

AFDC Students in the California Community Colleges 1992-93

Walter Charles Wiseley
B.A., University of California, Davis, 1989

Thesis

Submitted in partial satisfaction of
the requirements for the degree of

Master of Arts

in

Sociology

at

CALIFORNIA STATE UNIVERSITY, SACRAMENTO

FALL
1998

AFDC Students in the California Community Colleges 1992-93

A Thesis

by

Walter Charles Wiseley

Approved by:

_____, Committee Chair
Robert Kloss, Ph.D.

_____, Second Reader
Dean S. Dorn, Ph.D

Date: _____

Student: Walter Charles Wiseley

I certify that this student has met the requirements for format contained in the University format manual, and that this thesis is suitable for shelving in the Library and credit is to be awarded for the thesis.

Dean S. Dorn, Graduate Coordinator

Date

Department of Sociology

Abstract

of

AFDC Students in the California Community Colleges 1992-93

Current Welfare Reform policies limit the time available for education and training for welfare recipients to one year or less. Training that provides these recipients with skills to earn above poverty wages is necessary for many of them to rise out of poverty. Whether vocational education of short duration in California Community Colleges can be a vehicle for economic mobility was investigated in this study.

Data from the California Community Colleges, the California Department of Social Services, and California's Employment Development Department was used to determine whether long term economic benefits were available to graduates of vocational education programs in the California Community Colleges.

Completing a vocational Certificate or Degree program of 18 units or more at a California Community College provided long term economic benefits to nearly 70 percent of unemployed AFDC female students of prime working age. Alternatively, although unemployed female students not completing a program of 18 or more units had increases in earnings averaging \$1,500 each year for three years after college, they did not move out of poverty. More importantly, this

group of women did not complete programs at rates even close to the rates of their comparison group of unemployed female students.

_____, Committee Chair
Robert Kloss, Ph.D.

Acknowledgements

This study was made possible through the efforts of numerous people in the California Community Colleges. I owe an immense debt to both Dr. Phoebe Helm, Vice-Chancellor of Vocational Education in the early 1990's, and Chris Willis, Dean of Vocational Education, who had the idea to use the California Unemployment Insurance data to follow community colleges students into the workforce, and the persistence to find the funding and start the data matches. I owe more than I can say to Dr. Marilyn Jorgensen, a Specialist in Vocational Education, and Jan Paulsen in the Management Information division at the Chancellor's Office who worked tirelessly for years with Chris and the Research Advisory Committee to develop the specifications for the data and the wage studies that proceeded this research.

I owe an immense gratitude to the members of the advisory committee who invested years of their time and energy working with me on those earlier studies. I owe particular thanks to Dr. Jack Friedlander, Vice President of Academic Affairs at Santa Barbara Community College, who not only chaired the committee all these years but produced the pilot study on which the wage study system was built.

I am also deeply indebted to Jorge Sanchez, Dean of Vocational Education at Coast Community College district, and Dr. Frankie Laanan who constantly prodded me to coauthor articles on the wage data with them as well as start this study to finish my Masters degree.

I can not thank enough Dr. Robert Kloss and Dr. Dean Dorn in the Sociology department at CSU Sacramento who not only showed me the way to finish my thesis but provoked my critical thinking in directions that made this thesis meaningful. I would also like to thank Dr. W. Norton Grubb at UC Berkeley, for his insightful books (Broken Promises, Learning to Work, and Working in the Middle) on the economic benefit of education and his clear descriptions of the complexities of outcomes of community college education. And, I am delighted that he has agreed to working with us at the Chancellor's Office on interpreting our wage studies in the coming years.

I also want to give my deepest thanks to Loretta Neubert who took over many of my household duties and provided the loving support that allowed me to dedicate the time to complete this thesis.

Table of Contents

Acknowledgements	vi
List of Tables	x
List of Figures	xii
Chapter	
1. Introduction.....	1
Community College Benefits for Welfare Recipients.....	5
2. Theory and Review of the Literature.....	11
Education and Mobility	12
Social Control: The Americans	15
Social Control: The Europeans.....	18
Social Stratification.....	19
Education, Class and the Labor Market.....	21
Education, Capitalism and Social Policies	27
Social policy and poverty.....	28
The effects: economic and social policies and poverty.....	35
Poverty: the measure.	44
Welfare policy.....	45
Current Welfare Policy	47
California Implementation of PRWORA	52
Early Effects of PRWORA and CalWorks	54
Education and Training Effects for Low Skilled Workers	60
3. Methodology.....	65
Datasources	65

Analytic Approach	68
Data Cleaning	71
4. Results	73
5. Conclusions.....	79
Indications for Further Research.....	84
Appendix: Tables.....	86
Bibliography.....	118

List of Tables

Table:	Page
1	Examples of Poverty Thresholds for Four-Person Families..... 87
2	Students in the 1992-93 Academic Year 88
3	All Students Leaving CCC in 1992-3 for At Least One Year..... 89
4	Quarters with Earnings in CA UI Covered Employment 91
5	Quarters with Earnings in CA UI Covered Employment 92
6	Third Year After College Earnings in Constant 1995 Dollars..... 93
7	Output of ANOVA Analysis: Earnings by Program Type 94
8	Output of ANOVA Analysis: Earnings by AFDC & Program 95
9	Third Year After College Earnings by AFDC Status 96
10	Unemployed Female 17-57 Year Old Students Leaving College in the 1992-93 Academic Year Income in Constant 1995 Dollars by Educational Attainment by Program Area 97
11	Twenty Highest Enrollment Programs Ranked by Highest Enrollment 99
12	Analysis of Variance for Vocational Unemployed Females 17-57..... 100
13	Analysis of Variance for Vocational Unemployed Females 17-57..... 102
14	ANOVA Output for Model: Educational Attainment=AFDC Program Vocational Unemployed Females 17-57..... 104
15	Educational Attainment for Vocational Unemployed Females Students 17-57..... 105
16	Logistic Regression Analysis: Completion by AFDC 106
17	Significance of Earnings Differences for Three Years After College..... 107

18	Educational Attainment by AFDC Status, Precollegiate Basic Skills (PBS) and Limited English Proficiency (LEP) Status for Unemployed Female 17-57 Year Old Vocational Students Leaving College in the 1992-93 Academic Year.....	109
19	Logistic Regression Analysis: Completion by AFDC and Precollegiate Basic Skills Status.....	110
20	Unemployed Female 17-57 Year Old Students Third Year After College Earnings by Educational Attainment, AFDC Status, Precollegiate Basic Skills (PBS) Status	111
21	ANOVA Output for PBS effects on Third Year After College Earnings For Those Working in All 4 Quarters	112
22	Completers Third Year Earnings in Constant 1995 Dollars For Those Working in Any Quarter.....	113
23	Completers Third Year Earnings for Those Working All 4 Quarters in Constant 1995 Dollars	114
24	Noncompleters Third Year After College Earnings for Those Working Any Quarter in Constant 1995 Dollars.....	115
25	Noncompleters Third Year After College Earnings for Those Working All 4 Quarters in Constant 1995 Dollars	116
26	Unemployed Female Students 17-57 Years Old Educational Attainment and CSU Continuation Status	117

List of Figures

Figure:	Page
1 Critical Paths Through the Community Colleges For AFDC Recipients.....	7
2 Median Income for Third Year After College for Unemployed Females 17-57 by Type of Coursework.....	74
3 Annual Median Earnings for Three Years After College for Unemployed Female Credit Vocational Students 17-57 by Type AFDC Status.....	75
4 Vocational Unemployed Female Students 17-57 Educational Attainment by AFDC Status	77
5 Unemployed AFDC Female Vocational Students 17-57 Third Year After Colleges Earnings by PBS Status	78
6 Completion and Transfer of Vocational Unemployed Female Students 17-57	82

Chapter 1

Introduction

Education has long been acclaimed as the vehicle for mobility between social and economic classes. Most people believe that education provides resources to take advantage of opportunities often unavailable to them through any other means. The recent attention to education's role in providing vocational education will test the ability of education to act as a mobility mediator for the low economic classes currently being effected by the welfare reforms of the last decade.

The urgency of defining education's role in welfare reform is generated by a fundamental change in the U. S. public debate about welfare in recent years. The terms "welfare" and "jobs" are increasingly being linked in public discussions and the policies emanating from them. "The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) passed by Congress and signed [into law] by President Clinton in August of 1996 represents the largest single change in federal provisions since the 'Great Society' years of the Lyndon Johnson administration" (Association of California School Administrators, 1998).

Current "Welfare Reform" policies focus on "Work First" and minimal training when necessary to move people in poverty into the workforce. The intent is to find employment for people receiving public assistance. The 1996 PRWORA replaced the Aid to Families with Dependent Children (AFDC) with the

Temporary Assistance to Needy Families Block Grant (TANF). The legislation eliminated the *entitlement* in assistance programs, and among other provisions, placed time limits on receipt of benefits and required states to “move recipients into work training or jobs” (Sahr, 1998).

There has been, however, a radical disappearance of jobs that pay adequate wages for individuals with less than a high school education that would move them out of poverty. “Unless one has at least a high school diploma (and better yet, a college degree), it is extremely difficult to earn enough to support a family” (New York State College of Human Ecology, 1996). The problem states face is that unless recipients improve their educational status, it will be difficult for states to move those welfare recipients with low educational attainment into steady work.

The 1996 PRWORA does allow vocational education to count as work for as long as 12 months for up to 30 percent of those counted in the work participation rates required by the legislation. Policymakers continue to battle over issues in the PRWORA and legislation continues to amend its provisions. For example, Senator Paul Wellstone proposed an amendment to the Higher Education reauthorization Act (HEA) in the summer of 1998 that would have expanded “educational opportunities for recipients to include all types of postsecondary education and would extend the time limit for these activities” (American Association of Community Colleges, 1998a). The American

Association of Community Colleges (AACC) (1998a) took the position that “the current 12 month limit hampers an individual's ability to find lasting, satisfying employment.” In that position statement, they note that increasing the amount of time that a welfare recipient can participate in vocational education is “the most effective strategy for achieving self-sufficiency.” And, they maintain that: “Education and training for welfare recipients remains a priority for several other Capitol Hill lawmakers.”

The Republican controlled conference committee, however, rejected the Senate provision to expand the time limits for education and training and the ability of states to use postsecondary education strategies to meet their “work participation rate” requirements. “Instead, the Comptroller General is directed to study the effectiveness of educational approaches and rapid employment approaches to helping welfare recipients and other low-income adults become employed and economically self-sufficient” (American Association of Community Colleges, 1998b).

Current research monitoring the effects of the PRWORA indicates some devastating consequences for the recipients being denied benefits under the current provisions. The National Coalition for the Homeless (NCH) (1998a) have released preliminary reports from studies on the impact of welfare reform on homelessness from monitoring efforts in Los Angeles, Atlanta, Chicago, and various Health Care for the Homeless projects across the nation.

In the Los Angeles study, the Los Angeles Coalition to End Hunger & Homelessness reporting on the impact of welfare reform on women and children from April 1997 to November 1997 found that 20 percent of 602 families surveyed had had their incomes cut or reduced. Of those, 55 percent became homeless. For those families surveyed where no one was employed, “the reasons for not working included lack of child care, homelessness, *lack of education and skills* [emphasis added], and lack of transportation” (NCH, 1998a). Even for those who did find jobs, seventeen percent of the 602 families were employed but 70 percent of those employed were employed “just above or below minimum wage” (NCH, 1998a).

In Atlanta, beginning in June 1997, 161 personal interviews with families who had already become homeless were conducted by the Task Force for the Homeless in 14 homeless service agencies. Of the 161 homeless women interviewed, 93 percent had received public assistance in the previous year; “of those, 50% had their benefits terminated within the past year and 23% had their benefits reduced” (NCH, 1998a).

Other welfare reform monitoring projects presented in an issue brief, *Early Findings on Welfare and Well-Being*, from a joint project of the Children’s Defense Fund and National Coalition for the Homeless (1998) have found unprecedented homelessness for children concentrated in former TANF families. They report that other studies show between 10 and 29 percent of former and

current TANF recipients increasingly can not pay their rent and were either evicted or face eviction. In addition, they report that 40 to 71 percent who left TANF did not find employment and for those who did find employment, “the proportion with above-poverty wages is small and dwindling.”

Community College Benefits for Welfare Recipients

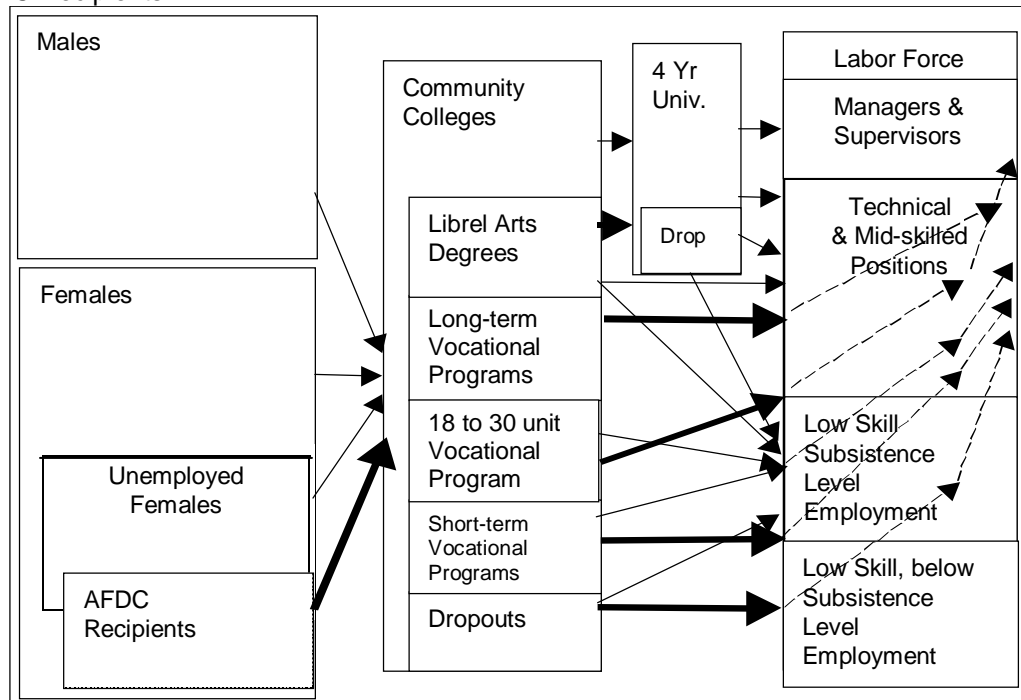
Clearly without additional skills current and former TANF head of households and their families face an increasingly desperate future. Short-term job training, however, has been shown to be ineffectual in raising people out of poverty (Grubb, 1996a; Jencks, 1993). Recent studies have provided evidence of long term economic benefits to sub-Bacalauriate education provided by community colleges (Grubb, 1996a, 1996b; Sanchez, Laanan, and Wiseley, 1999). Whether the long term effects of community college education extend to all classes as social mobility, human capital and certification theories would suggest or whether the earnings benefits of community college education are short lived or nonexistent for those entering with low skills or little attachment to the labor force to move out of poverty must be answered if we are to inform policy being made in the coming years.

Theories of class and status structures in America have long been used to understand the effects of education on mobility and education’s role in solving the social problem of poverty in America. Many studies over the past thirty years have provided strong evidence of economic benefits of postsecondary education.

Most of the work in developing the relationship of education to earnings, however, focus on comparing high school dropouts, high school graduates, those with “some college,” and those with four-year college degrees.

Community college degrees and certificates are included in the “some college” category and until recently, little was known about the effects of community college education on the life chances of graduates from those institutions. Many colleges are responding to the needs of the current population of welfare recipients with very short-term programs that meet the limitations of current welfare reform policies. This study demonstrates that vocational training of sufficient length in California Community Colleges does function to move unemployed women on welfare living in poverty, who may have weak or no attachment to the labor force into employment that will move them out of poverty. The study also shows, however, that vocational training in community colleges that is not of sufficient length or content does not, however, move many of them out of poverty but simply turns them into the “working poor,” often still below the poverty line. This study provides evidence that programs of 18 to 30 units, usually one year or less, at community colleges in California can provide earnings benefits to raise and keep them out of poverty. Figure 1 below provides a visual view of the basis for this study.

Figure 1
Critical Paths Through the Community Colleges
For AFDC Recipients



The figure above shows the paths through community colleges for the unemployed female AFDC recipients. The dark solid lines show their paths based on human capital (Becker, 1964, 1975; Rosenbaum, 1976; Hope, 1984) and mobility (e.g. Meyer, 1977; Collins, 1979; Grubb, 1996) theories. The dotted lines show the paths that the belief system of individualism would provide for those who want to work hard to succeed (Cagan, 1978; Banks, 1989; Bellah and Lasch, 1978; Bellah et al., 1985; Grubb & Lazerson, 1982; Ward, 1883; Wilson, 1996). Whether the group of AFDC women who were unemployed while in college gain mobility in the labor force through education and if so, under what circumstances are addressed by this study. Whether education as the vehicle for

mobility between social and economic classes will decrease welfare roles may depend on the ability of short term training to provide sufficient benefits for long term success, as shown by the dotted lines within the labor force box. Critics of those theories suggest, however, there is another aspect of the question this study must address to provide an understanding of the effects of community college programs. The critics of mobility theories recognize that education has no power over the economic opportunities available to the citizenry (Grubb, 1996b, 1999; Grubb & Lazerson, 1982; Jencks, 1996; Wilson, 1996). Instead they suggest that education, especially at the low-skill levels, simply reorders the queue of the under and un-employed.

Moreover, they believe that, the educational systems in America are themselves structured under a class model that has only minor movement toward equality of opportunity and back as the focus of society sways toward using the redistributive effects of equal schooling and back again to meet the economic demands of the social structure (Jordan, 1998; Grubb, 1996, 1998; Grubb & Lazerson, 1982; The National Center for Public Policy and Higher Education, 1998). While four-year universities are increasingly available only to upper economic classes due to cost and location, the community colleges may be the only possible post secondary choice for many citizens in the middle and lower classes (Grubb & Lazerson, 1982).

The job opportunities for which graduates of these institutions compete are reflective of the resources necessary to enter them. University graduates typically vie for managerial and supervisory positions while community colleges prepare students for labor intensive and technical positions (Grubb & Lazerson, 1982; Grubb, 1996b, 1998). The new mini-programs being developed at community colleges for low-skilled low-wage jobs presents a new level of stratification in the system of higher education in America. And, the job opportunities for which that level of education prepares the students are far more subject to social and economic policies regardless of the effects of education on mobility.

This study provides evidence that vocational education in California Community Colleges can serve as a mechanism for social mobility. Although the study will does not attempt to show a reordering the queue of the under- and unemployed in California as suggested in the literature, it will provide strength to their argument by exhibiting the minimal effects of short term job training. The study exposes the inability of short term training to provide a sustainable income after college required for the economic structure to absorb them as additional long term employees in the labor market under the current economic and social policy paradigms.

Theories addressing why short term training is unable to provide sustained employment is discussed in the literature but further research is required on it's

effects with the new social policies recently enacted. Even with the new policies, however, understanding the constraints they place on the economy and education and the effects those policies will have on similar populations as the one in this study is urgently needed. Moreover, whether the constraints of the economic system as currently maintained simply allows displacement of current workers with newly trained low-skilled workers in jobs that will not provide the long term economic benefits available to other economic classes through the educational system should be researched to provide a basis for educational choices being made by those in the low-skilled population.

This thesis will discuss the social policies and economic strategies employed over the last century that are a product of a belief system that ignores the structural basis for the social problem of poverty and focuses blame on the individual, family, and culture. Evidence is provided that the unemployed women receiving AFDC in the 1992-93 academic year not completing programs of at least 18 units moved into jobs with below subsistence wages and did not gain sufficient resources to continue in the labor force much less move out of poverty. More importantly, the study raises questions about the resources available to continue in community colleges long enough to complete an 18 unit program. If the literature is correct, that inability to continue in either education or employment due to a lack of resources will further diminish their attachment to the labor force.

Chapter 2

Theory and Review of the Literature

Individualism is a basic and fundamental concept of American social thought and culture (Cagan, 1978; Banks, 1989; Bellah and Lasch, 1978; Bellah et al., 1985; Grubb & Lazerson, 1982; Ward, 1883; Wilson, 1996). Elizabeth Cagan called individualism a "cornerstone of democratic society" in her 1978 article on educational reform. In this system of beliefs, life chances are seen as a result of individual effort, hard work and personal achievement. The opportunity to improve one's "station" in life is presumed by many to be equally available to all members of American society regardless of race, ethnic background, social class or gender. Even those with the greatest barriers to success accept this belief with little or no questioning of the impact of social structures on their life chances (Grubb, 1996a; Grubb & Lazerson, 1982; Jencks, 1993; Wilson, 1996).

The focus on the individual results in beliefs that have existed since early American culture began to develop. It is the failure of the family (Grubb & Lazerson, 1982; Jencks, 1996; Wilson, 1996) and "...the moral fabric of individuals, not the social and economic structure of society, that is taken to be the root of the problem" (Wilson, 1996: p. 164).

Education has been suggested as the main vehicle for both instilling these values in social citizenry and providing the equal opportunity to achieve their

benefits. The realization of this ideal, however, has not come within reach of large segments of American society. Yet, in America, the schools have been very successful in the conveying the values of individualism, but much controversy remains on the ability of schooling to meet the expectations of that ideal (i.e. providing for mobility).

In order to understand how the structural inequalities continue to be ignored in both the belief system of most Americans and the social policies that are developed because of them, it is necessary to understand the economic and social functions education provides as well as the economic reality of the social and economic structures of the American capitalist economy that education works within. First the theories of education as a vehicle for mobility will be discussed. Second, the evolution of the belief system of individualism and its consistent focus on the failure of individuals, families, and whole groups of people will be presented. Next, the evolution of the labor market in America and the recent globalization of both the labor market and the economy will be discussed. And lastly, the ability of education to provide mobility within the constraints of the social policies that have resulted from those beliefs and the influences of the capitalist economic system will be scrutinized.

Education and Mobility

Since the earliest sociological discourses, both in America with those by Ellsworth Faris (1928), Albion Small (1897) and Lester Ward (1883) and in

Europe by Emile Durkheim (1903) and Max Weber (1906), education has been enveloped in the explanations of social construction. Within the sociological writings on education and stratification a variety of approaches, questions, and concerns are developed. Organizational theorists (e.g. Bendix, 1966; Bidwell, 1965; Meyer, 1970; Meyer and Rowan, 1978; Meyer and Scott, 1983; Slate, 1976) discuss the roles of schools in society "with an awareness of political and organizational power" (Perrow, 1986; p. 265). Other theorists "applied ideas about work and occupations to school teaching and administration...(e.g. Gordon, 1957; Gross, Mason, and McEachern, 1958; Lortie, 1975)" while others "probed the subcultures of schools and colleges (e.g. Coleman, 1961; Trow, 1962; Wallace, 1966)..." (Bidwell, 1988; p. 449).

During the past hundred years, however, the idea of schooling as mobility-mediator has increasingly been criticized. "While social inequality is a social fact in American society, the contribution of schooling to inequality is a matter of debate" (Mehan, 1986; p. 1). And, whether schooling makes a difference in the life chances available to members of a society is the essence of the larger topic examined and presented in this thesis, that of the structural mechanics of social stratification. To understand how one attains positions in the American society, prevailing stratification models will be presented while focusing on the role that schooling plays on later life chances as suggested by those models. Furthermore, how access to education is managed to function within the social

stratification system to reinforce the structural inequities of that system must be understood.

The most central concerns of theorists writing in the sociology of education and stratification can be described by two somewhat generic and evolving terms - *Form* and *Content*. Research analyzing form and content discusses the relationships between education, social stratification and mobility, and issues of justice. Moreover, those sociologists discuss how, in the educational mechanisms, "life chances are embedded in the institutional fabric of society" (Bidwell, 1988; p. 449).

