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ABSTRACT

This document presents five winning entries in the second annual competition for papers reporting research and policy studies on the topic of youth employability. In their paper entitled "The Impact of Employment and Training Programs on the Work Attitudes of Disadvantaged Youth," Michael Forcier and Andrew Hahn review and synthesize the theoretical literature regarding the impact of such programs on disadvantaged youth. Margaret Gaddy and Janet Ockerman-Garza, in a study entitled "Predicting Academic Success for High Risk Students: Implications for Improving the Postsecondary Response to Youth Employability," examine issues related to identifying and supporting low-income and minority youth as a strategy for increasing employability. The paper "On Creating Viable Work Experience Programs: Design and Implementation" by Mary Agnes Hamilton addresses the issue of quality in work experience programs. In their paper on "Youth Employability Training: Linkage as a Catalyst," Katherine Manley and Daniel Volger examine the notion of linkage between vocational education and CETA as a catalyst for improving youth employability training. A distinguishing feature of the study by Janice Shack-Marquez entitled "Information and the Employment Success of Young Men" is the development of a working definition of various aspects of information that young people need.

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YOUTH EMPLOYABILITY
MONOGRAPHS ON
RESEARCH AND POLICY STUDIES

Five Award-Winning
Monographs

The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

U.S. DEPARTMENT OF EDUCATION
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FOREWORD

In an effort to identify recent investigative evidence about youth employability, as well as to recognize future leaders in research, the National Center for Research in Vocational Education, with the support of the National Institute of Education, sponsors an annual national competition for scholarly papers from graduate students. The papers are to be reports of recent research and policy studies and are invited from the various social science disciplines including psychology, vocational education, sociology, anthropology, and labor and human resources.

Students enrolled in graduate programs or recent recipients of advanced degrees are eligible to enter the annual competitions, with their degree program advisor or another departmental faculty member serving as their coauthor or as their recommending sponsor. Entries are submitted to a panel of distinguished judges from the various social sciences areas. The judges individually review and rate the entries on the basis of their scholarship, usefulness, and quality of writing. This monograph contains the five top-rated papers from the second annual competition.

The National Center for Research in Vocational Education is pleased to present herein the winning entries in the second national competition. We congratulate the authors of the papers and thank them for their contributions to an area of vitally needed knowledge. It is our hope and expectation that this second competition, in this series of such annual events, will serve as an incentive and vehicle for stimulating and recognizing scholarship and future leadership in education and human resources research.

We also extend sincere thanks to those who critiqued the entries and selected the winners. These distinguished reviewers were: Dr. Leonard Hausman, The Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University; Ms. Gretchen Maclachan, Department of Social Science, Clark College; and Dr. Richard Toikka, Toikka Enterprises, Washington, D.C.

Our thanks also go to Dr. Barbara Fleming of the National Center who planned and organized the competition and preparation of the monograph, and to Janet Kiplinger of the National Center's Editorial Services area who directed the editorial review of the manuscript. Funding for the competition was provided by the National Institute of Education.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

EXECUTIVE SUMMARY

This document presents the winning entries in the second annual competition for papers reporting research and policy studies on the topic of youth employability. The competition was conducted in order to recognize excellence in research by graduate students, and the topic was selected for its timeliness and potential contribution to the research concerns of the National Center for Research in Vocational Education. Eligible authors were students enrolled in graduate programs in 1981 or recipients of advanced degrees in 1981, with faculty advisors serving as coauthors or recommending sponsors. Winning entries were determined by a panel of distinguished judges external to the National Center, and representing several branches of the social sciences.

In their paper entitled "The Impact of Employment and Training Programs on the Work Attitudes of Disadvantaged Youth," Michael Forcier and Andrew Hahn review and synthesize the theoretical and empirical literature regarding the impact of employment and training programs on the work attitudes of disadvantaged youth. Noting the crucial importance of positive work attitudes in the establishment of stable and successful employment patterns, the study examines the policy and program implications of changing disadvantaged youths' work attitudes. Results of research studies are reviewed for early job training programs, as well as for the most recent youth initiatives of the Youth Employment and Demonstration Projects Act of 1977. Based on this knowledge, recommendations are presented concerning future policies and program efforts in this area.

Margaret Gaddy and Janet Ockerman-Garza, in a study entitled "Predicting Academic Success for High Risk Students: Implications for Improving the Postsecondary Response to Youth Employability," examine issues related to identifying and supporting low-income and minority youth at the postsecondary level as a strategy for increasing employability. The research investigated the effectiveness of psychosocial variables--self-esteem, social anchorage, alienation, and locus of control--as predictors of college success for high risk students. Self-esteem was found to be the only variable that discriminated between successful and unsuccessful students. The program that was the basis of the research is presented, and the implications of the findings of postsecondary intervention are discussed.

The paper "On Creating Viable Work Experience Programs: Design and Implementation" by Mary Agnes Hamilton addresses the issue of quality of work experience programs. Part one identifies a set of learning programs. Part two assesses the program design by developing principles for curricular analysis. Part three assesses the concepts and behaviors learned through such activities. Part four describes key elements in the context for program implementation that influence choices in program design. The result of this effort is to present a coherent and concise framework for the assessment of the quality of work experience programs, as influenced by program design and implementation.

In their paper on "Youth Employability Training: Linkage as a Catalyst," Katherine Manley and Daniel Vogler examine the notion of linkage between vocational education and CETA as a catalyst for improving youth employability training. The paper focuses on (a) the concept of linkage, (b) the current impact of linkage, (c) the identification of linkage activities, and (d) the highlights of youth employability linkages. A national survey to ascertain the extent, approaches, and practices used by states in implementing the section 202(d) linkage provision of CETA is reported. While qualitative conclusions could not be made, a composite listing of youth employability linkages raises doubt regarding the congruence of the linkage activities with the congressional intent.

Information about job opportunities is important for young people entering the labor market. A distinguishing feature of the study by Janice Shack-Marquez entitled "Information and the Employment Success of Young Men" is the development of an operationalizable definition of various aspects of information young people need. Analysis of the employment success of the subsample of employed eighteen- to twenty-four-year-old men from the National Longitudinal Survey reveals two central findings. Immediate employment success depends in part on development of good job search skills and on good contacts. Longer-term success is more closely related to extensive information about occupational requirements and opportunities in the labor market.

THE IMPACT OF EMPLOYMENT AND TRAINING PROGRAMS ON THE
WORK ATTITUDES OF DISADVANTAGED YOUTH:
A SYNTHESIS OF THEORY AND EVIDENCE

Michael W. Forcier and Andrew B. Hahn

ABOUT THE AUTHORS

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INTRODUCTION

It is generally recognized by social scientists as well as program practitioners that work attitudes and orientations play a critical role in adjustment to work and subsequent work behavior. The difference between a successful and unsuccessful work experience will hinge upon an individual's attitude toward work in general and the specific job experience in particular. Positive work attitudes and adequate labor market knowledge have been shown to be very important in the establishment of stable and successful employment patterns among youth. Negative attitudes have been found to have a deleterious impact on work adjustment (Andrisani et al. 1977; Andrisani 1980; Raelin 1980).

From an employer perspective, workers are expected to have certain acceptable attitudes and work habits. Characteristics such as reliability, self-confidence, a neat appearance, a respectful demeanor, an interest in the type of work, and a general alertness have been found to be important in the hiring decisions of employers. Employers have frequently cited immaturity, instability, and high turnover as reasons for not hiring youth (National Commission for Employment Policy 1979).

From a policy perspective, one broad strategy for increasing the employability of low-income youth is to increase their attractiveness to employers. The primary tools in this effort are interventions that increase educational levels, provide occupational training, and improve work habits and attitudes. Naturally, the success or failure of employment and training programs designed to train and prepare disadvantaged youth for the world of work will depend in large part on the latter. The attitudes of youth towards work will be an important determinant of program participation and success. As Bottom and Stromsdorfer (1980) have noted:

In a formal framework program outcomes are expected to be a function of program treatments, youths' preprogram attitudes, and other factors. During the course of program participation a change in preprogram attitudes may occur as a direct result of program treatments, . . . and other factors. Further, the change in attitudes may feed back into subsequent program participation and induce another round of effects on program outcomes. (p. 2)

Work training programs will clearly be ineffective if program enrollees have little interest in working. Furthermore, if enrollees reject the importance of work, not only will programs be ineffective, but combining training with income through subsidized wages could result in their leaving the labor force altogether.

The public policy implications are twofold. First, in designing and implementing national employment and training programs for the disadvantaged, it is important to understand the views of poor youth about life and work so that employment and training programs can be based on this knowledge. Second, an important issue is whether youth-oriented labor market programs should emphasize basic socialization and motivation and, if so, how these emphases should be implemented.

Up to now, there has been much confusion and uncertainty about the attitudes held by low-income youth toward work. As a result of the range of opinion on this issue, it has not been clear what action the federal government should take, if any, to have a direct impact on the attitudes and motivation of youth.

This paper will review what has been learned regarding the impact of federal employment and training programs on the work attitudes of disadvantaged youth.* Particular attention will be focused on what has been learned as a result of the most recent of youth employment initiatives, the Youth Employment and Demonstration Projects Act of 1977. Before assessing the evidence on program approaches and impacts, however, the paper will give a brief overview of related theory and evidence from the pre-1977 period regarding the work attitudes of disadvantaged youth.

THEORY AND EVIDENCE

During the 1960s, both popular and scholarly wisdom held that the work orientations of disadvantaged, low income youth were an important, if not primary factor in their inability to obtain employment, for two reasons. First, by virtue of the fact that they are economically disadvantaged, some writers (Lewis 1968; Banfield 1970; Moynihan 1968), argued that the poor maintain a different value system and subculture from the regularly employed nonpoor, and consequently may hold negative attitudes toward work. This "culture of poverty" thesis suggested that the low work orientation of the poor constitutes a rejection of or inability to share in middle-class expectancies, values, and aspirations in the world of work. Second, by virtue of the fact that they are young, some (Silberman 1965) have argued that there is reason to suspect an opposition to (or at least an immature) "work ethic" among this age group.

In contrast to the culture of poverty school of thought, others have held that the work orientations of poor youth are not different from those of the nonpoor or that any differences are the result of the young person's adaptation to the situational facts of life and employment, rather than a reflection of cultural differences. This perspective, the "powerlessness" view, sees motivational problems as stemming from the inability of poor youth to implement their values. According to this view, problems of low motivation, demoralization, and alienation exist even among people who share societal aspirations and (middle-class) values, but who feel unable to attain these goals or implement such values.

Goodwin (1972), for example, compared the work orientations of poor young people to those of more advantaged youth. His study of youth was part of a larger study of attitudes toward work and welfare among public assistance

*The term work attitudes has been defined and measured in a variety of ways by different investigators. In this review paper we use the term broadly to refer to a cluster of social-psychological orientations and knowledge areas pertaining to the ways in which disadvantaged youth view work.

recipients. He discovered similar patterns of work ethic among poor and non-poor youth alike, although the poor youth had less confidence about their ability to succeed in the world of work. The latter was interpreted as a realistic response to different life experiences, especially in terms of the relative powerlessness of the poor to influence their success in the labor market.

In an attempt to resolve the differences between the "culture of poverty" and the "social powerlessness" schools of thought, Gurin (1970a, 1971) proposed an "expectancy" approach to job training programs. Without denying that low motivation among trainees may be a result of disposition or rejection of some of the achievement goals and incentives of society, Gurin stressed that a major issue in the trainees' low expectancy--the motivational problems that stem not from a lack of desire for societal goals, but from a feeling that they have little chance of attaining those goals.

Persons with low expectancies of success, like many in employment and training programs, will not automatically change their expectancies when their situation improves. The problem thus becomes one of once having improved and expanded reality opportunities (through a training opportunity), getting the trainees' expectancies of success to reflect the new opportunities.

As Gurin (1971) notes, an important implication of these theories is that if one is concerned with helping trainees adjust their expectancies to their internal resources, then the experiences that trainees have in the course of their training should be tied to their actual performance. These theories lead to the point that it is important to train program enrollees in emotional competence as well as job skills, with the latter often leading to the former through performance-based assessments of individual enrollees.

Prior to the 1977 amendment to the Comprehensive Employment and Training Act (CETA) known as the Youth Employment and Demonstration Projects Act (YEDPA), a number of programs were administered to address the employment problems of disadvantaged youth. The Neighborhood Youth Corps of the Manpower Demonstration and Training Act, the Work Incentive Program, and private sector efforts such as the JOBS program were examples of programs that were based on the assumption that participants require some form of attitudinal and behavioral socialization in addition to basic skills and work experience.

Specific items under the socialization rubric included lessons in personal grooming, practice in filling out forms, role playing on how to conduct oneself on a job, attempts to instill positive attitudes toward work and appropriate habits of work discipline, and programming aimed at moral and value development. Typically, these socialization efforts assumed that the work world demands certain knowledge, attitudes, and habits that are not available to trainees in their own environments, but which they will have to learn if they are to make proper occupational adjustments.

These socialization aspects of job training programs have often been a central part of the programs. Gurin (1970a) noted that in many of the early programs, more money and effort were expended in attempts at socialization

than in actual training. But despite the centrality of the socialization function to many job training programs, pre-YEDPA programs were characterized by a lack of agreement on the nature of the psychological and motivational problems of disadvantaged youth. Second, many of the early youth employment programs operated as "crash programs," lasting but a few months, providing socialization and coping skills without long-term emotional support mechanisms.

Extracting lessons from what has been learned about the impact of pre-YEDPA employment and training programs on the work attitudes of disadvantaged youth is very difficult for several reasons. Among the reasons is the fundamental point that early program evaluation processes varied from one site to another; each researcher defined success differently, with some sites using control or comparison groups and others operating without such groups. Also, few programs from the era were administered in multiple sites, a deficiency that made controlling for the peculiarities of individual locations impossible. The evaluations of the period were also marred by the failure to control for appropriate variables, ignorance of selection bias, and limited data collection (e.g., the failure to collect process or implementation data as well as postprogram impacts). Finally, entire clusters of variables of interest were frequently ignored. Typically, for example, economic outcomes were favored over assessments of social-psychological inprogram change. Finally, participants were rarely followed for many months after leaving the programs; more frequently the programs followed participants through project termination. Long-term follow-ups were considered costly and difficult to administer.

Despite these shortcomings, some evidence does exist on the impact of pre-YEDPA employment and training programs on the work attitudes of the disadvantaged. The methodological shortcomings must be considered in interpreting the findings.

Pre-YEDPA Program Impacts

A vast body of research on the Neighborhood Youth Corps (NYC)* found that NYC enrollees had educational and occupational aspirations very similar to those of middle-class youth--although consistent with Gurin's (1970a, 1971) expectancy perspective--very few NYC enrollees expected to achieve such positions. In an obvious finding, in-school NYC enrollees were found to be slightly more ambitious, both occupationally and educationally, than out-of-school NYC enrollees (Goodman and Myint 1969).

Unfortunately, little of the vast NYC research was designed to measure the impact of the NYC experience on the work attitudes of enrollees specifically. Of that which did, the findings were generally negative. For example, Robin's (1969) study of 890 black youths in NYC found no indication that the NYC experience had a positive effect on educational expectations or

*The following review of research on the NYC is summarized in U.S. Department of Labor (1970).

aspirations, attitudes toward the school system and teachers, or scholastic achievement. Similarly, there was no indication that NYC participation led to increased desire for further training as the road to better jobs.

Harwood and Olasov's (1968) study of two of Houston's out-of-school NYC projects cited significant "attitude problems" among enrollees. Group counseling did not affect these attitude problems. Out of a total of 800 enrollees in one project who had left the program by June 1968, some 40 percent were terminated because of bad attitudes and absenteeism.

Mandell, Blackman, and Sullivan's (1969) study of nine NYC projects in New York found that the NYC experience resulted in little change in the enrollee's work-related perceptions and apparently did not increase enrollees' optimism that the work world would be benevolent, nor did it appear to increase their confidence that effort on their part could lead to better economic opportunities.

Walther and Magnusson (1967) and Walther, Magnusson, and Cherkasky (1968) conducted a five-year longitudinal study of NYC out-of-school programs in five urban cities and found many indications that terminated enrollees were often deficient in basic skills, "good attitudes", and knowledge of the requirements of the working world. On the other hand, Walther's (1975) Work-Relevant Attitudes Inventory (WRAI), developed as part of his five-year survey of NYC programs (and used in diagnosing the needs of individuals and evaluating the effectiveness of manpower programs), was able to differentiate between subjects making a "good" and a "poor" adjustment to work. The change in WRAI scores while participating in the NYC program was in a positive direction for subjects making a "good" adjustment. Walther concluded that the WRAI had demonstrated its potential use as a measure of program effectiveness and as a help in diagnosing the needs of new program participants.

Gurin (1971) conducted a study of the backgrounds and motivations of inner-city black youth who were trainees in a Chicago JOBS Project, established under the Manpower Development and Training Act (MDTA). The study examined the relationship between motivational factors and trainee "success." Particular emphasis in the project was placed upon teaching the trainees attitudes and behavior appropriate to the world of work. Employing two criteria of success, (a) the trainee's postprogram earnings and (2) program ability to keep trainees committed to the program (in other words, prevent dropouts), Gurin found that almost all of the attitudinal and motivational measures utilized showed no relationship to either the two success criteria.

Drawing conclusions from the literature is a hazardous task. Even though much was tried, little reliable information was learned from these efforts because of the flaws in research and demonstration designs. In fact, it was the congressional perception that there was no solid informational basis for public policy that led Congress to enact the 1977 Youth Employment and Demonstration Projects Act to learn "what works best for whom."

In addition to program studies, however, other research, primarily in the form of surveys, has been conducted with youth populations. This research

sheds much light on the attitudes of youth toward work. Some illuminating results of this research are discussed in this section.

Attitudes of Youth toward Work: Evidence from Surveys

Many view the work attitudes of youth and particularly disadvantaged youth as leaving much to be desired when compared to older, more mature workers. This is particularly true of employers whose reluctance to hire youth is largely based on the calculation that the productivity of young workers is lower than prevailing wage rates, or is lower than the productivity of older workers who can be hired at comparable rates. Given this, one can expect employers to hold a variety of beliefs about young workers that support that calculation. The following attitudes about youth, commonly ascribed to employers, might help to explain the judgment that young workers represent a genuine financial risk (National Commission for Employment Policy 1979, Osterman 1980).

The attitudes and behavior of young workers are perceived to undermine productivity because of four primary reasons. First, it is thought that youth tend to be less disciplined and less serious about their jobs than older workers. Second, youth do not dress or behave in a manner appropriate to the work place. Third, youth have only a casual attachment to work, leading to high turnover rates. And fourth, youth lack prior work experience. They are "unproven commodities," and this adds to the risk involved in hiring them.

How accurate are these perceptions? Judging from the empirical evidence, one can only conclude that some employer impressions about youth appear to be contradicted by research. Despite popular and scholarly impressions postulating a "culture of poverty," "rejection of the work ethic," or "poor work attitudes" among the young, little empirical evidence exists to support these assertions. Many studies, for example, find little justification for considering youth's attitudes toward work as inadequate, immature (other than for lack of adequate labor market information), negative, or the cause of their unique labor market problems. On the contrary, studies from the previous decade have shown that youth display the positive attitudes toward work similar to those of older workers. (Andrisani 1980, Berryman 1978).

Employer impressions about the apparent unwillingness of youth to work at low-paying, low-status jobs run counter to the responses of youth to questions from the 1979 National Longitudinal Survey (NLS) (Borus et al. 1980). For example, approximately 55 percent of all sixteen to twenty-one year-olds out of school and out of the labor force at the time of the 1979 NLS indicated that they wanted a job. Furthermore, 40-50 percent of youth surveyed who were out of the labor force, and an even higher proportion of black youth in this circumstance, indicated that they would accept a job as a dishwasher, general factory laborer, fast-food service worker, cleaning person, or check-out counter worker in a grocery store, paying \$3.10 or less per hour (i.e., below the minimum wage at the survey date). These data, however, are hardly conclusive. Even though 40-50 percent of those surveyed would take jobs at the minimum wage level or less, this does not mean that equal numbers of youth in the population as a whole would take such jobs.

Nonetheless, particularly for inner-city black youth, a group disproportionately hit by high rates of unemployment, one finds two sources of evidence against attributing the bulk of their employment problems to their own attitudes and behavior. First, virtually all unemployed youth take the first job offered (although they may restrict their search to a narrow range of jobs). In a study of the job search behavior of 300 unemployed male youths, Stephenson (1976) found that 90 percent of both white and black youths, when describing the search before their last job, said they took their first offer.

Second, black youth employment is very seasonal and cyclically sensitive; when jobs are available, black youth are offered and take more of them (National Commission for Employment Policy 1979). For example, generally a vast flow of young workers enters the labor force every summer. Thus, in 1976, the full-time labor force of sixteen to nineteen year-olds jumped from 3.8 million in March to 7.0 million in June, 8.3 million in July, and 7.5 million in August, before falling back to about 4 million for the rest of the year. Furthermore, nearly 90 percent of this increase in the youth labor force was matched with an increase in employment, resulting in a decline in the unemployment rate between the spring and summer (Lerman 1980). In particular, among blacks sixteen to twenty-one, employment/population ratios (E/P) were .45 among black males and approximately .35 among black females in the summer months of 1980. The point here is that the labor market behavior of young people is firmly tied to job opportunities.

Finally, rates of voluntary participation in employment and training programs in the absence of coercive or mandatory measures indicate that not only do youth want to work, but also that they want to be better prepared for work. For example, the NLS study finds that 44 percent of all black youth aged fourteen to nineteen who held jobs in 1978 had been enrolled in federal employment and training programs (Borus et al. 1980). The Summer Youth Employment Program in 1978 accounted for four out of ten jobs held by all minority youth (sixteen to nineteen) that summer.

Osterman (1980) has offered some additional reasons for the unique labor market problems facing youth, which should not be equated with "poor work attitudes" or a "rejection of the work ethic." First, Osterman characterizes adolescence as a period of "moratorium" in which youth are not generally concerned with career choices and ladders, but rather view employment as a means of earning some "fast cash." Youth also have a tendency to "shop around" and gain exposure to a variety of areas. This is generally considered a healthy, normal step in social development. However, this job sampling results in a high rate of quits, and this tends to reinforce employer prejudices against youth.

Second, the jobs open to youth are overwhelmingly in the secondary or youth labor markets--labor markets that pay low wages. Thus, there is a mutual reinforcement between the behavior of youth and their marginal labor market status. Consider the following data from the National Longitudinal Survey of Young Men (NLS), on wages and weeks of unemployment by age cited by Osterman and reported in table 1. In tracing the basic pattern of youth employment, it is clear from the above that, as youth age, unemployment tends

TABLE 1
WAGES AND WEEKS OF UNEMPLOYMENT BY AGE

Age	Hourly Wage		Annual Weeks of Unemployment	
	Whites	Blacks	Whites	Blacks
17	\$2.18	\$1.83	1.32	3.89
18	2.23	2.01	2.66	4.79
19	2.46	2.19	3.27	4.50
20	2.68	2.16	2.53	4.14
21	2.82	2.13	2.05	3.09
22	2.86	2.18	1.79	3.14
23	2.95	2.16	1.12	2.30
24	3.17	2.34	1.12	2.76
25	3.41	2.44	.85	2.10
26	3.60	2.67	1.03	1.53
27	3.84	2.71	1.20	2.93
28	3.99	2.97	1.57	3.03
29	4.38	3.03	1.43	1.36

SOURCE: The table is reprinted from Osterman (1980, p. 7).

NOTE: These data are for out-of-school youth and are from the National Longitudinal Survey of Young Men (NLS). The figures are averages for all youths during the sample period (1966-1971). Thus, for example, the dates in the cells for twenty-four-year-olds are the average of 1966 wage rates of twenty-four-year-olds in 1966, the 1967 wage rates for twenty-three-year-olds in 1966, the 1968 wage rates for twenty-two-year-olds in 1966, the 1969 wage rates for twenty-one-year-olds in 1966, the 1970 wage rates for twenty-year-olds in 1966, and the 1971 wage rate for nineteen-year-olds in 1966 (assuming that during the specified year the youth was out of school). Cells with an N less than 30 are not reported.

to fall and wages tend to rise. A closer look at table 1, however, shows less growth in wage rates for blacks than whites, especially between the ages of nineteen to twenty-three years.

Third, because of their primary commitment to school, in-school youth generally seek part-time and casual jobs rather than career-oriented ones. Due to school schedules, such jobs (usually in the unstable secondary labor market) are generally the only ones available. Youth interviewed by Osterman showed an informal pattern of job search, as most obtained their jobs through friends, neighbors, and relatives (i.e., informal contacts). In sum, the intermittent and casual attachment of younger youth to the labor market need not be equated with "poor work attitudes" and a "rejection of the work ethic."

We now turn to a review of recent findings from the Youth Employment and Demonstration Projects Act (YEDPA) of 1977.

YEDPA PROGRAM IMPACT ON WORK ATTITUDES

Introduction

After four years of experience under the YEDPA of 1977, many important questions concerning the unemployment problems of the nation's youth and the effectiveness of programs to deal with those problems have been addressed. YEDPA expanded and coordinated programs of career development with employment and training opportunities. It was designed to help ease youth into the labor force after successful attainment of preemployment education or job training skills and to sustain their success in the world of work.*

YEDPA programs representing five different approaches are examined in this review of the impact of the programs on participants' attitudes and work orientations: career development, work experience, intensive training, job search assistance, and summer work experience programs. All of these approaches have in common the broad strategy of helping low-income youth by increasing their attractiveness to employers. Some do it through interventions that increase educational levels, others through occupational training, and still others by improving the work habits of young job seekers.

