertise and Excellence. Working Paper 95-13. Center for Advanced Human Resources Studies. Ithaca, N.Y.: Cornell Univeristy.

Byrne, E. F. (1990). *Work, Inc.: A Philosophical Inquiry.* Philadelphia, P.A.: Temple University Press.

Brustein, M. & Mahler, M. (1994). *AVA Guide to School-to-Work Opportunities Act.* Alexandria, V.A.: American Vocational Association.

Bureau of Labor Statistics. (2000). *Employment Projections.* Fullerton [On-line]. Available: http://www.bls.gov/news.release/ecopro.t07.htm.

Carnevale, A. P., Reich, K., Johnson, N. C., & Sylvester, K. (2000). *A Piece of the Pubzzle How States Can Use Education to Make Work Pay for Welfare Recipients.* Princeton, NJ: Educational Testing Service.

Cammisa, A. M. (1998). *From Rhetoric to Reform? Welfare Policy in American Politics.* Boulder, C.O.: Westview Press.

Carl D. Perkins Vocational Education Act of 1984, Public L. No. 98-524.

Carl D. Perkins Vocational and Applied Technology Act of 1990, Public L. No. 101-392.

Carl D. Perkins Vocational and Technical Education Act of 1998, Public L. No. 105-332.

Collin, M. (1991). *Adult Education as Vocation: A Critical Role for the Adult Education.* New York, N.Y.: Routledge.

Culver, S. M., & Burge, P. L. (1985). Self-concept of students in vocational programs nontraditional for their sex. *Journal of Vocational Education Research,* 10(2), 1-9.

Dewey, J. (1916), *Democracy in eduation.* New York: Free Press.

Dewey, J. (1938). Experience and Education. New York, N.Y.: Macmillan.

Dippo, D., Schendke, A. & Simon, R. (1991). *Learning Work: A critical pedagogy of work and education.* New York, N.Y.: Bergin and Garvey.

Elias, J. L., & Merriam, S. B. (2nd Ed.) (1995). *Philosophical Foundations of Adult Education.* Malalbar, F.L.: Krieger Publishing Company.

Economic Research Service of the U.S. Department of Agriculture. http://www.ers.usda.gov/statefacts/OK.HTM.

Family Support Act of 1988, Public L. No. 100-485.

Gallagher, L. J., Gallagher, M., Perese, K., Schreiber, S. & Watson, K. (1998). *One Year After Federal Welfare Reform: A description of State Temporary Assistance for Needy Families (TANF) Decisions as of October 1997.* Washington, D.C.: Urban Institutue.

Golonka, S. & Matus-Grossman, L. (2001). *Opening Doors: Expanding Educational Opportunities for Low-Income Workers.* New York, N.Y.: Manpower Demonstration Research Cooperation.

Gray, K. & Herr, E. (1998). *Workforce Education: The Basics.* Boston, M.A.: Allyn and Bacon.

Hinton, M. (1999). "Oklahoma Gets Bonus for Progress on Welfare." *Daily Oklahoman.* Dec. 10, 11-A.

Howard, V.A. & Sheffler, I. (1995). *Work, Education, & Leadership: Essays in the Philosophy of Education.* New York, N.Y.: Peter Lang.

Hull, G. (1993). Hearing other voices: A critical assessment of popular views on literacy and work. *Harvard Education Review,* 63(1), 20-49.

James, W. (1909). The Meaning of Truth: A Sequel to Pragmatism. New York, N.Y.: Appleton.

Jobs Training Partnership Act of 1982, Public L. No. 97-300.

Kazemek, F.E. (1991). In ignorance to view a small portion and thing that all: The false promise of job literacy. *Journal of Education,* 173(1), 51-64.

Keesee, M. & Williams, L (1997). *Profile of Multi-Challenged TANF recipients and Challenges They Face in Achieving Lifetime Self-Sufficiency.* Oklahoma City, O.K.: Oklahoma Department of Human Services [On-line]. Available: http://odhs.org/ifinance/Research Studies/multichanllenged.htm.

Keesee, M. (1998). *Who Will Hit The Five Year Wall? Characteristics of Recipients Who are At Greatest Risk of Being Unsuccessful in Meeting the TANF Challenge.* Oklahoma City, O.K.: Oklahoma Department of Human Services [On-line]. Available: http://odhs.org/ ifinance/Research Studies/fiveyearwall.htm

Kickham, K., Harnden, A., Sasser, K., Effendi, N. & Bently, R. (2000) *Leaving Welfare Behind: The Oklahoma TANF Leavers Report.* Oklahoma City, O.K.: Oklahoma Department of Human Services.