Although the literature has generally, since the beginnings in America at least, dealt with the institution, many sociologists have shifted their focus of attention from institutional topics to more group and individual-centered topics of study. This shift to a more ethnographic approach has generated a preponderance of classroom level studies. To describe the relationship between educational attainment and social mobility, however, a synthesis of the research into classroom and counselling interactions, the social organization of education, and the society-level socio-political analysis of institutional change is necessary. The synthesis has begun to crystallize in work both recently published and research underway by conflict theorists, symbolic interactionists, and ethnomethodologists to mention a few (Turner, 1988). The macro approach to stratification has shown us how the society is stratified, or rather, the location of

individuals in the system, and what movement there is within the stratification system. The micro oriented approaches inform us of the daily interaction processes and mechanisms of the stratification system (Mehan, 1986; p. 1).

A variety of components of the social stratification system seem to be common to nearly all the stratification paradigms in the literature: background socioeconomic variables, attained socioeconomic status, and schooling, where attained status is a function of background and schooling. And, the various theories of stratification can be distinguished most generally on the role they give to education. Two roles for schooling seem to predominate in the social stratification theories: one of mobility-mediator and the other of reproducer of the *status quo*.

No discussion of research on education would be complete without mentioning sociologists such as Durkheim, Weber, Ward, and Sorokin or the social philosopher John Dewey. Questions of social control dominated sociology in the first half of the 20th century. "Americans and Europeans approached the issue from different starting points," (Bidwell, 1988; p. 450) however, and some basic delineation of their differing arguments is called for.

Social Control: The Americans

As early as 1883 Lester Ward posited in his *Dynamic Sociology* that "The principle mechanisms of social betterment...were mechanisms of individual improvement." Like many sociologists to follow (most until World War II and

many to the present), he believed that individuals were what made up society, change them and you change society. Education then, "by virtue of its beneficial effects on a person's values and knowledge, was among the chief instruments of social progress" (Bidwell, 1988; p. 450).

These sociologists focused on the *form* of education. They proposed that education taught individuals how to function in a complex social organization. John Dewey (1900), possibly the most cogent advocate of this approach, described education as a preparation for adult society. Schools were to "form students' capacity for independent, critical social practice." Albion Small, Dewey's colleague at the University of Chicago, included *content* in his idea of education's role. He believed that along with learning social skills, students needed practical skills to function in society (Bidwell, 1988; p. 450).

In the mid nineteenth century the educational reformer Horace Mann described the role of education as one in which education developed character and discipline necessary for adult success (Grubb & Lazerson, 1982). By the turn of the century, reformers began focusing more and more on content as awareness of the contradictory and "potentially revolutionary" nature of education providing both the concepts of "individual emancipation," independent thought and critical awareness, and the social control aspects focusing on "the behavior appropriate for class-differentiated citizenship" (Grubb & Lazerson, 1982; p. 293).

The concepts of preparing students for citizenship were increasingly being replaced by the idea that schooling taught job skills (Grubb & Lazerson, 1982).

The shift from liberal education to vocational education increased throughout the twentieth century. Education became “the primary mechanism for preparing individuals for labor markets” (Grubb & Lazerson, 1982; p. 293). The transformation of education to vocational institutions “extended the class divisions of schooling and further undermined the conception of liberal education” (Grubb & Lazerson, 1982: p. 293). Grubb and Lazerson (1982) further state that “Older conceptions of liberal education have been eliminated at every level of education (including higher education) in favor of vocational conceptions” (P.293). And, they conclude that this transformation implies that with this emphasis on vocational goals, schooling is now evaluated only by rates of return on investment in the form of increased earnings.

Grubb and Lazerson (1982; p. 54) indicate that Becker’s development of the “human capital” theory as the economic effects of investment in education on employment and earnings in the 1960s “completed the identification of education with income returns.” More importantly they believed that that association of education and economic returns “codified the basic principle for evaluation: investment in children, and in educational programs specifically, ought to be undertaken only when the return in the form of increased earnings is at least as high as the return to private investment.” Moreover, the linking of education with

return on investment set barriers for those endorsing legislation and policy to utilize education to benefit children or the lower class. They further emphasized that:

It has become impossible to justify public spending on schools that are challenging, enjoyable places for children; only demonstration of future benefits – in cognitive skills, in reduced delinquency and crime, above all in earnings differentials – is regarded as a legitimate argument.

Social Control: The Europeans

Durkheim believed as the Americans did that schooling forms the student's habits, values, and skills which are needed to succeed in society. He believed, however, that "only the state, in contrast to the family, religious orders, or other parochial groups, could educate with sufficient disinterest to serve a whole nation." Durkheim was less concerned with teaching critical thought and practical action than were his American counterparts and more concerned with developing a national identity and preparing the student for social integration. In Durkheim's argument, three properties of schooling made it a natural vehicle for socialization: (1) schooling prepared the student for the regularities of the workplace, (2) teachers mirrored the authority figure of the state, and (3) students, probably for the first time, experienced a "society of equals" (Bidwell, 1988; p. 451).

Max Weber, unlike Durkheim, was not concerned with education per se. His delineation of education's effects on society stemmed from his analysis of social stratification. He proposed that education became a means of legitimation

of traditional status honor by preparing students not for work so much as a "conduct of life" (Weber, 1946; pp. 242-243, 426). Although he saw education instituting new competition for status honor with training for occupations such as engineering and law, he also explained that major status groups would control the access and content of university education (Bidwell, 1988; p. 451).

Social Stratification

As the Great Depression took hold in the U.S., the optimism of the earlier sociologists waned. Social stratification was a prime topic among the new concerns of the times. The forms and mechanisms of stratification were now seen to include the educational system.

Pitirim Sorokin was one of the first American sociologists to tie education to larger systems of social stratification (Ritzer, 1988: p. 52). He, like Weber, understood that educational systems were not the great vehicles for open social mobility that others (e.g. Parsons) suggested they were. He did believe that they could be open if familial control of access, finance and content were reduced, which he believed was becoming the case in America by 1927. Recent research of Scottish Universities, where access is granted more by ability, seem to suggest he was correct (Hope, 1984; Wilson, 1996). It is important to recognize that Sorokin believed the schools to be mechanisms of stratification, what he called "aristocratization" not a democratizer or leveler of society.

Sorokin also recognized that when an educational institution gained autonomy, it would substitute its own agenda, values, etc. for those of the prior controlling influences i.e. family, military, and the church. Two indicators of institutional autonomy were identified by Sorokin: "(1) the degree to which individuals' educational attainment is independent of ascriptive characteristics; and (2) the degree to which individuals' occupational attainment depends upon the kinds and amounts of schooling attained"(Bidwell, 1988; p. 452,453).

Research in education has progressed in the field of stratification through a variety of approaches. Studies of educational opportunity allocation (Alexander et al., 1975, 1978; Bowles & Gintis, 1976; Coleman, 1966; Jencks, 1972, 1979, 1983; Mehan, 1981, 1986; Sewell et al., 1975, 1976) --- Sorokin's first indicator of institutional autonomy --- describe the differences in education available in a stratified society as well as the effects of schooling itself with socialization in such a society (Illich, 1970; Lauter and Howe, 1970 – cited in Skolnick, 1973) and the methods by which both students and faculty maintain the stratification system (Mehan, 1979, 1984). Even in such a contrasting array, which represents only a few grains of sand on the beach of current literature, a consistency arises. "...primary sources of individual differences in educational life chances arise more from the traits of students than from differences of access to school resources or exposure to school social organization" (Bidwell, 1988; p. 456).

This necessarily includes the social structure *visa vi* the effects of the social environment before, during and after schooling (Wilson, 1996).

Occupational attainment as a topic for research, Sorokin's second indicator, has followed two distinct perspectives: 1) "credentialing" or "Signalling", the practice where certificates are awarded by schools which employers accept, is questioned or rather the relationship of what the students learn while attaining the credential and the jobs the credentials qualify students for is questioned, by some sociologists (e.g. Meyer, 1977; Collins, 1979; Grubb, 1996); 2) and "human capital" where "schooling endows individuals with cognitive and motivational resources that are not otherwise available and that are essential for productive life on the job and elsewhere" (Bidwell, 1988; p. 454) are studied by others (e.g. Becker, 1964, 1975; Rosenbaum, 1976; Hope, 1984).

Education, Class and the Labor Market

To understand how education functions in the current capitalist economy of America it is necessary to describe the transformation of the labor market over the past century. "The growth of entrepreneurial capitalism in the nineteenth century, which generated class heterogeneity at the same time that emigration made cities ethnically heterogeneous, increased the importance of schooling" (Grubb & Lazerson, 1982, p. 132). The transformation of the system of production in America from cottage industries to a factory system of production was accompanied by a similar shift to vocational education in the schools. Public

education was used “to contain the social disruption of entrepreneurial capitalism, and to prepare youth for occupational success” (Grubb & Lazerson).

While education was considered the mechanism for socializing children to the shifting labor market, conceptions of socialization were differentiated based on class. “Educating poor children became synonymous with overcoming the childrearing deficiencies of poor families” (Grubb & Lazerson, 1982). The children from families of both lower-class, mostly recent immigrants, and the middle-class, mostly white-protestants, needed to learn the new disciplines of work, such as punctuality, regularity, and the routines of work. The need for schooling for the poor was attributed to the failure of the family while the need for schooling for children of middle-class families was a “mild corrective of some of its deficiencies” (Grubb & Lazerson). Grubb & Lazerson continue the explanation of the differentiation with:

By the end of the nineteenth century schooling had come to stand in *loco parentis* for all children, to remedy the different deficiencies of both poor and middle-class parents. In differentiating students by class and race while claiming universality and promising to mold one country out of a heterogeneous population, nineteenth century public education established the duality that has been elaborated ever since...as schools became more vocationally oriented, they began to degrade older conceptions of liberal education on which they were founded. The goals of schooling which Thomas Jefferson had promoted---to provide every citizen of the republic with critical facilities, “to diffuse knowledge more generally through the mass of the people”---were potentially disruptive in a class society...Lower-class children needed moral training, not extensive knowledge, and education valued for its own sake became a luxury for an elite few. While all should go to school, all children would not be equally educated.

The expansion of secondary education in the early twentieth century was driven by the increased industrialization of the American economy and was similarly differentiated by class. Vocational tracking of students from the lower-

class was nearly universally accepted in America. The superintendent of the Boston school system put it most aptly in a speech just prior to World War I when he stated that the schools “have offered equal opportunity for all to receive one kind of education, but what will make them democratic is to provide opportunity for all to receive such education as will fit them equally well for their particular life work”(as cited in Grubb & Lazerson, 1982).

By the time of the expansion of post-secondary education after World War II, a vocational purpose dominated secondary education. The expansion of post-secondary education was necessitated by the increase in demand for highly educated labor especially in the defense industry and education itself. The expansion of higher education, however, became problematic as the focus of higher education became more and more vocational. Students were attracted to colleges because of the higher earnings and increasingly the students attracted to the colleges included those from the working and lower-class which threatened the historic role of higher education of perpetuating class and racial differences.

Grubb & Lazerson (1982) attribute the rapid expansion of the community college system as the nations solution to this problem. They state:

Again, the conflict inherent in the rush for places was muted by combining “equality of opportunity” with the creation of alternative institutions and programs for “appropriate” students. The principle mechanism of stratification was the expansion of the community college, which---because of its lower entrance requirements and because of barriers of distance and money---tended to attract students of lower incomes and lower class standing and more minority students than four year institutions, and to prepare them for working-class rather than middle-class jobs...Once again the concept of equal educational opportunity was compromised: while promising to be a route to social mobility for all, in reality education continued to distinguish students by their class and racial backgrounds.

The next transformation of the labor market began in the second half of the twentieth century. With advancements in technology and communications, systems of production became more technical and mechanized with the introduction of robotics. Line worker positions became operators of complex machinery. The result was a decrease in demand for low skilled workers and a smaller increase in jobs that required more technical skills. Even in manufacturing, while low-skilled jobs decreased, "...substantial numbers of new professional, technical, and managerial positions have been created. However, such jobs require at least some years of post-secondary education" (Wilson, 1996: p. 31).

The steady expansion of the labor market in the 1950s and 60s produced many more service jobs than manufacturing jobs. And, that shift from blue-collar jobs available to workers with little formal education to service jobs brought into the labor market more women who were traditionally excluded (Wilson, 1996: p. 27). Wilson (1996: p. 26) provides evidence that the deindustrialization of the economy had a great effect on the availability of jobs:

In the 1970s, two-thirds of prime age [22-58] male workers with less than a high school education worked full-time, year round, in eight out of ten years. During the 1980s, only half did so...And, of those with high school diplomas, one out of ten did not hold a job in 1993, up sharply from 1967 when only one out of fifty reported that he had no job throughout the year...These changes are related to the decline of the mass production system in the United States.

With the expansion of the labor market in the 1950s came a growth in the strength of American labor unions and with the unions came more stable jobs.

When the stability of jobs increased, “the underclass shrank. Now it is growing again” (Jencks, 1996a: p. 114). Labor market flexibility prefers weak unions where employers can hire and fire at will, where new workers are easy to find, and labor functions as a commodity, an “infinitely divisible and rearrangeable good, like electric power...it guarantees that some workers will never find steady employment” (Jencks, 1996a: p. 114). In Jencks (1996a) book on how working poor in the underclass become homeless, he describes how thoroughly the American belief in flexible labor markets is embraced: “Almost everyone else [except labor leaders] believes that efficiency (often called competitiveness) must come first, and that social stability will somehow follow. How anyone can still believe this after watching what happened in the 1980s I do not know, but most people do.”

As advances in technology facilitated a more global economy and market for goods and services, it also facilitated expansion of the labor force by providing a new source of low-wage, low skill workforce from abroad. American companies could now move and expand production systems to utilize workers at the lowest wage globally. With globalization, the trend of deindustrializing America grew more rapid. With that deindustrialization came a similar increase in poverty due in part to the disappearance of manufacturing jobs that paid living wages for medium and low-skilled workers. Economic growth today does not necessarily produce good jobs in America. In The Disappearance of Work,

Wilson (1996: p. 153) states: “Capital and technology are so mobile that they do not always create good jobs in their own backyard.”

Concern for the increase in poverty did not include any recognition of the shift in labor market structures evidenced by Wilson (1996) as he quotes the work of economists Sheldon Danziger and Peter Gottschalk:

In our view, the problem is not that more people have chosen not to work, but rather that demand by employers for less-skilled workers, even those willing to work at low wages, has declined. We find it paradoxical that so much attention has been focused on changing the labor-supply behavior of welfare recipients and so little has been given to changing the demand side of the labor market that has been increasingly unable to employ less-skilled and less-experienced workers.

During this shift in the labor market, however, Wilson (1996: p. 29)) found that “unlike men with lower education, college-educated men are working more, not less.” He provides evidence from numerous studies, one of which, John Kasarda’s 1990 study of nine major cities in the U.S., is telling of both trends. In Kasarda’s study “Jobs traditionally held by high school dropouts declined in all nine northern cities between 1980 and 1990, while those held by college graduates increased.” even those new jobs that were available “for workers with limited training and education” are in the services sector and are disproportionately held by women (Wilson, 1996: p. 32).

In those new service sector jobs, a different set of skills are required than those used by workers on production lines. The need for good language skills and those skills used where extensive public contact is required continues to increase. Even advancement into white-collar positions continues to increasingly require those “softer” skills unlike the “hard” job specific skills of blue-collar work.

And, the women with limited education but sufficient soft skills filling those new low-wage low-skilled jobs often times have children they must support.

Norton Grubb (1996b) provides the relationship of positions in the labor market---low-skilled, medium and technical-skilled, managerial and supervisory, and professional--- with the educational institutions---high school, community college, four year university, and professional school dropouts and graduates. The system he identifies as the supply-side of worker training evidences the current stratification system of secondary and post secondary education where access is determined more by economic resources.

With the increased vocational purpose of education in the twentieth century came a stronger mechanism for perpetuating the stratification system with “form” directed at the upper classes and “content” at the lower. Those in the working and lower-class have recognized, however, that even with its limited abilities, education may be the only mechanism for social mobility for those without wealth or status.

Education, Capitalism and Social Policies

To understand how current welfare reform policy is using education to maintain structural inequalities in America it is necessary to understand how the belief systems behind social policy were developed and maintained. Furthermore, it is necessary to uncover the relationship between American capitalist economic policy and the social policies they influence.

Education is shown to be a mechanism to enforce economic and social policy. Moreover, social policy is described as the mechanism for enforcing economic policies of corporate capitalism in America through “Interest Group” politics. These policies are clearly shown to use both education and social policies to provide and maintain a more stable “army of the unemployed” of able bodied men, and more recently women, for employers (Grubb & Lazerson, 1982; Jencks, 1996a, 1996b; Wilson, 1996).

Social policy will be discussed in light of the American belief system that places blame on individuals, families and groups while disregarding structural systems of inequalities. With a preponderance of research into the causes and effects of poverty illuminating the structural nature of poverty, even coming from the General Accounting Office (GAO) in Washington D.C., policymakers have continued to ignore structural systems of inequality when developing social policy. Some contrasts of the American and European models are drawn using the work of Wilson (1996), Jencks (1996b), and Grubb (1996).

Social policy and poverty.

The same problems confronting children and families keep reemerging because the reforms to treat them have always been contradictory and incomplete (Grubb & Lazerson, 1982; Jencks, 1996a, 1996b; Wilson, 1996). Public discussions of parental deficiencies focus on the effects of inequalities rather than their origins. “The myth of the family as the ‘basic unit of society’ has

led us to ignore the social and economic basis of family life and to blame the family for its problems” (Grubb & Lazerson, 1982: p. 40). And, discussions of family policy ignore the role of the state in economic policy. Moreover, the social welfare programs with which policymakers respond to the problems of poverty are based on class differences.

The tendency to blame families has its roots in the belief system that has guided American social policy since the early nineteenth century. While society changed from blaming individual families to blaming the family in whole groups, mainly immigrants and slaves, in the 1840’s and 50’s, it ignored the structural inequities (Grubb & Lazerson, 1982: p. 16). Social policy was also guided by a second belief that families are a private institution. Concern in the early twentieth century for keeping children with their single parent mothers in the home, usually widows and wives of disabled husbands, initiated the provision of “Mothers’ pensions”. “Since financial support of children was ideally a private responsibility, the funding of public institutions remained inadequate; public schools, juvenile facilities, and day nurseries were often grim places, and mother’s pensions were stingy and their recipients stigmatized” (Grubb & Lazerson, 1982: p. 27).

Both conservatives and liberals have responded to poverty with social policies intended to help children. Both have generally ignored, however, the origins of income and racial inequalities in the class divisions of a capitalist

economy. As Wilson describes: “Too often, as reflected in the current public policy debates on welfare reform, the discussion of behavior and social responsibility fails to mention the structural underpinnings of poverty and welfare.” The focus is on shortcomings of the family without regards to the conditions that “have produced certain unique responses and behavior patterns over time” (Wilson, 1996: p. 53). Failing to address those origins of class guarantee structural inequalities will continue.

The origins and influences of poverty have been recognized as structural only in times of great economic uncertainty and social unrest such as the 1890s, 1930s, and 1960s and it is during those times of recognition of structural origin that poverty policies have been the most effective (Grubb & Lazerson, 1982).

Mother’s pensions and childcare in 1909 and expansion of public schooling, especially high schools, were an effort to “mute the antagonism between capital and labor” (Grubb & Lazerson, 1982). The focus on and emergence of vocational education and tracking that “continued the separation of middle-class and lower class children were justified by the different child rearing abilities of their parents” (Grubb & Lazerson, 1982). Stratified education and social welfare smoothed the growth of capitalism in the early twentieth century.

Until the Great Depression, the state did very little to manage the economy. By the end of the 1930s, however, pressures began to mount from a coalition of labor leaders and liberals to take a more active role in managing

business cycles and the unregulated market to prevent recessions. These *Keynesian* policies “ranked full employment as the goal rather than maximum profits” (Grubb & Lazerson, 1982). Business, worried that full employment would increase labor costs, quickly opposed Keynesian policies noting concerns of state intervention in private enterprise. By the time the Employment Act of 1946 was passed, it had been diluted to providing advisory rather than administrative agencies and set vague goals of “high” and “maximum” rather than full employment. Even with its diluted content, however, the state had “accepted an active role in managing the economy” (Grubb & Lazerson, 1982: p. 241)

Economic policy as a tool for managing the economy quickly became focused on those with power in the economy and oriented itself with business and military interests. Policies emphasized military spending, tax cuts and subsidies favoring upper-income families and business rather than social welfare programs, services and progressive tax cuts. Policy choices became more defined in the 1960s when the apparent trade off between unemployment and inflation were discovered. “In the interest of lower wages and higher profits, business has preferred low rates of inflation to low unemployment rates, while labor and advocates for the poor have advocated low employment as a way of increasing real wages and redistributing income. The battle...has thus represented a form of class struggle between capital and labor, now taking place within the state” (Grubb & Lazerson, 1982).

Wilson (1996) describes how unemployment and welfare rates are related and concludes that: "As unemployment in the general population rises, the probability of exiting welfare diminishes." Grubb and Lazerson (1982) explain the consequences of the failure of labor to make sufficient headway in the class struggle between capital and labor: "...the chronic inability of the American economy to achieve full employment (except in war time) has kept large numbers of families susceptible to the ravages of unemployment."

Wilson (1996) describes how policy continues to support capitalist ideals at the expense of the poor and working class. He states:

...in the absence of an effective labor-market policy, they [policymakers] have tolerated industry practices that undermine worker security, such as the decrease in benefits and the rise of involuntary part-time employment, and they have "allowed the minimum wage to erode to its second lowest level in purchasing power in 40 years." After adjusting for inflation, "the minimum wage is 26 percent below its average level in the 1970s." Moreover, they virtually eliminated AFDC benefits for families in which the mother is employed at least half-time. In the early 1970s, a working mother with two children whose wages equaled 75 percent of the amount designated as the poverty line could receive AFDC benefits as a wage supplement in forty-nine states; in 1995 only those in three states could. (Wilson, 1996: p. 50)

Although during the 1980s, and even in the early 1990s in California, high unemployment and high rates of inflation coexisted, the obsession with inflation and low wages continued unabated as corporate powers influenced policies to keep the minimum wage low. Economic policy has allowed the real value of minimum wage to erode by a third during the 1980s (Jencks, 1996a: p. 115) and by 1989 average hourly wages were lower in real terms than in any year since 1970 (Wilson, 1996: p. 156). Even with the 1995 adjustment to the minimum wage pushed through by the Clinton administration, the 1998 minimum wage

would have to be \$2.40 higher than the mandated \$5.15, a 47 percent increase, in order to match the 1968 peak-year value of \$7.55 in 1998 dollars (Sahr, 1998). Those in lower wage jobs suffer the consequences of inflation at the highest rates. Men below the 20th percentile in wage distributions experienced a 30 percent drop in real wages between 1970 and 1989 (Wilson, 1996: p. 25). The low-wage strategy of American companies and their influence on economic policies has serious economic and social consequences as the former secretary of labor of the Carter administration suggests: “Most other industrialized nations have rejected this strategy because it implies lower and more unequal wages, with serious political, social, and economic implications” (as cited in Wilson, 1996: p. 152).

These low-wage strategies are reflected both in hiring practices and wage rates of the late 1980s and employees abilities to remain in employment at low wages as Wilson (1996) shows in his description of comments of employers and his findings from the Urban Poverty and Family Life Study (UPFLS) conducted in 1987 and 1988. They found that with turnover rates of 50 percent and higher employers made conscious decisions to tolerate turnover rather than increase wages. Jobs paying \$5 or \$6 an hour had high turnover rates, higher paying jobs, by contrast, had turnover rates of less than 20 percent per year. “Annual turnover rates of 50 to 100 percent are common in low-skill service jobs in Chicago, regardless of race or ethnicity of the employees” (Wilson, 1996: p. 142).

Wilson (1996: p. 145) describes how changes in economic policies could effect those facing the prospects of long term low wage employment:

Despite the attitudes of employers, joblessness in inner-city ghetto neighborhoods would decline if the U.S. economy could sustain high levels of employment over a long period of time. ...In a tight labor market, job vacancies are numerous, unemployment is of short duration, and wages are higher. Moreover, ...the labor force expands because increased job opportunities not only reduce unemployment but also draw into the labor force those workers who, in periods of slack labor markets, respond to fading job prospects by dropping out of the labor force altogether.