YEDPA Program Impacts

Career Development

The Youth Career Development Projects (YCD) is one of the earliest and largest YEDPA projects. The purpose of the demonstration is to facilitate the school-to-work transition for in-school youth through traditional and enriching career development services. The program is designed to recruit disadvantaged and hard-to-employ youth, largely through community-based organizations.

*For general reviews of YEDPA, see Hahn (1979, 1980), Taggart (1980), Office of Youth Programs (1980), and Butler and Darr (1980a).

Since its inception, YCD has served about seventy-five hundred students in thirty cities. The YCD population is approximately 60 percent black, 20 percent Hispanic, and 15 percent white.

Among the major features of the program is the use of occupational and career information resources to develop career goals. Career exploration is stressed by on-site visits to local companies, motivation training, and vocational and personal guidance. These services frequently culminate in direct assistance in job placement during the senior year of high school. While career services for secondary school youth are not a novel approach, their combination with job placement administered by community groups is unique.

An examination of the effect of YCD on the attitudes, knowledge, and performance of participants has been conducted by the Educational Testing Service (ETS) (1980a). Their findings are based on a comparison of the experimental group of 1,755 high school seniors enrolled in YCD during the 1978-79 academic year with a comparison group (not randomly assigned in most instances) of 1,684 high school seniors. Comparisons were made on the basis of scores on the Standardized Assessment System (SAS), which was administered at the beginning of the senior year in high school and at the time of completion of high school. The SAS is a group of survey instruments organized for the U.S. Department of Labor by the ETS as a common assessment tool for a wide variety of YEDPA programs (Educational Testing Service, 1980b).^{*} It measures the following:

- Changes in attitudes about and knowledge of work as measured by the SAS psychometric battery:
 - Vocational attitudes
 - Job knowledge
 - Self-esteem
 - Work attitudes
 - Job-holding skills
 - Job-seeking skills
 - Attitudes about sex stereotyping

It was found that participation in the YCD program led to small but statistically significant gains in the areas measured by the SAS psychometric battery. Specifically, when the differences between pretest to posttest scores for participant and comparison groups were compared, a significant gain for YCD participants was found in the following areas: vocational attitudes, job-holding skills, work attitudes, job-seeking skills, and attitudes about occupational sex stereotyping. Not surprisingly, youth with modest reading scores gained more on these measures than youth with poor reading skills.

Do the program gains in work-related attitudes and knowledge show a positive correlation with immediate postprogram labor market experience? The

^{*}For a technical report on the SAS, see Educational Testing Service (1980b).

ETS presents the following findings, based on a three-month postprogram follow-up:

- Full-time employment--with the exception of participants in the YCD project, none of the gains in attitude and knowledge areas were related to full-time employment status.
- Status level of employment--gains in self-esteem, job-holding skills, attitudes about occupational sex stereotyping, and vocational attitudes were significantly related to higher job status among young job holders.
- Skill level of job aspired to--gains in attitudes about occupational sex stereotyping were related to higher career aspirations, particularly for women.

Thus, although it was found that participation in the YCD program resulted in very limited employment effects (e.g., a 2.5 percent gain in full-time employment), there were significant but modest changes in attitudes and knowledge areas as a result of program participation.

Another set of career development projects, the Vocational Exploration Demonstration Projects (VEPS), is cosponsored by business and labor groups. The program operates as a summer program, as well as a year-round program for both in- and out-of-school youth. It is run by eight community groups, four CETA organizations, two labor unions, a college, and a CETA Private Industry Council, depending on the site. VEPS seeks to acquaint young people with a range of opportunities that exist in the private sector. Through vocational exploration, counseling, and occupational information, VEPS attempts to motivate youth to find jobs in the unsubsidized private sector. Exploration is carried out through a variety of models, ranging from visits to private sector work settings, to job shadowing, to simulating work settings in classroom settings. Early research results are available for the academic year 1979-1980 based on a sample of 1,905 youth (Nedwek et al. 1981). Although there are no control groups, different VEPS models may be compared with one another.

Using the ETS instruments described for YCD, the VEPS evaluators looked for gains in work-related attitudes and knowledge areas. They found gains in an absolute sense from pre- to posttests, but none of the various models of vocational exploration resulted in significant differences among youth of various characteristics, such as sex, minority status, or school status. In a finding similar to YCD, VEPS youth with moderate reading skills gained more on a variety of knowledge and attitude areas than did youth with minimal reading abilities.

Work Experience

The largest amount of YEDPA resources goes for youth work experience programs, but the effects of the work experience on low-income youths' work

habits is difficult to document. In one demonstration, however, evidence does exist on the effects of work experience programs on work habits. The demonstration was designed to test whether the work experience arising out of private sector subsidized jobs differed from the experience in public, subsidized jobs (Gilsinan and Tomey 1980).

Youth participants took ETS/SAS tests measuring their attitudes about work immediately before and after the work experience. Although the researchers had no pure control group, the results for youth who participated for varying amounts of time are suggestive.

Youth in the "public versus private" demonstration rated higher on vocational attitudes and work-relevant attitudes after the work experience than before the work experience. The gains were clearly higher among those completing work experience than among those who left the program early. Interestingly enough, there were no demonstrable differences in gains between public sector program completers and private sector completers. Finally, only one test score--Work Related Attitudes--was consistently and statistically related to postprogram labor market outcomes.

Intensive Training

The Job Corps program is the most intensive intervention providing training to out-of-school, low-income youth. Although the Job Corps has operated since the mid 1960s, it is only within the last two years that a thorough evaluation has become available from YEDPA-financed research. The Job Corps offers training, basic education, counseling, and health care in a residential setting outside the normal home environment of the enrollee. Of all the youth programs, the Job Corps generally accepts those with the poorest educational backgrounds and employment prospects.

In a study of the noneconomic impacts of the Job Corps, researchers at Abt Associates (1980) examined the impact* that Job Corps training had on

*Three scales were used to measure these potential impacts. The first, Regis Walther's Work Relevant Attitudes Scale, taps three separate types of work related attitudes. These are described by the scale's author as "Optimism," "Self-confidence," and "Unsocialized Attitudes." See Walther (1975).

The second scale, the Work Ethic Scale (from Goodwin's Work Orientation Questionnaire), attempts to assess the extent to which the respondent perceives that work advances his or her self-development and that such efforts will lead to success. See Goodwin (1972).

The third, Goodwin's Lack of Confidence in Ability to Succeed in the World of Work Scale (see Goodwin, op. cit.), measured the degree to which the participants felt that they could succeed in the job market. A positive change on this scale indicates a decline in confidence. See Goodwin (1972).

attitudes concerning work for a sample of 489 young men and women in two Job Corps groups and a comparison group.*

Results from a variety of Job Corps participants showed that although there were no significant differences among groups at pretest, there was a consistent, though not always statistically significant, drop in the social-psychological level of self-confidence and optimism for all groups between the pre- and posttest. However, there were no significant positive differences across groups on the three scales that directly measured attitudes toward work. Few changes in attitude emerged on the posttest, and those that did were negative. The impact of Job Corps, for example, was negative for those who dropped out early as their attitudes toward work dropped on all scales. For men and women who stayed at least three months (i.e., Persisters), Job Corps seemed to have no impact, positive or negative. The authors conclude that attitudes toward work are not easily improved over a ten-month period. If, however, a young person makes a commitment to improving work skills and this goal is not realized, the result can be a negative impact on attitudes toward work. In sum, remaining in Job Corps allows a young person to retain those initial positive attitudes toward work; dropping out is associated with a significant and negative change in attitudes toward work.

Job Search Assistance

Job search skills can be acquired through formal instruction. Youth who were taught how and where to look for work may do better in the labor market than youth who search by trial and error. A number of job search assistance programs were sponsored under YEDPA to provide youth with the skills necessary to initiate the self-directed job search. The programs are comprised of courses, workshops, counseling, role playing, simulated job search, and actual job search. Job search assistance programs teach participants how to prepare resumes and present information over the telephone or during an interview, and they impart commonsense advice on how to approach employers and get jobs.

One YEDPA study of a CETA job search assistance program examined the Cambridge, Massachusetts, Job Factory (Hahn and Friedman 1981). Each cycle of the Job Factory lasted approximately four weeks and paid CETA stipends to youth to learn how to find a job. The study randomly assigned out-of-school CETA-eligible youth to program and control groups with procedures to ensure equivalent distribution by age, sex, and ethnicity. There were several cycles of operations. The first and last cycles served graduating seniors in the last days of their senior year, while other cycles served unemployed youth, some with, and others without, high school diplomas.

Although the principal outcome of interest in job search assistance is employment, these findings will not be discussed here. Instead, regarding work attitudes (as measured by the ETS/SAS psychometric battery), it was

*The groups were: Persisters (those who remained in Job Corps at least three months); Dropouts (those who attended Job Corps for fewer than three months); and No-Shows (nonenrollees).

apparent that for this program, the short duration of job search assistance and the emphasis on job finding rather than career development resulted in no significant, meaningful, positive gains in attitudes and knowledge areas from pre- to posttest. The researchers document that job search assistance works in the shortrun by speeding up the process of job finding, rather than transforming the work orientations of young participants.

Summer Work Experience

Together with Job Corps, the Summer Youth Employment Program (SYEP) is the oldest surviving young employment program. SYEP is also currently the largest of the CETA youth programs, generally serving over 700,000 economically disadvantaged fourteen to twenty-one year-olds in the summer months. Given its size, the SYEP program has a major impact upon the youth labor market during the summer months, particularly for minorities and economically disadvantaged youths.

The SYEP program, however, has been subject to a growing number of criticisms during the past few years. These criticisms have been directed at the value of the work activities performed by youths, and the program's perceived failure to generate long lasting impacts on the employability, educational status, and work attitudes of SYEP youth participants (Office of Youth Programs 1979).

A major evaluation of the summer work experience program was conducted for the U.S. Department of Labor (Nellum and Associates 1980). The primary purpose of the study was to evaluate the impact of SYEP participation of the postprogram work-related behavior and attitudes of economically disadvantaged youth. The Nellum study assessed the net impact of the 1979 SYEP program in eight sites across the country by collecting and analyzing information on a sample of nonparticipants, as well as on youth who had participated in the program. In most cases, the sample of nonparticipants was drawn from the pool of applicants to the program who were not accepted for reasons other than eligibility (e.g., surplus applicants). Approximately 900 SYEP participants and 900 nonparticipants were included in the analysis.

Another evaluation by Nedwek and Tomey (1979) focused on the changes in attitudes of participants in the 1978 summer youth program and of participants in the 1978 summer Vocational Explorations Programs (VEPS).

The effects of summer youth programs on work attitudes in the Nellum study and in the Nedwek and Tomey study were mixed. The Nellum study indicates that SYEP exerts no positive effects on attitudes. There were, for example, no significant changes in work attitude and job knowledge test scores between the start and completion of the program for either participants or nonparticipants. In contrast, the findings from the Nedwek and Tomey study indicated that participants in the regular summer program and in the summer VEPS program experienced improvements in their social and work-related attitudes. While youth in the regular summer program showed less improvement than did youth in VEPS, they still improved their scores on measures of life

satisfaction, self-esteem, attitudes toward the world of work, and knowledge of the world of work.

In addition to the formula-funded Summer Youth Employment Program (SYEP), the U.S. Department of Labor funded a series of enriched summer youth program demonstrations designed to test their effects upon the schooling, employment, and work attitudes of different subgroups of the youth population. These demonstrations have been administered by a wide variety of community-based service groups, and have added support and educational services to the basic summer work experience approach. Evaluations of the impact of these demonstration programs generally make use of comparisons between participants and youth from comparison or control groups. The impact of two of these programs on participant attitudes is discussed in the following paragraph.

The 1979 summer Career Exploration Program was operated by Opportunities Industrialization Centers of America (OIC) and was designed to serve the employment and training needs of sixteen to twenty-one-year-old high school dropouts, potential dropouts, and juvenile offenders from the economically disadvantaged youth population (Opportunities Industrialization Centers of America, Inc. 1980). The services were offered to assist youth in clarifying their occupational interests and goals and to provide them with an opportunity to explore alternative career options.

The OIC career exploration program operated in seven sites for ten weeks during the summer of 1979. In order to allow estimates to be made of the net impact of CEP participation, eligible youth were randomly assigned to either the program or to a control group. Approximately eighteen hundred fifty participants and eight hundred sixty controls were included in the sample used to evaluate the effects of this program.

SER-Jobs for Progress (1980) administered a 1979 summer career exploration demonstration program in eight separate sites throughout the nation. The program lasted eight weeks and was designed to enhance the employability of participants and encourage them either to return to school or continue their formal education at the end of the program. Approximately one thousand twenty-five SYEP-eligible individuals participated in this demonstration program; about 20 percent were high school dropouts, 65 percent were high school students, and 15 percent were high school graduates or holders of GED certificates.

The program provided participants with an exposure to several jobs in local firms cooperating with the program, as well as classroom instruction in job preparation, English As a Second Language, and survival skills. The comparison group consisted of 470 individuals not receiving the career exploration and classroom training services (although some did enroll in regular federal SYEP programs).

Both the enriched programs demonstrated some positive effects on participants. Relative to control or comparison group youth, participants generally showed higher school enrollment and higher employment rates. However, the evidence indicates that the programs did little to improve

job-relevant attitudes. In neither program (OIC or SER) did participants gain more on tests of work attitudes and job knowledge than did controls.

SUMMARY

Summarizing the evidence on the impact of YEDPA Programs on the work attitudes of disadvantaged youth necessitates first examining the particular program approach taken. If one were to ask, "Do attitudes and knowledge areas change as a result of participating in a YEDPA program?" the following statements could safely be made from the emerging findings:

Career Development: Yes. In some instances, modest gains relate significantly to postprogram outcomes, such as quality of jobs found. None of the attitude or knowledge gains, however, relate significantly to postprogram job findings.

Work Experience: Gains are reported on vocational attitudes and work-relevant attitudes after the work experience. Higher gains occur among those completing the work experience than among those who left the program early. Only one scale out of a battery of work-related attitudes and knowledge areas relates significantly to postprogram job findings.

Intensive Training: No (positive or negative) gains in work-related attitudes for those who remain enrolled in Job Corps at least three months. Dropping out of Job Corps, however, was associated with a significant and negative change in attitudes toward work.

Job Search Assistance: No evidence of meaningful changes in work orientations.

Summer Work Experience: Impacts of programs on attitudes were mixed, with one study indicating no positive effects on work attitudes, while a second study found program participants experienced improvements in their social and work-related attitudes. Enriched summer programs did not have any measurable effect on job-related attitudes and knowledge.

What can one conclude from both the YEDPA and pre-YEDPA evidence concerning the impact of employment and training programs on the work attitudes of disadvantaged youth? Do programs have any impact? If so, in which direction? If not, should policymakers bother to address directly the issue of work attitudes in employment and training programs? The last section of this paper focuses on these and other issues of concern to both policymakers and program practitioners.

Conclusion

Both conventional wisdom and program experience suggest the importance of positive work attitudes in the establishment of stable and successful employment patterns. But is it necessary for public employment and training

programs to attempt to change directly young people's basic attitudes toward work?

This paper has shown that the idea of disadvantaged, low-income youth hold negative attitudes toward work and that these attitudes in turn are responsible for their inability to obtain employment cannot be strongly supported by the evidence from the pre-YEDPA or YEDPA eras. Nonetheless, policymakers have made socialization and attitude change central features of strategies to increase the employability of disadvantaged youth.

We examined two decades of employment and training programs for their impact on young participants' work-related attitudes. The paper noted the methodological shortcomings of many evaluations of the early job training programs. We concluded that little confidence could be placed in the early research findings. Even taken at face value, however, it is striking how few studies from the MDTA era document successful change in work orientations as a result of program participation.

Next, we reviewed recent findings, many of them still preliminary, from a massive federal demonstration effort to understand the unemployment problems of the nation's youth. We reviewed five types of youth employment training programs. In only two of the approaches reviewed were there clear-cut, in-program gains on work-relevant attitudes. Work attitudes do seem to change as a result of work experience and career development programs. However, in the latter case, there is not a clear connection between the changes in work orientations and subsequent job finding. Therefore, even when attitudes are changed through special counseling programs, there is a tenuous relationship between the changed orientations and ultimate results in the labor market.

One might ask, "If the work attitudes of disadvantaged youth are positive to begin with and if, as most of the empirical evidence indicates, youth really do want to work, why should employment and training programs attempt to change attitudes at all?" First, it may be that the lack of program impact is attributable to the fact that youthful work attitudes are positive to begin with. Second, even when attitudes are changed, few, if any, studies show a direct link between the changes in attitudes and postprogram success in the labor market. The latter conclusions suggest that programs designed specifically for changing work orientations may be unnecessary or focused on a problem that resists the specific program treatment.

The review leads to the conclusions that training programs have perhaps placed too much emphasis on changing attitudes and have miscalculated the workreadiness of the young clients coming into the programs. The actions of the youth themselves speak louder than words; no battery of social-psychological testing has refuted the fact that youth, in general, and disadvantaged, minority youth, in particular, generally take jobs when they are available. Perhaps the best testimony to the strong work ethic of our nation's youth is the vast flow of teenagers into the labor force every summer and into training programs when slots are made available throughout the year. In sum, we would argue that the behavior of youth tells us infinitely more about their work attitudes than do scores on the battery of psychometric tests.

Our review concurs with research that shows that the intermittent and casual attachment of youth to the labor market should not be confused with poor work attitudes or a rejection of the work ethic. Adolescence can indeed be characterized as a period of "moratorium." Rather than trying to instill adult work attitudes in young people, policies should aim to increase the total number of jobs available to disadvantaged youth and to provide skills training to job-ready youth who may be unprepared for the technological demands of the labor market. Finally, no discussion of the attitudes of youth should ignore the perceptions, attitudes, and hiring practices of employers.

Despite our criticism of the attitudinal focus of programs, we believe that programs must be careful to counter the low expectancies of success that many youths bring to training programs. Employment training programs should develop approaches that heighten the youth's expectancies of completing the programs and successfully attaining jobs in the unsubsidized labor market. Approaches for the latter need not be aimed at the socialization or value development of youth, since it has been shown that these elements frequently take care of themselves in well-managed, basic skills, work experience, or skills training programs. It is the improvements in the management of employment and training programs for disadvantaged youth that may well represent the single greatest challenge for the next generation of youth programs.

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**PREDICTING ACADEMIC SUCCESS FOR HIGH RISK STUDENTS:
IMPLICATIONS FOR IMPROVING THE POSTSECONDARY
RESPONSE TO YOUTH EMPLOYABILITY**

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INTRODUCTION

The causes of minority youth unemployment are complex and interrelated. Population shifts, a "dysfunctional life-style" and a growing minority teenage cohort have been cited as critical elements of the current unemployment crisis. Mangum and Seninger in Coming of Age in the Ghetto review these factors and argue that the lack of job opportunities for urban youth will have an impact on their work-related attitudes as adults (Mangum and Seninger 1978).

Barriers to employment arise from the life-styles and value systems of minority and low-income persons. Nonstandard English, lack of job-appropriate grooming and behaviors are reasons why a youth may fail to obtain or keep a job. Many urban youth lack basic academic skills demanded by employers (Mangum and Seninger 1978, p. 9). Unless youth are taught these skills and appropriate behaviors, the same barriers will keep them unemployed as adults.

In order to intervene in this situation and to increase the employability of youth, employment and training strategies have been developed that attempt to teach work-related skills and values. In an era of "accountability" and scarce public resources, there is increasing demand for educational institutions (including postsecondaries) to adapt their programs and curricula to prepare youth adequately for private sector employment. There are increased public expectations that education for employability will alleviate the need for public-sector training programs (i.e., CETA programs) to upgrade worker skills and experience. According to the President's Science Advisory Committee, one of the major objectives that youth programs should address is the acquisition of skills that expand the "personal resources" of youth (U.S. President's Science Advisory Committee Panel on Youth 1973). Higher education must be responsive to the current thrust toward linking work and learning by developing special youth programs to serve the educational needs of those who have previously been served inadequately.

Many special intervention models have sought to improve the acquisition of skills of minority and low-income youth through the identification and support of students who have been labeled least likely to succeed (high risk) at the college level. Counseling, tutoring, and financial aid are only a few of the services used in intervention strategies that seek to support high risk students. Questions remain as to which services are most critical to student academic achievement.

Project EXCEL (Exemplary Collegiate Experiential Learning) was one such intervention strategy designed to improve the accessibility of the university to low-income and minority students. The university-initiated project was part of a Youthwork, Inc. national demonstration and was developed by Georgia State University's College of Urban Life. It was designed to link work and

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learning by giving academic credit to students for skills and competencies gained at worksites. As a cooperative partnership between the university and the Atlanta CETA Prime Sponsor, Project EXCEL brought community resources to bear to give CETA-eligible youth the opportunity to earn an associate of science degree in urban life.

Project EXCEL addressed the objective of acquisition of skills that would enlarge the "personal resources" of youth by (a) providing a program adapted to their needs, (b) providing specialized career counseling through professional and paraprofessional role models, and (c) expanding learning and living skills to a level of competence that facilitates entry into the job market. The project model was designed to incorporate the worksite skills development into a traditional liberal arts curriculum as a strategy for increasing youth employability.

Although special support services, such as individual and group counseling, academic assistance, and financial aid, were available to all EXCEL students, it became apparent through ten academic quarters of the project's operation that some students were able to take advantage of the university resources, while others of similar academic and demographic backgrounds were unable to meet the academic expectations of the university. Thus, a research question of whether variables can be identified that predict academic success for high risk students arose from the EXCEL experience. The purpose of the current research is to identify those variables that discriminate between those EXCEL students who achieved some academic success and those who did not.

Prior to discussion of the discriminating variables, section II of this report will review some of the research concerning screening methods used for admittance into postsecondary programs and some psychosocial variables that may be stronger indicators of academic potential. In section III, the current role of the postsecondary institution in special intervention is discussed, and the EXCEL model and student population are detailed. Finally, the variables that were found to discriminate between the successful and unsuccessful students are discussed and conclusions drawn from the analysis.

IDENTIFYING ACADEMIC POTENTIAL

The role of the postsecondary institution in improving the employability of low-income and minority youth has not yet been well defined. Although the need for special intervention programs is apparent, institutional barriers exist within the educational system that have affected the ability of the postsecondary institution to adapt standards and programs to special employability needs. This section will examine the postsecondary institution's response to this issue by discussing the traditional admissions standards and some psychosocial variables, hypothesized to be related to academic achievement, that could increase flexibility in university admissions.

Selective Admissions: The Exclusion Equation

The process of selective admissions by colleges and universities is designed to offer the opportunity to enroll and improve career opportunities only to those applicants who are predicted to be likely to perform college level course work in a satisfactory manner. The most common method of predicting satisfactory performance is a regression equation using high school grade point average (GPA), high school class rank, and scores on standardized tests. This "exclusion equation," however, has been found to be only moderately successful for the student population as a whole (Bean 1980) and somewhat less successful for low-income and minority students (Rovessi-Carroll and Thompson 1980). The effect of the exclusion equation is to penalize minority and low-income students, who have generally lower high school grades and test scores than nonminority middle-class students.

Some research has found a positive relationship between the intellectual (or cognitive) measures that make up the exclusion equation and college GPA (Cleary 1968), whereas other research reports little predictive value in the equation (Nairn and Associates 1980). Seigelman (1971) found that when the variables of high school GPA and intellectual measures are correlated, about half of the variability on academic achievement can be attributed to intellectual variables.

High school grades or rank tested independently have been cited as more valid predictors of college achievement than standardized scores (Guisti 1964). Fisher (1965) and Gallant (1966) concluded that high school GPA was predictive of academic success, or lack of success, at the college level. Chase and Johnson (1977) found in their 1973 research that high school rank and the number of English courses taken in high school were positively related to college GPA, and that this composite measure discriminated between successful and unsuccessful students. Other researchers have objected to reliance on high school grades for prediction, however, arguing that there is too much variation in the quality of high schools for grades alone to indicate a specific level of achievement (Hills 1964).

The use of standardized test scores in the exclusion equation introduces an adjustment for variation among high schools, but this intellectual measure has been discredited in much research. A cross-sectional study of selected postsecondary institutions conducted by Boyd (1977) found SAT scores to be poor predictors of college achievement. Boyd's conclusions have been supported in independent investigations at other universities (Gordon 1976).

Although research on the validity of the SAT score as a predictor of academic achievement as a whole is inconclusive, several studies particularly question the usefulness of the SAT to identify qualified minority and low-income students (Pfeifer and Sedlacek 1971). Nairn and Associates (1980) assert that reliance on SAT scores especially penalized persons from minority, ethnic, and lower socioeconomic backgrounds. Their analysis, using a College Board Statistical Report of 1973-1974 SAT test scores, revealed a strong tendency for test scores to be positively correlated with income levels. The study concluded that test scores of minority groups are systematically

distributed below those of the white, middle-class individuals, reflecting the national income distribution. Lack of familiarity with the language and vocabulary of the test among minority students, hidden political biases in test questions, the students' anxiety levels, and lack of access to coaching are some variables that may account for the score differential between minorities and nonminorities.

If the exclusion equation is not a reliable indicator of academic potential, the question of how to improve prediction arises. The postsecondary institution must examine additional variables that could improve prediction in order to utilize scarce educational resources frugally and fairly. Research has suggested nonintellective (or noncognitive) variables that may have an impact on academic performance. These variables, presented in the following discussion, could be used in addition to the traditional intellective indicators to develop an "inclusion equation" with increased predictive reliability.

The Inclusion Equation: NonIntellective Variables that Predict Academic Achievement

The variables that have been most successful in predicting academic success investigate constructs that deal with the "self" and the individual's social environment. In this research, such nonintellective variables were conceptualized on the basis of three psychosocial constructs: self-concept, locus of control, and alienation. Each of these is discussed as it relates to the current research.