Kincheloe, J. (1999). *How do we tell the workers: The socioeconomic foundation of work and vocational education.* Boulder, C.O.: Westview Press.

Klerman, J. A. & Karoly, L. A. (1995). *The Transition to Stable Employment: The Experience of U.S. Youth in Their Early Labor Market Career.* Berkeley, C.A.: National Center for Research on Vocational Education.

Knowles, M. (1970). *The Modern Practice of Adult Education.* New York, N.Y.: Association Press.

Lakes, R. D. (Ed.). (1994). *Critical Education for Work: Multidisciplinary Approaches.* Norwood, N.J.: Ablex Publishing Corporation.

Lindeman, E. (1956). *The Democratic Man: Selected Writing of Edward Lindeman.* Edited by Robert Glessner. Boston M.A.: Beacon.

Lyon, R. (1994). *Frames of Reference for the Assessment of Learning Disabilities – New Views on Measurement Issues*. Baltimore, M.A.

Maher, F. A. (1987). Toward a Richer Theory of Feminist Pedagogy: A comparison of "Liberation" and "Gender" Modules for Teaching and Learning. *Journal of Education,* 169 (3). 91-100.

Measuring Learning Gains with Pretest/Posttest. (1998). Stillwater, O.K.: Oklahoma Department of Vocational and Technical Education.

Murphy, L. C. & Vetter, L. B. (1990, August). *Federal Legislation to Eliminate Sex Discrimination in Vocational Education: "The Impossible Acts".* Newark, D.L.: University of Delaware.

Nightingale, D. S. & Haveman, R. H. (1994). *The Work Alternative Welfare Reform and the Realities of the job Market.* Washington, D.C.: The Urban Institute Press.

Nontraditional Employment for Women Act of 1991, Public L. No. 102-235.

Personal Responsibility and Work Opportunity Reconciliation Act of 1964, Public L. No. 104-193.

Ostow, M. and Dutka, A. B. (1975). *Work and Welfare in New York City.* Baltimore, M..A.: Johns Hopkins University Press.

Rehm, M. (1989) Emancipatory vocational education: Pedagogy for the work of individuals and society. *Journal of Education*, 121(3), 109-123.

Sadker, M. & Sadker, D. (1990). Confronting sexism in the college classroom. In S. Gabriel & I. Smithson (Eds.), *Gender in the Classroom: Power and pedagogy* (pp. 176-187). Urbana, I.L.: University of Illinois Press.

School-To-Work Opportunities Act of 1994, Public L. No. 103-239.

Secretary's Commission on Achieving Necessary Skills. (1992). *Learning A Living: A Blueprint for High Performance* (Stock No. 029-000-00440-4). Washington, D.C.: U.S. Government Printing Office.

Shavelson, R. (1996). *Statistical Reasoning for the Behavioral Sciences.* Needham Heights, M.A.: Simon & Schuster Company.

Skocpol, T. (1992). *Protecting Soldiers Mothers.* Cambridge: Belknap Press.

Skocpol, T., Abend-Wein, M., Howard, C., & Lehmann, S.G. (1993). Women's Association and the Enactment of Mothers' Pensions in the United States. *American Political Science Review* 87 (3):686-701.

Social Indicators of Equalities and Women. (1978). Washington, D.C.: U.S. Commission on Civil Rights.

Social Security Act of 1997. Pub. L. No. 106-113

Spencer, H. (1860). *Education: Intellectual, Moral and Physical.* New York, N.Y.: Appleton.

Steward, R. (1982). *Programs for People Oklahoma Vocational Education. Oklahoma* City, O.K.: Western Heritage Boos, Inc.

Tacking Liberties Collective. (1989). *Learning the hard way: Women's oppression in men's education.* London: Macmillan.

Taylor, J. C. (1997, April). *Learning at Work in a Work-Based Welfare System: Opportunities and Obstacles.* Boston, M.A.: Harvard University, Joyce Foundation.

Teles, S. (1998). *Whose Welfare: AFDC and Elite Politics.* Lawrence: University of Kansas Press.

Thomas, D. & Gray, K. (1992). An analysis of entry-level skills required for blue-collard technicians in electronics firms, *Journal of Vocational Education Research*, 16 (3): 59-77.

Tolstoy, L. (1967). *Tolstoy on Education*. Chicago, I.L.: University of Chicago Press.