The effects of these low wage policies are devastating to families who move in and out of poverty at an alarming rate. A University of Michigan Survey Research Center study reported that between 8 and 11 percent of individuals were in poverty at some time during the period of 1967 to 1972, but 21 percent were in poverty for at least one year during that period (as cited in Grubb & Lazerson, 1982: p. 70). "The precariousness of family life is partly caused by low paying jobs" (Grubb & Lazerson 1982). With full-time minimum wage work, a parent of two children could not then and cannot now keep his or her family out of poverty.

Policymakers generally have tended to ignore these consequences of class for children, as well as many others. The stresses that low wage work produces within the family and the different values that children of those families receive from their parents can be devastating to their childrens' futures (Grubb & Lazerson, 1982; Jencks, 1996a; Wilson, 1996). Even when one of their own attempts to enlighten policymaking, long held beliefs guide interpretations as with Senator Daniel Moynihan's 1965 report on the black family. His report

emphasized that the socioeconomic system was ultimately “responsible for producing unstable poor black families.” The commentary that followed, however, reported only the second part of the conclusion that that instability is “the principle source of most of the aberrant, inadequate, or antisocial behavior that did not establish, but now serves to perpetuate, the cycle of poverty and deprivation” (as cited in Wilson, 1996: p. 172). In his book on homelessness, Christopher Jencks (1996a: p. 114) puts it most succinctly:

In the nineteenth century Marx christened this group the lumpen proletariat. Until relatively recently, American sociologists called them the lower class. Today many Americans refer to them as the “underclass.” Regardless of how we label them, their troubles play a central role in homelessness. Because they cannot find steady jobs, they cannot afford to internalize the work ethic or link their self-respect to their job performance. Many leave the labor market entirely. Others treat work as no more than a way of picking up a few dollars as needed. The side effects of this adaptation include depression, rage, alcoholism, drug addiction, and domestic violence.

“Structural inequalities have therefore generated both the imperative for the state to intervene and the political resistance that keeps the states efforts of behalf of poor children relatively feeble” (Grubb & Lazerson, 1982: p. 7).

The effects: economic and social policies and poverty.

The effects of economic policy have been most devastating to those on welfare. Wilson points out that between 1972 and 1992 the decline in real welfare benefits, including food stamps which helps stabilize benefits due to adjustment for inflation, was only 26 percent nationwide. During the period from 1991 to 1994 only six states maintained or increased AFDC payments, nine states cut benefits, and the others allowed the benefits to be eroded by inflation. “Between 1975 and 1995, after adjusting for inflation, AFDC benefits had

declined in every state so much that the average real value of AFDC benefits nationwide had plummeted 37 percent during this period” (Wilson, 1996: p. 165).

Jencks (1996a: p. 90) research on the homeless found similar effects on single mothers. “After adjusting for inflation, the number of single mothers reporting cash incomes of below either \$2500 or \$5000 rose dramatically during the 1980s.” He cites the reason as their cash incomes lagging behind inflation. In relating this to homelessness he states: “As a result, the typical [single] mother’s estimated rent burden climbed from 37% in 1974 to 60% in 1985 but then fell to 46% in 1989. “ He makes it clear, however, that it was not landlord’s greed but that the main problem facing single mothers during the 1980s was legislative. Showing how traditional belief systems would dictate policy, he sums up with: “I therefore believe that the main source of single mother’s housing problems during the 1980s was state legislators’ growing reluctance to subsidize families in which the parents did not live together” (Jencks, 1996a: p. 93). When describing the debate on causes of homelessness between democrats and republicans during the Reagan and Bush administrations he adds: “In this debate both sides seemed to agree on at least one principle: simple distortions are more politically persuasive than complicated truths” (Jencks, 1996a: p. 98).

Wilson (1996) reminds us that policymakers are not the only ones looking for simple explanations: “During hard economic times, people become more receptive to simplistic ideological messages that deflect attention away from the

real and complex source of their problems.” It is important to appreciate that not only the poor and the working classes struggle to make ends meet, even the middle-class has experienced a decline in its living standard.

Most of the myths about welfare propagated as rhetoric to raise the issue to an emotional level in an effort to secure votes such as those like “most welfare families are long term recipients” or “most welfare mothers are black women with many children” are not supported by the research (or even any research). “Only a minority of the AFDC recipients were African-American in 1995, and the average number of children in welfare families was slightly less than the average number in nonwelfare families” (Wilson, 1996: p. 166). Jencks (1996a: p. 90) also reports that poor single mothers typically have fewer children. And, he continues with the explanation that the result is fewer welfare dollars to make rent and that “means they are more likely to become homeless.”

Furthermore, Wilson (1996) addresses the “long term” myth with: “half of welfare recipients exited the first year, and three quarters left within two years.” One third of the recipients interviewed in the UPFLS survey had been on welfare more than once. The cycle is clear, leave welfare for low-wage employment, try unsuccessfully to make ends meet, return to welfare. “Only 15% remained continuously on welfare for five years. Long term welfare mothers tend to be racial minorities, never married, high school dropouts, and those who lack employment experience” (Wilson, 1996: p. 167). Furthermore, he finds a

preponderance of evidence that welfare recipients prefer work over welfare and would readily accept jobs that will not result in their slipping deeper into poverty (p. 168).

Jencks (1996a: p. 110) tries to bring some reality to the argument and although it is quite long, his concluding statement required its inclusion:

If we want to solve single mothers' economic problems by making them take jobs, we must stop imagining that putting single mothers to work will make the country richer or generate extra money to pay these mothers' bills. Single mothers now care for their children. If we make them take jobs, someone else will have to care for their children while they are at work. We will have to pay the people who watch these children more than we now pay their mothers to do the same job. That is going to cost the taxpayer more money.

Working mothers who left their children in a nonrelative's home paid an average of \$64 a week in 1990. Those who used childcare centers paid \$76 a week. Meanwhile, cash welfare benefits for a mother with two children averaged \$42 per child per week. In most states, therefore, paying single mothers to care for their own children was a bargain. That is one reason why states have been so reluctant to implement federal legislation aimed at putting more welfare mothers to work. In order to make every mother with preschool children, work, states would usually have to spend more for childcare than they would save on welfare payments. While some surveys suggest that voters favor this approach, state legislators have refused to pursue it.

Those who want to solve welfare mothers' economic problems by putting them to work must also think more realistically about the cost of raising a family. The fact that cash welfare benefits are typically \$300 to \$400 a month for a mother with two children seems to have convinced a lot of people that families can really live on such sums. That delusion leads to an equally illusory corollary; if single mothers can live on welfare, they can also live on what they would earn in a minimum wage job. Both assumptions are wrong.

One of the studies Jencks (1996a) cites is that of Kathryn Edin and Laura Lein who interviewed hundreds of single mothers in four major cities. They found that urban welfare mothers typically need about twice as much cash as they get from welfare. Single mothers who worked in low wage jobs needed even more money for transportation, work clothes, child and medical care. The benefits of work were few, "Work yielded only two significant material advantages: working

mothers had better wardrobes, and they were likely to own cars” (Jencks, 1996a: p. 111). Most of the research in this area agrees that in order to make ends meet most heads of households in 1995 would have had to earn \$8 or \$9 an hour in full-time employment.

Wilson (1996) cites an Edin and Lein study where they found that “the average low income working mother would have to spend \$317 more than her welfare counterpart to maintain the same standard of living.” With an average gap in earnings-versus-expenses of 33 percent, most would need to generate large amounts of income outside of their regular employment (Wilson, 1996: p. 82-3).

LaDonna Pavetti’s study also found similar results. Welfare recipients who attempted to leave welfare for employment found it was not economically feasible to remain off welfare when “low-wage jobs do not pay enough to support a family either and offer little access to better-paying jobs” (as cited in Wilson, 1996: p. 80). The decisions to remain on welfare represent rational and realistic options “given the existing constraints and limited opportunities facing them” (Wilson, 1996: p. 80). Even with a total income of \$529 in AFDC and food stamps, they need to generate additional income to meet the minimum expenses of \$876. Pavetti found that these mothers who often worked as bartenders and waitresses making around \$5 an hour discovered that they needed \$8 to \$9 per

hour plus health benefits to make ends meet with the additional health and child care costs (as cited in Wilson, 1996: p. 80).

For their families to survive, welfare families must rely on unreported income and often as with low wage workers, supplement their income with illegitimate sources of income, thereby further weakening their attachment to the legitimate labor market (Wilson, 1996: p. 53). The poor may strongly agree with mainstream judgments of unacceptable behavior and yet feel utterly constrained by their circumstances, and for survival are sometimes forced to act in ways that violate mainstream norms (Wilson, 1996: p. 69).

The inability to influence or control the forces that affect one's life, create frustration and despondency, reinforced by others in the same position and weakening further the already weak attachment to the labor-force (Wilson, 1996). This often results in decreased self-efficacy contributing to the decreased beliefs in parenting abilities and parental influence over their children (Wilson, 1996: p. 76). The conditions of class profoundly influence the messages parents give to their children about success (Grubb & Lazerson, 1982: p. 75).

In addition, Wilson (1996) argues that, regular employment provides an "anchor for the spatial and temporal aspects of daily life" by providing a regular place to be during specified periods. He further argues that the concrete expectations of work and the ability to plan to get there are a "necessary condition of adaptation to an industrial economy." Grubb (1982: p. 77) adds that

the origins of patterns such as the lack of ability to plan, the devaluation of education, and feelings of powerlessness are rooted in their own work and lives and “lie not in the parents themselves but in the class structure in which they live.”

Additionally, other survival techniques attained in jobless poverty areas are often inappropriate for success in both education and the labor market such as “avoiding eye-to-eye contact or assuming a tough demeanor in the public sphere for self-protection” (Wilson, 1996: p. 63). These adaptations are linked to the structural sources of systematic impediments to opportunities in the society (Wilson, 1996: p. 72). Wilson (1996: p. 39) reported that as few as 18 percent of respondents in the UPFLS survey owned an automobile and reminds us:

Among two-car middle class and affluent families, commuting is accepted as a fact of life; but it occurs in a context of safe school environments for children, more available and accessible day care, and higher incomes to support mobile, away-from-home lifestyles.

Grubb (1996a, 1999), Jencks (1996), and Wilson (1996) all argue that education and training may move the underclass into employment. But the labor market works in a competitive fashion. For every person moved into the labor market under these competitive terms, another worker will slip to the end of the queue. “In a competitive labor market, someone always has to be the last hired and the first fired. Training schemes can rearrange the queue, but they cannot eliminate it” (Jencks, 1996a: p. 114).

There have been many public presentations of the effects of policy on the underclass. Time Magazine ran a cover story in August of 1977 entitled: "The American Underclass: Minority within a Minority." Over the next decade numerous books were written on the devastating effects that the article portrayed of people being stuck at the bottom of the economy for such long periods of time. Republicans and conservatives retaliated during the ascendancy of the Reagan administration with a literary blitz based on a culture-of-poverty argument that blamed liberal social policies since the 1960s.

Conservative analysts dominated public discussions in the first half of the 1980s with the culture-of-poverty arguments proposed in the media. "However, these journalistic accounts failed to establish a convincing case for a culture-of-poverty thesis that in effect ignores structural factors" (Wilson, 1996: p. 176). There were efforts to present a balanced view of poverty, such as the 1986 PBS television documentary "The Crisis on Federal Street," but even the best of them had a "clear lack of a framework of relating behavior and culture to the structure of opportunity as in the ethnographic studies of Lee Rainwater, Kenneth Clark, Elliot Liebow, and Ulf Hannerz" (Wilson, 1996: p. 177).

In 1980, the Swedish scholar Walter Korpi pointed out how American researchers had ignored the obvious. His comments were extremely relevant then and are often still relevant today. He wrote: "It is an intellectual paradox that living in a society that has been a sea of unemployment, American poverty

researchers have concentrated their research interests on the work motivation of the poor” rather than the cyclical nature of employment in the United States (as cited in Wilson, 1996). More ironical, Wilson continues, is the fact that they have “consistently uncovered empirical evidence that undermines, rather than supports, common assumptions about how welfare negatively affects individual initiative and motivation. Yet these assumptions persist among policymakers.”

And, Wilson (1996) proceeds with: “Although it is reasonable to argue that policymakers are not aware of a good deal of the empirical research on the effects of welfare,” they had been informed by the GAO, the investigative arm of Congress, in 1987 that “there is no conclusive evidence to support the prevailing common beliefs that welfare discourages individuals from working, breaks up two-parent families, or affects the childbearing rates of unmarried women, even young unmarried women.” The GAO reviewed results of over one hundred empirical studies on the effects of welfare completed since 1975, analyzed case files, and interviewed officials at all levels of government agencies. Wilson suggests that these findings should have “generated a stir among members of Congress...But,” he continues, “systematic scientific argument is no match for the dominant belief system: the views of members of Congress have apparently not been altered by the GAO report” (Wilson, 1996: p. 164).

More amazing is, however, how dominant the belief system is throughout the society. Inner-city residents of poverty ridden sectors, despite the

overwhelming joblessness and poverty they are confronted with, actually verbally endorse the American belief system values concerning individual initiative. In the UPFLS study, Wilson's (1996: p. 180) interviewers heard from a substantial majority of the respondents that "America is the land of opportunity where anybody can get ahead, and that individuals get pretty much what they deserve."

Poverty: the measure.

The U.S. measure of poverty, originally developed in the early 1960s, is an important social indicator that affects not only public perceptions of well-being in America, but also public policies and programs. It was developed as an indicator of the number and proportion of people with inadequate family incomes for needed consumption of food and other necessary goods and services. The current measure has remained virtually unchanged over the past 30 years. There have been recent criticisms of its ability to accurately identify the poor population. The Panel on Poverty and Family Assistance, commissioned by the National Research Council in 1995 to evaluate the "U.S. Poverty Rate" indicator, have some criticisms that have a bearing on this discussion.

The current measure does not distinguish between the needs of nonworkers and workers such as childcare, health insurance coverage, or transportation costs. The current measure also defines family resources as gross money income, it does not reflect the effects of important government policy initiatives that have significantly altered families' disposable income such

as the increase in the Social Security payroll tax, which reduces disposable income for workers. Although their analysis estimates that the current measure identifies a slightly lower dollar value for the poverty line for some people in nonworking families such as those who are retired or on public assistance, it underestimates the poverty rate for people in working families.

Of the 17 different methods to calculate poverty rates studied by the panel, only two resulted in a value below the “official” poverty line value (Table 1). Values calculated using the different methods studied ranged from 85 percent to 229 percent of the “official” poverty measure. Of the two below the current value the closest, with a value 92 percent of the current measure, was the value calculated using the original formula developed by Orshansky in the 1960s but with a slight variation in CPI (CPI-U-X1).

This suggests that using the current U.S. Poverty measure to calculate benefits for welfare that are an average of 60 to 75 percent of poverty (Jencks, 1993), the actual allocation may be 26 to 88 percent of the cash amount to live at the poverty level. More importantly, it suggests that unsubsidized full-time minimum wage employment may actually provide less than 25 percent but possibly as high as 68 percent of poverty for a family of three.

Welfare policy.

When the modern welfare system of the U.S. was implemented in the Social Security Act of 1935, it was implemented as a dual welfare system, unlike

most all other advanced industrial nations that have a single universal social welfare program. Americans have one set of programs for the poor and another for the non-poor (Sahr, 1998). Programs designed for the non-poor such as, social security, unemployment and later medicare have beneficiaries across the society and are well protected by policymakers due to public pressures. Programs for the poor, however, have been used to implement social and economic beliefs of the American society and economy with little care of their effects on families or children.

Like many beliefs and institutions in our society, our conception of social welfare and the family and our expectations for those in them reflect the current social behaviors, values and norms that are experienced in daily life in the society. During the first half of the twentieth century, when the social norm was mothers in the home caring for children and husbands were sole bread winners, mothers that were widowed or wives of disabled husbands who had children under 18 were provided resources, as pitifully inadequate as they were, to stay in the home (Grubb & Lazerson, 1982). Mother and homemaker were believed to be the normal family role for mothers. Policymakers even then, however, were confronted with the "central dilemma how to implement public responsibility in an economy considered private" (Grubb & Lazerson, 1982: p. 247).

Mothers pensions of the early 1900s and Aid to Dependent Children in the 1930s were designed to enforce those ideas of motherhood with pitifully low

levels of support so as to not undermine local labor markets. As labor markets needed seasonal work, especially in the South and other agricultural areas, "employable" mothers who either had available childcare or could take their children with them into the fields or factories, "often found themselves cut off the roles as seasonal work began" (Grubb & Lazerson, 1982: p.190).

As women began entering the labor force in increasing numbers and fewer roles for women excluded work, welfare mothers began to be characterized as taking advantage of those who couldn't afford to stay at home with their children. As early as 1962, policies began focusing on enabling welfare recipients to move into employment and off welfare by providing services, including education and training (Grubb, 1996a: p.39). Policies and programs increasingly focused on welfare-to-work through the 1960s, 1970s and 1980s with programs such as the "Work Incentive Program" (WIN) of 1967, which again focused on "employables" ---mothers with children over six--- to those of the Carter and Reagan eras. Those of the Reagan years that changed the employable definition from "mothers with children over six" to "mothers with children over three," however, codified the shift in public opinion and policy that mothers should be forced to work (Grubb & Lazerson, 1982: pp. 192-195).

Current Welfare Policy

The Family Support Act (FSA) of 1988 was considered at the time to be the definitive welfare overhaul of the day. It laid the ground work for the reforms

of the next decade. The Act allowed states, with a waiver system, to experiment with reforms to reduce their welfare case loads by moving recipients into employment. By the summer of 1996, 46 states had approved or pending waivers (Boehnen & Corbett, 1996 as cited in Blank, 1996).

The FSA integrated efforts to move recipients into jobs with basic skills training in the Job Opportunity and Basic Skill (JOBS) program. States were slow to implement this portion of the FSA as shown by the June 1995 rate of only 23 percent participation of mothers with children under three (Sawhill, 1998). As Governor of Arkansas, President Clinton supported the FSA but campaigned to "end welfare as we know it." Clinton's 1993 proposal for welfare reform, although it did have a two-year time limit, included universal health care, childcare, and child support provisions to ensure contributions from absent parents. It also included the creation of public sector jobs for those unable to find work in the private sector.

Legislation embodying his proposal, introduced in 1994, "was eclipsed, first by the focus on health care reform and later by the 1994 election..." Republicans won control of Congress in the election and introduced their own legislation, The Personal Responsibility Act (PRA), which was embodied in the House Republican "Contract with America." With the PRA, conservatives, and many others in the nation listening to their rhetoric, "seized on the time limits and

paid only lip service to the other provisions” (Joel F. Handler as cited in Wilson, 1996: p. 169).

Also of significance in the House bill passed in March of 1995 was movement to block granting of funds for each provision of the legislation. The Center for Budget and Policy Priorities, a policy research center in Washington, D.C., while discussing the problems states would face under the inflexible limits and restrictions of the PRA block grants stated: “Substantial numbers of such families [working poor who lose their jobs] apply for aid during economic downturns” (cited in Wilson, 1996: p. 170). The concern that states operating under balanced budgets would be unable to cover the costs of the social programs during economic downturns with unadjusted and decreasing block grants proposed in the PRA continues to be a problem under the current reform law.

Most governors strongly supported the increased state flexibility, and reduction of efforts to track categorical funds, of the block grants but were nervous about the implicit cost shifting to lower levels of government. The Senate Finance Committee endorsed the block grant approach adopted by the House but omitted some of the provisions most disliked by governors and sent the bill to the President for his signature. One estimate of the effects of the Senate and House proposals placed between 1.2 and 2.1 million more children pushed into poverty and 25 and 50 percent deeper levels of poverty, respectively, for those

already below the poverty line. When reacting to the estimates, Senator Daniel Patrick Moynihan stated: 'Welfare reform in fact means welfare repeal. The repeal, that is, of Title IV-A of the Social Security Act. Everyone is to blame for this duplicity, everyone is an accomplice' (cited in Wilson, 1996: p. 171).

President Clinton vetoed that version of the bill in January 1996. In August of 1996, President Clinton signed a revised version, the PRWORA, into law. Fundamentally, the Act ended the "entitlement" status of public assistance. The Act ended the Aid to Families with Dependent Children (AFDC), Emergency Assistance, and JOBS programs and replaced them with a single block grant to the states in the Temporary Assistance for Needy Families (TANF). The TANF block grant allocates a fixed amount of money, not adjusted for inflation even in future years, equal to the payments states received in 1994. Open-ended federal payments to states, providing increases when states faced increasing case loads, ended; if states run short of money at the end of the budget year, families can be turned away.

Some of the major provisions of the federal law included:

- The end of the "entitlement" status of benefits,
- Funding through block grants with emphasis on reducing welfare rolls,
- Time limits on the receipt of benefits and training,
- Eligibility tied to work and training requirements,
- Restrictions on eligibility for legal immigrants.

Both states and recipients face time limits for benefits and training. States must meet work participation rates set by the Act or face a 5 percent reduction in

block grant amounts in the first year and 2 percent each subsequent year, for a total possible reduction of 21 percent by 2002. Recipients have time limits for receipt of benefits and training or face reduced or denial of benefits. State work participation rates started at 25 percent in fiscal year (FY) 1997 and increase 5 percent per year until 2002 where they remain at 50 percent. Adults in families receiving benefits must participate in "work activities" within 24 months. Work activities may include:

- Unsubsidized employment,
- Subsidized employment, in either private or public sectors,
- Work experience,
- On-the-job training,
- Job search and readiness training (6 week limit),
- Community service programs,
- Vocational education (12 month limit),
- Jobs skills training (directly related to employment),
- Education related to employment for those without high school diplomas or GEDs,
- Secondary school leading to a GED,
- Provision of child care for those participating in community service programs.

No more than 20 percent of a state's caseloads were to be met with participation in vocational education and teenage TANF recipients working on GEDs automatically counted in the 20 percent. The law requires that teen parents without high school diplomas or GEDs work towards attaining them or participate in another state approved education or training activity. Estimates were derived that "much of the 20 percent maximum for vocational education"

would be made up of these teen parents, creating a disincentive for states to invest in post secondary education (AACC, 1998).

The Balanced Budget Act of 1997 further limited the states ability to use vocational education as a means to meet the work participation rates and move more people into stable employment. The 1997 Act limited the percent of vocational education participants to 30 percent of those counted in the work participation rate rather than the 20 percent of total caseloads. The effects of this revision to the 1996 law for vocational education participation result in estimates of 7.5 percent in FY 1997 and 9 percent in 2002 increasing and decreasing sporatically over the five years with a range of 6 percent (in FY 2000) to 10.5 percent (in FY 1999) of caseloads.

Policymakers continue to amend the 1996 PRWORA through other legislation but most efforts to repair holes in the national safety net are met with significant resistance by conservatives who consider that such provisions "undermine the 1996 reforms" (Sahr, 1998).

California Implementation of PRWORA

Californias implementation of PRWORA, "CalWorks" is one of the strictest implementations among the states with shorter time limits and higher work requirements to name a few of the tighter restrictions. Some of the more restrictive regulations cited by the California Department of Social Services (1998) are:

- a. New applicants receive aid for 18 months [within two years] while current recipients may receive aid for 24 months [within three years].
- b. Adults must accept any legal job unless otherwise exempted.
- c. Recipients will participate in an initial 4-week period of job search, which can be extended at the county's discretion.
- d. Following job search, adults in families receiving assistance will be required to work or be in work activities upon completion of an assessment.
- e. Single parents will be required to participate a minimum of 20 hours per week, growing to 32 hours by mid-1999. In two parent families, one or both parents must work a combined total 35-hours each week starting in 1998.
- f. If the recipient is not employed when the time limit is reached, the recipient enters community service provided the county certifies that "no job was available."
- g. Grants to recipients who do not meet their work participation requirement are reduced by the adult's portion of the grant.

Although California's "enthusiastic" implementation is more restrictive with lower time limits and more drastic sanctions, "CalWorks" has some positive provisions that other state implementations do not have. Urban Institute simulations, in "Does Work Pay" (1998), using the California formulas for earnings disregards and benefit reduction rates provide a look at the cash incentives for work. The simulation is for a single parent family of three and calculations of income include TANF, cash value of food stamps, Federal Earned Income Tax Credits (EITC), California Earned Income tax credits, payroll tax and income tax liabilities.