Self-Concept

Self-concept is an umbrella term used for numerous definitions of the "self" construct dating from Durkheim's theory of the social mind (Durkheim 1915) and William James's reconceptualization of the self (James 1948). Investigation of the "self" construct has been based on several different perspectives. Two of these, self-esteem and social anchorage, were utilized in this study.

The self-esteem conceptualization of self-concept reflects a psychological or social-psychological approach that is "phenomenological" in nature. This perspective, formulated primarily from Mead's theory of the development of self as a dynamic process, holds that individuals see themselves as others see them, through their own perceptions of what others see (Mead 1934). Self-esteem may also be viewed as the critical, or evaluative component of the whole self-concept (Gergen 1971). Some theorists have argued that if groups of persons are differentially esteemed by the broader culture, those individual group members who internalize this value system judge themselves accordingly. By extension, it would seem especially difficult for minority children to develop positive self-esteem in a society that mitigates against it (Gergen 1971, pp. 36-37).

The perspective of social anchorage represents a sociological conceptualization of self-concept. This research perspective also investigates self-identity, as derived within the context of the enveloping social system. For example, Festinger (1954) emphasized the idea that individuals develop identity through "social comparison," evaluating their status and social categories relative to those of other individuals and groups.

Research acknowledges sociocultural identifications as salient components of individual self-concepts (Kuhn and McPartland 1954). Minority group members have been found to be even more aware of their group memberships--thus, more anchored to their social groups--than majority group members. Further, group identifications and awareness of that group's relative position in the social hierarchy have an effect upon the way individual members of that group view themselves (Ockerman 1969).

For purposes of this research, the two components of the construct self-concept were measured independently. Self-esteem was measured by Rosenberg's Self-Esteem Index, a ten-item scale answered on a four-point scale from "strongly agree" to "strongly disagree" (Rosenberg 1965). Research has found this test to be a highly reliable measure of the psychological or social-psychological conceptualization of self-concept, and to be correlated with other measurements and clinical assessments (Robinson and Shaver 1973).

Social anchorage was measured in this study by a Ten Statements Test, a variation of the Twenty Statements Test developed by Kuhn and McPartland (1954). Participants were asked to answer the question "Who am I?" ten times. Scores were developed to represent the proportion of statements that reflect social group identifications. This assessment approach has the advantage of letting the subjects structure their own test, revealing saliency of group identifications through the ordering of answers.

Using various measures of the self-concept construct, previous research has demonstrated a positive relationship between self-concept and academic achievement at all levels of schooling (John 1971; Bookover, Erickson, and Joiner 1964; Sattler and Neuringer 1965, Purkey 1970). In terms of relating self-concept specifically to college achievement, several studies at various universities have found the addition of self-concept as a variable in the predictive equation to increase greatly the predictive ability of the equation (Pfeifer and Sedlacek 1971, Monfrans 1973). DiCesare, Sedlacek, and Brook (1972) asserted that self-concept may be especially important in predicting college success for blacks. They concluded that successful blacks had high self-concepts and were able to adapt university structures and services to meet their needs.

Utilization of support services could make the difference between academic success and failure in cases where academic skills are low. The positive self-concept that has been found to be positively related to resource utilization is at least theoretically related to individuals' perception of the factors that control their environment and reinforcements, that is, locus of control.

Locus of Control

This construct conceptualizes individuals' orientation toward themselves in relationship to their environment and has also been related to school success. The construct locus of control refers to an individual's generalized orientation toward control of reinforcement, which is either internal or external. The locus of control construct has been extensively investigated since its introduction through Rotter's learning theory (Rotter 1966). This theory describes the degree to which individuals perceive reinforcements to be contingent upon their own behavior. If individuals believe that reinforcements are contingent upon their own behavior, capacities, or attributes, they are said to be internally controlled. If individuals believe that events are determined by luck, chance, fate, or other people, they are said to be externally controlled. While external control orientation has been found more frequently among lower SES than higher SES groups (Lefcourt 1976) and seems more typical of minority subjects than nonminority subjects (pp. 23-24), the nature of the relationship is unclear.

Lefcourt (1976) summarized research investigating locus of control, some of which has found locus of control orientation to be a predictor of academic success regardless of socioeconomic status (pp. 71-78). Internal control orientation has been found to be positively related to school achievement (Sattler and Neuringer 1965) and development of good study habits, and to be descriptive of academically successful minority college students (Gurin and Epps 1975). Internal control orientation also may be linked to the ability to plan and work toward long-term goals, such as a college degree (Rotter 1966).

For the purpose of this research, locus of control was measured by Rotter's Internal-External Control Scale, one of the most reliable and widely used of the internal-external orientation (I-E) measurement scales. Factor analysis of this scale has revealed it to be multidimensional in nature, with Personal Control, Control Ideology, and View of the World identified through the questions (Robinson and Shaver 1973, pp. 227-229).

Locus of control orientation conceptualizes individuals' views of themselves in relation to the events that shape their lives. If individuals view these events as outside of their control, they may choose not to participate in activities that may in fact influence their lives. Lack of participation in social, educational, economic, and political activities isolates individuals from the dominant social order. External locus of control orientation, by inhibiting participation, is theoretically related to a third variable in the inclusion equation, social alienation (Hutcheson 1969).

Social Alienation

Social alienation has been related to three lower order concepts: powerlessness, normlessness, and social isolation. Powerlessness may be defined as the extent to which individuals perceive themselves as unable to determine the reinforcement they seek. The normlessness concept, based upon Durkheim's description of "anomie," focuses upon the expectancy of the individual

that goals cannot be achieved through socially approved behavior. Social isolation connotes the degree to which the individual feels separated from a group or society or from group or societal standards (Dean 1961).

Several studies have found significant negative correlations between alienation and socioeconomic status (Dean 1961, McDill 1960-61). Much research in the school setting has concentrated upon behavioral indicators of social isolation, such as lack of participation in extracurricular activities or rejection by peers, as they are related to academic achievement. Such assessments have found alienation negatively correlated with positive academic achievement (Texas Education Agency 1980).

In this study, social isolation was measured by Dean's Alienation Scale. The scale consists of twenty-four items on a five-point scale from "strongly agree" to "strongly disagree" and measures each of the three lower order concepts--powerlessness, normlessness, and social isolation. Scores on the scale were found by its author to form a normal distribution with scores from 0 (lowest alienation) to 96 (highest alienation) (Dean, pp. 753-758). The Dean's scale has been widely used in social research, but more research validating the instrument is needed (Robinson and Shaver, pp. 275-276).

It was hypothesized in this research that the addition of one or more nonintellective variables to the "exclusion equation" would improve predictive ability at the postsecondary level. At this time, however, the exclusion equation is the admissions standard for many higher education agencies. Special programs that have been developed to reduce the discriminatory effects of the exclusion equation are discussed in the next section.

POSTSECONDARY INTERVENTION

Research cited previously has shown that the traditional criteria used for predicting academic success may fail to identify minority and low-income students for college entrance. Since the 1960s, colleges have tried various strategies to provide access to those who had been denied entrance because of financial limitations and/or marginal academic records. Many programs have been developed to recruit and support high risk students.

Support strategies have taken many forms, including reduced course loads, tutorial services, counseling, individualized curricula, study skills training, and academic remediation, in addition to financial assistance (Schavione 1973). Most special programs for high risk or underprepared students at the university level, however, have met the obstacles of (1) lack of adequate funding, (2) unrealistic goals and expectations, (3) administrative structures lacking authority commensurate with responsibility, and (4) isolation of programs and students from the university community (Morgan 1977). Many programs have operated in the face of such obstacles by employing different strategies to meet the needs of high risk students.

Very little research is available at this time that evaluates the success of programs for low-income or minority youth in postsecondary environments.

This is due in part to the short lifespans of many experimental programs and, in part, to the difficulties in assessing programmatic outcomes. Support strategies and conclusions drawn from evaluations that have been conducted are summarized in this section, followed by a brief description of the EXCEL program model on which this research was based.

Various Educational Opportunity Programs employed many different strategies in attempting to support high risk students. An Educational Opportunity Program at Temple University focused upon improving academic and interpersonal skills through tutoring and counseling services. This program also sought to develop an internal locus of control orientation in students through self-initiated actions to meet special needs and reliance upon peer support in problem solving (Wagner and McKenzie 1980). Other programs have attempted to teach students positive study habits to improve academic skills in concentrated training periods, prior to their admission to the university (Shaffer 1973).

Studies of Educational Opportunity Programs in California reveal that more high and average ability students took advantage of special support services than did lower ability students. For example, only 39.4 percent of the students whose GPAs were classified as low used the library, compared with 62.3 percent of those students with high GPAs. This differential was seen in all types of support services. Freidlander (1980) asserts in this study that students with low ability are likely to have failed in previous academic experiences, so they may try to avoid programs, like academic remediation, devoted to those activities at which they have experienced failure.

Requiring students to utilize counseling or remedial services has been attempted and has drawn criticism as degrading to students and inviting drop-outs (Schavione 1973). A demonstration program at Wichita State University, Early Alert, attempted a different approach to offering support services. Teachers reported academic problems or excessive absences to a counselor, who then contacted the student. It was the counselor who took the initiative in offering the support services (Crawford, McFarland, and Rhatigan 1974).

Individualized curriculum has been one strategy used for academic skill development. Evaluation of this method has shown that the greatest benefits of personalized instruction accrue to the most motivated students. Pascarella (1972) found that as the degree of student motivation declined, so did the difference between the benefits of individualized instruction and traditional teaching. This points out a need for programs that can identify and develop motivation and a positive self-concept, as well as deliver academic remediation.

The EXCEL program at Georgia State University was developed to support students in an academic program, incorporating counseling and worksite experience into a college degree program. The combination of experiences was designed to address academic skills and motivational factors, while increasing the employability of urban youth. That model is detailed below, followed by a profile of the EXCEL students.

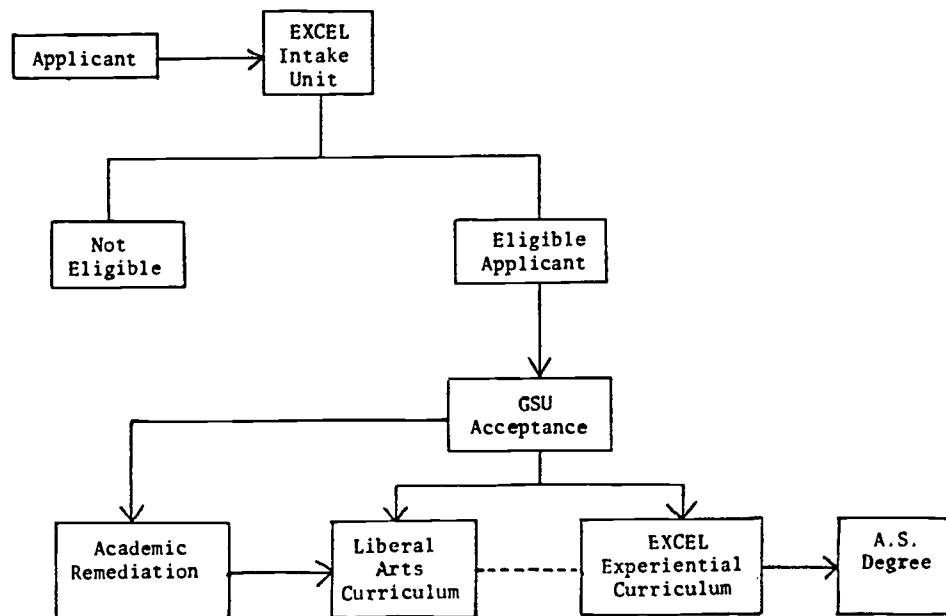
The EXCEL Model

Outreach, Recruitment, and Intake

The project staff developed specialized recruitment techniques by working with high school and CETA counselors to identify potential applicants. After eligibility screening and completion of necessary documentation (in cooperation with the CETA prime sponsor) students applied for admission to Georgia State University. The intake component was responsible for assisting applicants with all phases of this process, i.e., SAT application, student aid, and so forth.

Upon acceptance to GSU, the intake unit staff administered a battery of achievement, aptitude, occupational, personality, and psychosocial attitude assessments. These assessments were employed by project staff to develop detailed individual learning plans for specialized counseling activities, and for the development of worksite placements. The flow of clients through the process is summarized in figure 1.

FIGURE 1
EXCEL CLIENT FLOW



Counseling Activities

Specialized counseling services were developed by the EXCEL staff since lower-income young persons may suffer from a lack of motivation to achieve and low self-esteem (Mangum and Seninger, pp. 76-82). Research on the vocational patterns of lower income adolescents has shown that these youth generally score lower on vocational maturity assessments than do their age cohorts from more economically advantaged environments (Ansell and Hansen 1971).

Given these problems, EXCEL counselors attempted to foster a counseling relationship with their students in an atmosphere of openness, acceptance, understanding, and mutual positive regard. The counselor utilized this carefully structured relationship to foster self-understanding, acceptance, and internal direction by students. Students were required to participate in structured group and individualized counseling activities each week.

Experiential Curriculum

To expand opportunities for earning academic credit for learning during the work experience requires a curriculum that blends classroom activity, worksite experience, and support services into a learning experience for the student. EXCEL students were enrolled in a program of study for the associate degree in urban life, which requires area concentrations in the humanities, natural sciences, social sciences, and urban life. These courses could be utilized by the student not only to meet requirements for the two-year degree program, but also to move into a four-year degree program without loss of hours. Within the thirty hours required in urban life, EXCEL students could earn twenty hours through a combination of field experience (worksite based) and classroom activity.

The first course in the EXCEL sequence was a totally classroom-based career development course (combined with structured counseling activities). The second course was designed to teach the student how to utilize the worksite experience as a learning environment in conjunction with the courses to follow. Emphasis was placed upon the development of data gathering, analytical and problem-solving skills, as well as on how to develop a learning contract. The next three courses in the experiential series focused upon learning about the urban environment.

During the second academic quarter, students in Project EXCEL were placed in a paid worksite experience with human service delivery system agencies for fifteen hours a week unless they already had, or had developed, their own paid worksite. It was this agency worksite experience which was tied to the courses in urban life discussed above.

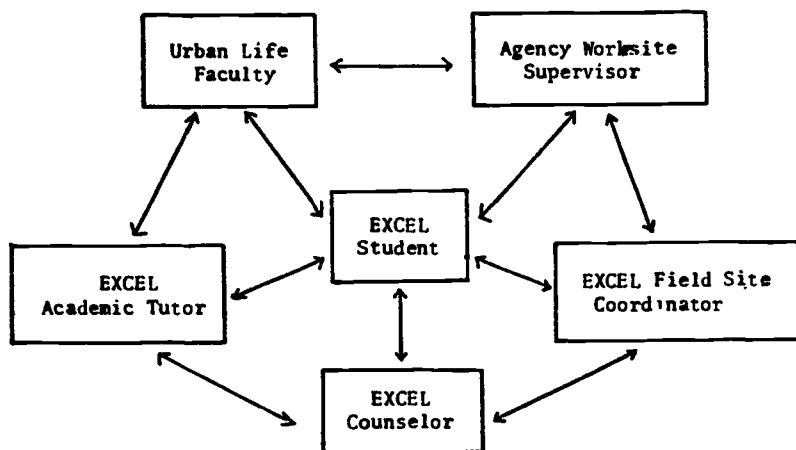
A learning contract between instructor and student was utilized, with the worksite as the focal point around which the contract was developed. The student and faculty member negotiated the learning contract with major responsibility for contract development increasingly passing to the student as the series of courses progressed. In this progression of courses, classroom

activity moved from the formal lecture to a seminar format. Finally, the student participated in a completely field-based seminar course that allowed the student to demonstrate acquired skills by solving or developing a plan of action addressing a problem in the agency to which the student was assigned.

Coordination of the worksite placement activities was the responsibility of an EXCEL staff member. Responsibilities included placement, monitoring, and facilitation of communication between student, faculty, and field supervisor. The role of this coordinator was vital to the success of the program, since the success of any field experience hinges upon cooperation among the student, faculty member, and work supervisor. The components of the curriculum approach might be depicted graphically as in figure 2.

FIGURE 2

EXCEL CURRICULUM



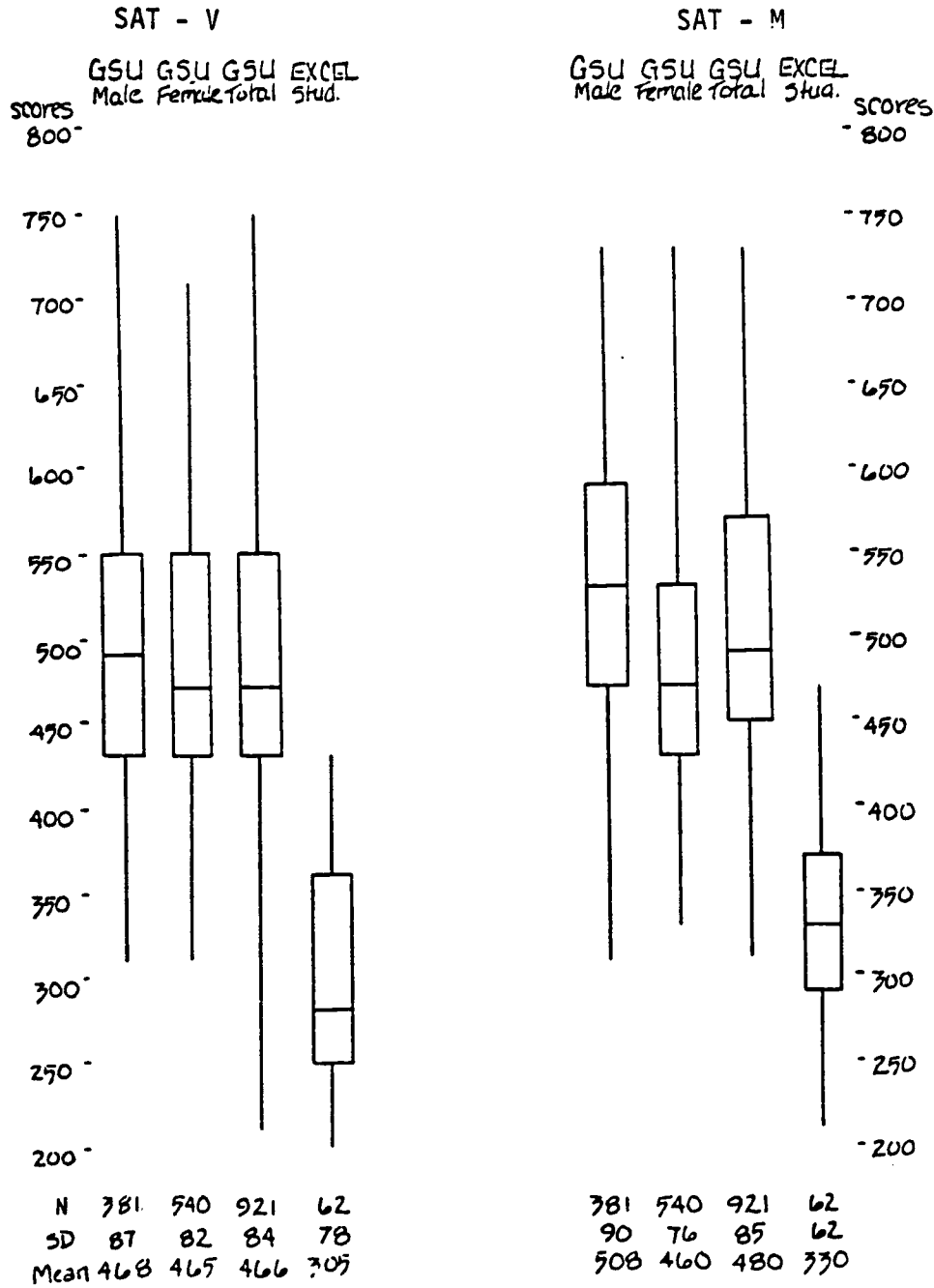
The EXCEL Students

A demographic and academic profile of the EXCEL student population is presented in order to describe some of the academic and social barriers that they faced at the university. The group of students who participated in Project EXCEL was predominately black (89 percent) and female (75 percent). Ages ranged from seventeen to twenty-one years, but most were eighteen to nineteen years old (53 percent). Many had children or other family responsibilities. The family income levels of all these students met CETA low-income eligibility requirements. The majority of the students' residences were in areas immediately surrounding the Atlanta central business district.

Table 1 compares SAT scores for EXCEL students with those of all freshmen entering Georgia State University. On the SAT verbal test, only two EXCEL students did not score lower than 75 percent of entering freshmen. SAT math scores were not significantly higher for EXCEL students in numerical terms or in comparison with other freshmen.

TABLE 1

SAT SCORE BY SEX FOR THE GSU UNDERGRADUATE
STUDENT BODY AND FOR PERSONS ADMITTED TO
PROJECT EXCEL



SOURCE: Prather 1980, p. 46.

Table 2 presents the high school GPAs of EXCEL students and of Georgia State University's entering freshmen. The data exhibit a pattern similar to that seen in SAT test scores; over 75 percent of the EXCEL students had high school GPAs lower than the median high school GPA for all freshmen.

Predicted GPAs for applicants are calculated by the admissions office of the university, using high school GPAs and SAT scores. Only those students who have GPAs of over 2.00 overall and in both math and English are admitted to the university with full student status. Students who are not accepted with full student status can be admitted with the provision that they complete two or more sections of remedial work in the Developmental Studies Division of the university. A significant number (approximately half) of the EXCEL students were accepted with the conditional status. The predicted GPA for EXCEL students admitted to the Developmental Studies Division exhibited a range from 1.00 to 2.50, with 75 percent of the students having predicted averages of less than 1.75.

Basic educational skills were also assessed by program staff. The Test of Adult Basic Education (TABE) was utilized for this purpose. The TABE is "grade" normed. Seventy-five percent of the students accepted by EXCEL had scores indicating that math skills were below the tenth grade level, and 50 percent of the applicants scored below the tenth grade level on reading comprehension and mechanical expression measures. The highest median grade scores (10.5) were obtained in the spelling and vocabulary test components.

ANALYSIS

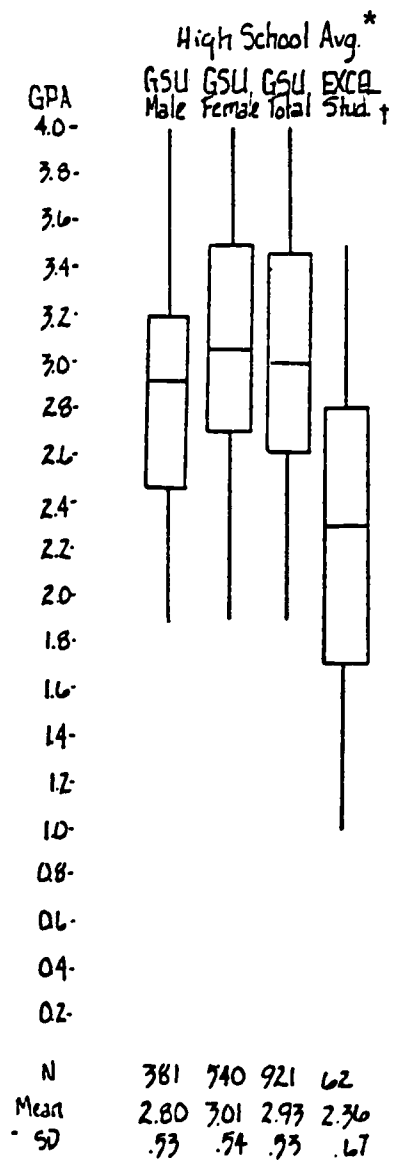
This research hypothesized that selected psychosocial variables could be utilized in an "inclusion equation" to predict college academic success for low-income, minority, and high risk students. The research was based upon data from a postsecondary intervention program, Project EXCEL, and discriminant analysis was used to test the hypothesis.

As discussed in section III of this report, there were ninety-three (93) students enrolled in the EXCEL program during the ten academic quarters (1979 - 1981) considered by this research. At program entry, each student enrolled was asked to complete attitudinal and aptitude assessments and placement tests. These assessments were initially utilized by project staff for individualized counseling, academic advisement, and field site placement activities. Data from four of these attitudinal assessments--Self-Esteem (S-E), Social Anchorage (SA), Locus of Control (I-E), and Alienation (A)--were examined as independent variables to address the primary question of this research.

A brief discussion of the EXCEL group's scores relative to each of the independent variables is presented to this section. Descriptive data for each of the two subgroups (successful and unsuccessful) are displayed, and the subgroups are compared on the assessments. Finally, the results of a discriminant analysis are reported, permitting an assessment of the degree to which each of the inclusion equation variables (discriminating variables) distinguishes group membership, whether successful or unsuccessful.

TABLE 2

HIGH SCHOOL GRADE POINT AVERAGES (GPAs) FOR
GSU FRESHMEN AND FOR STUDENTS ADMITTED TO
PROJECT EXCEL



SOURCE: Prather 1980, p. 46.
* From high school transcripts
† Students enrolled in EXCEL

The EXCEL Group

Self-esteem scores for all ninety-three students were measured by Rotter's Self-Esteem Scale and were distributed over the possible range of 0 to 7 (the lower scores indicating higher self-esteem). The mean score was 2.215, with a standard deviation of 1.55. The mode score was 1.00.

On the social anchorage assessment, EXCEL students exhibited a range of 0 to 1.00, reflecting scores at both extremes of the Ten Statements Test (TST). A score of 0 on this scale indicates the absence of group identifications, while a score of 1 indicates that all responses reveal group identifications. The mean score was .423, indicating that 42 percent of the responses showed group identifications. The standard deviation was .314, and the mode score was 0.