Tweedie, J., Christian, S., Groginsky, S., Reichert, D., & Brown, A. (1998, February). *Meeting the Challenges of Welfare Reform Programs with Promise.* (ISBN Publication No. 1-55516-758-6) Washington, D.C.: National Conference of State Legislatures.

Valli, L. (1986). *Becoming clerical workers.* Boston: Routeledge.

Vocational Education Act (Title II, Education Amendments of 1976). Pub. L. No. 94-482.

Vogel, S. & Stephens, R. (1998). *Learning Disabilities, Literacy, and Adult Education.* Baltimore, MA.

Welfare to Employment Vocational Training Program Guide. (2001). Stillwater, OK: Oklahoma Department of Career and Technology Education.

Workforce Investment Act of 1998, Public L. No. 105-220.

Yates, M. (1994). *Longer hours, fewer jobs: Employment and unemployment in the United States.* New York, N.Y.: Monthly Review Press.

Yuen, C. Y. (1983). International barriers for women entering nontraditional occupations: a review of the literature. *Occupational Education Forum,* 12 (2), 1-14.

APPENDIX

Institutional Review Board Waiver Document

Pursuant to 45 CFR 46 www.vpr.okstate.edu/irb

APPLICATION FOR REVIEW OF HUMAN SUBJECTS RESEARCH

Submitted to the
OKLAHOMA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD

Title of Project: The Impact of Vocational Training on Employment Rates and Wages for Recipients of Temporary Assistance for Needy Families.

Is the Project externally funded? ___Yes _x_ No If yes, co

Name of Agency Grant Number

IRB not needed if not using human subjects. This is secondary data? IRB not necessary.

Sharon Bacon IRB Office

Type of Review Requested: _x__Exempt ___Expedited

Principal Investigator(s): *I acknowledge that this represents a*

Lou Ann Hargrave
Name of Primary PI (typed) Signature of PI

Occupational Adult Education Department	Education College	
1601 West Broadway, Enid, Oklahoma 73703 PI's Address	580/237-3411 Phone	louhargrave@okcareertech.org E-Mail

Adviser (complete if PI is a student): *I agree to provide the proper surveillance of this project to ensure that the rights and welfare of the human subjects are properly protected.*

Lynna J. Ausburn, Ph.D. Adviser's Name	Signature of Adviser	May 20, 2001 Date
Curriculum and Educational Leadership Department		Education College
217 Willard Hall, Stillwater, Oklahoma 74078-4042 Adviser's Address	405/744-8322 Phone	alynna@okstate.edu E-Mail

VITA

Lou Ann Hargrave

Candidate for the Degree of

Doctor of Education

Dissertation: THE IMPACT OF VOCATIONAL TRAINING ON EMPLOYMENT RATES AND WAGES FOR RECIPIENTS OF TEMPORARY ASSISTANCE FOR NEEDY FAMILIES

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Windfield, Kansas, On December 12, 1954, the daughter of Charles and Vivian Hargrave.

Education: Graduated from Antlers High School, Antlers, Oklahoma in May 1973; received Bachelor of Science degree in Home Economics from Oklahoma State University, Stillwater, Oklahoma in May 1977; received Master of Science degree in Occupational and Adult Education from Oklahoma State University, Stillwater, Oklahoma in May 1981; received Doctorate degree in Occupational and Adult Education from Oklahoma State University, Stillwater, Oklahoma in Fall of 2001.

Experiences: Taught Vocational Home Economics from 1977-79 in Broken Bow High School in Broken Bow, Oklahoma; Provided career information as a Career Specialist for the Oklahoma Department of Career and Technology Education from 1979-81 in McCurtain, Choctaw, and Pushmataha Counties; Acted as the Equity Coordinator for the Oklahoma Department of Career and Technology Education from 1981-1996; Currently serving as the Temporary Assistance for Needy Families (TANF) Coordinator for the Oklahoma Department of Career and Technology Education.

Professional Memberships/Honors: Oklahoma Association for Job Search Training, Past Secretary, President-Elect; Phi Delta Kappa, Vice President; Presented citation by Oklahoma House of Representatives for promotion of the Displaced Homemakers and Single Parent program and the Careers Unlimited program; Outstanding VEEC Advisor Award; Presented Pioneer Woman Award by Displaced Homemakers Association; AVA Vocational Educational Equity Council Outstanding Member; AVA Administration Division, Past Secretary; AVA Vocational Educational Equity Council-National President; Oklahoma Women in Education Administration Past Treasurer; OVA Teacher of the Year 1983-1984, New and Related Services Division.