To move from the total benefits income of nonwork at \$825 (77 percent of poverty) to 20 hours of minimum wage work increases income by 49 percent to \$1,226 at 114 percent of poverty. Full-time work (35 hours per week) at minimum wage will provide another increase of \$223 per month moving the family to 134 percent of poverty. A last step in the simulation to full-time

employment at \$9 per hour add \$63 to monthly income placing the family at 140 percent of poverty.

Childcare, housing and Medical care subsidies are not included in the calculations. Additionally, California has the highest eligibility cutoff for childcare of the states reviewed with no copayments up to \$1,669 and a maximum of \$3,337 per month for those transitioning from TANF to work.

Additionally, counties are given incentives for reducing roles and share in sanctions for not meeting requirements. Some examples are: (1) 75 percent of savings generated from diversion, recipients who leave aid for a job, and reduced grant levels resulting from recipient earnings goes to the counties who meet goals outright ; (2) 25 percent of the savings is allocated on a statewide basis to those counties that are unable to meet employment outcomes because of good cause factors developed by CDSS; (3) Federal penalties to counties that do not meet the work requirements are shared 50-50 between the state and the applicable counties.

Early Effects of PRWORA and CalWorks

Although the PRWORA has been in law since 1996, states could operate under their waivers from the FSA and implement the law as resources became available. California, under a waiver since the late eighties began implementing CalWorks in the summer of 1997. An article by Kathy Johnston (1997) from the

local county publication "Newtimes" in San Luis Obispo, California speaks to the frantic pace of the reforms:

As talk-radio rhetoric on welfare reform rapidly becomes reality, San Luis Obispo County is mobilizing for the sudden and sweeping changes brought about by new federal and state laws designed to push aid recipients into the work force.

Indeed, the challenges are daunting, as several thousand local welfare moms and other needy adults face the ticking clock that signals an end to aid dependency. Are there enough jobs for all the people who will need them, or do we need to create new jobs? Where will they get education and training? What impact can we expect on current job seekers, including students? What about finding affordable child care when there is already a shortage of available care for babies and toddlers? What happens when thousands of families lose their access to Medi-Cal?... False stereotypes about aid recipients and misinformation about the impacts of Welfare on the federal budget are considered the driving force that led to the strict new rules.

The answer to the question asked by Johnston in the article and by many others throughout the nation, "Are there enough jobs for all the people who will need them..." is evident in monitoring projects which began shortly after the implementation of PRWORA began. In an issue brief, *Early Findings on Welfare and Well-Being*, from a joint project of the Children's Defense Fund and National Coalition for the Homeless (1998), reviewing studies by the National Governor's Association and other studies, report that 40 to 71 percent of those who left TANF did not find employment. For those who did find employment, "the proportion with above-poverty wages is small and dwindling" when the three person poverty line was only \$241 per week. A report from the Childrens Defense Fund (CDF) (1998) cites a study in Milwaukee that found that "Among those who left welfare for work in September 1996, only 16 percent earned above-poverty wages.

The Milwaukee study also reported that "although 72 percent of those leaving welfare in the first quarter of 1996 worked for at least some period over the next year, half of those who found work in that first quarter were unemployed or only marginally employed one year later." For those receiving TANF and working full-time as of September 1996, "only 28 percent remained employed two months later with earnings above \$2,500 in both that quarter and the first quarter of 1997." The CDF reported on a similar study by the state of New York that found "only one-fifth to one-third of those who left welfare found jobs."

Both employed and unemployed former TANF recipients report having trouble buying food. Seventeen percent of those leaving TANF in South Carolina, 27 percent in Michigan, and 36 percent in a 10 state study reported having problems providing food for their families. "Large numbers of former recipients (including families and individuals) are turning to soup kitchens and food pantries" (Children's Defense Fund and National Coalition for the Homeless, 1998). The Center on Budget and Policy Priorities in Washington, DC, "estimates that one million unemployed individuals who would work, if work slots were available, will be denied food stamps in an average month under this provision" (cited in National Coalition for the Homeless, 1996).

Other welfare reform monitoring projects they reviewed report that between 10 and 29 percent of former and current TANF recipients increasingly can not pay their rent and were either evicted or face eviction. In the Atlanta

study they reviewed, 46 percent of homeless families interviewed had lost TANF benefits in the previous 12 months. They report that a Wisconsin study shows a 50 percent increase in children in homeless shelters from 1994 to 1996, while single adult males, a group unaffected by TANF changes, increased only 1 percent.

The U.S. GAO report reviewed in the brief finds a tremendous drop in the proportion of welfare recipients receiving education or training. Using figures from 1994 through 1997, they reported a decrease in education/training participation ranging from 84 percent in Maryland to 30 percent in California. In a survey conducted by the California Community Colleges Chancellor's Office (CCCCO) in September of 1998, 33 percent of the colleges responding to the survey indicated that counties were not referring clients for training.

Although 30 percent of the colleges responded with county implementation delays as the reason, others responding reported that "their county's 'work-first' philosophy precluded any serious consideration of referrals to local community colleges..." and that where referrals would or were being made, they were made to other entities such as Community Based Organizations, Adult Regional Occupational Programs and Private Industry Councils. Colleges responding expressed strong concerns that "the de-emphasis on longer-term training and education would have an impact on clients' ability to acquire and maintain self- and/or family-sustaining employment."

More importantly, however, are the implications of moving the large number of welfare recipients into existing or newly created jobs. Although the unemployment rate ranges from 4.5 percent in "Silicon Valley" to 10 percent in Los Angeles, the unemployment rate for high school dropouts is 15 percent in California and the nation generally. There is no shortage of low skill workers already competing for current jobs. Even with estimated job creation of 30,000 new jobs per year over the next decade in California moving 350,000 to 450,000 welfare recipients into the workforce has significant consequences (Center for Continuing Study of the California Economy, 1997).

The Center for Continuing Study of the California Economy in their 1997 study, "The California Economy and Developing Annual Goals for Moving Welfare Recipients into the Workforce" expressed concerns that of the 13 million jobs in California, the 5 million low skilled jobs (40 percent) have "substantial turnover." The estimates of 6 million new hires in that 40 percent of California jobs indicates the instability of the labor market in low skill level employment. They provide the following statistics to emphasize the problem. Those competing for the 5 million low skill jobs include:

- a. The 5 million workers who already held these jobs at some point in 1996
- b. The 400,000 welfare recipients who are the initial target for welfare to work policies
- c. Some portion (perhaps 400,000) of California's one million unemployed workers
- d. Some "discouraged workers" who may re-enter the California workforce during this period of rapid job growth

They conclude with a nationally shared concern that "...unless the overall rate of economic growth is raised, it is likely that the hiring of a welfare recipient will result in someone else who is looking for a job not being hired." They also raise the concern that to expect that the additional jobs predicted "all be entry level" is unrealistic. They suggest that the newly created jobs will primarily be filled by (1) young workers moving into the labor force, (2) foreign workers imported to fill both lower and higher skilled jobs, and (3) from immigration from other states.

With a continued drop in the numbers of people on welfare roles since the beginning of the economy's expansion in the late 1980s and state pressures to decrease numbers from the 1994 baselines or lose grant monies, the NCH monitoring project also had concerns about the practices of determinations of eligibility on new applications. A study they found in Alabama makes real their concerns. A professor had undergraduate students pose as needy applicants. County welfare office intake workers repeatedly refused to give out applications upon request. Contrary to official state policy, workers demanded documentation prior to filling out an application "and refused to allow applications to be filled out off of the premises. Only 6 of the 27 students who requested TANF applications were able to obtain them" (Children's Defense Fund and National Coalition for the Homeless, 1998).

Education and Training Effects for Low Skilled Workers

The concerns of many officials, researchers and journalists over the past thirty years citing insufficient available jobs and the inability of the labor market to absorb high numbers of low skilled workers has not deterred efforts to increase the low skilled labor force with Job Training and Basic Skills educational programs. The JOBS program created by the FSA in 1988 was only a recent entrant into the long line of training programs ignoring the demand side of the market. The idea of providing services, including education and training, to enable welfare recipients to move into employment and off welfare dates at least from 1962 (Grubb, 1996a). The growth of programs to train people for employment include the manpower programs of the 1960s, the Comprehensive Employment and Training Act (CETA) and Job Corp of the 1970s, the Job Training and Partnership Act (JTPA) of the 1980s to name only a few of the many programs created.

In many cases, job training programs appear to be worth doing because they both have "statistically significant effects" and their benefits outweigh costs. Grubb (1996a: p.27) points out, however, that "the effects have been so small that they have little real influence on the courses of peoples lives, the continuing need for welfare programs, or the future development of those enrolled in youth programs." JTPA programs, for example, may have benefits for those enrolled in the program that outweigh program costs. The average earnings increase,

however, was only \$735 per year: "not enough to move individuals out of poverty...or enable them to leave welfare" (Grubb, 1996a: p.35).

Prior to the 1980s, early welfare-to-work experiments emphasized work rather than education or training. Beginning in the Nixon administration, states were allowed to experiment with their welfare-to-work programs. The California Work Experience Program (CWEP) created under Reagan in 1976 is one example where welfare recipients were required to "work off" their grant in a community service job. The evaluation of the program stated that it failed to meet any of its employment objectives. "Nonetheless, Reagan---never one to pay undue attention to the evidence---cited the program as a success virtually every time he discussed welfare and used its presumed 'success' to press for an expansion of welfare-to-work programs" (Grubb, 1996a: p.39)

During the Reagan Administration the experiments added job search training and work experience training. Grubb (1996a: p.41-42) reports on the outcomes of studies of five states experimenting with control groups.

The [five] welfare-to-work experiments yielded benefits of some kind in virtually all states, and the benefits exceeded the costs of operating these programs... However, the effects were still modest by almost any standard...and the programs did not reduce the number of families on the welfare rolls, the goal at the heart of the welfare-to-work programs.

Grubb's (1996a) analysis of other programs lacking significant educational segments, such as some of the GAIN efforts, found the programs did not move heads of households off welfare. "Project Independence" that focused on "job search" increased earnings (\$114 per year) and decreased welfare payments

even more. Although great for cost benefit analysis, Project Independence lowered total income for recipients. The Minority Female Single Parent (MSFP) demonstration, emphasized remedial education with a wide array of services such as child care, counseling, and job search. With the exception of the CET in San Jose, which added job specific skills and operated in an environment of decreasing unemployment, the MSFP "had no influence whatsoever on employment and earnings or the receipt of welfare benefits" (Grubb, 1996a: p.52). His analysis confirms the constant fear of welfare advocates that: "under certain conditions they [job services and training programs] may save taxpayers money, but they do so by making families with children who are dreadfully poor to start with even poorer" (p.49).

The JOBS program, started in 1988, is under a review with two different approaches to study the effectiveness of JOBS job training and placement functions. The study will evaluate the effectiveness of both functions using the "labor force attachment" model, emphasizing job placement and possibly short term training and the "human capital" model, emphasizing longer-term education and training (not college). Although early analysis of the different approaches in the programs shows early benefits of the labor force attachment model, longer term analysis is required for examination of sustaining benefits, since only minimal effects of the human capital model are evident in the first year after training. Results from similar experiments, though, are available from

evaluations of CETA that concluded that longer classroom training programs were on the whole more effective than shorter-term programs, especially for women (Grubb, 1996a: p.68).

Both on the job training and job search services are designed to get individuals into employment quickly. Emphasis is on socialization to the norms and values of employment: neither enhances basic cognitive or vocational skills. Whether such limited services have much effect over the long run and whether they merely substitute one group of underprepared workers for another are questions that most current evaluations of program success do not ask and cannot answer. What the research does show is that short term programs and services leave individuals with employment rates and earnings no higher than those of welfare recipients who had not enrolled in such programs. More importantly, they do not permanently move individuals off welfare. The reason for the lack of benefits to short job training programs is that they do not put individuals on career tracks with continued earnings increases, as formal schooling does. The most powerful evidence is the contrast between the typical job training benefits, which decay over four or five years, and the age-earnings associated with different levels of education, in which the benefits of education expand over time. Additionally, as Grubb (1996a: p.94) points out:

this strategy ignores the fact that the low-skilled labor market for which job training programs prepare individuals is so unstable that, without an increase in basic skills that would enable them to escape the secondary labor market, they will continue to suffer intermittent employment, low earnings, and the discouragement that leads them back to marginal employment or welfare in the long run.

An understanding of the instability of the low-skilled labor market provides more realistic expectations for short term job training programs. And, understanding the hiring practice of employers can provide insight into that segment of the labor market. Thurow's (1974 cited in Grubb, 1999) queuing theory provides a structure for that analysis. According to the theory, "employers arrange job applicants in queues, hiring from the top and moving toward the bottom depending on the amount of labor they need" (Grubb, 1999). Evidence from numerous studies (Jencks, 1996a, 1996b; Grubb, 1996a, 1996b; Wilson, 1996) displays queuing effects that suggest as each job is filled in a fixed labor market another worker is displaced. Norton Grubb (1996, p. 22) adds that in addition to displacing other workers, in "inelastic" markets that displacement also tends to lower wages.

Whether the reforms of social welfare will displace low skilled workers only or whether the services provided for sustaining labor force participation will displace higher skilled workers, moving them down in the queue, will be determined by policies that either encourage or discourage long term education and training of welfare recipients. Under current policies, however, job training participants are not referred to longer-term training or subsequent education after short term training or even sensitized to life-long learning.

Chapter 3

Methodology

Datasources

There are four main sources that were used to derive a dataset to respond to questions about the post-college earnings of students. The process involves electronically matching the student social security number from the student record files stored in the California Community Colleges (CCC) Chancellor's Office Management Information System (COMIS) with social security numbers (SSN) in the three other sources. SSNs were matched with: the records for those receiving public assistance maintained by the California Department of Social Services (DSS), the student records maintained by the California State University (CSU) Chancellor's Office, and the Unemployment Insurance (UI) wage record data files maintained by California Employment Development Department (EDD).

The COMIS database contains demographic and educational data of all students who attended California Community Colleges since fall 1990. As the state's official repository of community college student data, the COMIS contains demographic data such as age, gender, ethnicity, financial aid status, English language proficiency, and disability status. Furthermore, educational data maintained include pre-collegiate basic skills courses, occupational and non-occupational courses completed, grades, and AA/AS degrees and certificates of

18 or more units awarded. For the 1992-93 academic year 2,266,656 student records were in the COMIS system.

The California DSS maintains a database that includes SSN, codes to identify type of aid received and month of aid receipt. County welfare offices report data to the DSS monthly. The match for the 2,266,656 records sent to DSS identified 172,514 individual SSNs receiving a variety of aid (Table 2).

The CSU student record files maintained by the CSU Chancellor's Office include much of the information included in the COMIS but extends back to 1988 and includes additional information on eligibility and application status. The electronic match found information on 206,840 student records submitted to the CSU Chancellor's Office. The 33,672 females identified as continuing their education at CSU were removed from the wage analysis of the study cohort (Table 3). The females removed included 1,073 receiving AFDC while at CCC.

The California EDD collects and maintains UI wage records, which are used to determine employment and earnings of individuals in the labor market to determine UI benefit eligibility and payment levels. Employers are required to comply with the state's UI Compensation law by submitting UI quarterly reports of earnings for their employees. For each employee covered, an employer is required to report the employee's SSN and the total amount of earnings received during the quarter. Additional information about the employer is also reported, such as the unique employer identification number, the county in which the

business is located, and the industry affiliation of the business. The EDD match provided 13,484,191 wage records for 738,653 unique SSNs from the student records submitted for matching for a four year time span.

For this analysis, the target population was drawn from 90,403 female students (Tables 4 and 5) 17-57 years old who were either *completers* or *leavers* of the CCC and were unemployed during the 1992-93 academic year. A *completer* is defined as a student who received a certificate or degree requiring 18 or more units to complete; whereas a *leaver* is defined as a student, who did not receive a certificate or degree, but may have completed some units or completed a shorter term program. The data analyses conducted for this study is based on information from 738,653 students enrolled in 103 of the 106 California Community Colleges who submitted SSNs to the Chancellor's Office.

The reporting domain of the cohort included students with a social security number who enrolled in at least 1/2 unit or eight hours of positive attendance during the academic year. Excluded from the reporting domain were: 1) students enrolled in K-12 during the cohort year; 2) students enrolled in any California State University during the two years following the cohort year; and 3) students enrolled in the year following the end of the cohort year at any college in the California Community Colleges system. Earnings for individuals who were employed by the military or federal government, self-employed, unemployed, or not in the work force were not part of the UI dataset and may be represented as

either unemployed or low-wage workers due to part-time work in UI covered employment.

Analytic Approach

In order to make comparisons of earnings from first year out to second and third year out of college, the California Consumer Price Index for Urban (CPI-U) Consumers was used to adjust earnings for changes in inflation. Thus, all earnings were adjusted to 1995 dollars. For this study, earnings will be calculated for students who worked any quarters during the year and separately for those working all four quarters. The earnings of students in the cohort were evaluated using UI wage data beginning July 1, 1992, the quarter beginning their last year in college, through June 30, 1996, the fourth quarter of their third year out of college.

Match rates in the UI base wage file should not be taken as employment rates because of deficiencies in the UI base wage file. Many California workers are not represented in the UI file such as those who are self employed or independent contractors, nor are those employed by the military, federal government, U.S. postal service or out of state employees. Furthermore, following a randomly picked cohort from the CA UI base wage file will produce an average decrease in match rate of about 3 percent per year.

Further, in most of the tables representing average annual earnings the median annual earnings is displayed instead of the mean earnings to eliminate

and diminish errors. The median annual earnings represent the middle value in the distribution of the annual income. The annual income is derived by summing earnings for those working all four quarters. The purpose of using the median annual earnings is to have a more stable statistic. Compared to the mean, the median is more robust and less likely to be influenced by extreme outliers.

Completers will be analyzed by type of award conferred. Certificates are categorized by units required for completion and include the categories: 18 to 29.99 units, 30 to 59.99 units, and 60 or more units. Leavers will be categorized by units completed prior to leaving the institution and will include the categories: noncredit coursework only, 0.01 to 11.99 units, 12 to 23.99 units, and 24 or more units completed based on the total cumulative units reported for the student.

Because only two years of enrollment data were available in the COMIS for those students leaving CCC in the 92-93 academic year, vocational status for leavers was determined by examining the student enrollments for their last two years in college. Students were determined to be vocational if 12 vocational units were earned in an area of study identified in the CCC Taxonomy of Program (TOP) Manual (1983) as a discipline. Vocational courses were identified using course TOP code to determine vocational status of the course. Leavers were assigned a program of study based on the TOP code in which the most vocational units occurred.

Although many students receive multiple certificates during their educational careers at a community college, only one award is assigned for students in this cohort using the hierarchy of the vocational certificate with the greatest unit requirements. Units were aggregated for students across colleges so that an individual student attending two or more colleges had a single record indicating their total units earned at all colleges in the system.

A multivariate analysis was used to test whether the annual earnings three years after college are significantly different for two separate groups. Both groups will include females of prime working age after college (18-58) as referenced in Wilson (1996). Additionally, the study focused on those who had no earnings reported in the UI system during their last academic year in college. Those groups are: 1) female students receiving AFDC at least one month during their last academic year, and 2) female students not receiving public assistance, either AFDC or SSI/SSP, during their last year in college. Controls were made for ethnicity, age, program of study, and educational attainment.

A logistic regression analysis was also used to determine if completion of a program was significantly different for the two groups. Logistic regression analysis was used because the dependent and independent variables of program completion and AFDC status are dichotomous categorical variables. Controls were made for age and Basic Skills status. Design variables were created for AFDC status and basic skills status to allow comparisons in a

pairwise manner with the value of participation in a group as 1 and nonparticipation as a -1.

Data Cleaning

Data from DSS was only used when earnings reported from an employer were greater than \$1.00 and where a single SSN had less than 60 employer records reported in any quarter. For cases where the number of records exceeded 59 in a quarter or the value was equal to \$1.00 the earnings were set to missing for that SSN. Records containing \$1.00 were set to missing because of employer practices of reporting \$1.00 as a placeholder for earnings when submitting employee records for employees not working in the quarter but still on the books as an employee. Social security numbers that had over 59 employer records were considered in error and set to missing due to the likelihood of multiple employees being reported with the same SSN.

Students often attend more than one college and receive certificates or degree from both. Records with multiple awards from different colleges were combined into a single award with vocational awards kept over nonvocational and AA/AS degrees kept over certificates. Where multiple certificates were awarded the highest unit requirement was kept. If the awards had the same unit requirement, the program for the award was selected by alternately picking the high then low program code. No students in either group after selection of the cohorts followed had more than two equal unit requirement awards.

For students with multiple colleges of attendance the age, gender, and ethnicity were checked for consistency. Each was assigned the lowest value in conflicting records. For example, if one record had the student at 65 years old and the other had the student at 45, the student was assigned the age of 45.

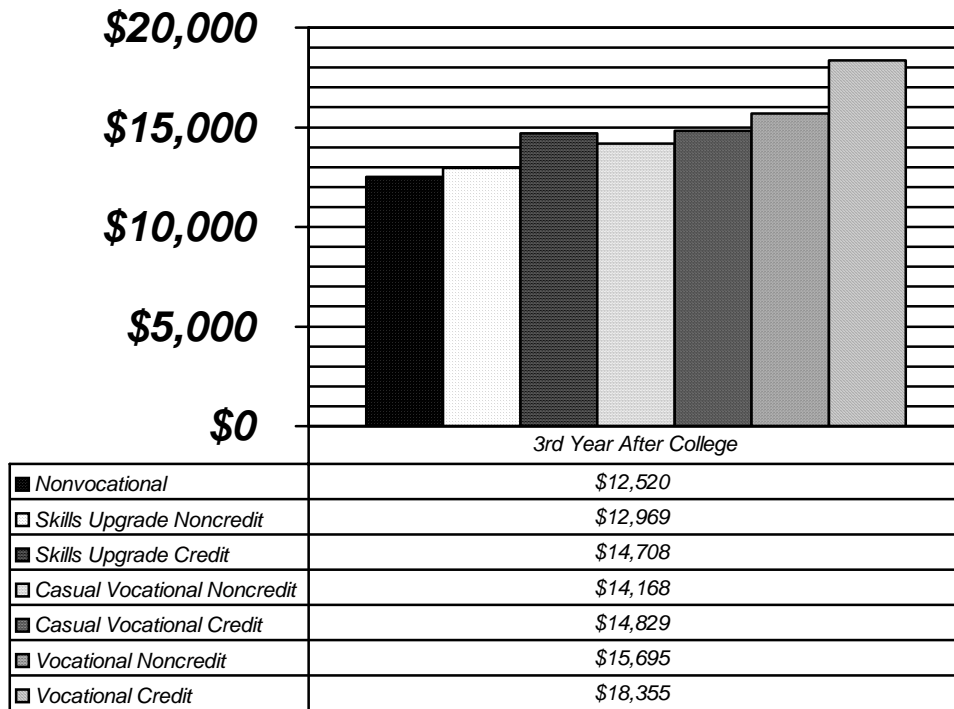
Chapter 4

Results

For this analysis, the target population focused on female students of prime working age who were 17-57 years old and unemployed during their last year in college and were enrolled in vocational programs. Two groups were selected. The study group from 16,433 unemployed AFDC females and the comparison group from 73,970 unemployed nonAFDC females (Table 5). The majority of students in both unemployed groups, 92 percent of AFDC and 94 percent of nonAFDC students, were enrolled in less than 12 units of vocational coursework during their last two years in college. The resulting two groups of vocational females consisted of 1,277 AFDC students and 4,351 nonAFDC students (Table 6).

The earnings for unemployed female students in their third year out of college were significantly different ($p < 0.0001$) by the type of coursework (e.g. nonvocational, skills upgrade, casual vocational or vocational) they completed during their last two years in college (Table 7). Figure 2 below shows the relationship between the median earnings of unemployed female students three years after college and the type of coursework completed at a CCC.