Two subscores were also developed from the TST. These scores revealed saliency of race and sex identifications on the same 0 to 1.00 continuum as the TST. Responses from EXCEL students ranged from 0 to .80 on the "race saliency" subscale. On the "sex saliency" subscale, the responses of the EXCEL students extended the entire range of 0 to 1.00. Again, the modes were 0 for both saliency scores. The means and standard deviations for the race and sex saliency scores were .095/.166, and .365/.314, respectively.

On the Rotter's Internal-External Orientation Scale, EXCEL students' scores ranged from 1 to 19 within a possible range of 0 to 23. On this scale, lower scores indicate more internal control orientation, while higher scores indicate more external orientation. The mean score for EXCEL students was 10.796, close to the mode of 11.00. The standard deviation of the scores was 3.095.

The Dean's Alienation Scale is composed of three subscales: powerlessness, normlessness, and social isolation. These three are added together to produce the alienation total score with a range of 0 to 96. High scores on each subscale indicate greater degrees of powerlessness, normlessness, and social isolation and, taken together, greater degrees of alienation. Actual total scores for the EXCEL students ranged from 5 to 75, with a mean score of 47.07, a mode of 49, and a standard deviation of 13.86. On the subscales: (1) powerlessness ranged from 5 to 36 within a possible range of 0 to 36; the mean was 25.7, with a mode of 24 and a standard deviation of 6.68; (2) normlessness scores ranged from 0 to 22 within a possible range of 0 to 24; the mean was 12.39, the mode 11.00, and the standard deviation 4.5; (3) social isolation scores ranged from 1 to 28 in a 0 = 36 possible range; the mean was 17.84, the mode 19.00, and the standard deviation 5.86.

The criterion for "success" in this study was a grade point average (GPA) of at least 2.00 overall (out of a maximum of 4.00) after at least twenty-four quarter hours of college course work. GPAs were calculated for all EXCEL students, and those who met or exceeded the minimum criteria stated were classified as successful. Those who did not achieve this minimum were deemed unsuccessful. Using this criterion, twenty-one students were classified as successful and seventy-two were classified as unsuccessful.

Predicting College Success

Table 3 describes each of the independent variables for successful and unsuccessful groups. Both group means and standard deviations for all variables are presented. The two groups showed marked similarity on three of the four assessments. Only self-esteem scores were significantly different. Successful students had significantly higher self-esteem scores ($t = 2.69$, $p \leq .009$) than unsuccessful students.

Table 4 displays the intercorrelational matrix for all the variables utilized in the discriminant analysis. As expected, there is a significant intercorrelation among the subscales of the Dean's Alienation Scale and the TST and saliency scores. There is also a weak significant negative correlation ($r = -.2088$) between the social anchorage scores and the internal-external locus of control scale scores. Thus, the greater the social anchorage, the greater the internal control orientation (lower scores reflect internality).

Correlating success to all independent variables indicates that self-esteem (lower scores on the self-esteem index) is associated with success.

The final analytic technique applied was discriminant analysis. Table 5 presents the information derived from this analysis. Part A describes a preliminary step in the analysis and includes mean scores on the discriminating variables for the two groups. The Univariate F statistics indicate the statistical significance of the differences between the successful and unsuccessful groups with reference to each independent variable. Self-esteem was the only variable that approached a significant difference between the groups (Univariate $F = 3.66$, $df 1.89$, $p \leq .05$).

Part B of table 5 reports unstandardized classification function coefficients. These coefficients suggest the direction of the differences between the groups on each variable. These coefficients indicate that Social Anchorage and Locus of Control,--in addition to Self-Esteem, which was identified by the Univariate analysis,--statistically discriminate between successful and unsuccessful groups when all of the other independent variables are controlled. Normlessness, although not significant, had enough predictive value to be added to the classification equation. Successful students revealed more group identification, a slightly more external control orientation, a significantly higher level of self-esteem, and slightly less normlessness than did the unsuccessful students.

The prediction results, based upon the variables Self-Esteem, Social Anchorage, internal-external Locus of Control, and normlessness are displayed in part C of table 5. The percentage of total "grouped" cases correctly classified was 61.3 percent. Successful cases were correctly classified as successful for 66.7 percent of the cases, and unsuccessful cases were correctly classified as unsuccessful for 59.7 percent of the cases.

TABLE 3

MEANS AND STANDARD DEVIATIONS FOR SUCCESSFUL AND UNSUCCESSFUL GROUPS

Variable	Successful (n = 21)		Unsuccessful (n = 72)	
	Mean	SD	Mean	SD
Self-Esteem*	1.67	0.80	2.40	1.70
Social Anchorage	0.48	0.28	0.41	0.33
Race Saliency	0.10	0.17	0.10	0.17
Sex Saliency	0.32	0.28	0.38	0.33
Internal-External Control	11.48	3.10	10.59	3.06
Alienation	46.10	13.53	47.44	14.11
Powerlessness	17.29	5.83	16.70	6.80
Normlessness	11.76	4.25	12.67	4.56
Social Isolation	17.05	5.55	18.07	6.01

* $t = 2.69, p \leq .009$

TABLE 4

INTERCORRELATION MATRIX FOR SELF-ESTEEM, SOCIAL ANCHORAGE (SA),
LOCUS OF CONTROL (I-E), AND ALIENATION (A) FOR EXCEL STUDENTS (n = 93)

	S-E	SA**	Race Saliency	Sex Saliency	I-E	A††	Power- lessness	Norm- lessness	Social Isolation
S-E	1.000								
SA	.0777	1.000							
Race Saliency	.0494	.2043*	1.000						
Sex Saliency	.0461	.2022*	.0275	1.000					
I-E	.0002	-.2088*	-.0479	-.0284	1.000				
A	.0544	-.0281	-.1629	.0067	.1319	1.000			
Power- lessness	.0199	.0219	-.1667	.0061	.1394	.8807†	1.00		
Norm- lessness	.0372	.0577	-.1877	.1643	.0757	.7686†	.5904†	1.00	
Social Isolation	.0777	-.1346	-.0562	-.1160	.0982	.7920†	.5141†	.3900†	1.00

* $p \leq .05$

† $p \leq .001$

**Race and sex saliency scores are subscores of the Ten Statements Test score.

††Powerlessness, normlessness and social isolation are subscores of Dean's
Alienation Scale score.

TABLE 5

INCLUSION EQUATION VARIABLES AND ACADEMIC SUCCESS:
DISCRIMINATE ANALYSIS (n = 93)

Part A

	Means		Univariate F (df = 1,89)
	Successful	Unsuccessful	
Self-Esteem	1.67	2.40	3.66*
Social Anchorage	0.48	0.41	0.94
Race Saliency	0.10	0.10	0.58
Sex Saliency	0.32	0.38	0.54
Internal-External Control	11.48	10.59	1.36
Alienation	46.10	47.44	0.15
Powerlessness	17.29	16.70	0.13
Normlessness	11.76	12.67	0.42
Social Isolation	17.05	18.07	0.49

Part B

	Classification Function Coefficients		
	Successful	Unsuccessful	Partial F (df = 4,86)
Self-Esteem	0.49	0.82	3.98†
Social Anchorage	6.98	5.70	2.24**
Race Saliency	a	a	a
Sex Saliency	a	a	a
Internal-External Control	1.31	1.17	2.40**
Alienation	a	a	a
Powerlessness	a	a	a
Normlessness	0.45	0.51	1.00
Social Isolation	a	a	a
Constant	-12.90	-12.23	

Performance of discriminate functions in predicting success:
Multivariate (Equivalent) F = 2.03 df = 4,86 p ≤ .097

Part C

	Prediction Results of Predicted Group		
	Successful	Unsuccessful	N
Successful	66.7%	33.3%	21
Unsuccessful	40.3%	59.7%	72

Percentage of "grouped" cases correctly classified: 61.3%

* p < .059

† p < .10

**p < .25

a = Variable not included in discriminate analysis: does not discriminate between groups.

CONCLUSIONS AND IMPLICATIONS FOR YOUTH EMPLOYABILITY

The ability to take advantage of the opportunities for acquisition of skills afforded by higher education is clearly linked to other motivational variables. These variables should be considered in the development of employment and training strategies appropriate to the varying needs of this population. In this section, the results of the current research are discussed, both within the context of their practical applications for postsecondary admissions and intervention strategies and in relation to the more complex theoretical implications of the data.

The research question of whether nonintellective variables (such as self-concept) that are predictive of college success could be identified was answered affirmatively by the discriminant analysis. Self-esteem, a psychological conceptualization of the self-concept construct, was found to discriminate between the successful and unsuccessful groups of students. Students who were found to have high self-esteem (lower S-E Scale scores) were more likely to achieve academic success than those with lower self-esteem (higher scale scores). This relationship supports previous findings that associated self-esteem with academic success.

It is important to note that the mean scores of both EXCEL subgroups indicated a high level of self-esteem. The most frequent response of the scale was 1.00, indicating the highest level of self-esteem. If all frequencies were considered in terms of "high," "medium," and "low" categories, the majority of all responses (65.2 percent) fell into the high self-esteem category; only two (2.2 percent) were found in the low category; and 32.6 percent were in the medium category. Although most students were high in self-esteem, unsuccessful students were more likely to be found in the medium and low response categories than were successful students.

Subjective evaluations of students by their EXCEL counselors suggest that this high level of self-esteem may have been inflated or unrealistically high in terms of real academic skill and/or potential for at least some of the students. This conflict between actual level of skill and unrealistic level of self-esteem may have mitigated against the utilization of remedial and support services by some unsuccessful students. On the other hand, positive self-esteem may have facilitated realistic appraisal of personal skills and encouraged successful students to utilize these resources more fully.

Social anchorage (SA), as measured by the Ten Statements Test (TST), was found to discriminate between groups only minimally ($F = 2.24, p < .25$) when other variables were considered. Contrary to the theoretical expectations, this group of predominantly minority females did not hold large numbers of group identifications. Most students gave evaluative types of responses to the TST, which might be expected from the high self-esteem reflected by the group as a whole.

Although no attempt was made to interpret the saliency implied in the rank ordering of the TST responses, the percentage of responses that indicated any type of group identification showed sex to be a more salient response for

both successful and unsuccessful groups than was race. The majority of the students were black and female, two obvious minority group memberships, but the mode score of the students was 0, indicating that students did not generally identify with either group.

Although the difference was not statistically significant, successful students, as a whole, tended to be more externally controlled than their unsuccessful peers. Both groups, however, display low scores on Rotter's I-E Scale, indicating internal control orientation. The mean for the EXCEL students was 10.8, as compared with a mean of 8.3 for college students in the standardization norms for the scale (Robinson and Shaver, p. 228). Thus, this trend in the data appears to be due to either the small sample size or the minority status of the students. Since all students were internal in control orientation, the difference was a matter of degree.

The only significant intercorrelation noted for the predictive variables was a negative relationship between locus of control and social anchorage. The greater the social anchorage, the greater the internal control orientation; the lower the social anchorage, the greater the external orientation. This relationship may have been due to the sample size or may simply reflect the highly evaluative nature of responses to the TST. Further research is needed to clarify the nature of this relationship.

The mean total alienation (A) score, as measured by Dean's Alienation Scale, for the EXCEL students was considerably higher, reflecting a greater degree of alienation, than the norms reported for college students in previous research (Robinson and Shaver, p. 275). However, when compared to earlier research on alienation among low-income minority residents of Atlanta who participated in Economic Opportunity Atlanta (EOA) programs, EXCEL students have mean scores indicating less alienation. Scores on the alienation scale were forty-seven for EXCEL students and seventy-nine for the 1961, EOA sample (Hutcheson, p. 52).

This finding may be due in part to the change in social attitudes and opportunities over the 1960s and 1970s. It may also be due to the marginal position of the EXCEL group. Marginality is usually viewed as characteristic of persons who hold membership in two psychologically conflicting groups and who stand on the boundary of the two. EXCEL students may stand on the boundary between college students and other low income minority Atlantans in terms of their perception of opportunity structures.

In the discriminant analysis, normlessness was the only subscale of the Dean's Alienation Scale that discriminated between the two groups. Although the difference was not statistically significant, the successful group was slightly less normless than the unsuccessful group. The normlessness subscale of the alienation score represents the extent to which the individual rejects the norms of the dominant culture. It might be argued that young persons who are most normless, rejecting the norms of the dominant culture, would also reject college as an option for improving their life circumstances. To the extent that normlessness would lead an individual to "opt out" of the educational institutions, the EXCEL sample might not be representative of the larger population of unemployed and/or disadvantaged youth.

The discriminant analysis demonstrates that academic achievement at the postsecondary level may be predicted with some degree of accuracy, using attitudinal data in addition to the SAT and high school grade data utilized in the exclusion equation. This research suggests that self-esteem may be the best discriminator of potential success when academic skills are marginal. Future research might assess the utility of the addition of other variables (such as biographical and/or other attitudinal variables) to the inclusion equation.

Researchers are cautioned to keep in mind the limitations of this research. The small sample and the unique demographic characteristics of the group limit the ability to generalize these results. Also, it should be noted that possible intervening variables include intersession and intrasession history and differences in testing conditions. A more comprehensive evaluation of the EXCEL model and further research are indicated by these findings.

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ON CREATING VIABLE WORK EXPERIENCE PROGRAMS:
DESIGN AND IMPLEMENTATION

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INTRODUCTION

The issues addressed in this paper are the design and implementation of work experience programs. Such programs are intended to be educational in the sense that they give participants new knowledge, skills, and attitudes.

The framework used to assess the quality of the programs under consideration is taken from curriculum theory and analysis, which is concerned about the form and content of educational activities. A second concern of program creation is the influence of the implementation process on the program design.

The Quality of Work Experience Programs

As our nation enters the 1980s, youth unemployment and discontent with schooling persist as problems facing educators. Numerous programs and recommendations to create school-based work experience programs have attempted to address these problems. The report of the Panel on Youth (1974) advocated a closer union of school and community by creating more opportunities for youth to participate in the life of the community. The Carnegie Report (1979, chapter 5) cited a number of reform proposals calling for shorter schooling and more work experiences for youth. The Youth Employment and Demonstration Projects Act (U.S. Congress 1977) encouraged local education agencies to place school age, low-income youth in jobs.

It was hoped that these programs would have an impact upon the future employability of youth, would make schooling more relevant and interesting to youth, and would thereby ease the transition from school to work. While adult employment status is the decisive measurement of program success, such a long-term outcome is expensive to document and difficult to assess. Other indicators of program effectiveness are needed for immediate evaluations of current and proposed programs to provide federal, state, and local policy-makers with guidelines for decision making.

Analytic principles from the curriculum field can serve as one source for indicators of current program effectiveness. These principles of curricular form and content embody both empirical and theoretical knowledge of human learning. They can provide criteria for evaluating the quality of work experience programs, though they have usually been applied to classroom instruction programs.

In order to analyze such programs for policy purposes, there is a need to assess the quality of the day-to-day activities that youth encounter, because it is the cumulative effect of these activities over time that offers hope of easing unemployment and reducing inequality. Program planners and proposal reviewers could make use of these principles to evaluate the probable effectiveness of programs in the planning stages. As programs are implemented, these principles can help local program personnel make further choices when faced with reality constraints.

The Promise of Curriculum Analysis

The traditional way of planning instruction is through curriculum development, a process that first includes the statement of objectives or aims and then logically deduces behaviors and activities in accord with the objectives (Tyler 1949). The traditional product of curriculum development is a package, with a teacher's guide and materials, that realizes the definition of curriculum as "a structured series of intended learning outcomes" (Johnson 1977) or "a course of study, the content" (Heubner 1976).

However, in the past ten years or so, critics in the curriculum field have proclaimed that the bent, or persuasion, of the field has drifted too far from the practical (Walker 1975b, Schwab 1969, Doyle and Ponder 1977, Heubner 1976, Pinar 1975). If one assumes that curriculum design must adhere to traditional rationality in both its process and product, then we have eliminated any possibility of viewing work experience projects as having a curriculum. If, on the other hand, we allow that program developers act with a logic of a different order, that of practical reasoning, when faced with time and financial constraints, our process and product definitions of curriculum change.

Walker (1975a) observed that reliance on objectives in curriculum making proved to be a myth in three curriculum development projects. He found the order and logic of practical reasoning, or deliberation, to be operating in its place. Certainly the time constraints, especially the short period for a response to a federal request for a proposal, as well as the financial constraints that often limit or eliminate the hiring of curriculum developers and other supports, make the art of the practical the prime mover in getting work experience projects off the ground.*

When policymakers and program staff can also use educational criteria for making choices about program design, the fate of those programs will be responsive to more than the practical constraints found in the local environment. Goodlad (1966) defined curriculum making as a rational process that entailed a number of decisions made by planners at various stages along the way:

Curriculum as a field of study, then, focuses on what is involved in selecting, justifying, and arranging these learnings. (p. 13)

In effect, the identification and use of these principles could bring about closer coordination of federal, state, and local policymakers in organizing and ascertaining the quality of education programs designed to address social issues such as unemployment and equal opportunity.†

Cremin (1971) noted the importance of extending the definition of curricula to programs planned beyond the auspices of a limited group of

* See Schwab (1969) for a discussion of the practical.

† See Keppel (1980) on the need for federal-state collaboration in educational policy for the 1980s.

professionals, acknowledging that in our pluralistic society many groups and institutions contribute to learning:

Finally, we would be forced to recognize that in a pluralistic society marked by a pluralistic education, it becomes a matter of the most urgent public concern to look at all these curricula in their various interrelations and to raise insistent questions of definition, scope, and priority. (p. 220)

The implications of such arguments mean that the field of curriculum must take into account the wide range of learning programs being planned and implemented by people other than curriculum developers, and under conditions experiencing time and financial limitations. Extending the notion of curriculum to this range of programs requires a definition of curriculum that captures the day-to-day activities of youth.

Work Experience Curriculum: A Definition

A work experience curriculum is defined for this paper as a set of learning activities centered around the work experience. Part of the task of this study is to generate activity categories that describe what youth do in the programs. This definition acknowledges foremost that the activities should have some relationship to learning. Wirtz (1975) emphasized that the learning should have an application beyond particular job tasks, to life in general:

An education-work policy is not one that misconceives of education as having for its purpose the preparation of people for work. Rather it includes this purpose as part of education's function of preparing people for life, of which work is one part; it takes full account of learning as a human value in itself. (p. 3)

Hamilton (1980) suggested that certain programmatic dimensions could help ensure that such learning takes place:

The need to supplement activity with reflection in order to enhance its educational value is perhaps the most firmly grounded assertion that can be made about experiential learning, an idea rooted in Dewey's theory and supported by the research of Coleman and his colleagues. (p. 184)

This importance of a reflective element suggests that we look at structures within the programs where reflection on work experience might take place.

These recent discussions regarding work experience programs echo the concerns expressed in the Dewey-Snedden debate about the place of work experience in schooling, the types of possible learnings, and the target group. This debate on vocational education appeared in the New Republic in

1914-1915.* Dewey objected to the possible tracking and thereby inherently limiting influences to which early technical training might lead.

Although the scope of work experience here examined does not include vocational education programs per se, the issues of equal opportunity and the quality of learning from employment training resurface in the program design. Only by attending to the set of learning activities available through work experience programs can we be assured that such programs provide opportunities for learning.

Study Methodology

The Youth Employment and Demonstration Projects Act became law on August 5, 1977. This Act amended the 1973 Comprehensive Employment and Training Act (CETA), so as to provide an expanded effort for understanding the youth unemployment problems and to create employment programs for low-income youth.

One part of the Act, the Youth Employment and Training Program (YETP), focused on the importance of the school-to-work transition by requiring that the programs be linked to the educational institutions in their community. In fiscal year (FY) 1979 the U.S. Department of Labor set aside approximately \$15 million from the secretary's YETP discretionary monies for Exemplary In-School Demonstration Projects. To administer these projects, the Department of Labor and five foundations set up a nonprofit organization named Youthwork, Inc. Youthwork selected forty-eight demonstration projects through a competitive process and added an additional fifteen noncompetitive projects in FY 1980.

To construct a cross-site analysis of policy issues using qualitative data collection strategies, Youthwork, Inc. contracted with a research group at Cornell University. The group, called the Youthwork National Policy Study, had observers at sites across the country collecting data relevant to key policy issues selected for study. A secondary analysis of data from five projects serves as the basis for this study on the design and implementation of work experience programs.

The on-site observers at each of the five sites provided data to the Youthwork National Policy Study from multiple sources. This strategy constituted a triangulation of data from interviews, participant observation, and printed reports and materials (Denzin 1970). The varying sources and types of information gathering allowed a clearer understanding to emerge of the process of implementing the programs.

The on-site observers were residents of the communities within which the projects operated. They recorded field notes describing visits to the project bases and worksites. These notes reported activities such as staff training sessions and classroom instruction, as well as job-related duties performed by youth and responses of staff members to requests of students or teachers. These observations were essential to understanding the development of the

* Reprinted in Curriculum Inquiry (Snedden and Dewey 1977).

curricular structure and content as it was implemented. The data proved especially important as four of the five sites did not have printed packages explaining their curriculum.

The interviews with youth by the on-site observers provided a rich data source about their perceptions of the work experience project. Interviews conducted in the spring of 1979 followed an interview schedule developed at Cornell to ascertain youth perceptions of their involvement in the project. Informal interviews conducted during site visits provided data that supplemented observations. Observers also interviewed project personnel involved in project implementation at various levels. Their descriptions about what they did and why they made certain choices provided insights in understanding the curriculum-making process. Worksite supervisors added another perspective that helped shape a more complete picture of program activities. Interviews with these participants fulfilled an aim of the qualitative research method, ensuring that the emic perspective was included in field notes (Pelto 1970). A crucial element to comprehending the evolution of the work experience projects was not only the perceptions of the observers, but also those of the participants.

The on-site observers forwarded copies of relevant printed materials about the projects, such as monthly reports submitted to Youthwork, evaluation reports, announcements, newspaper clippings, and the like. Site 1 provided a copy of the work experience teacher's manual that was produced after the first year of the project. This manual served as a valuable document for this study, as it put together the pieces of curriculum suggested from observations and interviews that the on-site observer had reported in field notes throughout the year. Staff at one other site developed materials for a curriculum, but they were not used with work experience students. Reasons for this choice by program staff are discussed in the implementation section.

The data collected from Site 1 provide the central case study material for this study on curriculum at work experience sites. Data from the remaining four sites served to modify or confirm the framework generated from Site 1. There were two reasons for this choice. First, data from Site 1 were more complete and comprehensive than from the other sites. Second, the purpose of this study is to articulate principles from the field of curriculum that identify important elements for learning within a work experience program, rather than to write a comparative case study.

Site Characteristics

The characteristics of the five projects varied considerably. Site 1 was operated by a nonprofit career guidance advocacy organization that had been working with the school district for seven years prior to the federal project. The project built upon links already established with principals and teachers in five high schools during FY 79 and in four during FY 80. A career team employed by the parent project was based at each of the high schools and implemented the work experience component of the project working with 100 students the first year and to between 65 and 85 the second year. In addition,

the career team had responsibilities for other project components such as operating the career center and helping high school teachers deliver career information to their classes.

Site 2 brought together an urban board of education and a community college in an effort to have college students counsel high school students during their time with the work experience program. Both bureaucracies in this consortium hired project coordinators to organize and manage program operations, but actual approval for implementation had to be granted by the consortium. The project placed ninety students in primarily public-sector work experience sites.

Site 3 was operated by a consortium of three rural school districts. Two high school principals organized placements in the private sector for fewer than ninety youths.

Site 4 expanded career services and public sector placements already in existence from two to four high schools. The program was operated by a consortium of school districts in an urban area.

Site 5 was operated by a nonprofit Native American organization in a rural area. It was the only project located at a training center rather than at a high school. The project hired staff to design and deliver services to approximately sixty youth.

WORK EXPERIENCE PROGRAM DESIGN AND IMPLEMENTATION

This study proposes a framework for creating viable work experience programs. Part I identifies a set of learning activities used in the curriculum design for work experience programs. Part II assesses the program design by developing principles for curricular analysis. Part III assesses the concepts and behaviors learned through such activities. Part IV describes key elements in implementation that influence choices in program design. The sum total of this effort is to present a coherent and concise framework for the assessment of the quality of work experience programs, as it is influenced by program design and implementation.

I. Curriculum Design: The Set of Learning Activities

This section categorizes the learning activities included in the five work experience projects serving as case studies for this report. Detailed descriptions of the events within each category suggest the importance of the interrelationships of the activities.

Students spent time in as many as five different types of program activities. These were: job-seeking skills, job placement, work experience, coping skills, and task skills. These categories were generated by a review of curricular materials from Site 1 and from observations and interviews describing the day-to-day activities of youth in all five projects. Table 1 summarizes activities consistently offered at each site for youth in their program.

TABLE 1
ACTIVITIES IN WORK EXPERIENCE PROGRAMS
AT FIVE SITES

	<u>Job-seeking Skills</u>	<u>Job Placement</u>	<u>Work Experience</u>	<u>Coping Skills</u>	<u>Task Skills</u>
Site 1	x	x	x	x	
Site 2		x	x		
Site 3		x	x		x
Site 4	x	x	x		
Site 5	x	x	x	x	

Job-Seeking Skills

Three sites offered training in job-seeking skills. Training at two sites involved classroom sessions on items such as interviewing, writing a resume, and completing an application. The career team at one site spent three half days on this activity, using materials developed by the work experience coordinator. Staff at another site provided assistance if requested.

Job Placement

All five sites placed youth in jobs. The degree of attention paid to individual needs of students in the placement process determined two styles of placement: broker and counselor.