Figure 2
 Median Income for Third Year After College
 for Unemployed Females 17-57 by Type of Coursework

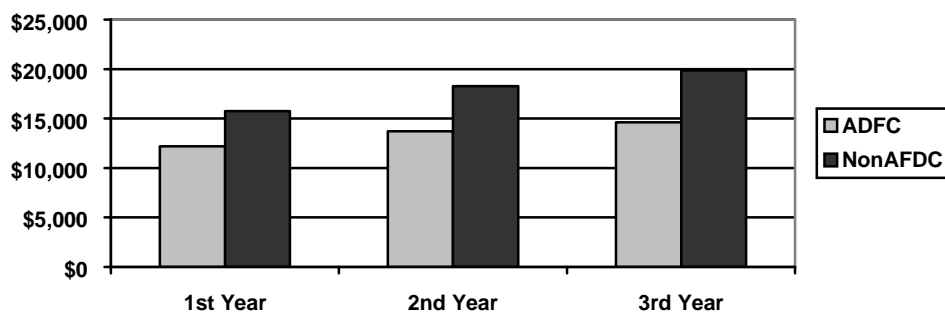


Vocational students earned higher incomes than their nonvocational counterparts in each of the three years after college. For both the AFDC and nonAFDC groups, the within group significance for earnings three years after college was similar when contrasting type of coursework (Tables 6 & 8). The vocational AFDC students had significantly ($p < .0001$) higher third year earnings than any of the other AFDC student groups and similarly, the vocational nonAFDC students had significantly ($p < .0001$) higher third year earnings than any of the other nonAFDC student groups. The median earnings show the effects of vocational coursework for these two groups with 37 percent higher

medians for vocational AFDC students than nonvocational and 49 percent higher medians for nonAFDC students in third year out earnings (Table 6).

For the unemployed vocational female students, the nonAFDC group had significantly higher earnings three years after college: on all earnings ($p < .0001$) with a mean of \$16,171 compared to \$12,015 for the AFDC students and for those working all four quarters ($p < .0001$) with a mean of \$23,192 compared to \$17,595 for the AFDC students (Table 9). Figure 3 shows the relative differences in median incomes for each year after college.

Figure 3
Annual Median Earnings for Three Years After College
for Unemployed Female Credit Vocational Students 17-57
by Type AFDC Status



	First	N	Second	N	Third	N
ADFC	\$12,180	175	\$13,724	315	\$14,616	347
NonAFDC	\$15,766	537	\$18,287	905	\$19,860	912

Source: Table 10

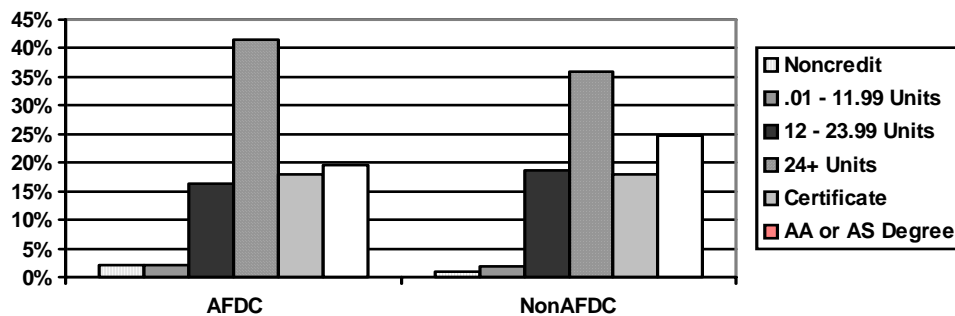
There was, however, a significant difference between the third year earnings for the two groups within only four vocational programs: Accounting, Cosmetology, Nursing, and Secretarial Studies (Table 11).

Additionally, there was no significant difference between the groups for those taking accounting or secretarial studies when controlling for educational

attainment and degree type (Table 12). Although the difference in earnings remained significant ($p < .0001$) for nursing students, AFDC nursing student earnings for certificate holders were higher than the nonAFDC certificate holders, while the AFDC AA/AS holders were lower than the nonAFDC AA/AS holders. Third year earnings for Cosmetology students also remained significantly ($p < .0482$) lower for those AFDC students working all four quarters but was not significant when considering educational attainment on earnings in any quarter (Table 12).

Although significant differences in third year after college earnings was found between the two groups when considering educational attainment for some programs, educational attainment appears more problematic. Educational attainment, more importantly, is significantly different ($p < .0001$) for the two groups when considering AFDC status and programs (Table 13).

Figure 4
Vocational Unemployed Female Students 17-57
Educational Attainment by AFDC Status



	AFDC	NonAFDC
Noncredit	2.1%	1.0%
.01 - 11.99 Units	2.2%	1.9%
12 - 23.99 Units	16.4%	18.6%
24+ Units	41.5%	35.9%
Certificate	18.0%	18.0%
AA or AS Degree	19.7%	24.6%

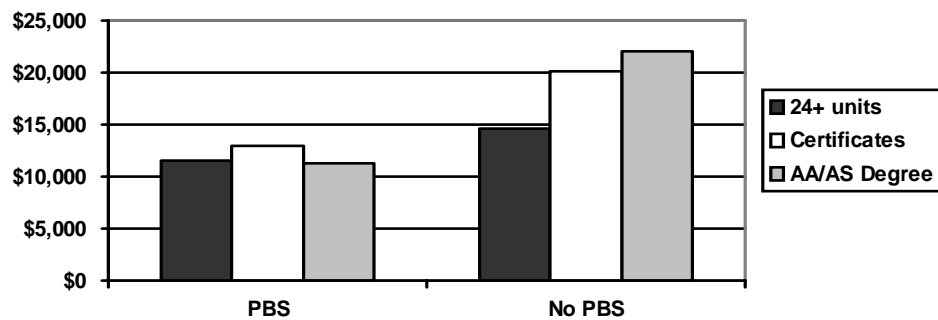
Source: Table 15

Although nearly equal percentages of vocational AFDC (79.3%) and notAFDC (78.5%) students completed 24 or more units, or received a formal Certificate or AA/AS degree (Table 15), a significantly ($p < .0015$) smaller proportion of AFDC students (37.7%:42.6%) were able to complete a program of 18 units or more and receive a certificate or degree (Table 16). And, program completion has a significant effect on earnings in the first ($p < .0001$), second ($p < .0001$), and third ($p < .0001$) year out of college (Tables 10 & 17).

Over twice as large a proportion of the vocational AFDC females took precollegiate basic skills coursework while at the community colleges. Fifteen percent of the unemployed vocational AFDC females took basic skills courses while only 6 percent of their nonAFDC counterparts did (Table 18). Basic skills

coursework significantly ($p < .01$) decreased the chance of completing a certificate or degree program (Table 19). Within the vocational AFDC female group, basic skills coursework was twice as prevalent (135:58) in the leaver groups (16 percent) compared to the completers (12 percent). Basic Skills coursework also significantly ($p < .006$) affected earnings for those found employed all 4 quarters three years after college for the AFDC group but not for the nonAFDC group (Table 20-21).

Figure 5
Unemployed AFDC Female Vocational Students 17-57
Third Year After Colleges Earnings by PBS Status



	PBS	No PBS
24+ units	\$ 11,536	\$ 14,657
Certificates	12,950	20,118
AA/AS Degree	11,281	22,097

Source: Table 20

Limited English Proficiency (LEP) was not prevalent in either group with only 2.6 percent of the AFDC group and 4.3 percent of the nonAFDC group enrolled in LEP courses while at the community college (Table 18).

Chapter 5

Conclusions

California Community Colleges did function as a vehicle for social mobility for some groups of the unemployed welfare recipients in this study. Long term economic benefits that moved them above poverty were realized by over half of those who completed a vocational certificate program requiring 18 or more units or a two year vocational Associate degree program (Table 22-23). The rate of completion of a certificate or degree program for the vocational AFDC females in this study, 37.7 percent (Table 15), was slightly higher than the national rate of 31 percent reported by Grubb (1996) and the majority of those completing moved out of poverty even in their first year after college.

Completing short term programs of under 18 units or earning high numbers of units without completing the certificate or degree requirements did not provide the women in this study with long term economic benefits in most of the cases. Less than 17 percent (Table 23) of the unemployed AFDC females who did not receive a certificate or degree earned over the 1995 Federal poverty line (FPL) of \$12,278 for a family of three (U.S. Census Bureau, 1998) in their third year after college. The seventeen percent of Leavers earning wages above poverty nearly matches the 16 percent found with above poverty wages discovered in the CDF (1998) study. The low percentage earning above poverty support's Grubb's (1996) assertion that "the economic benefits of small amounts

of postsecondary education (less than one year) are virtually nonexistent for both men and women, and even more substantial amounts (one or two years) are virtually worthless for women in particular.”

Grubb's, (1996) work in examining the mid-skilled labor market suggests that without the diploma, employers will not even consider the short term completers and noncompleters for the mid-skilled occupations. If these women's work in community colleges was focused in short term job readiness programs to move them into low-skill low wage jobs, which the current PRWORA mandates, they may have met their educational goals but did not move out of poverty. Nearly all groups, including those not receiving vocational degrees, had high increases in earnings from their first year out of college to their third year after college. The change in median annual earnings for those working in all 4 quarters in the nonvocational group, typical of the short term program groups, from \$7,572 to \$10,633, a 40 percent increase, suggests that these females are in low wage employment (Table 10). Although this is double what Grubb (1996a) reported for JTPA participants, it is evident that this group did not become economically self sufficient. Wilson (1996) and Jencks (1997), moreover, both warn that low wage and minimum wage jobs will not move families out of poverty and work in those low wage jobs can not be sustained without other resources available to them.

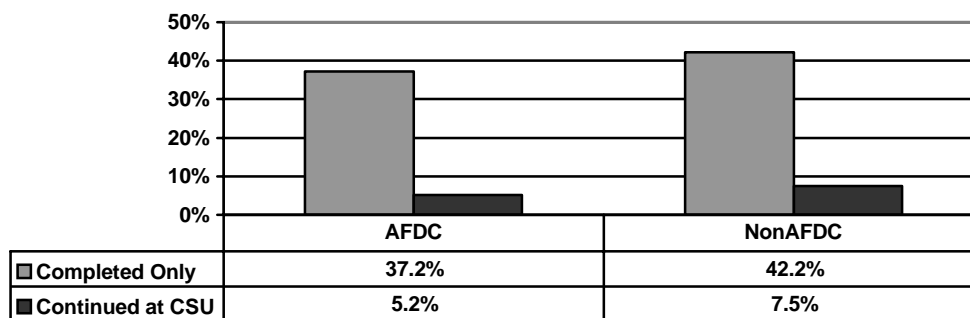
Unemployed vocational female student's earnings three years after college are well above the federal poverty threshold when they complete either a certificate or a degree program whether or not they received AFDC during their last year in college. For those receiving AFDC benefits during their last year in college, over half (53.3%) of the completers who were found employed in California UI covered employment three years after college earned above the FPL (Table 22). Just under 70 percent (68.5%) of those found working in all four quarters earned the FPL of \$12,278 or more (Table 23). Grubb (1996b) describes the relationship of long term economic benefits and completing an integrated community college program as a package of skills that provide both entry-level skill requirements and those skills valued by employers for promotion and advancement in the workplace.

The majority of unemployed AFDC female students, however, did not enroll in or complete programs that would function to move them out of poverty. While 92.1 percent of the unemployed AFDC females enrolled in nonvocational or low vocational unit programs, none of the groups of programs outside of vocational ones had median earnings three years after college that would place them above the FPL.

Just as important, very few nonvocational programs had completers. Only 211 (1.3 percent) of 15,697 unemployed AFDC female students 17-57 years old not enrolling in at least 12 units of vocational coursework completed certificates

or degrees (Table 26). These AFDC females did not complete long term programs nor did they transfer to CSU. The AFDC females overall transferred to CSU at very low rates (3.6 percent) compared to their nonAFDC counterparts at 7.5 percent (Table 26). The vocational AFDC female students both completed programs and transferred to CSU at rates much closer to their nonAFDC counterparts as shown in Figure 6 below.

Figure 6
Completion and Transfer of Vocational Unemployed Female Students 17-57



Source: Table 26

Although the data does not provide the answer to why the AFDC females did not complete long term programs or transfer to CSU at the same rates as their nonAFDC counterparts or those in the national studies presented by Grubb (1996), Wilson's (1996) work in the FPLS suggests that resources to continue long term educational programs were insufficient for this group. Both the Department of Labor's Consumer Expense Survey, conducted in the mid eighties, and Edin's work in 1988-90 (Jencks, 1993), estimate that 40 percent of expenses need to be additional income above AFDC benefits. Jencks (1993) also suggests that AFDC recipients in nearly every state would need to earn

\$300-\$400 dollars more to meet their expenses every month. While the resources of the nonAFDC students allowed them to complete at higher rates, the burden of attending school with the lack of resources available to the AFDC students during the period of this study was deadening. And, if Wilson's (1996) proposition that failure to retain jobs diminishes labor force attachment can be extended to schooling and his argument is correct, then the result of their failure to complete will further weaken their attachment both to education and the labor force. Additionally, the evidence also supports the premise that higher education itself is stratified with only lower stratas of education being available to those with less resources to enter or enough resources to continue into the higher levels of education in California.

The higher percentage of AFDC females who took basic skills provided evidence of another impediment to completion and the long term economic benefits completing a program provides. The additional time and endurance required when adding remedial coursework to the work already required in vocational programs at CCC that would move them out of poverty appeared to be overwhelming for this group of women. The nonAFDC counterparts of this study who took basic skills courses but had sufficient resources to not work while in college completed at a 33.3 percent higher rate (Table 20).

When only 42.4 percent of the unemployed AFDC female students either complete a program of 18 units or more or continue their education at a CSU and

less than 17 percent of those who don't complete earn above poverty in three years in California, it is questionable whether work first policies will be successful in moving these people out of poverty. Furthermore, unless either many more resources are provided to these women to help them stay in school to improve their skills so they can step out of low wage jobs or sufficient wage increases are made at the bottom of the labor market, they and the children in their care will continue to suffer the pains of poverty.

Indications for Further Research

The most important question raised but not answered by this research is why these women complete educational programs of sufficient length to provide long term economic benefits at such dismal rates. Qualitative research that could answer this question would provide community colleges with information to better address the barriers these women face as they try to remain in school to gain sufficient skills to move up in the labor market.

The research in this thesis did not include the rates at which any of these women returned to welfare over the followup period. Rematching these women's SSNs to the DSS database for the entire follow-up period would provide those rates and help us understand better the effects of short term programs, simple accumulation of units and low wage employment. Checking for these women's SSN's in the COMIS for the second, third and fourth years after the cohort year would also provide us with information on those who may have simply stopped

out for a year. Long term follow-up at five and seven years after college should be done to examine the sustainability of the economic benefit effects of community college educational programs in California.

The CCCs are now implementing data collection for all program completions, no matter what the length, which will allow future research to be done on the impact of completing programs of less than 18 units which were not identified in this study. Follow-up of those students who complete programs of less than 18 units separately from those who drop out needs to be accomplished if we are to understand the consequences of the policies currently in place which focus on very short term training programs.

This research also did not account for those women who may have entered self employment in a number of occupations that may require the worker to be an independent contractor such as the cosmetology and child development (child care) fields. With current privacy restrictions, data on earnings for self employed individuals is not available. Unless new inroads are made in data matches with the IRS or Franchise Tax Board, field research will be required to fully understand the effectiveness of programs leading to employment in areas dominated by self employed or independent contractor employees.

The question of whether those who entered employment displaced other low skilled workers in a fixed labor market was not answered by this study, but is critical to the success of current welfare policy implementations. If the literature

is correct and a reordering of the queue of the under and unemployed is the result of short term training, then both the people pushed down in the queue and the state, unable to meet it's work participation rates, will suffer from the same loss of funds.

Table 1
Examples of Poverty Thresholds for Four-Person Families
Set by Various Methods for Years Around 1980 and 1990, in Constant 1992 Dollars

Type and Source of Threshold	Thresholds	Thresholds	Percentage of	
	Set for Years Around 1980	Set for Years Around 1990	Orshanski Rate 1980	1990
Expert Budget Thresholds				
Official (Orshansky threshold indexed by CPI-U) 1963	14,228	14,228		
Orshansky 1963 threshold indexed by CPI-U-X1	13,082	13,082	92%	92%
Orshansky food multiplier developed from CEX data	16,163 (1980)	20,659 (1991)	114%	145%
Ruggles housing multiplier	21,331 (1980)	21,640 (1992)	150%	152%
Weinberg/Lamas food/housing multiplier—25th percentile	N.A.	20,267 (1989)		142%
Weinberg/Lamas food/housing multiplier—35th percentile	N.A.	21,790 (1989)		153%
BLS lower level budget	19,587 (1981)	N.A.	138%	
Renwick budget ^a	N.A.	17,600 (1992)		124%
Schwarz and Volgy budget	N.A.	18,983 (1990)		133%
Relative Thresholds				
Vaughan one-half median before-tax four-person family income	20,715 (1980)	22,308 (1992)	146%	157%
Vaughan one-half median after-tax four-person family income	16,629 (1980)	18,018 (1992)	117%	127%
Expert Committee on Family Budget Revisions social minimum	15,584 (1979)	19,987 (1991) ^b	110%	140%
Subjective Thresholds				
Vaughan "poverty"	15,895 (1980)	17,703 (1989)	112%	124%
General Social Survey "poverty"	N.A.	17,228 (1993)		121%
Colasanto et al.	12,160 (1981)	N.A.	85%	
Danziger et al. ^c	24,680 (1980)	N.A.	173%	
De Vos and Garner ^d	32,530 (1982)	N.A.	229%	

NOTE: All thresholds are after-tax unless otherwise noted; dates in parentheses are the year for which the threshold was developed; all amounts are expressed in constant 1992 dollars using the CPI-U (except the second one, as noted).

^a Renwick threshold calculated as weighted average of thresholds for two-adult/two-child families with one earner and two earners. (Weighting assumes that 75% of two-adult/two-child families have two earners and that one-third of those pay for day care.)

^b Calculated as one-half average (rather than median) expenditures of four-person consumer units.

^c Survey question did not specify whether respondents were to indicate minimum income level before or after taxes.

^d Survey question asked respondents to indicate minimum income level before taxes.

SOURCE: C. Citro and R. Michaels eds, National Academy Press, 1995: Measuring Poverty: A New Approach; TABLE 2-5 <http://www.nap.edu/readingroom/books/poverty/>

For pdf versions: <http://www.census.gov/hhes/poverty/povmeas/toc.html>

Table 2
 Students in the 1992-93 Academic Year
 Identified by the Department of Social Services
 By Aid Type

AIDCODE	Category	Frequency	Percent	Cumulative Frequency	Cumulative Percent
10	SSI/SSP Aged	8,544	5%	8,544	5%
20	SSI/SSP Blind	1,939	1.1	10,483	6.1
30	AFDC - Family	93,548	54.2	104,031	60.3
32	AFDC - Family (State)	1,350	0.8	105,381	61.1
33	AFDC - Unemployed Parent (State)	227	0.1	105,608	61.2
35	AFDC - Unemployed Parent (State)	29,921	17.3	135,529	78.6
40	AFDC - Foster Assistance	784	0.5	136,313	79.0
42	AFDC - Foster Care (Federal)	671	0.4	136,984	79.4
60	SSI/SSP Disabled	35,413	20.5	172,397	99.9
62	SSI/SSP Special Circumstances	117	0.1	172,514	100%

Table 3
 All Students Leaving CCC in 1992-3 for At Least One Year
 By DSS Aid Code and CSU Status

Type of Aid	DSS Aid Code	Not Found at CSU N	Found at CSU N	ALL Students N
All Leavers				
SSI/Aged	10	2,274	31	2,305
SSI/Blind	20	475	31	506
SSI/Disabled	60	9,266	321	9,587
	62	34	1	35
Total SSI		12,049	384	12,433
AFDC - Family	30	28,189	1,045	29,234
	32	487	16	503
	33	93	2	95
	35	8,652	253	8,905
Total AFDC - Family		37,421	1,316	38,737
AFDC - Foster Care	40	168	3	171
	42	174	2	176
Total AFDC - Foster Care		342	5	347
Total AFDC		37,763	1,321	39,084
Not AFDC, Disabled, or Foster Care		628,250	58,886	687,136
Total Leavers		678,062	60,591	738,653
GENDER				
Female				
SSI/Aged	10	1,366	20	1,386
SSI/Blind	20	259	16	275
SSI/Disabled	60	4,452	151	4,603
	62	19		19
Total SSI		6,096	187	6,283
AFDC - Family	30	24,787	955	25,742
	32	457	15	472
	33	64	2	66
	35	3,625	97	3,722
Total AFDC - Family		28,933	1,069	30,002
AFDC Foster Care	40	78	2	80
	42	91	2	93
Total AFDC - Foster Care		169	4	173
Total AFDC		29,102	1,073	30,175
Not AFDC, Disabled, or Foster Care		324,509	32,412	356,921
Total Female Leavers		359,707	33,672	393,379

Table continued next page

Table 3 continued

Gender	Type of Aid	DSS Aid Code	Not Found at CSU N	Found at CSU N	ALL Students N
Male	SSI/Aged	10	884	11	895
	SSI/Blind	20	214	15	229
	SSI/Disabled	60	4,735	170	4,905
		62	15	1	16
	Total SSI		5,848	197	6,045
	AFDC - Family	30	3,304	89	3,393
		32	27	1	28
		33	29		29
		35	4,976	156	5,132
	Total AFDC - Family		8,336	246	8,582
	AFDC Foster Care	40	89	1	90
		42	80		80
	Total AFDC - Foster Care		169	1	170
	Total AFDC Not AFDC, Disabled, or Foster Care		8,505	247	8,752
Total Male Leavers		300,488	26,355	326,843	
		314,841	26,799	341,640	
Unknown	SSI/Aged	10	24		24
	SSI/Blind	20	2		2
	SSI/Disabled	60	79		79
	Total SSI		105	0	105
	AFDC - Family	30	98	1	99
		32	3		3
		35	51		51
	Total AFDC - Family		152	1	153
	AFDC Foster Care	40	1		1
		42	3		3
	Total AFDC - Foster Care		4	0	4
	Total AFDC Not AFDC, Disabled, or Foster Care		156	1	157
	Total Unknown Gender Leavers		3,253	119	3,372
			3,514	120	3,634

Table 4
 Quarters with Earnings in CA UI Covered Employment
 for Females during their Last Year in College for those Not Continuing at CSU
 by AFDC Status, Age and Ethnicity

Age/Ethnicity	Number Quarters with Earnings					
	ALL N	0 N	1 N	2 N	3 N	4 N
AFDC						
00-16	162	127	16	8	8	3
17-19	3,401	1,683	549	433	360	376
20-29	13,947	7,754	2,002	1,532	1,308	1,351
30-39	8,770	5,204	1,059	835	713	959
40-49	2,425	1,597	218	202	157	251
50-59	287	209	22	16	21	19
60-99	110	71	20	6	4	9
ALL	29,102	16,645	3,886	3,032	2,571	2,968
Not AFDC or SSI/SSP						
00-16	1,991	1,402	140	82	94	273
17-19	25,799	5,801	2,949	3,208	4,108	9,733
20-29	114,167	23,157	7,667	9,578	14,333	59,432
30-39	80,490	21,797	4,509	5,047	8,161	40,976
40-49	55,091	15,908	2,800	3,140	5,281	27,962
50-59	23,790	8,732	1,228	1,305	2,001	10,524
60-99	23,181	18,028	701	654	864	2,934
ALL	324,509	94,825	19,994	23,014	34,842	151,834
AFDC						
American Indian	609	366	88	56	51	48
Asian	1,787	1,363	150	98	85	91
Black	7,235	3,969	1,085	804	616	761
Filipino	321	171	34	35	41	40
Hispanic	6,698	3,703	857	725	642	771
Other Nonwhite	342	210	33	36	30	33
Pacific Islander	116	72	14	8	13	9
Unknown	772	435	101	78	73	85
White	11,222	6,356	1,524	1,192	1,020	1,130
ALL	29,102	16,645	3,886	3,032	2,571	2,968
Not AFDC or SSI/SSP						
American Indian	3,579	894	242	284	474	1,685
Asian	26,251	10,231	1,827	1,897	2,459	9,837
Black	21,672	5,299	1,531	1,581	2,286	10,975
Filipino	9,405	1,793	545	668	1,110	5,289
Hispanic	53,839	13,781	3,571	4,097	6,065	26,325
Other Nonwhite	4,234	1,186	262	288	476	2,022
Pacific Islander	1,541	410	109	110	173	739
Unknown	13,484	5,095	716	819	1,275	5,579
White	190,504	56,136	11,191	13,270	20,524	89,383
ALL	324,509	94,825	19,994	23,014	34,842	151,834
ALL	353,611	111,470	23,880	26,046	37,413	154,802

note: Counts are duplicated for those attending multiple colleges.

Table 5
 Quarters with Earnings in CA UI Covered Employment
 for Females 17-57 during their Last Year in College for those Not Continuing at CSU
 by AFDC Status, Age and Ethnicity

Age/Ethnicity	Number Quarters with Earnings					
	ALL N	0 N	1 N	2 N	3 N	4 N
AFDC						
17-19	3,401	1,683	549	433	360	376
20-29	13,947	7,754	2,002	1,532	1,308	1,351
30-39	8,770	5,204	1,059	835	713	959
40-49	2,425	1,597	218	202	157	251
50-59	267	195	21	15	20	16
ALL	28,810	16,433	3,849	3,017	2,558	2,953
Not AFDC or SSI/SSP						
17-19	25,799	5,801	2,949	3,208	4,108	9,733
20-29	114,167	23,157	7,667	9,578	14,333	59,432
30-39	80,490	21,797	4,509	5,047	8,161	40,976
40-49	55,091	15,908	2,800	3,140	5,281	27,962
50-59	20,722	7,307	1,064	1,142	1,759	9,450
ALL	296,269	73,970	18,989	22,115	33,642	147,553
AFDC						
American Indian	603	362	87	56	51	47
Asian	1,750	1,334	145	98	83	90
Black	7,192	3,934	1,082	802	615	759
Filipino	319	170	34	35	41	39
Hispanic	6,625	3,649	850	719	638	769
Other Nonwhite	337	207	31	36	30	33
Pacific Islander	116	72	14	8	13	9
Unknown	737	415	96	74	71	81
White	11,131	6,290	1,510	1,189	1,016	1,126
ALL	28,810	16,433	3,849	3,017	2,558	2,953
Not AFDC or SSI/SSP						
American Indian	3,362	747	235	277	464	1,639
Asian	25,026	9,365	1,770	1,849	2,410	9,632
Black	20,774	4,767	1,482	1,548	2,231	10,746
Filipino	9,074	1,638	526	647	1,091	5,172
Hispanic	52,256	12,829	3,479	4,021	5,961	25,966
Other Nonwhite	3,963	998	251	280	462	1,972
Pacific Islander	1,499	379	108	109	172	731
Unknown	10,414	2,842	622	727	1,134	5,089
White	169,901	40,405	10,516	12,657	19,717	86,606
ALL	296,269	73,970	18,989	22,115	33,642	147,553
ALL	325,079	90,403	22,838	25,132	36,200	150,506

note: Counts are duplicated for those attending multiple colleges.

Table 6
 Third Year After College Earnings in Constant 1995 Dollars
 for Unemployed Female 17-57 Year Old Students
 Leaving College in the 1992-93 Academic Year
 by Type of Coursework

	N	Percent	Median Earnings	Worked 4 Quarters
AFDC				
ALL STUDENTS	16,428	100%	\$ 11,294	2,516
NON-VOCATIONAL STUDENTS	12,640	76.9%	\$ 10,633	1,708
SKILLS UPGRADE NONCRED	87	0.5%	\$ 12,966	23
SKILLS UPGRADE CREDIT	569	3.5%	\$ 11,618	95
CASUAL VOCATIONAL NONCREDIT	384	2.3%	\$ 11,790	65
CASUAL VOCATIONAL CREDIT	1,471	9.0%	\$ 12,425	281
VOC STUDENTS NONCREDIT	18	0.1%	*****	*****
VOC STUDENTS CREDIT	1,259	7.7%	\$ 14,616	347
Total Vocational	1,277	7.8%		
Difference between Vocational Credit and Nonvocational			\$ 3,983	37%
Not AFDC				
ALL STUDENTS	73,823	100%	\$ 14,498	8,646
NON-VOCATIONAL STUDENTS	52,352	70.9%	\$ 13,364	5,569
SKILLS UPGRADE NONCRED	334	0.5%	\$ 14,208	38
SKILLS UPGRADE CREDIT	6,787	9.2%	\$ 15,189	832
CASUAL VOCATIONAL NONCREDIT	1,905	2.6%	\$ 14,485	217
CASUAL VOCATIONAL CREDIT	8,094	11.0%	\$ 15,776	1,078
VOC STUDENTS NONCREDIT	47	0.1%	\$ 15,695	10
VOC STUDENTS CREDIT	4,304	5.8%	\$ 19,860	911
Total Vocational	4,351	5.9%		
Difference between Vocational Credit and Nonvocational			\$ 6,496	49%

Skills Upgrade: Students earning less than 12 credit units or 648 noncredit hours with vocational coursework only.

Casual vocational: Students earning less than 12 credit units or 648 noncredit hours of vocational coursework with some nonvocational units earned.

Voc Students: Students earning at least 12 credit units or 648 noncredit hours of vocational coursework.

note: Privacy restrictions require suppression of cells containing less than five. Suppressed cells are filled with asterisks (*****).

Table 7

Output of ANOVA Analysis: Earnings by Program Type

Model: Earnings Third Year After College=Program Type (e.g. vocational, nonvocational, etc.)

General Linear Models Procedure
Class Level Information

Class	Levels	Values
PROGRAM	7	0001 0002 0003 0004 0005 0006 0007

Number of observations in data set = 90251

NOTE: Due to missing values, only 11180 observations can be used in this analysis.

General Linear Models Procedure

Dependent Variable: WAGE3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	41312900317.97040	6885483386.32841	41.91	0.0001
Error	11173	1835581935923.57000	164287294.00551		
Corrected Total	11179	1876894836241.54000			

R-Square	C.V.	Root MSE	WAGE3 Mean
0.022011	77.20639	12817.46051312	16601.55304114

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PROGRAM	6	41312900317.97070	6885483386.32845	41.91	0.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROGRAM	6	41312900317.97060	6885483386.32844	41.91	0.0001

Table 8
Output of ANOVA Analysis: Earnings by AFDC & Program
 Model: Wages Third Year After College=Program Type by AFDC Status

Vocational Unemployed AFDC Females 17-57

Class Level Information

Class	Levels	Values
PROGRAM	7	0001 0002 0003 0004 0005 0006 0007

Number of observations in by group = 16428

NOTE: Due to missing values, only 2520 observations can be used in this analysis.

Dependent Variable: WAGE3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	9460255004.018120	1576709167.336350	21.73	0.0001

Error	2513	182302076730.378000	72543603.951603		
Corrected	2519	191762331734.396000			

R-Square	C.V.	Root MSE	WAGE3 Mean
0.049333	65.52398	8517.25331029	12998.68214286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PROGRAM	6	9460255004.018150	1576709167.336360	21.73	0.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROGRAM	6	9460255004.018160	1576709167.336360	21.73	0.0001

Vocational Unemployed nonAFDC Females 17-57

Class	Levels	Values
PROGRAM	7	0001 0002 0003 0004 0005 0006 0007

Number of observations in by group = 73823

NOTE: Due to missing values, only 8660 observations can be used in this analysis.

Dependent Variable: WAGE3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	34325583969.94480	5720930661.65747	30.77	0.0001

Error	8653	1608576845514.52000	185898167.74697		
Corrected	8659	1642902429484.46000			

R-Square	C.V.	Root MSE	WAGE3 Mean
0.020893	77.24916	13634.44783433	17649.96351039

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PROGRAM	6	34325583969.94500	5720930661.65751	30.77	0.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROGRAM	6	34325583969.94490	5720930661.65749	30.77	0.0001

Table 9
 Third Year After College Earnings by AFDC Status
 for Vocational Unemployed Females 17-57
 Means and Output of ANOVA

	Any Qtrs		All 4 Qtrs	
	MEAN	N	MEAN	N
AFDC	\$12,015*	697	\$17,595*	347
Not AFDC	\$16,171*	1,714	\$23,192*	912

* Significant at .0001

General Linear Models Procedure

Class Level Information

Class	Levels	Values
AFDC	2	AFDC Not AFDC

Number of observations in data set = 5563

Group	Obs	Dependent Variables
1	2411	WAGEY3
2	1259	WAGE3

NOTE: Variables in each group are consistent with respect to the presence or absence of missing values.

Dependent Variable: WAGEY3

Source	DF	Sum of Squares	F Value	Pr > F
Model	1	8558473095.21	46.00	0.0001
Error	2409	448250577527.82		
Corrected Total	2410	456809050623.02		

	R-Square	C.V.	WAGEY3 Mean
	0.018735	91.12425	14969.5268

Source	DF	Type I SS	F Value	Pr > F
AFDC	1	8558473095.21	46.00	0.0001

Source	DF	Type III SS	F Value	Pr > F
AFDC	1	8558473095.21	46.00	0.0001

Dependent Variable: WAGE3

Source	DF	Sum of Squares	F Value	Pr > F
Model	1	7874125491.33	40.89	0.0001
Error	1257	242045643016.84		
Corrected Total	1258	249919768508.18		

	R-Square	C.V.	WAGE3 Mean
	0.031507	64.09752	21649.0969

Source	DF	Type I SS	F Value	Pr > F
AFDC	1	7874125491.33	40.89	0.0001

Source	DF	Type III SS	F Value	Pr > F
AFDC	1	7874125491.33	40.89	0.0001

Table 10
 Unemployed Female 17-57 Year Old Students
 Leaving College in the 1992-93 Academic Year
 Income in Constant 1995 Dollars by Educational Attainment by Program Area
 Community College System Statewide

Educational Attainment	Total Students	1993-94 First Year Out of College			1994-95 Second Year Out of College			1995-96 Third Year Out of College		
		% Match	% Worked 4 Qtrs	Median Annual* Income	% Match	% Worked 4 Qtrs	Median Annual* Income	% Match	% Worked 4 Qtrs	Median Annual* Income
AFDC										
ALL AFDC STUDENTS	16,428	28.8%	17.1%	\$8,619	37.7%	32.8%	\$10,552	41.4%	37.0%	\$11,294
Noncredit or 0 Units Earned	7,091	24.9%	14.2%	\$7,601	33.8%	28.2%	\$9,552	37.7%	32.8%	\$10,007
.01 - 11.99 Units	4,579	29.7%	14.7%	\$7,807	39.3%	31.3%	\$9,938	43.0%	36.5%	\$10,937
12 - 23.99 Units	1,728	32.3%	18.3%	\$8,907	40.3%	36.2%	\$11,393	44.2%	36.6%	\$12,042
24+ Units	2,442	30.1%	19.9%	\$9,266	39.5%	37.9%	\$11,351	42.4%	42.2%	\$12,343
Certificate	232	52.6%	33.6%	\$15,420	59.5%	54.3%	\$15,124	58.2%	65.9%	\$16,613
AA or AS Degree	356	52.0%	35.7%	\$13,421	59.0%	49.5%	\$15,816	64.9%	51.1%	\$16,624
NON-VOCATIONAL	12,640	26.8%	14.0%	\$7,572	35.7%	30.2%	\$9,787	39.5%	34.2%	\$10,633
Noncredit or 0 Units Earned	6,533	24.6%	12.8%	\$7,391	33.4%	27.3%	\$9,199	37.0%	31.9%	\$9,869
.01 - 11.99 Units	3,562	29.6%	13.5%	\$7,170	38.6%	30.7%	\$9,624	43.0%	35.4%	\$10,818
12 - 23.99 Units	1,110	31.1%	17.4%	\$8,109	38.9%	35.4%	\$10,958	42.8%	34.1%	\$11,686
24+ Units	1,369	25.9%	17.5%	\$9,308	36.4%	35.7%	\$11,232	38.2%	40.5%	\$11,678
Certificate	4	****	****	*****	****	****	*****	****	****	*****
AA or AS Degree	62	32.3%	****	*****	46.8%	51.7%	\$7,648	59.7%	51.4%	\$14,208
VOC STUDENTS CREDIT	1,259	45.1%	30.8%	\$12,180	51.7%	48.4%	\$13,724	55.4%	49.8%	\$14,616
Noncredit or 0 Units Earned	26	46.2%	****	*****	53.8%	42.9%	\$22,760	57.7%	40.0%	\$12,457
.01 - 11.99 Units	28	21.4%	****	*****	32.1%	****	*****	46.4%	38.5%	\$6,860
12 - 23.99 Units	207	40.1%	26.5%	\$10,248	45.4%	46.8%	\$14,712	50.7%	44.8%	\$12,296
24+ Units	523	38.0%	23.1%	\$8,723	45.5%	44.1%	\$10,710	49.3%	41.9%	\$12,195
Certificate	227	53.7%	33.6%	\$15,420	60.4%	54.7%	\$15,124	59.0%	66.4%	\$16,613
AA or AS Degree	248	58.9%	41.1%	\$14,459	64.1%	51.6%	\$18,521	69.4%	53.5%	\$19,406

Table continued next page

Table 10 continued
 Unemployed Female 17-57 Year Old Students
 Leaving College in the 1992-93 Academic Year
 Income in Constant 1995 Dollars by Educational Attainment by Program Area
 Community College System Statewide

Educational Attainment	Total Students	1993-94 First Year Out of College			1994-95 Second Year Out of College			1995-96 Third Year Out of College		
		% Match	% Worked 4 Qtrs	Median Annual* Income	% Match	% Worked 4 Qtrs	Median Annual* Income	% Match	% Worked 4 Qtrs	Median Annual* Income
Not AFDC										
ALL Not AFDC STUDENTS	73,823	19.8%	21.6%	\$10,377	24.9%	38.5%	\$12,974	27.3%	42.9%	\$14,498
Noncredit or 0 Units Earned	22,880	16.8%	18.5%	\$8,898	21.5%	34.6%	\$11,171	23.5%	40.0%	\$12,324
.01 - 11.99 Units	26,992	19.9%	20.9%	\$9,989	25.1%	37.9%	\$12,927	27.7%	42.5%	\$14,409
12 - 23.99 Units	8,493	20.6%	22.5%	\$9,745	25.7%	39.4%	\$12,806	28.6%	43.5%	\$14,283
24+ Units	12,784	21.2%	21.0%	\$10,315	27.0%	39.5%	\$13,241	29.6%	44.2%	\$15,626
Certificate	807	40.0%	36.2%	\$16,585	45.6%	54.1%	\$19,345	44.6%	53.1%	\$21,126
AA or AS Degree	1,867	33.4%	38.5%	\$20,018	39.0%	54.6%	\$21,966	40.7%	54.1%	\$23,415
NON-VOCATIONAL										
Noncredit or 0 Units Earned	52,352	18.5%	19.0%	\$9,377	23.6%	35.7%	\$12,111	26.2%	40.6%	\$13,364
.01 - 11.99 Units	20,257	16.6%	17.5%	\$8,762	21.3%	33.7%	\$11,027	23.3%	38.9%	\$12,006
.01 - 11.99 Units	18,547	19.7%	19.9%	\$9,486	24.9%	36.6%	\$12,839	27.6%	41.8%	\$13,913
12 - 23.99 Units	5,239	19.8%	21.0%	\$9,829	25.1%	37.8%	\$12,602	28.3%	41.5%	\$14,119
24+ Units	7,703	19.8%	18.3%	\$9,792	25.3%	36.2%	\$12,766	28.5%	41.0%	\$14,376
Certificate	13	****	****	*****	****	****	*****	****	****	*****
AA or AS Degree	593	18.2%	25.9%	\$8,837	26.3%	39.7%	\$10,315	30.9%	43.2%	\$15,600
VOC STUDENTS CREDIT										
Noncredit or 0 Units Earned	4,304	35.4%	35.3%	\$15,766	40.6%	51.8%	\$18,287	39.8%	53.2%	\$19,860
.01 - 11.99 Units	42	31.0%	46.2%	\$9,614	42.9%	27.8%	\$15,906	33.3%	35.7%	\$18,604
.01 - 11.99 Units	83	36.1%	23.3%	\$7,592	34.9%	37.9%	\$12,652	30.1%	60.0%	\$11,807
12 - 23.99 Units	799	28.0%	30.4%	\$10,111	32.0%	42.2%	\$13,612	33.0%	50.4%	\$13,925
24+ Units	1,546	29.9%	29.6%	\$11,096	36.5%	47.9%	\$14,241	35.5%	49.7%	\$17,540
Certificate	775	40.5%	36.3%	\$16,868	46.1%	54.3%	\$19,567	44.9%	53.4%	\$21,250
AA or AS Degree	1,059	45.1%	42.9%	\$22,495	49.5%	60.5%	\$25,386	48.5%	58.4%	\$27,143

Table 11
 Twenty Highest Enrollment Programs Ranked by Highest Enrollment
 With Third Year After College Median Earnings for those working all 4 Quarters

Program	Total Students	3 rd Year Median Earnings	N	Program Rank by Earnings	Sig1 at p<	Sig2 at p<
AFDC	1,128					
SECRETARIAL STUDIES, GEN	201	\$13,032	53	7	.017	
VOCATIONAL with nonVocational Award	160	\$12,388	34	9		
COSMETOLOGY	146	\$10,327	26	11	.044	.0482
NURSING	145	\$28,770	57	2	.029	.0001
HUMAN SERVICES	74	\$12,809	19	8		
ACCOUNTING	68	\$13,987	18	5	.028	
BUSINESS & COMMERCE, GEN	61	\$17,132	18	4		
ADMINISTRATION OF JUSTICE	56	\$13,779	12	6		
FAMILY RELATIONS & CHILD DEVEL	45	\$10,625	16	10		
DENTAL PROFES/OCCUP, GEN	28	\$20,226	17	3		
BUSINESS MGMT	26	\$8,961	7	12		
FOOD SERVICE TECHY	21	*****	*****			
SOCIAL WORK & HELPING SERV	18	*****	*****			
LAW, GEN	16	*****	*****			
REAL ESTATE	13	*****	*****			
DATA PROCESSING	11	*****	*****			
PSYCHIATRIC TECHY	11	\$34,960	6	1		
AUTOMOTIVE TECHY	10	*****	*****			
BANKING & FINANCE	9	*****	*****			
ELECTRONICS & ELECTRIC TECHY	9	*****	*****			
Not AFDC	3,660					
NURSING	580	\$33,623	235	1	.029	.0001
VOCATIONAL with nonVocational Award	550	\$15,263	94	21		
COSMETOLOGY	415	\$13,025	75	25	.044	.0482
SECRETARIAL STUDIES, GEN	349	\$15,202	73	22	.017	
HUMAN SERVICES	233	\$15,501	32	20		
ACCOUNTING	230	\$19,500	47	14	.028	
FAMILY RELATIONS & CHILD DEVEL	209	\$10,064	35	28		
BUSINESS MGMT	144	\$16,520	19	18		
REAL ESTATE	136	\$13,255	16	24		
BUSINESS & COMMERCE, GEN	134	\$17,205	21	17		
TRANSPORTATION	104	\$19,901	14	13		
ADMINISTRATION OF JUSTICE	86	\$18,566	15	16		
DENTAL PROFES/OCCUP, GEN	84	\$31,726	43	3		
CLOTHING & TEXTILES	76	\$12,948	14	26		
LAW, GEN	72	\$22,638	17	10		
COMPUTER & INFO SCI, GEN.	53	\$24,782	10	5		
INTERIOR DESIGN	53	\$28,101	6	6		
RADIOLOGICAL TECHY	53	\$23,541	18	7		
MEDICAL SPECIALTIES, GEN.	51	\$32,130	29	2		
ORNAMENTAL HORTICULTURE	48	\$20,612	6	11		

note: Privacy restrictions require suppression of cell containing less than five. Suppressed cells are filled with asterisks (*****).

Sig1 at p<: Earnings significantly different using anova between groups, AFDC and NotAFDC, within program.

Sig2 at p<: Earnings significantly different using anova between groups, AFDC and NotAFDC, within program controlling for educational attainment and degree type.

Table 12
Analysis of Variance for Vocational Unemployed Females 17-57
Third Year After College Earnings for those Working All 4 Quarters
by AFDC Status and Educational Attainment

General Linear Models Procedure
 Class Level Information

Class	Levels	Values	
AFDC	2	AFDC Not AFDC	
DEG	6	0 1 2 3 4 5	Dependent Variable: WAGE3

ACCOUNTING

Number of observations in data set = 298

NOTE: Due to missing values, only 65 observations can be used in this analysis.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	471525937.59	94305187.52	1.46	0.2156
Error	59	3802598051.55	64450814.43		
Corrected Total	64	4274123989.14			
	R-Square	C.V.	Root MSE	WAGE3 Mean	
	0.110321	44.45541	8028.1265	18058.831	

Source	DF	Type I SS	Mean Square	F Value	Pr > F
AFDC	1	315629160.49	315629160.49	4.90	0.0308
DEG	4	155896777.10	38974194.28	0.60	0.6608
Source	DF	Type III SS	Mean Square	F Value	Pr > F
AFDC	1	357213606.23	357213606.23	5.54	0.0219
DEG	4	155896777.10	38974194.28	0.60	0.6608

COSMETOLOGY

Number of observations in data set = 561

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	649441021.23	108240170.21	2.21	0.0482
Error	94	4593545071.28	48867500.76		
Corrected Total	100	5242986092.51			
	R-Square	C.V.	Root MSE	WAGE3 Mean	
	0.123869	52.42662	6990.5294	13333.931	

Source	DF	Type I SS	Mean Square	F Value	Pr > F
AFDC	1	210512111.79	210512111.79	4.31	0.0407
DEG	5	438928909.44	87785781.89	1.80	0.1211

Source	DF	Type III SS	Mean Square	F Value	Pr > F
AFDC	1	201684097.93	201684097.93	4.13	0.0450
DEG	5	438928909.44	87785781.89	1.80	0.1211

Table continued next page

Table 12 continued

NURSING

Number of observations in data set = 725

NOTE: Due to missing values, only 292 observations can be used in this analysis.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	5173765025.8	1034753005.2	5.84	0.0001
Error	286	50676054946.2	177189003.3		
Corrected Total	291	55849819972.0			

R-Square	C.V.	Root MSE	WAGE3 Mean
0.092637	42.05507	13311.236	31651.918

Source	DF	Type I SS	Mean Square	F Value	Pr > F
AFDC	1	912702293.4	912702293.4	5.15	0.0240
DEG	4	4261062732.4	1065265683.1	6.01	0.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
AFDC	1	276948540.2	276948540.2	1.56	0.2122
DEG	4	4261062732.4	1065265683.1	6.01	0.0001

SECRETARIAL STUDIES, GEN

Number of observations in data set = 550

NOTE: Due to missing values, only 126 observations can be used in this analysis.

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	805001207.54	134166867.92	1.73	0.1201
Error	119	9235582113.95	77609933.73		
Corrected Total	125	10040583321.49			

R-Square	C.V.	Root MSE	WAGE3 Mean
0.080175	55.38399	8809.6500	15906.492

Source	DF	Type I SS	Mean Square	F Value	Pr > F
AFDC	1	448032157.43	448032157.43	5.77	0.0178
DEG	5	356969050.11	71393810.02	0.92	0.4707

Source	DF	Type III SS	Mean Square	F Value	Pr > F
AFDC	1	609196523.88	609196523.88	7.85	0.0059
DEG	5	356969050.11	71393810.02	0.92	0.4707

Table 13
Analysis of Variance for Vocational Unemployed Females 17-57
Third Year After College Earnings for those Working Any Quarter
by AFDC Status and Educational Attainment

General Linear Models Procedure
 Class Level Information
 Class Levels Values
 AFDC 2 AFDC Not AFDC
 DEG 6 0 1 2 3 4 5

Dependent Variable: WAGEY3

ACCOUNTING

Number of observations in data set = 298

NOTE: Due to missing values, only 124 observations can be used in this analysis.

Source	DF	Sum of Squares	F Value	Pr > F
Model	5	732502448.898	1.72	0.1360
Error	118	10069304324.029		
Corrected Total	123	10801806772.927		

R-Square	C.V.	WAGEY3 Mean
0.067813	72.62271	12719.9758

Source	DF	Type I SS	F Value	Pr > F
AFDC	1	573934613.939	6.73	0.0107
DEG	4	158567834.960	0.46	0.7616
Source	DF	Type III SS	F Value	Pr > F
AFDC	1	447854322.101	5.25	0.0237
DEG	4	158567834.960	0.46	0.7616

COSMETOLOGY

Number of observations in data set = 561

NOTE: Due to missing values, only 224 observations can be used in this analysis.