Three sites were brokerage agencies, matching students with private or public sector jobs already identified by a job developer, employment computer, or personal contacts. Placement services provided by the other two sites were more extensive and time consuming. Staff spent more time trying to find placements compatible with the expectations and interests of the students, as well as occasionally figuring out transportation schedules and securing contracts with the employer. One on-site observer recorded this brief interchange with a job developer who worked with project teams in three high schools:

As I walked toward the new career center in the auditorium at the high school, I met the job developer. She said that since I had last seen her, "I have developed twenty-two jobs in seven working days."

The on-site observer asked, "What happened?" The job developer responded, "Well, the interest areas of the kids were very different from the ones we already had developed. Out of the thirty jobs I had developed I could only use fourteen." I asked, "What were these interest areas?" She said, "Oh, cosmetology and seamstresses."

The on-site observer asked, "Must these all be in the public sector?" The job developer responded, "Yes, can you imagine trying to get a cosmetologist into a public-sector job?" I said, "What did you do?" She said, "Finally, I got them with the state opera company." She said that the youth would get to go to the capitol and apply makeup on some of the cast members.

At this site, placing youth in public-sector jobs that matched their interests was accorded a high importance. This was evidenced by the behavior of the job developer during the placement process, and her creative solution to locating public-sector placements for cosmetology in the state opera company. The three sites that offered brokering services were not sufficiently staffed to provide this degree of responsiveness in placement.

Work Experience

The work experience activities involved regular work at a job placement site after school hours. Work activities were site dependent. One site paid students to work eighty hours over a two-month period. These placements were in the public sector and provided a wide range of activities for the youth. Table 2 summarizes the job titles and employers used during one two-month cycle. The teacher/counselors at this site placed fifty students in work experiences during two cycles of the project's first year, and they placed approximately thirty-five students during the two cycles of the project's second year.

Coping Skills

Two sites offered classroom sessions on coping skills concurrent with the students' time in the work experience. The activities included in these sessions were similar to those identified by Walther (1976):

Coping skills are defined here as those competencies which permit the individual to function within formal or informal social groups. Included are developing and executing plans, working with others, controlling impulses, processing and interpreting information, communicating, problem solving, and working within an authority structure. (p. 65)

TABLE 2

WORK EXPERIENCE JOB TYPES AND EMPLOYERS AT SITE 1
FEBRUARY-MARCH 1979

<u>N</u>	<u>JOB TYPE</u>	<u>EMPLOYER</u>
16	clerk and/or typist	YMCA, city (police, employment, safety, prosecutor, data control)
6	childcare aide	day care center, university preschool
1	guidance trainee	project
1	probation aide	justice department
3	inspector aide: plans, sign	city (safety)
2	production trainee: radio, television	university radio station
3	pharmacy and supply aide	hospital
1	secretary trainee	city (safety)
3	office aide	neighborhood center, university
3	recreation trainee: counselor, leader	YMCA
3	library aide trainee	neighborhood center, high school, pharmacy
2	trainee: auto service attendant, dispatch	university garage
1	bindery assistant	university
1	health aide	health center
1	trainee: production, vending	university food service
2	therapy aide: physical, occupational, radiation	health sciences center, hospital
1	community service aide	March of Dimes
1	administrative aide trainee	U.S. Attorney
1	general admissions trainee	art museum

One site developed ten weekly sessions, each an hour in length, during the two-month work experience. Filmstrips, discussions, and role playing focused on the following topics: first day work experiences, work and life styles, understanding deductions on a paycheck and managing savings and checking accounts, and communication skills. In the second session students saw, for example, three filmstrips ("The Factory Worker," "The Construction Worker," and "The T.V. Repairman") that showed workers at their jobs talking about why they chose their jobs. It was not important that the students rememberd why the workers chose their jobs. Rather, their comments served as a point of departure for the students to explore their own ambitions and expectations about work.

The on-site observer recorded notes during the third session, at which time the teacher/counselor talked about the paycheck stubs:

She began talking about the deductions from their paychecks and passed out a Xerox copy of a check stub. She asked the question, "Have you ever looked at your paycheck stubs?"

One girl said she had not been paid yet, and there was muffled laughter from the others. Neither she nor the boy next to her had been paid yet.

Another boy nodded and said, "Yes. I have looked at it." Then the teacher posed the question, "What is taken out?" A girl said, "FICA." The teacher said, "Yes, what does that mean?" And a girl responded, "Social Security." The teacher said, "What is that for?" One boy said, "For old age . . . like when you do not have a job anymore."

And the teacher explained a little more about the procedure and gave a personal example of her pay stub deductions. She said that when she first came to the high school, they had taken out two times as much FICA as they were supposed to. She got a refund a little later because there was some confusion about getting on the payroll late.

She asked the question, "What other kinds of things are taken out?" And students responded: "Medical . . . insurance"

The teacher elaborated on these and also mentioned savings, union dues, and then mentioned another personal example of how different employers cite benefits that they contribute as one of their competitive bargaining opportunities [students] might look at the ones that provided the best benefits. She used an example of an interview at one school where the employer had emphasized their benefit package.

The half hour lesson continued with the teacher asking what the students did with their checks and then followed with a discussion about the possibilities of saving and checking accounts. The session also put the teacher into contact with the students in order to give feedback about their work experience.

In the eighth session, students saw a filmstrip depicting a secretary arguing with her boss about performing duties she felt were not her responsibilities (description from the teacher's manual). After the filmstrip, students were asked to consider how they would handle the situation, including alternative behaviors. The activity was one of the problem-solving exercises outlined in the teacher's manual. Observations show that the teachers followed these exercises, adding questions such as, "Does this come up at work?"

Task Skills

One site emphasized that students receive instruction from the worksite supervisor in job-related skills, that is, task skills (Walther 1976). The project contracted for out-of-school training in specific vocational skills at business sites, reimbursing employers for their time with the students. Training sites included a newspaper office, a hospital, a car repair garage, and a discount store. Project staff hoped that after the training ended, students would be employable in the skills learned at the job site.

II. Curriculum Principles: Assessing the Design

This section demonstrates that Dewey's (1938) principles of continuity and interaction argue in favor of attention to the set of activities when developing work experience programs, if these programs are genuinely concerned with learning.

The question of the value for the learner of the set of activities already identified can be addressed by using principles suggested by educators in the field of curriculum. Jackson (1973) noted that experiences related to schooling should be more than "intrinsically worthwhile" or "simply enjoyable." Instead, he emphasized that Dewey's principles of continuity and interaction offer useful indicators for judging the extent to which an experience becomes a learning experience. Jackson wrote:

From an educational viewpoint, the potential value of any experience is gauged by the answers to two questions: Are participants prepared to make the most of it? Where does the experience lead in a developmental sense? As some readers will recognize, these questions contain, in disguise, Dewey's two principles of interaction and continuity, which he offered as criteria to discriminate between educative and miseducative experience. "The principle of interaction," he explains, "makes it clear

that failure of adaptation of material to needs and capabilities of individuals may cause an experience to be noneducative quite as much as failure of the individual to adapt himself to the material" (Dewey 1963, pp. 46-47). He continues, "The principle of continuity in its educational application means, nevertheless, that the future had to be taken into account at every stage of the educational process." (p. 58)

These principles are particularly helpful when understanding work experience programs, as youth spend most of their work experience program time in their job placement.

The Principle of Interaction

An activity that sites developed to ensure some degree of interaction between the learner and the work experience was the job placement procedure. As indicated, the five sites all tried to some degree to encourage student motivation to participate by locating a placement close to each student's interests. Time and method spent on this activity varied, as is demonstrated by the three sites using a brokering role and two sites using a counseling role.

One brokerage site listed jobs available in large private-sector corporations. The correspondence between the student interests and the work opportunity did not appear to be a key variable in the job placement, but rather students were informed of employment opportunities available. This site also placed several hundred students. Many more than other sites. These large numbers of students and the emphasis on job placement may explain the low priority of interaction with the learner.

The following notes by the on-site observer at a site where interaction was emphasized describe one student's feelings about being placed in an area of her interest:

The on-site observer asked, "I am interested to know what kind of work you did."

She said she had done clerical work at the police department. She had been filing reports and she said that the job was boring, but that she did learn about some programs. She was really interested in law enforcement, but before she went into the program, she did not know what aspect of law enforcement she wanted to be in. She said that now she knows for sure that she does not want to be in clerical parts of it, but that she really was interested in being an officer.

On-site observer: "What is your opinion about this program?" The student: "It was really good. It got

us jobs like we wanted to have. They might not have been just exactly like what we wanted. But it was in a field that helped us get a look at what else was going on around."

The student said that she had been involved in three other job programs. The observer asked, "Could you compare this program with those other ones?" She said, "Well, the other ones were just something to do in the summer. We were just placed there and we were paid. In this one we got to choose."

The Principle of Continuity

The principle of continuity asks how the various activities promote learning by logically developing or strengthening what has been previously learned. When viewing the work experience programs, the job-seeking skills and placement services all helped the student secure a placement at a worksite. Three sites designed programmatic structures that formally encouraged growth while at the worksite. Two sites used activities previously described as coping skills, and one site used task skills.

The teacher's manual for Site 1 used the student's work experience as the content for session one on "coping skills." Students talked about what their work entailed and what they observed their colleagues doing, and they shared their feelings about their experience and what they hoped to learn. The primary criteria for selecting this focus appeared to be the direct manner of addressing an intended learning outcome (ILO), as well as the benefits to be gained by tapping the new experiences of the students. The ILO to increase student awareness of careers, work roles, and jobs was directly served by the student oral reports about what they did and observed at their jobs, both on a cognitive and affective level. Valuing was developed as well, as students were asked how they felt about what they did. They were encouraged to keep track of their reactions in a daily work log. Such procedures assisted the youth to conceptualize their experience, become more sensitized to what was happening to them every day, and to internalize their own values about work--in sum, making the relationship between the actual work experience and coping skills sessions particularly valid.

The continuity between these two activities was also appropriate because it was feasible. It enabled the teachers to learn how their students perceived the world of work around them and enabled teachers to assess the conceptual and affective competencies of their students through the discussion. This choice of focus made an economical use of time by allowing students to reflect on their experiences and to deepen their understandings of experiences not necessarily assimilated at their work placement.

Continuity between the work experience and coping skills activities was limited to this session. Other sessions introduced new material for student discussions and role playing. Consequently, concepts and behaviors were

introduced in a new context that was potentially unfamiliar to the student. For example, session two on "Why do people work?" introduced three filmstrips about three workers. Students discussed the filmstrips and what they learned from them. The choice of focus was primarily to increase learning of the ILOs, particularly knowledge of the relationships between the economy of work and life-styles, as well as to internalize values about how one type of work might be more satisfying than another. The filmstrip could have also expressed certain points of view not arising from student observations at the work-sites. Consequently, this focus made an economical use of time for broadening the discussion and also was a convenient, yet controlled way to increase substantive input after session one.

Another strategy might have been to send students into the field after the first session with questions for their colleagues and then have them share the responses in the second session. Such a strategy would put a high priority on student interest, motivation, and responsibility, as opposed to teacher control. Such a strategy would also strengthen the continuity between the work experience and the classroom sessions. This continuity between program parts would also introduce a necessary element for assimilating the day-to-day experiences at the worksite and for making sense of these experiences. That element is reflection, another mechanism that contributes to interaction between the learner and the activity.

A final programmatic mechanism that facilitated learning by ensuring both continuity and interaction for the youth was the worksite supervisor. Throughout the field notes for the five sites, the importance of this role for learning continued to surface. The supervisor was usually in daily contact with the students and could know if their interests were waning or changing, if they were puzzled or troubled about a particular event, or if their activities at the site needed to be altered or modified to bring about more satisfaction. The supervisor assumed the role of teacher, leading the student through the experiences. Project staff at the project home bases sometimes also served in this capacity in a different way. They were physically removed from daily activities at the worksite and, therefore, could not be in touch with the youth as they reacted to daily occurrences, but they often served as supporters and counselors when opportunities arose.

A Short Aside: Visits to Two Day-Care Centers*

One on-site observer recorded these observations during visits made the same day to two day-care centers:

Although an appointment had been made with the director of the day-care center she had apparently forgotten about the appointment and indicated that she was pressed for time. Nevertheless, she did "sit quiet" for our interview which, under the circumstances, was certainly not prolonged. While she seemed tense, the project's

*All persons identified in the protocols have pseudonyms.

job developer indicated that this was normal. The program staff have had some problems with the director with respect to obtaining time sheets and reports on students. She apparently does not feel that she has time for such activities. One would gather that secretarial or clerical help is not available in abundance. She did indicate that the school funding had been reduced and that the availability of five students was a tremendous help to the school. In fact, she hopes to get other students from the program to work at the school.

In spite of whatever circumstances were that seem to trouble her, she had a lot of nice things to say about the students. She felt that they were interested in the school and its work, they did their assignments without fail, and they worked with the school staff without any problems. She indicated that the staff often discussed their work with the students, in staff "meetings" and in informal discussions. While she indicated that the students were almost always on time, the two students who were supposed to be at the school at 2 p.m. had not shown up at the time the OSO (on-site observer) left the school (nearly 2:30). However, she did not seem sure which students or how many were to be at the school at 2:00 (or thereabouts), she did not know which high schools they came from, but she did invite the OSO to wait for the students in a rather uncompromising waiting room. She did indicate that she would be glad to have the OSO return to the school at another time to observe the students and to visit in the classes in which they worked.

(Observer comment: From the director's reactions, one would wonder whether this school represented the best training and learning situation for the students. She spoke of the students in glowing terms and, with a semicolon, indicated that she was so short-handed that almost any kind of assistance was very important.)

The second day-care center represented an entirely different picture. Ms. Jones, the director, was delighted to see the OSO, to talk about the children in the school, what the school was doing, how the high school students were making out, etc. She is proud of the school and the purpose it is serving. There are nine teachers and four teacher aids at the school in addition to one "urban aide," the kitchen staff, janitors, a bookkeeper and assistant bookkeeper, etc. She insists that all teachers (regular and assistant) be enrolled in some postsecondary program or some other kind of training-related program.

There are two students assigned to the school, Mark and Andrew, both from the same high school, a vocational high school. In the director's opinion, Mark is "terrific." He loves to work with the children, he learns rapidly and he is interested in learning and in being helpful.

On the other hand, Andrew is primarily interested in work where he can use his hands--like electrical or woodwork. When he first came to the school he seemed depressed and bored (in fact, told the director that he was bored). He had difficulties in becoming involved with the children. While Andrew runs a poor second to Mark, there have been many improvements. Andrew does participate and he seems more interested in the center's work with children. In spite of his lack of interest, Andrew has been working at the school since November 30. He is usually on time but not on the day the OSO visited. According to the director he does not usually call in when he is going to be absent. She would like to have a student who is more interested in working with children, but on the other hand, she is pleased with the progress that Andrew has made. She feels that more attention should be given to the high school students' interests and aptitudes in their work assignments. Still, she takes some pride in the progress that Andrew has made and thinks that this is important in his growth and development.

It develops that some other worksites may be available in the near future that will provide Andrew with the kind of work in which he is interested. An effort will be made to transfer Andrew to the new job site, if he is interested in changing. This new site, a hospital, will have a number of jobs where Andrew could "use his hands" in work more suited to his present interests.

The director feels that both the youths have learned a number of transferable skills, e.g., how to accept criticism, how to approach teachers, how to work with children and with adults, and how to deal with new and different situations. In addition, she feels that it is helpful for the youths to see how one works with children and assists them in their development.

The director is obviously a good teacher and a good supervisor. While busy, she participated in our interview, even with one or two interruptions, graciously and with obvious pleasure.

This observation illustrates that the supervisor's role as teacher is important for the learning of the student. A good teacher has several qualities that can be identified from these field notes.

1. The worksite supervisor makes sure that the student is not overwhelmed by the worksites' administrative problems.
2. The worksite supervisor provides opportunities for reflection about day-to-day activities at the worksite. This takes the form of counseling sessions, informal talks with other staff members, or problem-solving opportunities.
3. The worksite supervisor provides opportunities for changes in activities and increased responsibility.
4. The worksite supervisor facilitates a change in worksite placement if it does not fulfill the needs and interests of the student.

Summary

The principles of continuity and interaction were introduced as a way of assessing the curriculum design contained in the set of learning activities of a work experience program.

Interaction meant that the program related to the educational needs of the learner. Several mechanisms enhanced opportunities for interaction: (1) a careful placement that suited the interests of the learner, (2) opportunities for reflection during the work experiences, (3) teacher/counselors and worksite supervisors who interact frequently with the student.

Continuity means that the program paid attention to having one learning activity lead to another, and to integrating the activities into a whole. The job-seeking skills and placement activities naturally led to locating a work placement. The coping skills activity could serve as a rich resource for designing programmatic opportunities for reflection on the work experience.

III. Concepts and Behaviors: Assessing the Content

The concepts and the behaviors that the participants are expected to learn in the five work experience programs examined here were not clearly and explicitly stated. In order to understand these programs as learning experiences, attention must be given to the concepts and behaviors that learners are expected to develop. A detailed analysis of a teacher's manual developed and used at one site gives a picture of the concepts and behaviors that work experience programs might foster.

Concepts

Table 3 lists concepts inferred from that curriculum guide. Those concepts were not explicitly identified in the curriculum. One set of concepts focused on the economy, including information about banking, earnings, and life-styles. Self-awareness was another focus area, subsuming the concepts of self-presentation, personal needs, and personal abilities. A third group of concepts was categorized as human relations. This included information about clarifying expectations, communication, and self-assertion. The fourth set of concepts related to the workplace, e.g., information about job clusters, responsibilities, contracts, and the job search.

The concepts are reasonable to teach as context and content for a work experience program. They reoccur within the set of learning activities. This is consistent with the notion of continuity. For example, self-awareness appears in all four stages of the curriculum sequence. The learner first formally encounters the concept in "job-seeking skills" when learning to interview. The learner has an opportunity to apply the concept during actual "job placement" interviews and during the "work experience." Finally, the concept is reintroduced during three "coping skills" sessions.

However, all the concepts remain at a fairly elementary level, and the repetition of concepts does not appear to build in an increasingly complex manner. The fact that concepts within the curriculum are not consistently developed and expanded upon sequentially within or between the set of activities indicates that the principle of continuity here received little attention in the curriculum design. One could infer that this indicates an inadequate application of the principle of continuity.

If work experience programs are to extend the domain of education into the workplace, then staff must give active consideration to the concepts to be learned. Attention to the starting point of the students and their interests can enhance interaction between the learner and the concepts to be learned. The principle of continuity would require choices on the part of staff about program design for the particular learning activities, as well as choices about the concepts to be developed or emphasized. It is interesting to note that the concepts identified at this site did not include "initiative," "creativity," "responsibility," "cooperation," or "sharing." Their absence makes it more obvious that concepts are an integral part of the content, even if not explicitly intended.

Further, if work experience programs are to encourage learning, and by extension, equal opportunity for all youth, then efforts need to be made to ensure that programs have the potential to promote conceptual growth. Otherwise, the programs become another lower level tracking mechanism teaching rote behaviors at best.

Cognitive and Affective Behaviors

The following analysis of behaviors is also based upon the curriculum manual used at one site. The Taxonomy of Educational Objectives, which is

TABLE 3

CONCEPTS INFERRED FROM A WORK EXPERIENCE CURRICULUM

Economy

- | | | |
|---|---|---|
| <p>1. Bankings</p> <ul style="list-style-type: none"> a. Saving b. Checking | <p>2. Actual Earnings</p> <ul style="list-style-type: none"> a. Paycheck b. Deductions c. Time Worked d. Expenses | <p>3. Life-styles</p> <ul style="list-style-type: none"> a. Relationship to Earnings |
|---|---|---|

Self-Awareness

- | | | |
|---|---|--|
| <p>1. Self-Presentation</p> <ul style="list-style-type: none"> a. Image b. Appearance | <p>2. Personal Needs</p> <ul style="list-style-type: none"> a. Activity Preferences b. Life-style | <p>3. Personal Abilities</p> <ul style="list-style-type: none"> a. Competencies b. Potential Development |
|---|---|--|

Human Relations

- | | | |
|---|--|--|
| <p>1. Clarifying Expectations</p> <ul style="list-style-type: none"> a. Employer b. Colleagues c. Supervisor | <p>2. Communication</p> <ul style="list-style-type: none"> a. Reporting, Interviewing b. Questions c. Negotiation | <p>3. Self-assertion</p> <ul style="list-style-type: none"> a. Confronting Authority b. Expressing Needs |
|---|--|--|

Workplace

- | | | | |
|---|--|--|--|
| <p>1. Job Clusters</p> <ul style="list-style-type: none"> a. Range b. Differences | <p>2. Responsibilities in Roles</p> <ul style="list-style-type: none"> a. Roles b. Responsibilities c. Requirements | <p>3. Contracts</p> <ul style="list-style-type: none"> a. Negotiation b. Setting Expectations c. Completion | <p>4. Job Search</p> <ul style="list-style-type: none"> a. Self-presentation b. Personal Information c. Employer Expectations |
|---|--|--|--|

widely used by curriculum developers, will be used to identify¹ the levels of cognitive and affective behaviors, which are inferred to be intended learnings from the work experience curriculum. The levels of cognitive learning identified by Bloom et al. (1956) are, beginning with the lowest level, (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, and (6) evaluation.

The authors order a wide range of learning hierarchically and designate each with numbers along this scale. For example, Bloom defines comprehension as follows:

That is, when students are confronted with a communication, they are expected to know what is being communicated and to be able to make some use of the material or idea contained in it.

In ascending order within the comprehension category are: 2.1, translation; 2.2, interpretation; and 2.3, extrapolation.

The following analysis of the set of learning activities demonstrates to what extent the development of comprehension behaviors was encouraged. The many job-seeking personnel forms involved translation skills (2.1), knowing what information goes into which questions, and what certain symbols or categories mean. One coping skills activity emphasized interpretation skills (2.2), mainly "the ability to interpret various types of social data;" recognizing conflict with interactions, and figuring out the meaning of it, granted this is done within the constructs of feelings of self and other. Extrapolation (2.3) existed as a general but vague goal of several coping skills activities and ultimately of the whole program.

Ultimately, youth may know how to formulate conclusions about the types of work available (2.1) and why people work in certain jobs (2.2) and may come to some sort of conclusion about themselves and work (2.3). However, these steps from one stage of reasoning to another are very involved and certainly are not developed systematically within each training session. The most striking result of an analysis of intended cognitive learning is the concentration on lower level cognitive skills.

Krathwohl, Bloom, and Masia (1964) have produced a similar taxonomy for the affective domain. These levels are: (1) receiving, (2) responding, (3) valuing, (4) organization, and (5) characterization by a value or value complex. The receiving and responding levels of the affective domain are prominent in the curriculum, or set of learning activities. In particular, the learner develops skills within the lower levels of these two domains.

For example, the job-seeking skills activities emphasized that the "learner be sensitized to the existence of certain phenomena and stimuli," such as awareness of feelings of others (1.1), and controlled or selected attention (1.3), which would include remembering names. These activities also emphasized responding to stimuli (2.0), and most likely occur in the obedience or compliance levels (2.1). However, when the students choose a job and go

through the actual interview, there is some capacity for a voluntary act, thus putting these actions into the willingness to respond level (2.2). The satisfaction in responses (2.3) could accompany their behaviors in the program at the sessions and at the apprenticeships.

Ultimately, the program tries to incorporate a realistic sense of the work in the world today and the value of work, and to integrate them into the value systems of the youth. The program provides some beginning steps in that direction, but it would be mere speculation to analyze the affective levels achieved in valuing (3), organization (4), and characterization by a value (5).

Summary

Analysis of the curriculum content contained in a package describing the set of learning activities suggests the concepts intended to be learned. These include (1) economy, (2) self-awareness, (3) human relations, and (4) workplace. The concepts remained at a fairly elementary level and were inferred from the curriculum, rather than explicitly discussed. That the concepts were not systematically developed throughout into learning activities indicates an inadequate application of the principle of continuity. Likewise, an analysis of cognitive and affective behaviors inferred from the curriculum using the Taxonomy of Educational Objectives revealed an unsystematic treatment of lower level skills. Attention to the principles of continuity and interaction when designing the curricular concepts and behaviors would help staff ensure an equal educational opportunity for the students.

IV. Context for Implementation: The Art of the Practical

The context within which the work experience curriculum at five sites occurred clearly affects the implementation. Johnson (1977) categorizes the accommodations necessary to a project's implementation as organizational, temporal, personal, and cultural. Table 4 outlines these accommodations for the curricular context that surfaced from plans, observations, and interviews recorded during implementation at the five sites. The types of accommodations necessary were both explicitly and implicitly stated with the data. For example, one curriculum manual addressed some organizational and temporal accommodations necessary to one project's implementation. The personal and cultural accommodations were deduced from observational and interview data contained in field notes of on-site observers. This included necessary inputs regarding time, staffing, student characteristics, and the cultural values, especially the institutional norms of the school system within which the project operated.

Organizational Arrangements

That a project must adapt to or change an organization for project implementation has often been noted (Gross, Giaquinta, and Bernstein 1971;

TABLE 4

THE CONTEXT FOR PROGRAM IMPLEMENTATION

I. Arrangements Affecting Feasibility

A. Organizational

1. Work experience team source
2. Study selection process
3. Managment plan

B. Temporal

1. Work experience activity
2. Coping skills activity
3. Proposal deadlines
4. Program design

II. Arrangements Affecting Congruence

A. Personal

1. Role models
2. Student selection criteria

B. Cultural

1. Work experience academic credit and pay
2. Acceptance by school personnel

Smith and Keith 1971). The organizational arrangements required for an in-school work experience program involve establishing a work experience team, selecting students, and negotiating a management plan.