Source	DF	Sum of Squares	F Value	Pr > F
Model	6	521621126.388	1.58	0.1541
Error	217	11938527160.607		
Corrected Total	223	12460148286.996		

R-Square	C.V.	WAGEY3 Mean
0.041863	93.89654	7899.43304

Source	DF	Type I SS	F Value	Pr > F
AFDC	1	206482100.934	3.75	0.0540
DEG	5	315139025.454	1.15	0.3373
Source	DF	Type III SS	F Value	Pr > F
AFDC	1	171788845.921	3.12	0.0786
DEG	5	315139025.454	1.15	0.3373

Table continued next page

Table 13 continued

Nursing

Number of observations in data set = 725

NOTE: Due to missing values, only 490 observations can be used in this analysis.

Source	DF	Sum of Squares	F Value	Pr > F
Model	6	7403623698.02	5.63	0.0001
Error	483	105875439890.19		
Corrected Total	489	113279063588.21		

R-Square	C.V.	WAGEY3 Mean
0.065357	58.62148	25256.1551

Source	DF	Type I SS	F Value	Pr > F
AFDC	1	903661694.40	4.12	0.0429
DEG	5	6499962003.62	5.93	0.0001
Source	DF	Type III SS	F Value	Pr > F
AFDC	1	286804343.90	1.31	0.2533
DEG	5	6499962003.62	5.93	0.0001

SECRETARIAL STUDIES, GEN

Number of observations in data set = 550

NOTE: Due to missing values, only 253 observations can be used in this analysis.

Source	DF	Sum of Squares	F Value	Pr > F
Model	6	1044328610.07	2.06	0.0586
Error	246	20789658977.79		
Corrected Total	252	21833987587.86		

R-Square	C.V.	WAGEY3 Mean
0.047830	84.57926	10869.0672

Source	DF	Type I SS	F Value	Pr > F
AFDC	1	813062863.341	9.62	0.0021
DEG	5	231265746.727	0.55	0.7403
Source	DF	Type III SS	F Value	Pr > F
AFDC	1	886943665.665	10.50	0.0014
DEG	5	231265746.727	0.55	0.7403

Table 14
ANOVA Output for Model: Educational Attainment=AFDC Program
Vocational Unemployed Females 17-57

Analysis of Variance
General Linear Models Procedure

Class Level Information

Class	Levels	Values
AFDC	2	ADFC NonAFDC
PROGRAM	83	0101 0102 0109 0112 0114 0115 0116 0201 0203 0500 0501 0502 0504 0506 0509 0510 0511 0514 0516 0599 0602 0603 0700 0701 0703 0704 0808 0925 0934 0935 0936 0937 0945 0947 0948 0950 0952 0953 0956 0957 1004 1009 1010 1011 1030 1202 1203 1204 1206 1207 1209 1211 1212 1215 1225 1239 1250 1255 1299 1300 1302 1303 1304 1305 1306 1401 1601 2101 2103 2104 2105 2107 2133 2199 3000 3001 3002 3005 3007 3009 4930 8888 9999

Number of observations in data set = 5628

Dependent Variable: DEGREE

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	83	1446.7346319	17.4305377	14.44	0.0001
Error	5544	6693.6639111	1.2073708		
Corrected Total	5627	8140.3985430			

R-Square	C.V.	Root MSE	DEGREE Mean
0.177723	25.23184	1.0988043	4.3548330

Source	DF	Type I SS	Mean Square	F Value	Pr > F
AFDC	1	15.8576734	15.8576734	13.13	0.0003
PROGRAM	82	1430.8769584	17.4497190	14.45	0.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
AFDC	1	6.3634156	6.3634156	5.27	0.0217
PROGRAM	82	1430.8769584	17.4497190	14.45	0.0001

Table 15
 Educational Attainment for Vocational Unemployed Females Students 17-57
 by AFDC Status

	AFDC		Not AFDC	
	Students	Percent	Students	Percent
VOC STUDENTS CREDIT	1,259	100%	4,304	100%
Noncredit or 0 Units Earned	26	2.1%	42	1.0%
.01 - 11.99 Units	28	2.2%	83	1.9%
12 - 23.99 Units	207	16.4%	799	18.6%
24+ Units	523	41.5%	1,546	35.9%
Certificate	227	18.0%	775	18.0%
AA or AS Degree	248	19.7%	1,059	24.6%

Table 16
Logistic Regression Analysis: Completion by AFDC
for Vocational Unemployed Females 17-57

The LOGISTIC Procedure

Data Set: WORK.P
 Response Variable: COMPLTER
 Response Levels: 2
 Number of Observations: 5628
 Link Function: Logit

Response Profile

Ordered Value	COMPLTER	Count
1	0	3318
2	1	2310

Simple Statistics for Explanatory Variables

Variable	COMPLTER	Mean	Standard Deviation	Minimum	Maximum
AFDCN	0	-0.516576	0.856370	-1.000000	1.000000
	1	-0.588745	0.808494	-1.000000	1.000000
	Total	-0.546198	0.837731	-1.000000	1.000000

Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept and Covariates		Chi-Square for Covariates
	Intercept Only	Intercept and Covariates	
AIC	7622.550	7614.363	.
SC	7629.185	7627.634	.
-2 LOG L	7620.550	7610.363	10.186 with 1 DF (p=0.0014)
Score	.	.	10.109 with 1 DF (p=0.0015)

Analysis of Maximum Likelihood Estimates

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	0.4197	0.0328	164.0739	0.0001	.	.
AFDCN	1	0.1041	0.0328	10.0904	0.0015	0.048073	1.110

Association of Predicted Probabilities and Observed Responses

Concordant = 19.2%	Somers' D = 0.036
Discordant = 15.6%	Gamma = 0.104
Tied = 65.2%	Tau-a = 0.017
(7664580 pairs)	c = 0.518

Table 17
Significance of Earnings Differences for Three Years After College

Multivariate Analysis of Variance
 Vocational Unemployed Females 17-57

General Linear Models Procedure
 Class Level Information

Class	Levels	Values
COMPLTER	2	0 1

Number of observations in data set = 186130

Group	Obs	Dependent Variables
1	40793	WAGEY1
2	51647	WAGEY2
3	56421	WAGEY3

NOTE: Variables in each group are consistent with respect to the presence or absence of missing values.

Dependent Variable: WAGEY1

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	143926840369.40400000	143926840369.40400000	2529.21	0.0001
Error	40791	2321242049176.34000000	56905740.21662480		
Corrected	40792	2465168889545.74000000			
	R-Square	C.V.	Root MSE	WAGEY1 Mean	
	0.058384	130.0901	7543.58934570	5798.74241784	

Source	DF	Type I SS	Mean Square	F Value	Pr > F
COMPLTER	1	143926840369.40400000	143926840369.40400000	2529.21	0.0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F
COMPLTER	1	143926840369.40400000	143926840369.40400000	2529.21	0.0001

Dependent Variable: WAGEY2

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	243869204225.77300000	243869204225.77300000	2341.29	0.0001
Error	51645	5379350844735.75000000	104160148.02470200		
Corrected	51646	5623220048961.52000000			
	R-Square	C.V.	Root MSE	WAGEY2 Mean	
	0.043368	119.1509	10205.88790967	8565.51262815	

Source	DF	Type I SS	Mean Square	F Value	Pr > F
COMPLTER	1	243869204225.77300000	243869204225.77300000	2341.29	0.0001
Source	DF <th>Type III SS</th> <th>Mean Square</th> <th>F Value</th> <th>Pr > F</th>	Type III SS	Mean Square	F Value	Pr > F
COMPLTER	1	243869204225.77300000	243869204225.77300000	2341.29	0.0001

Table continued next page

Table 17 continued

Dependent Variable: WAGEY3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	238316149516.89500000	238316149516.89500000	1847.52	0.0001
Error	56419	7277635870012.34000000	128992642.01797800		
Corrected	56420	7515952019529.24000000			

R-Square		C.V.	Root MSE	WAGEY3 Mean
0.031708		112.9361	11357.49276988	10056.56494922

Source	DF	Type I SS	Mean Square	F Value	Pr > F
COMPLTER	1	238316149516.89600000	238316149516.89600000	1847.52	0.0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F
COMPLTER	1	238316149516.89600000	238316149516.89600000	1847.52	0.0001

Table 18
 Educational Attainment by AFDC Status, Precollegiate Basic Skills (PBS)
 and Limited English Proficiency (LEP) Status
 for Unemployed Female 17-57 Year Old Vocational Students
 Leaving College in the 1992-93 Academic Year

	All N	No PBS		PBS		No LEP		LEP	
		N	Percent	N	Percent	N	Percent	N	Percent
ALL Students									
AFDC	1,277	1,084	84.9%	193	15.1%	1,244	97.4%	33	2.6%
Not AFDC	4,351	4,083	93.8	268	6.2	4,165	95.7	186	4.3
Noncredit Only									
AFDC	44	41	93.2	3	6.8	37	84.1	7	15.9
Not AFDC	84	80	95.2	4	4.8	61	72.6	23	27.4
Noncredit Vocational with less than 12 credit units									
AFDC	28	22	78.6	6	21.4	28	100	.	.
Not AFDC	87	81	93.1	6	6.9	81	93.1	6	6.9
12 to 23.9 units									
AFDC	207	173	83.6	34	16.4	206	99.5	1	0.5
Not AFDC	799	752	94.1	47	5.9	789	98.7	10	1.3
24+ units									
AFDC	523	431	82.4	92	17.6	500	95.6	23	4.4
Not AFDC	1,546	1,441	93.2	105	6.8	1,481	95.8	65	4.2
Certificates									
AFDC	227	196	86.3	31	13.7	225	99.1	2	0.9
Not AFDC	776	750	96.6	26	3.4	748	96.4	28	3.6
AA/AS Degree									
AFDC	248	221	89.1	27	10.9	248	100	.	.
Not AFDC	1,059	979	92.4	80	7.6	1,005	94.9	54	5.1

Table 19
Logistic Regression Analysis: Completion by AFDC and Precollegiate Basic Skills Status
for Vocational Unemployed Females 17-57

The LOGISTIC Procedure

Data Set: WORK.P

Response Variable: COMPLTER

Response Levels: 2

Number of Observations: 5628

Link Function: Logit

Response Profile

Ordered Value	COMPLTER	Count
1	0	3318
2	1	2310

Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept and Covariates		Chi-Square for Covariates
	Intercept Only	Covariates	
AIC	7622.550	7618.250	.
SC	7629.185	7631.522	.
-2 LOG L	7620.550	7614.250	6.299 with 1 DF (p=0.0121)
Score	.	.	6.209 with 1 DF (p=0.0127)

Analysis of Maximum Likelihood Estimates

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	0.4679	0.0506	85.3488	0.0001	.	.
PBSN	1	0.1259	0.0506	6.1828	0.0129	0.038086	1.134

Association of Predicted Probabilities and Observed Responses

Concordant = 8.3%	Somers' D = 0.019
Discordant = 6.5%	Gamma = 0.125
Tied = 85.2%	Tau-a = 0.009
(7664580 pairs)	c = 0.509

Table 20
 Unemployed Female 17-57 Year Old Students Third Year After College Earnings
 by Educational Attainment, AFDC Status, Precollegiate Basic Skills (PBS) Status

	PBS				Not PBS			
	N	Percent	Mean Earnings	N Used In Mean	N	Percent	Mean Earnings	N Used In Mean
Worked Any Quarter								
AFDC								
ALL	193	100%	\$8,326	103	1,084	100%	\$12,626	599
Noncredit (NC) Only	3	2	*****	*****	41	4	13,723	19
NC Voc w/ <12 units	6	3	*****	*****	22	2	16,200	9
12 to 23.9 units	34	18	9,782	20	173	16	8,508	85
24+ units	92	48	6,975	47	431	40	8,634	211
Certificates	31	16	12,770	17	196	18	17,049	117
AA/AS Degree	27	14	7,676	14	221	20	16,561	158
Not AFDC								
ALL	268	100%	\$15,597	107	4,083	100%	\$16,178	1,622
Noncredit Only	4	1	*****	*****	80	2	12,867	25
NC Voc w/ <12 units	6	2	*****	*****	81	2	11,098	25
12 to 23.9 units	47	18	15,594	21	752	18	11,526	243
24+ units	105	39	12,004	37	1,441	35	13,493	512
Certificates	26	10	13,642	11	750	18	16,546	337
AA/AS Degree	80	30	21,197	34	979	24	21,574	480
Worked All 4 Quarters								
AFDC								
ALL	193	100%	\$12,891	42	1,084	100%	\$18,204	307
Noncredit Only	3	2	*****	*****	41	4	18,428	8
NC Voc w/ <12 units	6	3	*****	*****	22	2	23,576	5
12 to 23.9 units	34	18	16,271	9	173	16	13,105	38
24+ units	92	48	11,536	17	431	40	14,657	91
Certificates	31	16	12,950	11	196	18	20,118	78
AA/AS Degree	27	14	11,281	5	221	20	22,097	87
Not AFDC								
ALL	268	100%	\$25,357	50	4,083	100%	\$22,993	872
Noncredit Only	4	1	*****	*****	80	2	17,240	14
NC Voc w/ <12 units	6	2	*****	*****	81	2	16,791	14
12 to 23.9 units	47	18	27,230	10	752	18	17,562	123
24+ units	105	39	19,069	18	1,441	35	20,619	255
Certificates	26	10	*****	*****	750	18	22,834	182
AA/AS Degree	80	30	32,376	16	979	24	28,167	284

note: Privacy restrictions require suppression of cells containing less than five. Suppressed cells are filled with asterisks (*****).

Table 21
ANOVA Output for PBS effects on Third Year After College Earnings
For Those Working in All 4 Quarters

nonAFDC females 17-57

General Linear Models Procedure
Class Level Information

Class	Levels	Values
PBS	2	0 2

Number of observations in by group = 4351

NOTE: Due to missing values, only 922 observations can be used in this analysis.

Dependent Variable: WAGE3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	264387547.17	264387547.17	1.25	0.2631
Error	920	194016467416.4	210887464.58		
Corrected Total	921	194280854963.6			

R-Square	C.V.	Root MSE	WAGE3 Mean
0.001361	62.80809	14521.965	23121.169

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PBS	1	264387547.17	264387547.17	1.25	0.2631
Source	DF	Type III SS	Mean Square	F Value	Pr > F
PBS	1	264387547.17	264387547.17	1.25	0.2631

AFDC female 17-57

Number of observations in by group = 1277

NOTE: Due to missing values, only 349 observations can be used in this analysis.

Dependent Variable: WAGE3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1043215977.6	1043215977.6	7.56	0.0063
Error	347	47867630986.7	137947063.4		
Corrected Total	348	48910846964.3			

R-Square	C.V.	Root MSE	WAGE3 Mean
0.021329	66.86681	11745.087	17564.897

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PBS	1	1043215977.6	1043215977.6	7.56	0.0063
Source	DF	Type III SS	Mean Square	F Value	Pr > F
PBS	1	1043215977.6	1043215977.6	7.56	0.0063

Table 22
 Completers Third Year Earnings in Constant 1995 Dollars
 For Those Working in Any Quarter

Annual Wages	AFDC		Not AFDC		
	N	Percent	N	Percent	
Below \$12,278	143	46.7%	332	38.5%	
\$12,278+	163	53.3	530	61.5	
All	306	100.0%	862	100.0%	

Decile	N	Minimum	Maximum	Mean	Std Dev
AFDC Completers					
First Decile	30	\$ 43	\$ 1,863	\$ 818.90	534.3
Second Decile	31	\$ 1,966	\$ 3,881	\$ 2,959.40	614.7
Third Decile	31	\$ 3,926	\$ 6,698	\$ 5,286.70	891.7
Fourth Decile	30	\$ 6,779	\$ 9,841	\$ 8,269.10	882.5
Fifth Decile	31	\$ 10,097	\$ 13,612	\$11,708.20	1140.5
Sixth Decile	31	\$ 13,869	\$ 17,888	\$15,806.30	1120.9
Seventh Decile	30	\$ 17,937	\$ 21,262	\$19,656.10	1098.6
Eighth Decile	31	\$ 21,338	\$ 26,184	\$23,572.40	1539.7
Ninth Decile	31	\$ 26,219	\$ 35,659	\$30,908.70	3061.1
Tenth Decile	30	\$ 35,966	\$ 62,186	\$42,533.90	5930.2
Not AFDC completers					
First Decile	85	\$ 29	\$ 1,982	\$ 887.80	622.9
Second Decile	87	\$ 1,988	\$ 5,015	\$ 3,518.60	919.4
Third Decile	86	\$ 5,080	\$ 9,024	\$ 7,109.30	1165.8
Fourth Decile	87	\$ 9,091	\$ 12,876	\$11,013.70	1137.5
Fifth Decile	86	\$ 12,998	\$ 17,205	\$15,065.00	1220.5
Sixth Decile	86	\$ 17,263	\$ 21,837	\$19,306.30	1349.1
Seventh Decile	87	\$ 21,842	\$ 26,058	\$23,873.40	1196
Eighth Decile	86	\$ 26,222	\$ 32,130	\$28,894.60	1899.5
Ninth Decile	86	\$ 32,198	\$ 39,686	\$35,847.40	2356.9
Tenth Decile	86	\$ 39,755	\$ 81,900	\$49,423.30	8869.2

Table 23
 Completers Third Year Earnings
 for Those Working All 4 Quarters in Constant 1995 Dollars

Annual Wages	N	AFDC		Not AFDC	
		Percent	N	Percent	N
\$12,278+	124	68.5%	403	82.9%	
Below \$12,278	57	31.5	83	17.1	
All	281	100.0%	486	100.0%	

Decile	N	Minimum	Maximum	Mean	Std Dev
AFDC Completers					
First Decile	18	\$ 2,050	\$ 6,147	\$ 4,648.70	1251.1
Second Decile	18	\$ 6,631	\$ 8,969	\$ 7,876.90	779.9
Third Decile	18	\$ 9,325	\$ 11,884	\$10,613.00	761.1
Fourth Decile	18	\$ 11,906	\$ 14,969	\$13,360.70	939.3
Fifth Decile	18	\$ 15,091	\$ 17,937	\$16,488.80	825.9
Sixth Decile	19	\$ 18,210	\$ 21,202	\$19,847.40	931
Seventh Decile	18	\$ 21,238	\$ 24,581	\$22,527.20	937.8
Eighth Decile	18	\$ 25,369	\$ 32,374	\$27,619.10	2087.6
Ninth Decile	18	\$ 32,392	\$ 38,410	\$35,483.60	2224.4
Tenth Decile	18	\$ 38,712	\$ 62,186	\$45,458.20	5914.8
Not AFDC completers					
First Decile	48	\$ 2,271	\$ 8,813	\$ 6,507.00	1917.1
Second Decile	49	\$ 8,877	\$ 13,515	\$11,458.00	1387.3
Third Decile	49	\$ 13,672	\$ 17,422	\$15,443.20	1158.2
Fourth Decile	48	\$ 17,435	\$ 20,379	\$18,838.70	883.5
Fifth Decile	49	\$ 20,536	\$ 24,053	\$22,477.20	908.4
Sixth Decile	49	\$ 24,252	\$ 27,881	\$25,945.10	1108.5
Seventh Decile	48	\$ 27,889	\$ 32,503	\$30,607.00	1416.9
Eighth Decile	49	\$ 32,683	\$ 38,395	\$35,853.60	1831
Ninth Decile	49	\$ 38,428	\$ 44,102	\$41,231.50	1806.8
Tenth Decile	48	\$ 44,279	\$ 81,900	\$54,846.30	8152.3

Table 24
 Noncompleters Third Year After College Earnings
 for Those Working Any Quarter in Constant 1995 Dollars

Annual Wages	AFDC		Not AFDC	
	N	Percent	N	Percent
Below \$12,278	4,115	83.1%	9,673	71.5%
\$12,278+	834	16.9%	3,849	28.5%
All	4,949	100.0%	13,522	100.0%

AFDC: Wages in Any Quarter

Decile	N	Minimum	Maximum	Mean	Std Dev
First Decile	494	\$ 6	\$ 288	\$ 131.80	77.2
Second Decile	495	\$ 289	\$ 790	\$ 525.70	144.4
Third Decile	495	\$ 791	\$ 1,591	\$ 1,163.20	221.5
Fourth Decile	495	\$ 1,592	\$ 2,603	\$ 2,099.50	298.2
Fifth Decile	495	\$ 2,611	\$ 3,863	\$ 3,199.40	361.5
Sixth Decile	495	\$ 3,864	\$ 5,584	\$ 4,650.70	507.5
Seventh Decile	495	\$ 5,591	\$ 7,811	\$ 6,654.60	636.4
Eighth Decile	495	\$ 7,813	\$ 10,991	\$ 9,362.40	915.8
Ninth Decile	495	\$ 10,999	\$ 15,834	\$13,223.40	1,399.6
Tenth Decile	495	\$ 15,839	\$ 70,267	\$22,149.70	7,254.2

Not AFDC: Wages in Any Quarter

First Decile	1,353	\$ 3	\$ 490	\$ 223.00	139.6
Second Decile	1,352	\$ 491	\$ 1,348	\$ 900.80	252.4
Third Decile	1,351	\$ 1,349	\$ 2,569	\$ 1,933.90	354.1
Fourth Decile	1,353	\$ 2,571	\$ 4,151	\$ 3,330.30	453.1
Fifth Decile	1,352	\$ 4,153	\$ 6,192	\$ 5,122.60	580.8
Sixth Decile	1,352	\$ 6,196	\$ 8,632	\$ 7,348.60	714.7
Seventh Decile	1,353	\$ 8,633	\$ 11,764	\$10,128.20	896.6
Eighth Decile	1,352	\$ 11,766	\$ 16,096	\$13,773.30	1,269.5
Ninth Decile	1,352	\$ 16,107	\$ 23,410	\$19,358.50	2,086.2
Tenth Decile	1,352	\$ 23,433	\$ 199,694	\$36,051.90	16,803.9

Table 25
 Noncompleters Third Year After College Earnings
 for Those Working All 4 Quarters in Constant 1995 Dollars

Annual Wages	AFDC		Not AFDC	
	N	Percent	N	Percent
\$12,278+	82	49.4%	278	65.3%
Below \$12,278	84	50.6	148	34.7

AFDC: Working All 4 Quarters

<u>Decile</u>	<u>N</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>	<u>Std Dev</u>
First Decile	168	\$ 389	\$ 3,761	\$ 2,706.00	780.0
Second Decile	170	\$ 3,797	\$ 5,571	\$ 4,647.30	517.3
Third Decile	168	\$ 5,574	\$ 7,195	\$ 6,370.00	474.7
Fourth Decile	169	\$ 7,198	\$ 9,011	\$ 8,077.90	537.6
Fifth Decile	169	\$ 9,025	\$ 10,600	\$ 9,777.60	452.1
Sixth Decile	169	\$ 10,607	\$ 12,375	\$11,430.70	521.9
Seventh Decile	169	\$ 12,404	\$ 14,541	\$13,411.10	650.6
Eighth Decile	168	\$ 14,552	\$ 17,245	\$15,837.00	753.0
Ninth Decile	170	\$ 17,253	\$ 21,310	\$19,046.40	1,254.0
Tenth Decile	168	\$ 21,312	\$ 70,267	\$28,367.60	8,598.5

Not AFDC: Working All 4 Quarters

First Decile	549	\$ 110	\$ 4,366	\$ 2,799.80	1,068.2
Second Decile	549	\$ 4,367	\$ 6,746	\$ 5,602.70	686.2
Third Decile	549	\$ 6,749	\$ 8,910	\$ 7,842.50	626.8
Fourth Decile	550	\$ 8,912	\$ 11,094	\$10,020.70	612.7
Fifth Decile	548	\$ 11,105	\$ 13,327	\$12,188.50	623.0
Sixth Decile	550	\$ 13,329	\$ 16,046	\$14,687.60	771.8
Seventh Decile	550	\$ 16,052	\$ 19,353	\$17,614.10	944.3
Eighth Decile	549	\$ 19,364	\$ 23,796	\$21,416.20	1,267.9
Ninth Decile	549	\$ 23,840	\$ 31,905	\$27,299.10	2,373.1
Tenth Decile	549	\$ 31,912	\$ 199,694	\$46,654.80	19,394.2