The work experience team at Site 1 include a work experience specialist and an assistant, who worked with a support team of one to three people in each of five high schools. This team took responsibility for working out the details of the program within each school. This team was composed of "outsiders," i.e., individuals hired by the project funds and not regular classroom teachers. This becomes significant when considering the policy issue of how to change what schools do for the CETA-eligible youth. Another tack might have been to involve regular teachers as part of the support team, thereby increasing the potential for absorption or acceptance of the exemplary project into the regular school curriculum.

In interviews, the team expressed the idea that the selection process succeeded better the first year than the second. The number of program drop-outs increased during the second year. The team attributed this in part to the decreased amount of control over who entered the program, owing in part to their reduced staff and program and consequent decreased potential for contact with the student population.

Temporal Arrangements

Temporal arrangements necessary for implementing school work experience programs include time for the work experience activity, for the coping skills activity, for proposal writing, and for designing the program. Lundgrun (1972) stresses temporal realities as one of the most important "frame factors" influencing teaching plans in the school. The curriculum plan at one site explicitly stated that students were to be paid for eighty hours of work performed over a two-month period after school and on the weekends. The "job-seeking skills" and "job placement" activities that preceded the work experience were also after school hours. The "coping skills" sessions were planned to coincide with the two months of the job experience. The plans stated that this time should come during regular classes on a rotating basis, and included a sample school schedule illustrating how student schedules accommodated the class over the nine-week period. This was the only formal project time for possible teaching/learning moments where the students had an opportunity to integrate their work experience in the company of the teacher. All five projects used after-school time for the work experience activity.

The time allowed for writing the proposal, hiring staff, and writing curriculum plans was quite brief. The staff members were requested to add the work experience activity to the original proposal. The ability to generate a program design that could be disseminated to career awareness teams in five high schools quickly was possible in part because of the administrative supports of the parent project. Such a management plan might also explain the nuts-and-bolts appearance of the curriculum manual.

A second site had plans to conduct coping skills activities along with the work experience, but the project had difficulties with implementation.

The vagueness of plans and the wish to individualize instruction for each student contributed to staff "burn-out" and turnover.

Personal Arrangements

Attention given to the personal context for a particular curriculum takes into account the importance of characteristics of the teachers and students. One project aimed to expose students to working adults as possible role models. The work experience team members were long-term school staff (ex-teachers, counselors, reading specialists), but not part of the regular high school teaching staff. The federal grant requirements stated that the jobs had to be in the public rather than private sector, thereby limiting exposure to supervisors in the service professions.

The students chosen for the work experience had to be "CETA eligible," meaning that their income must be below the lower standard of living for their geographic region. However, the selection criteria in the manual included student applications, interviews, attendance record, and recommendations from teachers, counselors, and the school dean. The recommendation form included items to be rated on a scale of 1-5: dependability, promptness, cooperative attitude, self-motivated, well-groomed, neat, student would benefit. These selection criteria probably helped the project select those poor youth who were likely to succeed with minimal supervision and who were not high risk dropouts.

Cultural Arrangements

The culture of the schools contains values that influence the institutional arrangements for providing an education to youth. Some of those values (academic credit and pay for work experience, and time cards) were discreetly challenged by one project. On the subject of granting academic credit, teachers were approached individually rather than through discussion of the issues and implications in public forums. The project depended upon cooperation from classroom teachers at several points. Indeed, these teachers could be seen as the gatekeepers, able to issue academic credit for the work experience according to the contract terms agreed to with the students. They also could accommodate the students involved in training by making it easy for them to attend a session during their class. Yet the project never secured formal entry into the schools by a vote or by negotiating the terms of entry before approaching individual teachers about academic credit or excused absences. Rather, this potential curriculum change illustrates the slow decision-making process that Kirst and Walker (1971) have described as "disjointed incrementalism."

Practical Implications

Doyle and Ponder (1977) identify three criteria for determining the practicality of curriculum proposals. They are "instrumentality,"

"congruence," and "cost." Cost is not considered here, though this is an ultimate consideration, as the exemplary projects were funded for between one and two years, in many cases to be continued by school systems or community agencies after that time.

Instrumentality, in effect, explains the ability of a project's proposal to be made feasible by teachers or ~~service deliverers~~:

That is, a change proposal must describe an innovation procedure in terms which depict classroom contingencies . . . communicating the innovation in procedural, ecologically relevant terminology. (p. 77)

Site 1 stated the organizational arrangements necessary for implementation in its curriculum manual. Another site was unable to clarify these organizational arrangements because of a vague design, lack of time, and changing personnel. The three remaining sites implemented projects that focused on placement without a curriculum on "coping skills." The organizational arrangements for one of these three involving three bureaucracies to develop plans, as well as methods for cooperation, resulted in delayed implementation. A management plan outlining the decision-making authority and responsibility would have made the proposal more feasible. The other two required less complex organizational arrangements and could be implemented along the lines of the statements in the proposal.

Doyle and Ponder's notion of congruence referred to the "perceived match between the change proposal and prevailing conditions" (p. 78). One site again experienced difficulty in this area, partly because the project intended to help a minority group overcome employment problems by teaching work values recognized or perceived as rejected by that group's culture. This suggests that projects striving to implement programs based on values not congruent with those held by the local community will encounter obstacles along the way.

In conclusion, Doyle and Ponder's comments are applicable to the importance of the context variables highlighted in this section.

From the standpoint of curriculum effectiveness, policies stressing localization or development and implementation within a specific setting, such as a single school or similar classrooms within a school, would seem to have a greater chance of impacting practice because of the heightened ecological validity resulting from the increased attention to context variables. (p. 80)

Summary

This section presented the findings that organizational, temporal, personal, and cultural arrangements need to be made for successful project implementation of the curriculum design. In particular, the design should be

feasible and congruent with the cultural expectations and norms of the local community and school system.

SUMMARY AND RECOMMENDATIONS

This study addresses two issues regarding the creation of viable work experience programs: design and implementation. The purpose of the study is to help those responsible for youth employment programs to identify points in program design and implementation where they can increase the quality of the educational experience that participants will have.

Five work experience programs provided written program materials, observations, and interviews used for case studies in this report. The data were collected for the Youthwork National Policy Study conducted by a research team at Cornell University. The framework to assess the quality of the programs under consideration was developed from curriculum theory and analysis, as its chief concern is the form and content of educational activities. A second concern of program design that was examined was the influence of the implementation process on curricular decisions.

The study consisted of four parts: I. Curriculum Design: The Set of Learning Activities, II. Curriculum Principles: Assessing the Design, III. Concepts and Behaviors: Assessing the Content, and IV. Context for Implementation: The Art of the Practical.

I. Curriculum Design: The Set of Learning Activities

Students spent time in as many as five different types of program activities. These were: (1) job-seeking skills, (2) job placement, (3) work experience, (4) coping skills, and (5) task skills. Three sites offered job-seeking skills that included development of interviewing skills, writing a resume, and completing job applications.

All sites had job placement and work experience activities as part of their program. The role of the program staff in the job placement activity was described as broker or counselor. The broker matched students to jobs already identified by a job developer, employment computer, or personal contacts. The job counselor spent more time than the broker trying to find placements compatible with the interests of the student, and helped with additional matters such as transportation and employer contact.

The work experience activity was defined as what youth did in a job placement. Activities were site-dependent rather than program-dependent. All work experience took place after school hours.

Two sites offered classroom sessions on coping skills concurrent with the students' time in the work experience. Walther (1976) first identified the term that describes the activities found in these project sessions:

Coping skills are defined here as those competencies which permit the individual to function within formal

or informal social groups. Included are developing and executing plans, working with others, controlling impulses, processing and interpreting information, communication, problem solving, and working within an authority structure. (p. 65)

Methods of classroom instruction included filmstrips, discussions, and role playing.

One site emphasized task skills, another category from Walther (1976). This entailed instruction in job-related skills from the worksite supervisor.

Recommendations

1. A proposal and project design for work experience programs should differentiate among the types of learning activities to be included. This serves to clarify the range of services provided in programs. A recommended set of learning activities for a curriculum design contains (1) job-seeking skills, (2) job placement, (3) work experience, and (4) task skills.
2. Project designers should distinguish between the role of broker or job counselor that project staff members will play. Job counselors spent more time with youth in the placement process. Although this role is more costly to fund, students benefit from the attention given to a careful placement that takes into account their needs and interests. On the other hand, the broker could refer large numbers of students to jobs already identified.

II. Curriculum Principles: Assessing the Design

Dewey's (1938) principles of continuity and interaction introduced a way of assessing the educational value and structure of the set of learning activities in work experience programs.

Interaction meant that the program adapted to the "needs and capabilities" of the learners. Several mechanisms enhanced opportunities for interaction to take place: (1) a careful job placement that suited the interests of the learner, (2) opportunities for reflection on the actual work experience, particularly through activities such as coping skills, and (3) teacher/counselors and worksite supervisors who interact frequently with the student.

The role of staff as job counselors allowed greater attention to be paid to the matching of students and jobs. The role that staff members played as brokers at one project enabled them to channel several hundred students to private-sector openings.

Opportunities for reflection on what was learned through the work experience were not abundantly apparent at the five programs. An obvious

programmatic mechanism that could be used for critical reflection would be the coping skills activities. Such activities could use the actual experiences of youth in the workplace as a frame of reference for role playing, discussions, and introduction of new concepts, attitudes, and skills. This would promote a deeper understanding of their daily experiences.

Teacher/counselors and worksite supervisors who interacted frequently with students were in a better position to assess the response of the student to the job placement, and consequently, to restructure the job responsibilities, to counsel and advise, or to change the placement.

In the program design the principle of continuity at work meant that the program paid attention to leading one learning activity to another and integrating the activities into a whole. The sequencing of the set of learning activities served as one mechanism to implement the principle of continuity. The job-seeking skills and placement activities naturally led to locating a work experience. The coping skills activity could serve as a rich and logical resource for designing programmatic opportunities for reflection that link the work experience to these classroom sessions.

As with the principle of interaction, the role of the teacher/counselor and worksite supervisor emerged as key to programmatic decisions that enhance the principle of continuity, such as changes in activities, increasing responsibility, counseling, or changing the worksite.

Recommendations

1. Program staff and proposal authors should use the principles of continuity and interaction suggested by Dewey (1938) to guide the design of their work experience programs.
2. Interaction means that the program design is adapted to the "needs and capabilities" of the learners. Programmatic mechanisms that will enhance opportunities for interaction to take place are a careful job placement process, opportunities for reflection on the actual work experience, and frequent adult interaction with the students.
3. The coping skills activities would be an obvious opportunity for critical reflection on the work experience.
4. Teacher/counselors and work experience supervisors should be in frequent contact with students during the work experience so as to counsel and advise, to restructure the job responsibilities, and to change the placement if necessary.
5. The principle of continuity means that learning activities build upon each other. Programmatic mechanisms to enhance continuity include sequencing of the set of learning activities so that what is learned or experienced in one activity is reused in another.

6. Proposal reviewers should make judgments about the educational value of work experience programs by using the principles of continuity and interaction.

III. Concepts and Behaviors: Assessing the Content

The concepts and behaviors to be learned at the five work experience programs were not clearly and systematically included in the program design. A detailed analysis of the curriculum guide used at one site allowed a listing of concepts and behaviors from which a critique could be made.

Four sets of concepts were inferred from the curriculum guide: economy, self-awareness, human relations, and the workplace. It appeared reasonable to include them in a work experience curriculum. Some recurred in several learning activities, utilizing the principle of continuity in program design. However, all concepts remained at a fairly elementary level and were not developed systematically.

It is interesting to note the absence of some potentially valuable concepts, such as initiative, creativity, responsibility, and cooperation. Their absence emphasizes the importance of having program staff consciously decide upon a set of concepts to teach through a work experience program.

An analysis of cognitive and affective behaviors inferred from the curriculum, using the Taxonomy of Educational Objectives, revealed an unsystematic treatment of lower level skills.

In conclusion, attention to the principles of continuity and interaction when designing the curricular concepts and behaviors intended to be learned would help program staff ensure that the work experience program provides an equal educational opportunity for students, rather than a lower level, lower expectations tracking program for potential dropouts.

Recommendations

1. In order to understand work experience programs as learning experiences, attention must be explicitly given in the program design to the concepts and behaviors that learners are expected to develop.
2. Reasonable concepts to be developed in a program design include economy, self-awareness, human relations, and the workplace. Additional concepts might be initiative, creativity, responsibility, and cooperation.
3. Program planners should provide for a systematic development of concepts and behaviors, rather than restricting such development to lower levels.

IV. Context for Implementation: The Art of the Practical

This section outlined organizational, temporal, personal, and cultural arrangements in the project's context that enhance project implementation. Such arrangements needed to be negotiated with the related institutions or bureaucracies, such as school systems, CETA, and the worksites.

The organizational arrangements included the choice of a work experience team. The decision to hire school personnel or "outsiders" seems to lessen the ability of the project to change what schools do for CETA-eligible youth in the long run.

The necessity of a clear, mutually satisfactory management plan also surfaced. One project that depended upon the cooperation of three bureaucracies experienced a delayed implementation because of lengthy negotiations about project plans. A management plan would enhance the project's feasibility.

A third important organizational arrangement is the process of student selection for the projects. One site found that increased contact with the student body lessened the dropout rate of students who joined the work experience project.

Temporal arrangements that need to be made are a feasible time frame for responding to a request for a proposal, time for staff to develop a program design in the event that one is lacking, and clearances with school personnel about schedules for the classroom sessions of learning activities and the actual work experience.

Personal arrangements that need to be met include considerations of teachers and worksite supervisors as role models. Limiting these models to the service professions of the public sector means that exposure to the world of work is likewise limited.

Criteria for selecting the CETA eligible should also ensure that the project does not exclude students who would need supervision and be high risk dropouts.

Cultural arrangements for project implementation revealed that the projects needed clearance from the schools for the particular institutional arrangements such as academic credit and pay for work experience, as well as acceptance of the project idea by school personnel. In addition, project aspirations and values not congruent with those of the local community may result in delayed or difficult implementation.

Recommendations

1. Project operators need to make organizational, temporal, personal, and cultural arrangements with the related institutions to enhance project implementation.

2. Organizational arrangements include the staffing of a work experience team with school personnel or nonschool personnel. Such a choice has implications for impacting upon the long-term service delivery of school personnel.
3. A management plan would enhance the project's feasibility by making institutional interrelationships and authority clear at the outset.
4. Methods for student selection need to be outlined, as staff need to weigh the time they have for each of the alternatives.
5. Temporal arrangements include time for proposal writing and for completing a viable program design. Staff must also make clearances with school personnel about the use of project time during school time.
6. Personal arrangements involve decisions about role models for youth, that is, the characteristics of teachers and worksite supervisors. Also, criteria for student selection should not exclude the potential dropout, high risk student.
7. Project staff need to examine the cultural norms and assumptions of the project for possible conflict with those of the school or local community. Such conflict would impede or delay implementation.

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YOUTH EMPLOYABILITY TRAINING: LINKAGE AS A CATALYST

Katherine Kelly Manley and Daniel E. Vogler

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INTRODUCTION

On May 11, 1978, the Senate Human Resources Committee added an amendment to the Comprehensive Employment and Training Act (CETA) earmarking 1 percent of Title II funds to be used to encourage coordination and establish linkages between CETA and appropriate educational agencies and institutions. The intent of the Committee "goes back to the 22 percent set-aside that was enacted as part of Public Law 95-93, the Youth Employment and Demonstration Projects Act."^{*}

In 1977 Senator Hubert Humphrey and Senator Jacob Javits drafted the Youth Employment and Demonstration Projects Act (YEDPA) of 1977, which ultimately became Public Law 95-93, to initiate a new partnership between prime sponsors and local education agencies in improving the transition of youth from school to work. The motivation for the passage of YEDPA was summarized in the Congressional Record (July 21, 1977) when the conference committee submitted H.R. 6138 and asked for its consideration. Senator Hubert Humphrey summarized:

The plague of unemployment continues to strike hardest at our youth, The unemployment rate now stands at 38.7 percent for black teenagers and it approaches an appalling 60 percent in some of our central cities. Almost half of all unemployed Americans are under the age of 25 It is clear that the most direct and rapid way of alleviating youth unemployment is through specifically targeted youth employment programs. Economic recovery alone will not provide enough job opportunities to satisfy the nearly 3.2 million youths who want jobs. (Congressional Record--Senate, July 21, 1977, p. 24292)

Through Sub-part 3, Youth Employment and Training Programs (YETP), 22 percent of the funds available were set aside for programs administered by the local schools for in-school youth. Senator Javits and other members of the Human Resources Committee felt that the 22 percent set-aside could accomplish much in alleviating the problems of youth unemployment and underemployment. Indeed, increased collaboration between CETA and the educational community was needed (Congressional Record--Senate, August 22, 1978, p. 13968). However, the committee was concerned about the adequacy of the 22 percent incentive.[†]

This concern was a result of several important factors. First, the members of the subcommittee felt that prime sponsors and local educational agencies using the 22 percent set-aside "lacked the technical assistance that was required to bring these agreements about in a way other than just signing

^{*}James O'Connell, Testimony before Senate Subcommittee on Employment, Poverty, and Migratory Labor, interview with K. Manley, 19 March 1981.

[†]Ibid.

on the dotted line".* In addition, Wurzburg (1980) wrote that the two institutions needed to work out administrative differences and be provided substantive guidance and models in the form of collaboration. Further, Coleman and Wurzburg (1979) reported that educational leaders met on the YEDPA agenda, issued a statement of support for closer relationships, and adopted a conciliatory stance toward youth employment and training programs. To the Committee on Human Resources, and more specifically to Senator Javits, a new element was needed to promote negotiations developing out of the 22 percent set-aside funding requirements.† The additional encouragement came in the form of Section 202(d) in 1978.

The 1978 Congress amended CETA to add Section 202(d). Authorized funding of Section 202(d) followed in the amounts of \$44,310,300 for FY 1979 and \$35,562,019 for FY 1980. Section 202(d) required that CETA plan and conduct activities designed to link CETA and educational agencies. Clearly, a national signal was given that linkage was important.

This paper will focus upon linkage as a vehicle for improving training and thereby improving youth employability. The material is presented under four major sections, which include: (a) the concept of linkage, (b) the current impact of linkage, (c) identification of linkage activities, and (d) highlights of youth employability linkages.

CONCEPT OF LINKAGE

Vocational education is an integral part of the public educational system and represents a joint federal, state, and local partnership. Programs are designed to provide occupationally specific training and also to help students acquire general education knowledge and information about a variety of work settings. The vocational curriculum incorporates classroom instruction, laboratory work, participation in student organizations, and on-the-job training. Training through vocational education is offered primarily within institutional settings, which include comprehensive high schools, vocational high schools, area vocational centers, technical institutes, community and junior colleges, and specialized vocational schools. Legislation requires that the state administer vocational education using a five-year and a one-year plan approach.

CETA provides training to improve the employment opportunities for the economically disadvantaged who are unemployed and underemployed. Basic decision-making authority over CETA expenditures is lodged primarily with cities and counties with more than 100,000 people, or with consortia of cities and counties, designated as CETA prime sponsors. CETA contracts for classroom, laboratory, and on-the-job training. In addition, CETA provides counseling, job referral, child care, transportation, and other support services.

*James O'Connell, personal communication, 19 March 1981.

†Ibid.

Critical Factors that Facilitate Linkage

The literature identifies opportunities and incentives for linkages available to both CETA and educational communities. Opportunities are evidenced in (a) the legislative planning requirements, (b) the commonly defined purposes of each agency, (c) the overlapping target groups served, and (d) the financial incentive for linkage. This subsection will detail these facilitating factors.

Legislated Planning Requirements

CETA and educational institutions must plan for program activities. The mandated requirement that the plan of both agencies must be reviewed by the other facilitates identification of target groups with joint concerns. Points of commonality or interest can serve as the basis for cooperation. In addition, both CETA and vocational education are required to provide data identifying the local needs to be served by their programs. Assessing demographic and economic information to identify the universe of employment and economic problems--and thus the extent of need for services--is a task performed by CETA planners. Vocational education historically has relied on personal contacts with employers. These contacts provide estimates of the demand for jobs and give direction for the program planning efforts. While CETA and vocational education have different approaches to planning, sharing of the information can provide valuable information for both.

Common Purposes

CETA and vocational education have a common concern for meeting the employment and employability needs of youth and adults. Problems in serving this common group within the constraints of the existing organizational arrangements are mutual. Joint solutions to problems can result in improved accessibility, continuity, and efficiency in program delivery. Administratively, gaps in the delivery system can be identified and the client's needs met by a system that allows planning, budgeting, and evaluating the broad range of options to meet their needs.

Overlapping Target Groups Served

CETA specializes in serving the disadvantaged. Vocational education is under mandate to serve the disadvantaged. Both serve adults and youth who are unemployed, underemployed, or economically disadvantaged. Thus, vocational education includes disadvantaged clients, while CETA clientele must be disadvantaged.

Financial Incentive

CETA provides mandated educational set-asides in two of its eight titles. Title II of the CETA legislation provides two educational set-asides, the 6

percent supplemental vocational education grant and the 1 percent linkage funds. Title IV, Youth Programs, provides the 22 percent education set-aside for YETP programs. As an indication of the total amount of funds mandated for linkage by the CETA legislation, Title II had a budget appropriation of \$2,054 million in FY 1980. The 6 percent vocational education grant equaled \$123 million, and the 1 percent linkage grant equaled \$35 million. Title IV had a budget authority of \$826 million. The 22 percent set-aside equaled \$114 million (Wilken and Brown 1981). Preventing program overlap while CETA supports the financial needs of the target groups should be real incentive for coordination (Drewes 1980, Wilken and Brown 1981). In addition, consolidated operations can reduce duplication and facilitate efficiency (Institute for Manpower Programs Analysis 1978, p. 6). If protecting the public investment is a measure for efficiency, the incentive for linkage should be made stronger.

Critical Factors that Inhibit Linkage

The literature points to three causes of weak linkages (Wilken and Brown 1981). These three are (a) the short amount of time that CETA and educational agencies had to implement legislative mandates for coordination, (b) deficiencies in the mandates themselves, and (c) characteristics of the CETA and educational systems that cannot be changed by coordination alone.

Short Implementation Time

Developmental difficulties are a product of change. Experience indicates that almost any policy initiative is likely to face predictable initial problems. There was often a lack of information and understanding about CETA's complicated rules and regulations (Snedeker and Snedeker 1978, p. 65). This lack of clarity regarding the rules and regulations caused considerable tension (Youthwork National Policy Study 1978).

The lack of understanding by CETA and vocational educators of each other's operational process was evidenced when the linkage mandates were implemented. It was reported that local prime sponsor directors were confused and lacked understanding about the institutional vocational education programs (Anderson and Rozansky 1974). In addition, personnel in many school systems and manpower agencies were not aware of the problems to be encountered in operating a cooperative training system until it was operational. In the words of one local analyst, "Local expertise in employment and training affairs is (often) more political and managerial because grantsmanship and outguessing Congress and the Department of Labor are prerequisites for survival" (Wurzberg 1979, p. 9).

The newness of the mandate also is cited as the cause of inadequate program design and service agreements. As an example, during 1978 YEDPA mandated knowledge development with virtually no direction. Most prime sponsors attempted to do something, and the result was commonly chaotic (National Commission for Manpower Policy March 1978, p. vii). Reviews of prime sponsor and education agencies' nonfinancial agreements revealed that

they were often "vague with regard to roles, responsibilities, goals, target populations" (American Institute for Research 1980, p. 13). There was also disagreement over what activities were allowable (Snedeker and Snedeker 1978, p. 66), and there were differences in opinion on who had the authority to make key decisions affecting the jointly run programs (Manpower Demonstration Research Corporation, Inc. 1977).

Problems of this type usually pass with time. The longer the rules are in effect, the more individuals will understand the associated rules and procedures and gain the expertise needed to implement them. Time, however, cannot provide for defects in the mandates.

Deficiencies in Mandates

The literature points to several deficiencies in the coordination mandates. Most often cited was the mismatch between CETA and the public school's planning cycles. CETA's budget cycle runs from October to September, while the schools operate on a July to June cycle. As a result, schools must make commitments to training programs for CETA without assurances that the CETA system will be able to provide the funds for the entire fiscal cycle. Education administrators must also make decisions about CETA programs only a few days before schools open in the fall.

The legislation itself has also built doubt into the future funding of CETA programs. In addition, as prime sponsors receive funds annually, school systems must compete from year to year and from project to project (Mirengoff and Rindler 1976). In addition, when Congress enacted the YEDPA statute in 1977, it decided to treat youth programs under YETP as demonstration programs with only annual budgeted authority. This system disrupted the orderly management of vocational training programs and lead school officials to question the investment in manpower training programs.

While CETA was perceived to be a block grant program, it was, in fact, a series of separate programs fragmented around a central theme (Wilken and Brown 1981). As school systems attempted to work with CETA, they commonly found themselves working with many different contracting procedures, liaison persons, and eligibility practices. These legislative requirements were viewed by many as counterproductive (Wurzburg 1979, p. 236).

The most heated CETA/educational controversy has been over the awarding of academic credit for work experience or employability development training (Wurzburg 1979, p. 10). Credit is most generally determined on the basis of time spent, with one unit of elective credit generally given for a specified number of hours of classroom and/or job experience. Yet, credit for CETA-funded programs was seldom, if ever, awarded to clients upon completion (Drewes 1980, p. 65). There was also the question of whether local educators could make policy regarding the awarding of credit without specific state mandates on the subject (Wurzburg 1979).