Table 26
 Unemployed Female Students 17-57 Years Old
 Educational Attainment and CSU Continuation Status

	AFDC		NonAFDC	
	N	Percent	N	Percent
Not Vocational				
Noncredit (NC)	7,080	45.1%	23,255	31.0%
NC .1-11.9 Units	4,653	29.6	28,504	38.0
12-23.9 Units	1,556	9.9	8,184	10.9
24+ Units	2,197	14.0	13,598	18.1
Certificates	6	0.0	38	0.1
AA/AS Degree	205	1.3	1,391	1.9
ALL	15,697	100.0%	74,970	100.0%
Vocational				
Noncredit (NC)	44	3.3%	86	1.8%
NC .1-11.9 Units	30	2.2	93	1.9
12-23.9 Units	207	15.4	820	17.1
24+ Units	544	40.4	1,707	35.5
Certificates	231	17.1	805	16.8
AA/AS Degree	291	21.6	1,293	26.9
ALL	1,347	100.0%	4,804	100.0%
Continuing at CSU				
Not Vocational				
Noncredit (NC)	33	0.5%	459	2.0%
NC .1-11.9 Units	102	2.2	1,599	5.6
12-23.9 Units	35	2.2	490	6.0
24+ Units	278	12.7	2,360	17.4
Certificates	1	16.7	7	18.4
AA/AS Degree	97	47.3	583	41.9
ALL	546	3.5	5,498	7.3
Vocational				
Noncredit (NC)	0	0%	2	2.3%
NC .1-11.9 Units	2	6.7	6	6.5
12-23.9 Units	0	0	21	2.6
24+ Units	21	3.9	161	9.4
Certificates	4	1.7	29	3.6
AA/AS Degree	43	14.8	234	18.1
ALL	70	5.2	453	9.4
Overall Continuation	616	3.6%	5,951	7.5%

Bibliography

- Adams, W. and Jaffee, A. (1971). Economic returns on the college investment. *Change*, 3, 8.
- Alexander, C.N. and Campbell, E.Q. (1964). Peer Influence on Adolescent Educational Aspirations and Attainment. *American Sociological Review* 29:568-575
- Alexander, K.L. and Eckland, B.K. (1974). Sex Differences in the Educational Attainment Process. *American Sociological Review* 39:668-682
- Alexander, K.L. and Eckland, B.K. (1975). Contextual Effects in the High School Attainment Process. *American Sociological Review* 40:402-416
- Alexander, K.L. and Eckland, B.K. (1975). The Wisconsin Model of Socioeconomic Achievement: A Republication. *American Sociological Review* 41:324-363
- Alexander, K.L. and McDill, E.L. (1976). Selection and Allocation within Schools. *American Sociological Review* 41:963-980
- Alexander, K.L. and McDill, E.L. (1978). Curriculum Tracking and Educational Stratification: Some Further Evidence. *American Sociological Review* 43:47-66
- Alexander, K.L. and Cook, M. (1982). Curricula and Coursework. *American Sociological Review* 47:626-640
- American Association of Community Colleges. (1998a). Legislative Updates. Welfare Reform. [Online]. Available: <http://www.aacc.nche.edu/govtrel/legisu/welfare/Welfar.htm>
- American Association of Community Colleges. (1998b). Legislative Updates. Higher Education Reauthorization Act. [Online]. Available: <http://www.aacc.nche.edu/govtrel/docs/acheasum.htm>
- Association of California School Administrators. (1998). Welfare Reform in the Golden State: How Will California Implement the New Federal Programs? Number two in a series of background papers on welfare reform. [Online]. Available http://www.acsa.org/publications/Welfare_Reform_Statewide/welfare_reform_statewide.html

- Astin, A.W. (1977). *Four Critical Years*. San Francisco: Jossey-Bass
- Astin, A. W. (1985). *Achieving Educational Excellence*. San Francisco: Jossey-Bass.
- Banks, J.A. (1989). Multicultural Education: Characteristics and goals from *Multicultural Education: Issues and Perspectives*. Eds. J.A. and C.A. Banks. Boston: Allyn and Bacon
- Becker, G. S. (1964). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. New York: Columbia University Press.
- Becker, G. S. (1975). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. Second Edition. New York: Columbia University Press.
- Becker, G. S. (1992). Why go to college? The value of an investment in higher education. In W. E. Becker and D. R. Lewis (eds.), *The Economics of American Higher Education* (pp. 21-120). Boston: Kluwer Academic Publishers.
- Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Third Edition. Chicago, IL: The University of Chicago Press.
- Bellah, R.N. et.al. (1985). *Habits of the Heart: Individualism and Commitment in American Life*, New York: Harper and Row.
- Bendix, R. and Lipset, S.M. (1966). *Class, Status, and Power* New York: The Free Press.
- Bidwell, C.E. (1965). The School as a Formal Organization from *The Handbook of Organizations*. Chicago: Rand McNally.
- Bidwell, C.E. and Friedkin. (1988). The Sociology of Education from *The Handbook of Sociology*. Chicago: Rand McNally.
- Blank, R. M. (1996). Policy Watch: The 1996 Welfare Reform. [Online]. Available: <http://www.library.nwu.edu/publications/nupr/blank2.html> [October, 1998].
- Blaug, M. (1970). *An Introduction to the Economics of Education*. London: Allen Lane, Penguin Press.

- Blaug, M. (1972). The correlation between education and earnings: What does it signify? *Higher Education*, 1, 53-76.
- Bottomore, T.B. (1972). *Sociology: A Guide to Problems and Literature*. New York: Vintage Books.
- Bowles, S., and Gintis, H. (1976). *Schooling in Capitalist America*. New York: Basic Books.
- Bullivant, B.M. (1989). Culture: Its Nature and meaning for Educators from *Multicultural Education: Issues and Perspectives*. Eds. J.A. and C.A. Banks. Boston: Allyn and Bacon.
- Cagan, E. (1978). Individualism, Collectivism, and Radical Educational Reform. *Harvard Educational Review*, Vol. 48, No 2, May.
- California Community College Chancellor's Office. (October, 1998). County Referrals: A Survey. CalWorks Program. Paper presented at the 1998 Fall Conference of California Community College Occupational Educators. Anaheim, Ca.
- Carnegie Council on Policy Studies in Higher Education. (1979). *Fair Practices in Higher Education*. San Francisco: Jossey-Bass.
- Carnegie Council on Policy Studies in Higher Education. (1980). *Three Thousand Futures*. San Francisco: Jossey-Bass.
- Catterall, J. and Cota-Robles, E. (1988). *Demography of At-Risk Students and the Social Consequences*; U.C. Press: Berkeley, California, 1988.
- Center for Continuing Study of the California Economy. (August, 1997). The California Economy and Developing Annual Goals for Moving Welfare Recipients into the Workforce. Paper presented at the 1998 Fall Conference of California Community College Occupational Educators. Anaheim, Ca.
- Children's Defense Fund. (1998). Welfare in the states: CDF, new studies look at status of former welfare recipients. *CDF Reports*. April/May 1998. [Online]. Available: http://www.childrensdefense.org/fairstart_status.html [October, 1998].
- Children's Defense Fund and National Coalition for the Homeless. (1998). Early Findings on Welfare and Well-Being. [Online]. Available: <http://nch.ari.net/short.html> [October, 1998].

- Cicourel, A. (1974). *Cognitive Sociology*. New York: Free Press.
- Cicourel, A.V. and Mehan, H. (1984). Universal Development, Stratifying Practices, and Status Attainment. *Research in Social Stratification and Mobility*. Vol. 4:
- Coleman, J.S. (1961). *The Adolescent Society*. Glencoe, IL: Free Press.
- Coleman, J.S. et al (1966). *Equality of Educational Opportunity*. Washington D.C.: Government Printing Office.
- Coleman, J.S. et al (1982). *High School Achievement: Public, Catholic, and Other Private Schools Compared*. New York: Basic Books.
- Collins, R. (1971). Functional and conflict theories of educational stratification. *American Sociological Review*, Vol. 36: 1002-19.
- Collins, R. (1979). *The Credential Society*. New York: Academic.
- CPEC; (1986). Purposes and Effects of Student Financial Aid; California Postsecondary Education Commission: Sacramento, Ca.; Report 86-16.
- Davis, K. and Moore, W. E. (1945). Some Principles of Stratification. *American Sociological Review*. Vol. 10: 242-49.
- Dewey, J. (1900). *The School and Society*. Chicago: University of Chicago Press.
- Dewey, J. (1916). Aims in Education from *Contemporary American Education*. 1965 eds. Dropkin, Full, and Schwarcz. New York: Macmillan.
- Dreeben, R. (1968). *On What is Learned in School*. Reading, Mass.: Addison-Wesley.
- Dropkin, Full, and Schwarcz. (1965). *Contemporary American Education*. New York: Macmillan.
- Durkheim, E. (1956). *Education and Sociology*. Glencoe, IL: Free Press (Original works written in 1903, 1906, 1911).
- Durkheim, E. (1961). *Moral Education*. Glencoe, IL: Free Press (Original work written in 1925).
- Durkheim, E. (1967). *The Evolution of Educational Thought*. London: Routledge & Kegan Paul (Original work written in 1938).

- Elam, S. (1983). The Gallup education surveys: Impressions of a pool watcher. *Phi Delta Kappan*, 64, 14-22.
- Faris, E. (1928). The Sociologist and The Educator. *American Journal of Sociology*. 33:796-801.
- Friedlander, J. (1993a). Using wage record data to track the post-college employment and earnings of community college students (ERIC Document Reproduction Service No. 360007).
- Friedlander, J. (1993b). Post-college employment rates and earnings of students who participated in SBCC occupational education programs (ERIC Document Reproduction Service No. 361022).
- Friedlander, J. (1996). Using wage record data to track the post college rates and wages of California community college students (ERIC Document Reproduction Service No. 390507).
- Froeschle, R. (1991). Pilot Study Findings of the Use of the Texas Employment Commission Unemployment Insurance Wage Records to Document Outcomes of Technical-Vocational Education and Training. Austin, TX: Texas Higher Education Coordinating Board.
- Garrison, D.R. (1986). Research Paradigms in Adult Education: Philosophical Differences and Complementary Methodologies. ERIC:ED262243.
- Gordon, C.W. (1957). *The Social System of the High School*. Glencoe, IL: Free Press.
- Gould, S. J. (1981). *The Mismeasure of Man*. New York: Norton.
- Grant, C.A. and Sleeter, C.E. (1989). Race, Class, Gender, Exceptionality, and Educational Reform from *Multicultural Education: Issues and Perspectives*. Eds. J.A. and C.A. Banks. Boston: Allyn and Bacon.
- Gross, N., Mason, W.S. and McEachern, A.W. (1958). *Explorations in Role Analysis*. New York: John Wiley.
- Grubb, W.N. (1996a). *Learning to Work*. The Case for Reintegrating Job Training and Education. New York: Russell Sage Foundation.
- Grubb, W. N. (1996b). *Working in the Middle*. *Strengthening Education and Training for the Mid-Skilled Labor Force*. San Francisco: Jossey-Bass .

- Grubb, W. N., & Lazerson, M. (1982). *Broken Promises. How Americans Fail Their Children*. New York: Basic Books, Inc.
- Haller, A. (1982). Reflections on the social psychology of status attainment. In R. Hauser, D. Mechanic, A. Haller, & T. Hauser (Eds.), *Social Structure and Behavior*. New York: Academic Press.
- Head, R. B. (1994). *The economic impact of piedmont Virginia community college upon its service region*. Research Report Number 2-94. Charlottesville: Piedmont Virginia Community College (ERIC Document Reproduction Service No. 368437).
- Henderson, C., and Ottinger, C. (1985). College degrees - still a ladder to success? *Journal of College Placement*, 45, 35.
- HHS (1998). The HHS Poverty Guidelines. [Online]. Available: <http://aspe.os.dhhs.gov/poverty/97poverty.htm> [October, 1998].
- Hodgkinson, H.L. (1985). *All One System*. The Institute for Educational Leadership. Washington, D.C.
- Hodgkinson, H.L. (1986). *California: The State and Its Educational System*. The Institute for Educational Leadership; Washington, D.C.
- Hope, K. (1984). *As Others See Us: Schooling and Social Mobility In Scotland and the U.S.* Cambridge, England: Cambridge University Press.
- Illich, I. (1970). Why we must Abolish Schooling from Skolnick. 1973 pp. 329-345
- Jencks, C., (1993). *Rethinking Social Policy*. New York: HarperPerennial (Originally published 1992 by Harvard University Press)
- Jencks, C., (1997). *The Homeless*. Massachusetts: Harvard University Press (Originally published 1994)
- Jencks, C., et al. (1972). *Inequality; a reassessment of the effect of family and schooling in America*. New York: Basic Books
- Jencks, C., Bartlett, S., Corcoran, M., Crouse, J., Eaglesfield, D., Jackson, G., McClelland, K.I., Mueser, p. , Olneck, M., Schwarts, J., Ward, S., and Williams, J. (1979). *Who Gets Ahead? The Determinants of Economic Success in America*. New York: Basic Books.

- Jencks, C., Crouse, J. and Mueser, P. (1983). The Wisconsin Model of Status Attainment: A National Replication with Improved Measures of Ability and Aspiration. *Sociology of Education*. 56:3-19.
- Katsinas, S. G. (1994). A review of the literature to economic development and community colleges. *Community College Review*, 21(4): 67-80.
- Johnston, K. (1997). The Reality of Reform: County Social Services Officials Look to the Future of Welfare. From the San Louis Obispo *Newtimes*, [Online]. Available: <http://www.newtimes-slo.com/cvr%20archives/frntpg5197.html> [October, 1998].
- Lasch, C. and Bellah, R.N. (1978). *The Culture of Narcism*. New York: Norton.
- Lauer and Handel . (1977). *Social Psychology: the theory and application of symbolic interactionism*. Boston: Houghton Mifflin.
- Levitas, M. (1974). *Marxist Perspectives in the Sociology of Education*. London and Boston: Routledge & Kegan Paul.
- Lortie, D.C. (1975). *Schoolteacher*. Chicago: University of Chicago Press.
- McIntyre, C. (1996). *Trends of importance to California Community Colleges*. Sacramento: Office of the Chancellor, California Community Colleges (ERIC Document Reproduction Service No. 401956).
- Mehan, H. (1979). "The Competent Student" a Sociolinguistic Working Paper. ERIC: ED250934.
- Mehan, H., et al. (1981). "Educational Decision Making in Students' Careers" a Final Report. ERIC: ED228586.
- Mehan, H., et al. (1984). "Research Currents: Knowledge of Text Editing and Control of Literacy Skills" *Language Arts* vol 61, #5: September '84.
- Mehan, H., Hertweck, A. and Meihls, J. L. (1986). *Handicapping the Handicapped*, Stanford, CA.: Stanford Univ. Press
- Merano, M. A. (1990). On-The-Job-Training-Programs in JTPA: A Quality of Service Report to the Illinois Job Training Coordinating Council. Illinois Department of Commerce and Community Affairs.
- Meyer, J.W. (1970). The Charter: Conditions of Diffuse Socialization in Schools. from *Social Processes and Social Structures*, ed. W.R. Scott New York: Holt, Reinhart, and Winston.

Meyer, J. W. and Scott, W. R. (1983). *Organizational Environments : Ritual and Rationality*. Beverly Hills: Sage.

Meyer, M. W. and Rowan, B. (1978). *Environments and Organizations*. (1st ed). San Francisco : Jossey-Bass, 1978.

Munro, J.H. "I'm Taking Notes". ERIC: ED272289.

National Center for Public Policy and Higher Education. (1998). A Very Public Agenda: A National Roundtable Examines the Role of Public Policy in Shaping Higher Education. A special feature in *Crosstalk*, Vol.6, 3, Summer 1998. [Online]. Available: <http://www.highereducation.org/crosstalk/ct0798/special0798-agenda.html> [October, 1998].

National Coalition for the Homeless. (1998a). The Impact of Welfare Reform on Homelessness. *Safety Network The newsletter of NCH*, Vol.17, 2, May - June 1998. [Online]. Available: <http://nch.ari.net/sn/1998/may/mayjune98.html>.

National Coalition for the Homeless. (1996). Welfare Repeal: The Impact of H.R. 3734 on Homelessness in America. In *Legislation and Policy reports*. [Online]. Available: <http://nch.ari.net/welfareimpact.html> [October, 1998].

New York State College of Human Ecology. (1996). Supporting Children in an Era of Welfare Reform. SUMMARY REPORT. In *Policy Perspectives*, Vol. 1, No. 1, Fall 1996. [Online]. Available: <http://www.human.cornell.edu/Faculty/SummaryReport.html>.

O'Conner, J. (1987). *The Meaning of Crisis*. New York: Basil Blackwell.

Occupational Outlook Quarterly. (1992). Washington, D.C.: U.S. Department of Labor, Bureau of Labor Statistics. Spring 1992, p. 40.

Pace, C. (1979). *Measuring outcomes of college: Fifty years of findings and recommendations for the future*. San Francisco: Jossey-Bass.

Pailthorpe, K. (1987). California's Changing Population a presentation to California Special Educators at Los Angeles: California Postsecondary Education Commission; Sacramento, California.

Parsons, T. (1959). The school classroom as a social system. *Harvard Educational Review*. Vol 29: 297-318.

- Pascarella, E., and Terenzini, P. (1991). *How College Affects Students*. San Francisco: Jossey-Bass.
- Perrow, C. (1986). *Complex Organizations*. New York: Random House
- Persell, C.H. (1989). "Social Class and Educational Equality" from *Multicultural Education: Issues and Perspectives*. Eds. J.A. and C.A. Banks. Boston: Allyn and Bacon.
- Pfeiffer, J. J. (1990). *Florida Education and Training Placement Program. Annual Report*. Tallahassee, FL: Florida Department of Education.
- Piper, L. S. (1990). *Feasibility study using employer wage records to determine vocational completer labor market outcomes*. Indianapolis, IN: Indiana Commission on Vocational and Technical Education.
- Portes, Alejandro & Bach, Robert L. (1985). *Latin Journey*, University of California Press; Berkeley, California.
- Psacharopoulos, G. (1973). *Returns to Education*. San Francisco: Jossey-Bass.
- Psacharopoulos, G. (1985). Returns to education: A further international update and implications. *Journal of Human Resources*, 20, 538-604.
- Riel, M.M. (1983) "Education and Ecstasy: Computer Chronicles of Students Writing Together" *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition* Vol 5:pp313-320.
- Ritzer, G. (1988). *Contemporary Sociological Theory*. New York: Alfred A. Knopf, Inc.
- Rosenbaum, J.E. (1976). *Making Inequality*. New York: John Wiley
- Sahr, R. C., (1998). Welfare and Jobs, In *1998-99 Reporters Source Book*, [Online]. Available <http://www.vote-smart.org/issues/1998rsb/welfare.html>
- Sanchez J. R., Laanan, F. S., and Wiseley, W. C. (1999 *In Press*). Post-College Earnings of Former CCC Students: Methods, Analysis and Implications. *Research in Higher Education*, 40(1): 000-000.
- Sarup, M. (1979). *Marxism and Education*. London: Routledge & Kegan Paul.

- Sawhill, I. V. (1998). *Welfare Reform: An Analysis of the Issues*. The Urban Institute. [Online]. Available: <http://www.urban.org/welfare/Overview.htm> [July, 1998].
- Seppanen, L. J. (1993). *Using administrative data matches for follow-up*. Technical Report No. 93-5. Olympia: Washington State Board for Community and Technical Colleges (ERIC Document Reproduction Service No. 382250).
- Seppanen, L. J. (1994). *Job placement rates for graduates of Washington community and technical college vocational programs*. Research Report No. 94-7. Olympia: Washington State Board for Community and Technical Colleges (ERIC Document Reproduction Service No. 382255).
- Skolnick, J.H. and Currie, E. (1973). *Crisis in American Institutions*. Boston: Little, Brown and Company.
- Slater, p. (1976). *The Pursuit of Loneliness* Boston: Beacon Press.
- Small, A.W. (1897). Some Demands of Sociology upon Pedagogy. *American Journal of Sociology* 2:839-851.
- Smith, G. P. (1989). A Longitudinal Tracking Study of Short-Term Education and Employment Outcomes of Colorado Community College Graduates. Colorado Community College and Occupational Education System.
- Smith, T. E. (1989). Mother-Father Differences in Parental Influence on School Grades and Educational Goals; *Sociological Inquiry*, Vol. 59, No 1, Feb 1989.
- Stevens, D. W., Richmond, P. A., Haenn, J. F., and Michie, J.S. (1992). *Measuring employment outcomes using unemployment insurance wage records*. Washington, D.C.: Research and Evaluation Associates, Inc.
- Stout, R. J. (1996). *Community attitudes about economic impacts of colleges: A case study*. Paper presented at the 1996 Association for Institutional Research Annual Forum, Albuquerque, New Mexico (ERIC Document Reproduction Service No. 397737).
- Stryker, Sheldon and Statham, A. (1986). "Symbolic Interaction and Role Theory" from *The Handbook of Social Psychology*, New York: Random House.
- Terkel, S. (1980). *American Dreams: Lost and Found*. New York: Pantheon Books.

- Trow, M.A. (1961). "The Second Transformation of American Secondary Education" *The International Journal of Comparative Sociology* 2:144-166 from Bendix, 1966, p. 437-449.
- Trow, M.A. (1962). "The Democratization of Higher Education in America" *European Journal of Sociology* 3:231-262
- Trow, M.A. (1984). "The Analysis of Status" from *Perspectives on Higher Education: Eight Disciplinary and Comparative Views* ed. B.R. Clark Berkeley: UC Press.
- Turner, J. H. (1988). *A Theory of Social Interaction*. Stanford: Stanford University Press.
- U.S. Bureau of the Census. (1998). Measuring Poverty: A New Approach. [Online] Available: <http://www.census.gov/hhes/poverty/povmeas/toc.html> [October, 1998].
- U.S. Bureau of the Census. (1998). Poverty Thresholds: 1995. [Online] Available: <http://www.census.gov/hhes/poverty/threshld/thresh95.html> [November, 1998].
- U.S. Department of Commerce, Bureau of the Census. (1996). Current Population Survey: Historical Income Tables - Persons. Washington, D.C.
- Vanderheyden, B. (1994). *Employment of community college completers*. Research Brief No. 1994-01. North Carolina: North Carolina State Department of Community Colleges (ERIC Document Reproduction Service No. 375896).
- Wallace, W.L. (1966). *Student Culture: Social Structure and Continuity in Liberal Arts College*. Chicago: Aldine.
- Ward, L. (1883). *Dynamic Sociology*. Vol 2. New York: Appleton.
- Weber, M. (1946). *The Theory of Social and Economic Organization*. Glencoe, IL: Free Press(Original works from 1906, 1922).
- Weitzman, S. M. (1991). *The economic impact of the community college system on the state of Florida*. Gainesville: Florida University, Interinstitutional Research Council (ERIC Document Reproduction Service No. 336145).
- Whorf, B. L. (1941). "Languages and Logic" *Technological Review* 43:250-272 (April 1941).

- Willower, D.J. (1983). "Analogies Gone Awry: Replies to Hills and Gronn"
Educational Administration Quarterly vol 19, #1 Winter '83 p. 35-47.
- Wilson, J. (1983). *Social Theory*. New Jersey: Prentice-Hall, Inc.
- Wilson, W. J. (1996). *When Work Disappears: The World of the New Urban Poor*. New York: Alfred A. Knopf.
- Winter, G. M., and Fadale, L. M. (1991). *The economic impact of SUNY's community colleges on the state of New York. Spring 1991 - Update*. Albany: State University of New York, Two Year College Development Center (ERIC Document Reproduction Service No. 337239).
- Yang, X., and Brown, J. K. (1998). Using unemployment insurance data and job record data to track the employment and earnings of community college students. Paper presented at the annual forum of the Association for Institutional Research. Minneapolis, Minnesota, May.