Finally, there is no truly authoritative coordination mechanism (Wilken and Brown 1981). Both CETA and the education institutions remained basically sovereign entities. The incentives for cooperation remained inadequate and are expected to remain inadequate as long as CETA goals are not in line with those of the educational community (Wilken and Brown 1981).

Conflicting Characteristics

There are several important realities that must be considered when discussing state and local policymaking. CETA and vocational education constitute two different systems for improving employment prospects for their clients. These differences are evidenced in the philosophical and organizational structures of the two systems.

Vocational education programs address education disadvantage, which includes economic disadvantage (Stevens 1979). The term disadvantaged is defined in the legislation for vocational education as "persons (other than handicapped persons) who have academic or economic handicaps and who require special services and assistance in order to enable them to succeed in vocational education programs" (Educational Amendments of 1976, Sec. 195, 90 STAT. 2213). The determination of who is disadvantaged from a vocational education perspective is program specific and not necessarily a characteristic of the individual. This differs from the CETA definition of the disadvantaged, which is solely in terms of financial eligibility. In addition, vocational education regulations defined economic disadvantage in terms of the poverty level, which is a census concept. In contrast, CETA standards are based on the lower living standard income level, which is determined by the Bureau of Labor Statistics (Drewes 1980, p. 59).

In addition, differences in perception of what constitutes effective training have been noted in the literature (Mirengoff and Rindler 1978, p. 128). CETA programs are commonly directed at narrow, short-term objectives and stress the minimum amount of training necessary to secure employment. In contrast, vocational educators prefer a more generalized and more enriching training curriculum. Finally, turf protection has been cited as the largest coordination problem at the local level (Anderson and Rozansky 1976, p. 3).

The vocational education system has existing buildings, equipment, and certified staff members. Manpower Development and Training Act (MDTA) funds to vocational education in 1968 expanded both physical and faculty resources (Stevens 1979). Many of these resources are still being used. However, the CETA system has no presumptive service agents, although the CETA amendments stress the prime sponsor's responsibility to use existing organizations of demonstrated effectiveness. In addition, CETA philosophy calls for training programs to be flexible, with open-entry/open-exit in order to produce large numbers of job-ready clients. The instructors are not required to be certified teachers. This conflicts with the vocational education's traditional program operation and organization.

The conflicting characteristics, however, go beyond these philosophical and organizational differences. The public school system faces a multitude of

problems, including enormous pressure to comply with more compelling federal mandates (Wilken and Brown 1981). Special education, desegregation, and the like must be included in the realm of activities public schools deal with daily. Participation with CETA, unfortunately, is optional and in most cases schools are free to accept or reject CETA clients. Budget restraints, weak internal administrative stability, and priorities differing from those of state and local political groups are all problems that public schools face (Wilken and Brown 1981). As a consequence, the mandate for coordination with CETA is often "treated as little more than incidental appendages for most education institutions" (Wilken and Brown 1981, p. 41).

CURRENT IMPACT OF LINKAGE

Since the federal government became active in training programs for disadvantaged Americans, the federal policymakers have attempted to promote coordination between education and manpower programs. Prior to CETA, this was attempted through a series of "top-down" mandates, which gave state education agencies a major role in operating training programs. The 1973 CETA changed this strategy to allow employment and training agencies the right to operate educational programs from the "bottomup." Consequently, state and local education agencies regarded this as a "major assault on their established authority" (Wilken and Brown 1981). Congress responded by amending CETA in 1977 and 1978 with a series of compromise measures that allowed manpower agencies to retain full authority over their programs, while giving state and local education agencies an assured role in providing educational services to manpower clients.

It is not surprising that the studies conducted to assess the impact of coordination between CETA and education agencies indicate that little progress has been made. The National League of Cities, U.S. Conference of Mayors, has conducted studies since CETA was enacted in 1973 to track the development of coordination. Their first study in 1974 (Anderson and Rozansky 1974) gave some preliminary indications that CETA was not significantly impacting on institutional vocational education. This study indicated that difficulties and frustration existed among localities in negotiating non-financial agreements. Part of the problem was attributed to the vague CETA rules and regulations. After this negative assessment of CETA's first year of operation, a second study was conducted to examine the issues. It reported that over 50 percent of the prime sponsors experienced a more effective working relationship with their respective vocational education communities (Anderson and Rozansky 1976), but also cited continuing problems.

The Manpower Demonstration Research Corporation, Inc. (1977) conducted on-site studies in nine states during 1976 to investigate the Special Grants to Governors. This study analyzed the planning procedures, program activities, and results associated with state administration of CETA's 6 percent grants for vocational education services. The single significant accomplishment of this set-aside was the success in bringing CETA prime sponsors and vocational education administrators face to face (p. 65). Overall, however, the study indicated that CETA's special grant set-aside had few apparent

pluses (p. 66). It further set forth the fact that while some states were successful in working out the technical problems, most of the states found that extraordinary efforts were required just to keep the special grants to vocational education from having a negative impact (p. 66).

Following the enactment of YEDPA and the 22 percent earmark of funds for school-to-work efforts aimed at youth still in school, the Office of Youth Programs of the U.S. Department of Labor (DOL) found that the collaboration between schools and CETA program sponsors was improving. From evidence collected in case studies by the National Council on Employment Policy on the implementation of the 22 percent set-aside, it was stated "that the 22 percent set-aside for CETA-LEA agreements is a useful starting point for improving relationships between local CETA sponsors and schools, and for developing institutional complementarity" (Wurzburg 1979, p. 1).

The CETA Amendments of 1977 and 1978 have been in operation for such a short time that few studies have been conducted to assess the efforts of Congress. However, there is mounting evidence that supports the conclusion that CETA and educational institutions are moving toward a form of "administrative detente" (Wilken and Brown 1981). There has been an increasing involvement of state and local education officials in the CETA planning (U.S. Conference of Mayors 1979); increasing interchange of statistical data between education and manpower programs (Wilken and Brown 1981); expanding collaboration on coordination issues between the Departments of Education and Labor (Wurzburg 1979); and increased fiscal linkages between CETA agencies and educational institutions (Wilken and Brown 1981). In 1980, economic transitions between CETA agencies and institutions providing educational services "totaled between \$1.1 and \$1.5 billion" (Wilken and Brown 1981, p. 16).

Fragmented data from different sources indicated that most CETA agencies rely on educational institutions essentially for the purchase of classroom training (U.S. Conference of Mayors 1979). However, in a survey of forty prime sponsors, it was found that almost 95 percent of the prime sponsors purchased basic education, preemployment training, skill training, counseling, job placement/development, and administration from educational agencies (U.S. Conference of Mayors 1979, p. 23). This same document reported that 73.7 percent of the 5 percent supplemental funds for vocational education were used for that portion of the skill training that included "tuition, instructors' salaries, equipment, books, supplies, etc." (p. 24). Wilken and Brown (1981) noted that the U.S. Conference of Mayors' study predated the implementation of YETP. The 22 percent set-aside requires all in-school service agreements to supplement any classroom training with what are called "transition services," including noninstructional assistance such as counseling, transportation, outreach, and child care (p. 19). Thus, the economic ties may, in fact, be much greater in dollars spent.

While manpower agencies and educational institutions have expanded their administrative and financial relationships, little progress has been made toward actual integration of service activities (Wilken and Brown 1981). This is evidenced in three ways. First, there has been limited progress toward mutual funding of CETA-school activities; second, CETA depends upon schools

for basic skills instruction; and third, schools are not awarding academic credit for CETA-funded programs.

It appears that most local education agencies operate CETA training programs exclusively with CETA dollars. Pooled financial support for CETA youth programs is estimated at only one program out of five (Wilken and Brown 1981). In addition, CETA has not drawn on the schools' educational services, and most of the resources involved are used for participant stipends (Wilken and Brown 1981). The DOL, Employment and Training Administration (Wilken and Brown 1981) reported during fiscal 1979, for example, that 63 percent of services under YETP went for participant wages and benefits and only 30 percent was spent on teaching, training, or support services. The balance of funds went for program administration (pp. 30-31). And finally, the number of youth program participants receiving academic credit was very small. In 1979, the youth program reported that only about 39,000 enrollees earned scholastic credit for work experience or on-the-job training. This represented about 3 percent of all enrollees in such programs (Wilken and Brown 1981).

In summary, working relationships between CETA agencies and educational institutions have improved in several respects over the last several years. There is greater interagency communication, planning, and increased sharing of financial resources. However, few educational institutions matched CETA dollars with resources of their own, and few awarded CETA clients academic credit for work experience. While the dollars spent may seem impressive, a closer look reveals that the majority of the funds were used to pay participant stipends and to provide supportive services. Thus, the amount of funds used for instructional services was relatively small.

Nevertheless, since the enactment of YEDFA, studies surfaced that indicated that a new spirit of collaboration had been initiated between prime sponsors and local educational agencies (U.S. Department of Labor Youth Initiatives 1978; Coleman and Wurzburg 1979). Wurzburg (1980) reported that after one year, in virtually all prime sponsorships, there was some progress toward joint planning and coordinated planning (p. 21). The report further stated that more frequently, positive steps in the right direction were spurred, but indicated that despite them the road is a very long one.

LINKAGE ACTIVITIES

The literature supports the idea that development of linkages between vocational education and CETA are a high priority. Funds were provided following the initiation of the linkage concept to encourage further linkages. And indeed, linkages were viewed as a critical factor for improving the training of youth. The 22 percent YETP set-aside with the subsequent Section 202(d) funds was evidence of the importance of linkages. This section will report the findings of a national survey conducted to identify Section 202(d) linkages.

The data reported were in response to a letter and/or follow-up letter sent to the fifty state employment and training council directors requesting

copies of the 1979 Annual Report and the 1980 Special Grant Annual Plan. Eighty-six percent (86 percent) of the states responded to the request. The materials for this document were extracted from a broader research base conducted as part of the doctoral dissertation on the policy impact of Section 202(d) (Manley 1981).

The Annual Reports and Annual Plans provided a wide variety of formats, detail, and information. However, the 1979 Annual Reports to the governors provided little usable information for this study. This is especially true because funds were not released until April 1, 1979. As this left only six months for program operation, many states did not have time to implement programs. Thus, several states carried their FY 1979 monies over to FY 1980. Due to the lack of information reported in the Annual Reports and the variability in the reporting of information, it was determined that the Annual Reports were not usable for the survey.

The FY 1980 Annual Plans, however, were more informative and provided the data pool for this document. The section of the Annual Plans specifically requested from each state employment and training council director was the part entitled "State Coordination and Establishment of Linkages Between Prime Sponsors and Federal Educational Agencies and Institutions Program Narrative" (U.S. Department of Labor Federal Register, April 1979, Rules and Regulations, p. 20041).

The Forms Preparation Handbook (U.S. Department of Labor 1979) gives instructions in preparing the Annual Plan narrative request from each state. Specifically, the Annual Plan narrative related to the 1 percent linkage funds requires descriptions of eight activities and thus permits their codification. The categories were: (a) arrangements made to provide assistance in the development of agreements; (b) mechanisms to increase information exchange; (c) descriptions for developing and disseminating models of linkages; (d) technical assistance in the extension of educational offerings; (e) provisions for providing information, curriculum materials, and technical assistance in curriculum and staff development; (f) provisions for assistance in the development of assessment systems and educational attainment testing; (g) provisions for providing assistance to eliminate barriers in the educational system that hamper employment and training activities; and (h) jointly delivered training programs.

Generalizations revealed that there was variability in the activities reported by the states. Most of the states planned to fund a variety of projects to meet the specific categories offered in the Forms Preparation Handbook. Many of the same states had formed steering or advisory committees to assist in the administration of the funds. Often priorities were identified and projects funded according to priority. Other states identified only one or two projects for which linkage funds could be used.

A summary of the activities is provided in table 1. Two states were eliminated from the study because they provided inappropriate information. Colorado submitted a narrative other than 1 percent narrative. Oregon, at the time of the writing of the Annual Plan, had not developed programs, and thus

TABLE 1

SUMMARY OF SECTION 202(d) ACTIVITIES

STATE	Arrangements made to provide assistance to develop agreements	Mechanisms established to increase information exchange	Arrangements made for developing and disseminating models of linkages	Technical assistance provided in the extension of educational offerings	Provisions made for providing information, curriculum materials, & technical assistance in curriculum & staff	Development of systems for assessment and testing of educational attainment	Eliminate barriers in the educational system that hamper activities	Arrangements to increase coordination & establish linkages between prime sponsors & institutions providing training programs approved by the Secretary of the U.S. Department of Labor
Alabama	conduct workshops; publish	conduct workshops; serve as clearing-house	develop model projects; disseminate written information	conduct research;	conduct research; develop curriculum	conduct research; develop model project	develop model project	conduct research
Alaska	develop models	serve as clearing-house; publish	conduct research	provide staff support	provide technical assistance	NP	provide staff support	disseminate written information
Arizona	purchase service	provide coordination	develop model	provide staff support	develop curriculum	provide technical assistance	NA	NP
Arkansas	develop models	provide coordination; conduct workshops	disseminate written information; conduct workshop	disseminate written information	develop curriculum	develop model project	NA	initiate communication
California	conduct workshop	develop data system; publish	conduct workshop	provide staff support	conduct research; provide technical assistance	NA	develop model project	provide staff support
Colorado	Eliminated	due to inappropriate	information					
Connecticut	purchase service	NP	NP	NP	NP	NP	NP	NP
Delaware	NP	NP	NP	NP	NP	NP	conduct research	NP
Florida	conduct workshop	NA	develop model project	develop model project; conduct research	conduct research; develop curriculum	conduct research; develop model project	develop model project	develop model project
Georgia	purchase service	conduct workshops	disseminate written information	conduct research	conduct workshops; provide technical assistance	develop model project	disseminate written information	disseminate written information

TABLE 1--Continued

SUMMARY OF SECTION 202(d) ACTIVITIES

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Hawaii	NA	conduct workshop; publish; serve as clear- inghouse	develop model project	NP	NP	NP	NP	NP
Idaho	publish	serve as clear- inghouse	develop model project	provide staff support	NA	NA	NA	NA
Illinois	purchase service	conduct workshop; provide coordi- nation; develop data system	NA	dissemi- nate written informa- tion	conduct research	develop model project	develop model project	develop model project
Indiana	NP	serve as clear- inghouse	conduct workshop	NP	NP	NP	NP	NP
Iowa	provided by other funds	NA	NA	develop model project	purchase material	NA	NA	develop model project
Kansas	NP	publish	develop model project	develop model project	provide technical assistance	NP	NP	NP
Kentucky	NP	NP	NP	develop model project	NP	develop model project	develop model project	NP
Louisiana	purchase service	conduct workshop; provide coordi- nation; develop data system	NA	dissemi- nate written informa- tion	conduct research	develop model project	develop model project	develop model project
Maine	develop models	publish; conduct workshop	NP	NP	NP	NP	conduct research	NP
Maryland	NP	provide coordi- nation	develop model project	NP	NP	NP	develop model project	NP

TABLE 1--Continued

SUMMARY OF SECTION 202(d) ACTIVITIES

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Massachusetts	publish; purchase service; conduct workshop	provide coordination; develop data system; publish	disseminate written information	develop model projects	develop curriculum; provide staff development	develop model project	develop model project	initiate communication
Michigan	purchase service; conduct workshop	provide coordination	disseminate written information	NP	conduct research; conduct workshop	develop model project	develop model project	develop model project
Minnesota	purchase service	serve as clearinghouse	NA	provide staff support	provide staff development	provide staff support	develop model project	develop model project
Mississippi	NA	serve as clearinghouse	disseminate written information	conduct research	NA	develop model project	NA	NP
Missouri	purchase service	NA	NA	conduct research	provide technical assistance	NA	conduct research	develop model project
Montana	NA	publish	develop model project	conduct research	purchase material	conduct research	develop model project	develop model project
Nebraska	NP	NP	NP	NP	provide staff development	NP	NP	develop model project
Nevada	conduct workshop	publish	disseminate written information	conduct research	provide technical assistance	NA	provide staff support	disseminate written information
New Hampshire	Did not respond							
New Jersey	purchase service	provide coordination	develop model project	NP	NA	NA	develop model project	NP
New Mexico	NA	provide coordination	conduct workshop	develop model project	provide staff development	NP	NP	develop model project; initiate communication

TABLE 1--Continued
SUMMARY OF SECTION 202(d) ACTIVITIES

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New York	provided by other funds	conduct workshop	conduct workshop	conduct workshop	NA	NP	provide staff support	develop model project
North Carolina	Did not respond							
North Dakota	Did not respond							
Ohio	provided by other funds	serve as clear- inghouse	dissemi- nate written informa- tion	provide staff support	provide staff develop- ment	NA	NA	initiate communication
Oklahoma	Did not respond							
Oregon	Eliminated	for inappropriate information						
Pennsylvania	purchase service; conduct workshop	develop data system	conduct workshop	develop data project	provide staff develop- ment; provide technical assistance develop curricu- lum	develop model project	conduct research	conduct research
Rhode Island	Did not respond							
South Carolina	Did not respond							
South Dakota	NA	NA	develop model project	NA	NA	NA	develop model project	NA
Tennessee	purchase service	conduct workshop; serve as clear- inghouse	dissemi- nate written informa- tion	conduct research	conduct workshop; provide staff develop- ment	develop model project	dissemi- nate written informa- tion	develop model project
Texas	provided by other funds	NP	NP	develop model project	develop curricu- lum	NP	NP	conduct research
Utah	NA	serve as clear- inghouse	develop model project	develop model project	provide technical assistance	NP	NA	develop model project

TABLE 1--Continued

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Vermont	NA	NP	NP	develop model project	NP	develop model project	NP	NA
Virginia	provided by other funds	publish; conduct workshop	disseminate written information	NP	provide staff development; conduct workshop; provide technical assistance	conduct research	conduct research	develop model project
Washington	purchase service	serve as clearinghouse	conduct research	conduct research	conduct research	NA	conduct research; provide staff support	NA
West Virginia	Did not respond							
Wisconsin	NA	NP	conduct research	develop model project	develop communications	develop model project	conduct research; develop model project	develop model project
Wyoming	Did not respond							

time of the writing of the Annual Plan, had not developed programs, and thus the specific responses to the required narrative were too general to be usable. Other than for these two states, the activities are reported in the context that the states provided.

While some states provided extensive information about funded activities to encourage linkages, other states provided paragraph formats that detailed little activity. Some provided information about a funded activity, but the particular activity did not relate to the category. The sections that provided no activity or an unrelated activity were coded "NA" or "Not Addressed".

There were other states that did not provide a comprehensive narrative. For example, Connecticut sent only the first category and omitted the remaining sections when responding to the survey. Indiana and Maine elected to place priorities on specific categories and only responded to the categories that addressed those priorities. Vermont funded two projects that did not meet all category requirements. Washington listed the projects funded and provided a table indicating which categories the projects addressed. New Jersey funded several projects and provided a narrative summary, but the data were not categorized in any manner. Therefore, for many of these states the researcher coded a "NP" or "Not Provided," which indicated that the state had not provided the appropriate information.

A variety of administrative techniques were used to provide assistance in the development of agreements between prime sponsors and educational agencies and institutions. These techniques included disseminating information through some type of publication, written model, conferences, workshops, and/or meetings, or purchasing the service to provide technical assistance from an outside agency.

The techniques identified by the states to increase information exchange included information processing, information dissemination, publication, workshops, conferences, and the development of a centralized system for information exchange. The centralized system included agency personnel, a clearinghouse of information, and the development of a data system.

The survey identified three basic means for disseminating models of linkages. The states disseminated model information through printed media, workshops, conferences, or meetings; conducted research on models; and conducted demonstration activities. The programmatic activity often included direct services to clients with project results disseminated throughout the state for possible replication.

Technical assistance to extend educational offerings was codified into four areas. Many states conducted research into the current utilization of programs, facilities, and equipment. Other states provided agency personnel support through technical assistance or disseminated information through workshops or printed media. Finally, several states conducted programmatic or administrative projects to extend educational offerings.

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Information, curriculum materials, and technical assistance in curriculum and staff development were provided through research, conferences, curriculum

development projects, staff development projects, or through technical assistance. Research was often conducted into programs currently offered throughout the state or into barriers existing in present systems. In-service or staff development projects were also used to assist CETA and educational personnel in effectively delivering services to clients.

The codification of the assistance in the development of assessment systems and educational attainment testing was the category least addressed by the states. While several states had developed model projects or regional assessment centers, other states conducted research into acceptable systems throughout the state and/or nation.

The methods used by the states to eliminate barriers in the educational system that hamper employment and training activities included research, staff support, program development, and information dissemination. Research was conducted regarding the issue of awarding academic credit and the concept of open-entry/open-exit curriculum systems. Many states indicated that such barriers had been eliminated.

The final category of jointly delivered programs included the codified activities of research, dissemination of information, initial communications with agencies, and jointly administered programs. It was pointed out that the governor's offices were often used to act as a liaison between the prime sponsors and the state apprenticeship programs.

HIGHLIGHTS OF YOUTH EMPLOYABILITY LINKAGES

Inasmuch as the original intent of the Section 202(d) funds was to help implement the 22 percent YETP set-aside, the data pool of Section 202(d) activities were scrutinized to identify highlights related to youth employability. This task produced a list of eighteen activities. Dollar expenditure figures or qualitative measures were not available for these specific activities.

1. Idaho produced a Youth Employment and Training Projects (YETP) Operations Manual on financial and nonfinancial agreements policies and procedures to be distributed to schools within the state.
2. Montana developed a brochure and slide series on the CETA Youth Employment and Training Program and on experience-based career education curriculum.
3. Maine held a statewide youth conference.
4. The Maryland State Department of Education was providing coordinators through their central office staff to provide services to CETA eligible youth.
5. Pennsylvania had a contract to integrate all computer facilities in Pennsylvania's educational system into one commonly supported network.

6. Massachusetts and Tennessee published a handbook and procedures manual respectively, identifying educational agencies and institutions and assessing capabilities for involvement in prime sponsor activities.
7. Wisconsin was specifically focusing research upon potential dropouts and was funding projects to review prevention programs.
8. Florida was developing a Computer Assisted Placement Service model program between CETA operators, private employers, and the Florida educational system.
9. Kentucky was making available expanded youth in-school programs plus summer youth funds to offer vocational exposure programs to high school youth who have not made an occupational choice or attended a vocational school.
10. Pennsylvania established a career education program for youth with a remedial skill training project for remedial reading and math skills.
11. Wisconsin proposed the funding of a joint interdistrict postsecondary vocational service to rural residents.
12. Texas was purchasing equipment for a newly constructed, jointly funded, training center.
13. Montana was purchasing career education resource materials that complement the strength of the experience-based career education curriculum provided to the state's school districts.
14. Minnesota was conducting an innovative reciprocal and employee transfer program that allowed employees of CETA and education to temporarily switch working environments for a limited time.
15. Georgia was providing instructional coordinators stationed at area vocational schools to work closely with sponsors on a regular or need basis.
16. Massachusetts was promoting the establishment of regional assessment centers for special needs youth, whether they are in-school or out of school.
17. Indiana was funding a vocational career information specialist who was trained in the operation of both the school and CETA programs and policies.
18. Wisconsin was funding a two-year project to research, pilot, revise, and adopt a policy governing the granting of advanced standing in courses.

Few conclusions can be reached concerning the value of Section 202(d) linkage activities for improving youth employability. Nonetheless, one should surely be intrigued by the shortness of a composite list of youth employability linkages.

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SUMMARY

This paper has addressed the notion of linkages between vocational education and CETA as a catalyst for improving youth employability training. The paper was organized into (a) the concept of linkage, (b) the current impact of linkage, (c) the identification of linkage activities, and (d) the highlights of youth employability linkages. The material presented was extracted from dissertation research conducted by the lead author.

Linkage as used within this paper is a concept that has grown out of CETA implementation strategies. The literature supports the premise that the concept is desirable and holds promise for reducing duplication of efforts and preventing the development of a dual delivery system for employment training. The concept has been put into operation with the aid of legislated mandates and earmarked funding.

A review of literature supported the idea that linkages are both facilitated and inhibited by various factors. At present the inhibiting factors seem to dominate the scene. Consistent with this perception, the Congress has followed a path of increased emphasis upon linkage. The most recent efforts have been under the aegis of Section 202(d) of CETA. This section mandated and funded specific linkage activities and made provisions for the governors of each state to administer the set-aside. A legislative trace and discussion with Congressional personnel revealed that the passage of this section was prompted by the need to implement the 22 percent YETP set-aside. The YETP set-aside promoted youth employability training.

A national survey was conducted to ascertain the extent, approaches, and practices used by states in implementing the linkage provisions as set forth in Section 202(d). The survey identified linkage activities. The results appeared consistent with the literature regarding the concept and impact of linkage efforts attempted in the past.

The activities were reviewed to identify highlights consistent with the youth employability thrust. This effort was made because of the explicit relationship between youth employability training and linkages. While qualitative conclusions could not be made, the scant nature of a composite listing of activities raises doubt as to whether the Section 202(d) linkage effort was congruent with the Congressional intent.

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INFORMATION AND THE EMPLOYMENT
SUCCESS OF YOUNG MEN

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INTRODUCTION

It has long been recognized that labor market information is important for young people entering the labor market. The federal government has been providing information since the early 1930s when it created the Employment Service to link unemployed workers with vacant jobs. As youth unemployment has become a more insistent problem, government efforts have expanded to include public school career counseling and placement programs, job interview and job search training programs through locally operated CETA programs, as well as support of nonprofit programs run by community organizations that help unemployed youths find work. Outside the public sector, numerous intermediaries including private employment agencies, newspaper want ads, and union hiring halls provide information and job matching services.

These programs are important for young people to the extent that they reduce the time and monetary costs of locating jobs. Labor market information networks can provide advantages to certain groups of young people. Job seekers who are "well connected" through friends and relatives have an advantage in the job search process because they have access to informal information about jobs. Job seekers who have the resources to register with private employment agencies have the advantage of greater access to formal information about jobs registered by employers with the agencies. This advantage arises because the more extensive and precise the information individuals have, the more likely they are to find jobs that are attractive to them and that fully utilize their skills.

The existing literature that deals with the relationship between labor market information and young people's success in the labor market falls into two categories. The theoretical literature, in the tradition of Stigler (1961, 1962), has focused on very abstract definitions of labor market information that could hardly be operationalized. On the other hand, in the interest of operationalizing labor market information, empirical work has employed such narrow definitions that the results lack general applicability. The empirical definitions have included, for example, information about occupational choices, information about a number of specific jobs, and general information about local labor market conditions. This paper is a study of the impact of labor market information on labor market success, using a definition of information that can be easily operationalized and that has general applicability. It is a middle road between the narrowly defined empirical literature and the more abstract theoretical literature. The measure of labor market information incorporates the range of information young people need when making decisions in the labor market.

LABOR MARKET INFORMATION

The hypothesized existence of a single construct of "labor market information" serves as a motivation for this study. However, it must be recognized that labor market information has several dimensions, each of which must be considered in measuring information: general/specific, extensive/intensive, and formal/informal. Together, these dimensions describe the kind of information young people need about the labor market.

Extensiveness refers to the number of job openings on which the information is available. Ideally, job seekers would like to know about every available vacancy in which they might be interested, and for which they could qualify. Extensive information is often acquired through formal channels such as employment services and newspaper want ads. Intensiveness relates to the characteristics on the job. The more detailed the information, the better for the job seeker. It is generally recognized that most intensive information comes through informal channels such as friends and relatives who know of available jobs in the plants and firms for which they work.

Information can also be viewed as falling along a general/specific dimension. The general dimension covers information about labor market conditions and occupational outlooks. The specific dimension covers both extensive and intensive information about specific jobs.

At the extensive margin, the score on a test of the knowledge of the world of work is included as an indicator of general information about occupational and educational requirements of a range of jobs.* An empirical investigation of a human capital model of information by Parnes and Kohen† found that this measure of occupational information is positively and significantly related to both hourly earnings and the occupational status of young black and white men. Similar results were found by Stevenson (1978) in a study of the same sample of young people.

As a measure of specific information, the search variable is included. This variable was constructed from responses to questions about plans following a hypothetical job loss. Much research to date has documented the fact that job seekers using informal search techniques are more successful at finding jobs. Most of these studies divide methods of finding jobs into formal and informal categories. The informal category includes personal contacts of any kind, as well as direct application to employers. In all of these studies, over 50 percent (and as many as 90 percent) of jobs are found through informal networks (Myers and Schultz 1951; Parnes 1954; Rees 1966; and Granovetter 1974). In a substantial number of cases, job changers did not even conduct a search, but rather were recommended to jobs for which they quit their current employment. A dummy variable is included, which takes on the

*It is important to note that substantial correlation exists between the knowledge of the world of work test, as measured, and IQ. Individuals with high scores on the test of KWW also tend to score high on IQ tests. As a matter of fact, Griliches (1976) has used the KWW score from the young men's sample of the National Longitudinal Survey as an alternative to IQ as a measure of ability. Griliches argues that the measure reflects both the quantity and quality of schooling, intelligence, and motivation (curiosity about the real world).

†In this study by Parnes and Kohen (1975), occupational information is measured by questions about the wage and educational requirements of selected occupations.

value 0 if the method of findings the current job was through formal channels, and 1 if through informal channels (friends and relatives primarily).

In making a distinction between formal and informal search techniques, it is also important to account for the "quality" of the individual's informal contacts. Socioeconomic status is included as a proxy for informal contacts, since it is expected that individuals with high socioeconomic status have contacts with better paying and higher status jobs.

THE MODEL

The labor market success of young men* between 1966 and 1971 is hypothesized to be a function of labor market information as well as the traditional human capital variables. Labor market success and labor market information cannot be directly measured or observed, although a number of variables can be used to measure various aspects of them. Therefore, a model is specified that relates general constructs (that are unobservable) to each other and then relates observable variables to the general constructs. Figure 1 illustrates the structural relationships in the model. Table 1 summarizes the relationships between these general constructs and observable variables. It is important to emphasize that this study focuses on the relative success of young men who are currently in the labor market, rather than on determinants of labor force participation or employment status.† Treatment of information as a determinant of participation decisions or of ability to obtain employment would certainly merit another study.

Labor market outcomes have been measured by wages.** However, it is reasonable to expect that young people trade off higher pay in order to get

*I limit my attention to males, since female career patterns are sufficiently different from those of males to make a separate study necessary.

†Implicit in the model is a self selection process that may result in biased estimates of the parameters. The problem is similar to Maddala's example of estimating returns to college education. Given income data on individuals, some of whom have college education and others who do not, it is important to take into account that those with a college education are those who chose to go to college and those without a college education are those who chose not to go. In the present model, a selection process operates when individuals choose whether to participate in the labor market, enroll in school, enter the military, or be unemployed. Similar problems have been considered by Heckman and others (Maddala 1971; Heckman 1979). Accounting for this problem substantially complicates the model, but will be taken into account in future research.

**See, for example: Gary Becker, Human Capital, 2nd ed. (New York: National Bureau for Economic Research, 1975); and Jacob Mincer, Schooling, Experience and Earnings (New York: National Bureau for Economic Research, 1974). A few studies, such as Herbert Parnes and Andrew Kohen, "Occupational Information and Labor Market Status: The Case of Young Men." Journal of Human Resources 10 (Winter 1975): 44-55, have looked at both wages and occupation.

FIGURE 1

STRUCTURAL RELATIONSHIPS

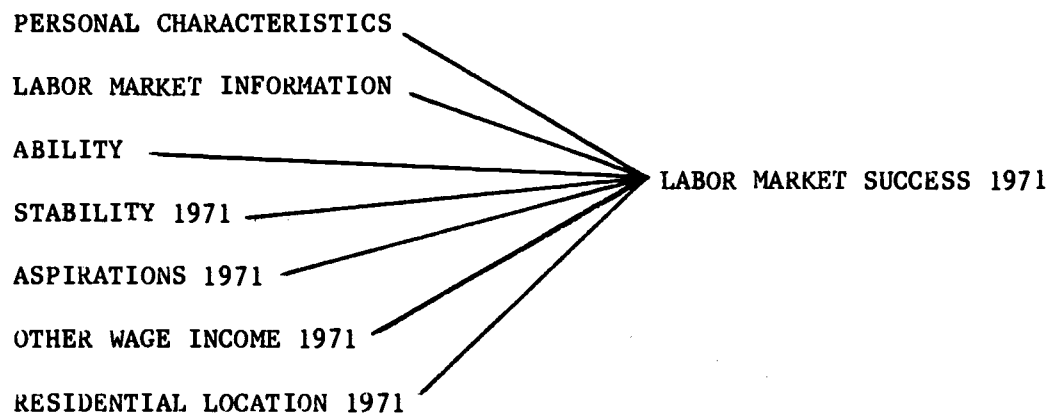
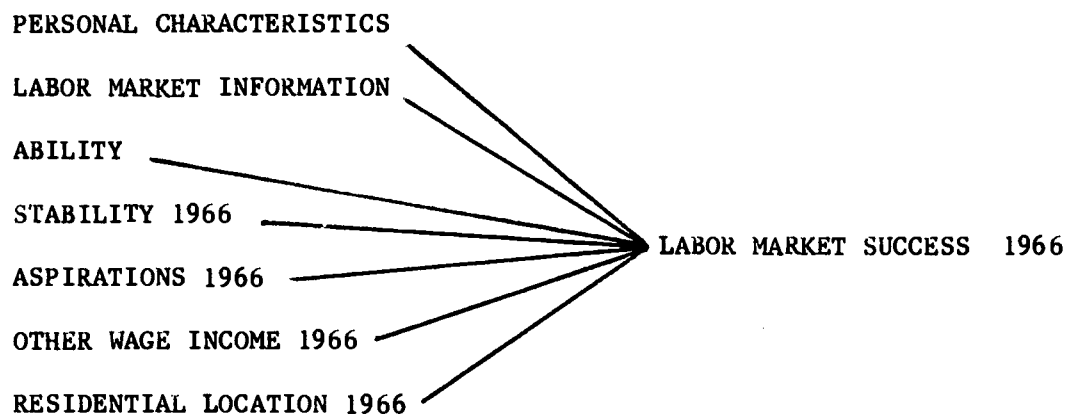


TABLE 1

OBSERVABLE INDICATORS OF GENERAL CONSTRUCTS

Observable Indicators	Aspirations	Personal characteristics	Ability	Labor market information	Other wage income	Location of residence	Stability	Labor market success
Attitude toward job	x							
Occupational goal	x							
Educational goal	x							
Motivation to work	x							
Commitment to work	x							
Age		x						
Race		x						
Health limits on work		x						
Socioeconomic status		x						
Years of school			x					
IQ			x					
Knowledge of work score				x				
Search				x				
Method of search				x				
Wife working					x			
Dual job					x			
Collective bargaining					x			
Region of residence						x		
SMSA status						x		
Unemployment rate						x		
Demand for male labor						x		
Marital status							x	
Dependents							x	
Household head							x	
Wage								x
Occupational status								x

NOTE: See the Appendix for definitions of the variables in the model

training that will allow even higher pay in the future. Therefore, in this study, labor market success is measured by two indicators: hourly wage and occupational status. Occupational status is measured by the Duncan Socio-economic Index of Occupations (Duncan 1961). The Index, computed from a linear combination of average educational attainment and average income of those working in certain occupations, ranks the "prestige" of occupations on a scale of 0 to 100. This index provides some indication of the future earnings potential of the respondents.

It is hypothesized that young men with greater ability will be more successful in the labor market. Ability has two indicators: IQ and years of schooling. Certain sociodemographic characteristics (personal characteristics and characteristics of the residence) are generally significant determinants of success. Personal characteristics included are age, race, socioeconomic status of the respondent's parental family, and a dummy variable that equals 1 if the respondent's health limits his ability to work.

Residential location includes residence in the North or the South, residence in or out of an SMSA, the local unemployment rate, and an index of the demand for male labor. An individual's aspirations can also be an important determinant of early labor market success. Aspirations are measured by an educational goal, an occupational goal, the attitude toward the job, the motivation or commitment to work, and by a score on a test of the individual's feelings of control over his destiny (Rotter Scale score) to indicate confidence in his ability to increase his success in the labor market.

Other sources of wage income may relieve pressures to obtain high paying jobs. Responsibilities to support others may increase pressures to succeed, at least financially. Other wage income includes two dummy variables: one indicates if the respondent's wife works, the other if the respondent holds a second job. Also included in 1971 is whether the respondent's primary job is covered by collective bargaining, since this is likely to improve wages. Finally, the home responsibility factor is measured by marital status, whether the respondent is the household head, and the number of dependents (excluding the wife) the respondent has.

SAMPLE POPULATION AND DATA

The data utilized are a subsample of the National Longitudinal Survey of the labor market experience of young men in the United States. Only respondents eighteen to twenty-four years of age in 1966, who were working in both 1966 and 1971 and who reported earnings, are included in the sample. The sample consists of 825 individuals of the 5,225 in the initial 1966 sample. Table 2 presents some summary statistics for the sample population.

ESTIMATION

For estimation purposes, the model was specified as a two-equation system: one equation for each dependent variable that measures market

TABLE 2
SUMMARY STATISTICS FOR NLS SUBSAMPLE
(N=825)

VARIABLE	MEAN	STANDARD DEVIATION
Wage 1966	2.214	0.916
Occupational status 1966	31.721	21.221
Attitude toward job 1966	1.606	0.549
Occupational goal 1966	55.921	23.369
Educational goal 1966	14.462	2.624
Motivation to work 1966	1.189	0.417
Age	20.799	2.109
Race	0.138	0.345
Health 1966	0.103	0.301
Socioeconomic status	106.816	19.758
Years of school 1966	12.665	1.765
IQ	101.543	14.969
Knowledge of the world of work	38.390	6.951
Search	1.134	0.819
Method of search	0.299	0.458
Rotter Scale score	21.585	4.407
Wife working 1966	0.147	0.354
Dual job holder 1966	0.055	0.135
SMSA status 1966	0.284	0.451
Unemployment rate 1966	5.768	2.076
Index of demand for male labor 1966	1.412	0.493
Marital status 1966	0.358	0.479
Number of dependents 1966	0.805	0.617
Household head 1966	1.390	0.488
Region of residence 1966	0.321	0.467

NOTE: See the Appendix for definitions of these variables

TABLE 2--Continued

SUMMARY STATISTICS FOR NLS SUBSAMPLE

VARIABLE	MEAN	STANDARD DEVIATION
Attitude toward job 1971	1.673	0.692
Educational goal 1971	14.805	2.379
Commitment to work 1971	1.206	0.483
Occupational goal 1971	52.664	22.429
Year last enrolled 1971	65.195	3.436
Years of schooling 1971	13.474	2.272
Wife working 1971	0.320	0.467
Dual job holder 1971	0.072	0.249
Collective bargaining 1971	0.338	0.459
Region of residence 1971	0.305	0.461
SMSA status 1971	0.223	0.417
Unemployment rate 1971	5.697	2.051
Marital status 1971	0.729	0.444
Household head 1971	0.841	0.366
Number of dependents 1971	1.064	1.135
Wage 1971	4.178	1.683
Occupational status 1971	45.888	25.117

success, a wage equation and an occupational status equation.* Ordinary least squares was first applied to each equation. The results appear below for the wage and occupational status equations for both 1966 (table 3) and 1971 (table 4). Equation A explains 26 percent of the variance in $\ln(\text{wage})$ of the respondents in 1966. None of the labor market information measures included in the equation significantly explained wages in 1966. In addition to the information variables, it is interesting to note some of the other results of this estimation. As expected, older respondents have significantly higher wages, as do married respondents. Respondents whose motivation to work is good wages or a combination of good wages and liking work, rather than simply liking work, are significantly more likely to have higher wages. Surprisingly, respondents from labor market areas with high demand for male labor are significantly more likely to have lower wages than those from areas with low demand. This may be reflecting the comparative low cost of living and, therefore, lower wages in the South, in which the high growth areas in 1966 were located. Respondents from the North and those living in SMSAs are likely to have higher wages.

Turning to the occupational status equation for 1966, 32 percent of the variance in the status score is explained. Of the measures of labor market information, only method of search was found to be significant. Respondents using informal search techniques had significantly higher occupational status than those using formal channels. This suggests that young people with good "grapevines" get better jobs than those who must resort to formal search processes.

Those whose attitude toward work is more positive (who like work very much) and who have high occupational goals tend to have high occupational status. Higher occupational status comes with age, IQ, and schooling. Finally, young whites tend to have higher status jobs than young blacks, as do those who live in SMSAs.

The ordinary least squares equations for 1971 reveal quite different results. The score on the test of occupational information, administered in 1969, is now a significant determinant of both wages and occupational status. Age and race are still both important determinants of wages and occupational status. Marriage is a significant determinant of high occupational status, as is IQ. Respondents whose families have high socioeconomic status also tend to have higher wages. Positive work attitudes and high occupational goals contribute to both increased wages and occupational status. Years of schooling also contribute to both wage and occupational status. A high educational goal is a significant determinant of low wages for the young respondents in the sample. This may be reflecting young people who are working to finance further schooling. Household heads tend to have both higher wages and occupational status. Workers covered under collective bargaining agreements have

*The structural model could be estimated using LISREL (see Joreskog 1973, 1977) or a similar technique that allows for the presence of unobservable or latent variables in the model. However, preliminary estimation indicated that because of the size of the model, convergence would not be possible within the existing computer budget.

TABLE 3
 ORDINARY LEAST SQUARES ESTIMATES
 (1966)
 (regression coefficients and t-statistics)

Explanatory Variable	Eq. A Hourly Wage 1966	Eq. B Occupational Status 1966
Attitude toward work	-0.0318 (-1.2753)	-5.9599 ^a (-5.0684)
Occupation desired	-0.0002 (-0.2277)	0.1504 ^a (4.4635)
Educational goal	-0.0032 (-0.3767)	-0.2164 (-0.5363)
Motivation to work	0.0941 ^a (2.8732)	0.4230 (0.2722)
Age	0.0542 ^a (6.6506)	2.3145 ^a (6.0154)
Race	-0.0779 ^a (-1.7550)	-3.7584 ^c (-1.7856)
Health limits	-0.0655 (-1.4781)	-2.5378 (-1.2144)
Socioeconomic status	-0.0005 (-0.5393)	0.0227 (0.5726)
Years of schooling	0.0071 (0.5598)	2.7382 ^a (4.5857)
IQ	0.0010 (0.8702)	0.1167 ^b (2.1118)
Knowledge of the world of work	0.0017 (0.7048)	0.0700 (0.6071)
Rotter Scale score	0.0031 (1.0083)	-0.0668 (-0.4643)
Wife working	-0.0665 (-1.4047)	0.8899 (0.3974)
Dual job holder	-0.1146 (-1.1951)	-3.1488 (-0.6770)
Region of residence	-0.1634 ^a (-5.0233)	0.2842 (0.1851)
SMSA status	-0.0562 ^c (-1.6913)	-4.6628 ^a (-2.9686)
Census unemployment rate	0.0095 (1.3972)	-0.5183 (-1.6106)
Demand for male labor	-0.1063 ^a (-3.3950)	0.3839 (0.2596)

TABLE 3--Continued

ORDINARY LEAST SQUARES ESTIMATES
(1966)

Explanatory Variable	Eq. A	Eq. B
	Hourly Wage 1966	Occupational Status 1966
Marital status	0.1331 ^b (2.2954)	0.8247 (0.3011)
Number of dependents	-0.0268 (-1.1114)	-1.4439 (-1.2711)
Household head	0.0550 (1.0136)	0.8212 (0.3211)
Method of search	-0.0403 (-1.3913)	3.9239 ^a (2.8614)
Search	-0.0011 (-0.0682)	0.1629 (0.2110)
INTERCEPT	-0.5958 ^a (-2.7024)	-59.9684 ^a (-5.7520)
N	825	825
R ²	0.2655	0.3198
F	12.70	16.38

^asignificant at the .99 level

^bsignificant at the .95 level

^csignificant at the .90 level

TABLE 4
ORDINARY LEAST SQUARES ESTIMATES
(1971)

Explanatory Variable	Eq. C Hourly Wage 1971	Eq. D Occupational Status 1971
Attitude toward work	-0.0400 ^b (-2.2063)	-3.6499 ^a (-4.3450)
Education goal	-0.0242 ^a (-2.7524)	-0.2090 (-0.5131)
Commitment to work	0.0327 (1.2745)	-0.1747 (-0.1465)
Occupation desired	0.0015 ^b (2.1994)	0.4538 ^a (14.0137)
Year last enrolled	-0.0020 (-0.4041)	0.5442 ^b (2.3094)
Years of school	0.0292 ^a (2.8024)	2.4645 ^a (5.1082)
Wife workings	-0.0418 (-1.3310)	-1.8817 (-1.2895)
Dual job holder	-0.0751 (-1.5053)	-3.9555 ^c (-1.7103)
Collective bargaining	0.1652 ^a (5.8753)	-7.6015 ^a (-5.8232)
Region of residence	-0.1096 ^a (-3.6214)	-0.5978 (-0.4256)
SMSA status	-0.1126 ^a (-3.5462)	2.1474 (1.4595)
Census unemployment rate	-0.0078 (-1.2039)	-0.7248 ^b (-2.4096)
Marital status	0.0619 (1.4682)	3.8262 ^c (1.9579)
Household head	0.1331 ^a (3.0261)	4.2425 ^b (2.0834)
Number of dependents	0.0169 (1.2102)	-0.1542 (-0.2371)
Age	0.0242 ^a (3.2742)	1.2255 ^a (3.5833)
Race	-0.0927 ^b (-2.2603)	-4.0387 ^b (-2.1201)
Knowledge of the world of work	0.0041 ^c (1.8247)	0.3655 ^a (3.5270)

TABLE 4--Continued
 ORDINARY LEAST SQUARES ESTIMATES
 (1971)

Explanatory Variable	Eq. C	Eq. D
	Hourly Wage 1971	Occupational Status 1971
Socioeconomic status	0.0023 ^a (2.9705)	-0.0027 (-0.0745)
IQ	-0.0004 (-0.4117)	0.1329 ^a (2.5971)
Search	-0.0205 (-1.3593)	0.4659 (0.6640)
Method of search	0.0056 (0.2081)	1.9282 (1.5458)
INTERCEPT	0.4621 (1.1674)	-89.4749 ^a (-4.8813)
N	825	825
R ²	0.2518	0.5941
F	12.38	53.36

^asignificant at the .99 level
^bsignificant at the .95 level
^csignificant at the .90 level

higher wages and occupational status, while those who hold two jobs tend to have lower status. Finally, location in the North and in an SMSA implies higher wages, whereas low unemployment rates imply higher occupational status.

These equations lead to substantially different conclusions for the role of information* in the short- and long-term employment success of young men. Informal search methods were significant correlates of occupational status in 1966. Five years later, general occupational information played a more important role for both higher occupational status and wages of these same young men.

The equations were also estimated using Zellner's (1962) seemingly unrelated regressions technique (Zellner 1962) to account for the covariance across the models that occurs since young people are likely to be trading off wages for occupational status at this early stage in their careers. This estimation led to substantially the same estimated coefficients and to the same conclusions as did the ordinary least squares technique. It is likely that because the Duncan Socioeconomic Index of Occupations is based partially upon average incomes within occupations, the trade-off is picked up by this variable. A measure of occupational status, not based so heavily upon income, would be necessary for this purpose.

CONCLUSIONS

This study provides empirical support for the hypothesis that labor market information is an important determinant of both wage and occupational employment success for young employed men.[†] Estimation for 1966 and 1971 indicate differential importance of the components of labor market information in earlier and later stages of young men's employment experience. In 1966, informal search techniques were positively related to higher occupational status. Five years later, high performance on a test of general occupational information was a significant correlate of success.

In a time of substantial funding cutbacks in the area of employment and training, emphasis is being placed on developing programs that efficiently utilize resources to aid the largest number of young people. The results of this study imply a twofold policy. Immediate employment success depends in

*The search variable performed rather poorly in all the equations. It is possible that young people who have held many jobs (due to quits, layoffs, or firings) have more experience in job search and are, therefore, better able to answer questions about plans following a hypothetical job loss. In these cases, a positive response to the search questions may be correlated with poor performance in the labor market. Therefore, responses by these young people may offset responses by young people who have more stable work histories and who are knowledgeable about the labor market.

[†]Tentative results of research in progress (by the author) indicate that these results also hold when unemployed young men are included in the analysis.

part on the development of good job search skills. The longer-term success is more closely related to extensive information about occupational requirements and opportunities in the labor market. Existing programs in schools such as career counseling and vocational education, as well as job search training programs under CETA, should be expanded to reach the maximum number of young people. Where these existing programs do not meet the informational needs of young people, substantial effort should be made to develop strong career counseling and job training components.

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APPENDIX

This appendix describes the variables used from the National Longitudinal Survey. For ease of presentation, they are grouped by general concept.

Labor Market Information

Knowledge of the World of Work Test Score: a test of the knowledge of educational and wage requirements of ten representative occupations; used as a proxy for general occupational information

Search: variable constructed from a series of questions regarding plans if the respondent lost the current job; used as a proxy for job-specific information

Method of Search: dummy variable, which equals 1 if respondent's current job was found through informal channels and 0 if through formal channels

Socioeconomic Status: socioeconomic status of parental family, used as an indicator of the extent of personal contacts; it is expected that low socioeconomic status respondents will have poorer informal contacts than high SES respondents

Labor Market Success

Wage: hourly wage on current job

Occupational Status: Duncan index of occupational status

Personal Characteristics

Age: age in 1966

Race: 0 if white, 1 if black

Health Limits: dummy variable, 1 if health limits the ability to work

Socioeconomic Status: socioeconomic status of respondent's parental family

Ability

Years of Schooling: years of schooling completed

IQ: "IQ" variable constructed from scores on standardized tests

Aspirations

Attitude Toward Current Job: scaled response to questions concerning how much respondent likes the current job

Occupation Desired at 30: Duncan index score for occupation respondent desires at 30

Educational Goal: years of schooling respondent would like to complete

Commitment to Work: 1 if respondent works because of the good wages, 2 if the respondent works because he likes it

Motivation to Work: response to question concerning why respondent works (e.g., to make money, relieve boredom)

Some of these measures are only available in one year. Adjustments in estimation are made

Location

Region of Residence: 0 if North, 1 if South

SMSA Status: 0 in SMSA, 1 if non-SMSA

Other Wage Income

Wife Working: dummy variable, 1 if wife works

Dual Job Holder: 1 if respondent holds a second job

Collective Bargaining: 1 if current job is covered by collective bargaining

Stability

Marital Status: 1 if married

Number of Dependents: actual number of dependents (excluding wife)

Household Head: 1 if respondent is head of household

NOTICE OF ANNUAL COMPETITION

An annual competition has been established as a strategy for identifying future leaders in research. Graduate students, with the support of their major advisors, are invited to submit scholarly, publishable papers on selected issues in education and work. The competition provides an incentive for scholarly publication and enhances opportunities for recognition of superior graduate students. The finalists in the competition receive an honorarium and have their papers printed in a collection of papers as a monograph.

The objectives of the competition are:

- To provide graduate students with incentives for scholarly writing.
- To promote advanced thinking concerning education in the home, community, and work.
- To present this advanced thinking to the professional community.

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