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ABSTRACT

Data are analyzed to examine systematically different configurations of work education by means of a typology in three dimensions: educational level, primary program purpose, and industrial setting. A stratified random sample of 50 work education sites was drawn to determine the degree to which different types of programs are meeting their intended objectives. Separate interview questionnaires were used for program administrators, participating and nonparticipating employers, and participating and nonparticipating unions. Based on findings of the data analysis, eleven policy recommendations are described. Appendixes present cross tabulations by student groups and the interview questionnaires. (MS)

SYSTEM DEVELOPMENT CORPORATION

DATA ANALYSIS REPORT AN ASSESSMENT OF SCHOOL-SUPERVISED WORK EDUCATION PROGRAMS

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14 SEPTEMBER 1973

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LIST OF PROJECT PUBLICATIONS

Banta, Trudy, Steven Frankel, Sylva Bowlby, and Cleone Geddes. A Topical Bibliography of Work Education Programs, Projects and Procedures. System Development Corporation, Santa Monica, Ca., 1973, 124 p. (Technical Memorandum-5086/000/00)

Cohen, Alan, and Steven Frankel. Data Analysis Report, An Assessment of School-Supervised Work Education Programs. System Development Corporation, Santa Monica, Ca., 1973, 270 p. (Technical Memorandum-5195/001/00)

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I. INTRODUCTION

A. BACKGROUND OF STUDY

This document is the data analysis report for the study "An Assessment of School-Supervised Work Education Programs," which was conducted by System Development Corporation for the Office of Planning, Budgeting, and Evaluation of the U.S. Office of Education. The objectives of the study were to examine the different configurations of work education programs which currently exist in the United States, to determine the degree that different types of programs are meeting their intended objectives, and to suggest ways in which different types of programs might be modified or expanded.

In order to examine the different configurations of work education systematically, a three dimensional typology was adopted by the project staff and advisory committee. The typology was structured around what were felt to be the three most relevant variables which were educational level, primary purpose and industrial setting.

To determine the degree that different types of programs are meeting their intended objectives, a stratified random sample of 50 work education sites was drawn from a set of 500 representative programs using the three dimensions of the typology as the basis for stratification.

Specific occupational training programs are usually referred to as cooperative education programs. Under this type of plan, students enrolled in vocational education classes hold down a job related to their training field and work at that job part time. Cooperative programs generally are headed by a coordinator who serves as a vocational teacher and/or guidance counselor as well. In some cases, there are written training agreements in cooperative programs which spell out the responsibilities for the student, the school, and the employer, and in many cases students receive academic credit for the time spent at work. For purposes of analysis, the Job Corps programs in our

sample were included in this category, since their coordinators considered specific occupational training to be their primary purpose.

Dropout prevention programs usually function by providing students with supplemental income which either permits or induces them to remain in school. Programs such as Neighborhood Youth Corps (NYC) In-School allow dropout-prone youth to earn pocket money if they remain in school, and the Federal Work-Study Program allows vocational education students to hold down part-time jobs to help finance their education.

Career exploration programs were defined for this study as those in which students are given the chance to explore different vocational opportunities by observing workers of different types as they go about their work and by actually performing tasks for pay on different types of jobs.

The Work Experience Career Exploration Programs (WECEP), funded under Federal guidelines as an experimental project for 14 and 15 year olds, included in our study were classified in the typology under dropout prevention rather than career exploration, since they are essentially the same as NYC and Work-Study except for the fact that they serve students under 16 years of age.

B. SAMPLE CHARACTERISTICS

The sample under study consists of 50 different work education programs located throughout the United States. These 50 programs were selected from a larger set of approximately 500 such programs using a stratified random sampling procedure that was designed to ensure representation of programs of every type in terms of the three separate dimensions of the study's typology. The breakdown of the final sample in terms of these three dimensions was:

Educational Level

- 36 secondary programs
- 14 postsecondary programs

Primary Program Purpose

- 30 occupational training programs
- 14 dropout prevention programs
- 6 career exploration programs

Industrial Setting

- 15 programs in farming regions
- 11 programs in bedroom communities
- 9 programs in single industry areas
- 15 programs in major industrial/business centers

A complete description of how the original list of 500 programs was developed and the details of the sampling rules used to select the specific 50 programs used in this analysis can be found in this project's Selection Procedures Report, System Development Corporation Technical Memorandum-5061/000/00. For each of these 50 programs data were collected from: The program administrator(s); participating students, a sample of approximately 20 students participating in the work education program; nonparticipating students, a sample of roughly the

same number of students who were in the same school but who were not participating in a work education program; participating employers, about four employers who were participating in the work education program under study; and nonparticipating employers, two employers who were not participating in the program. The details of the procedures used to select the two student and two employer samples are more thoroughly discussed in the Replication Handbook, System Development Corporation Technical Memorandum-5195/002/00. It was intended to analyze data from samples of unions, participating and nonparticipating, at some of these program sites. The very small number of eligible unions which could be located precluded the possibility of any statistical analysis. Therefore, only a brief description of the union data will be included in this report.

C. INSTRUMENTS

For each of the seven groups being studied, a separate questionnaire was developed.

The program administrator questionnaire was designed to collect a large body of information detailing the program's organizational structure and operational features, including its provisions for the students, the instructional environments at school and at the job site, the support given by the employers, and various components of the potential areas of program success.

The participating and nonparticipating student groups were given separate questionnaires, although a very large proportion of the items on each was similar or identical. The variables that were measured in these student instruments included student background characteristics, characteristics of the student's job, his attitudes toward his job, the student's perceptions of program characteristics, and his attitudes toward school and the work education program.

The participating employer questionnaire measured the structural characteristics of the company, the nature of the on-the-job training, some of the characteristics of the students, the level of student performance, economic factors involved in the hiring of work education students, the extent of the employer's involvement with the work education program, and his evaluation of the work education program.

The nonparticipating employers were given a brief questionnaire that tapped some of the structural characteristics of the company and both the manifest reasons and underlying factors for their lack of participation in the work education program.

Participating and nonparticipating union questionnaires were aimed at determining the unions' perception of work education programs, their opinions of student workers, reasons for participating or not participating in work education programs, and the structure of ongoing union apprenticeship programs.

D. METHODS OF ADMINISTRATION

In-depth interview sessions, following the appropriate interview schedule as described above, were held with the program administrator and each of the participating and nonparticipating employers.

The project administrator interview was held under the direction of the team leader with both members of the project interview team present. This interview session typically lasted 2 hours.

Employer interviews were usually conducted by the team leader. The participating employer interview generally took between 45 minutes and 1 hour. The non-participating employer interview session lasted 20-30 minutes.

Student interviews were conducted in group sessions by the one member of the interview team who had been specifically selected for his ability at developing good rapport with youth. The interviewer read each question to the entire group of students and worked individually with those requiring assistance. To elicit candor, students were assured that no one, other than persons coding the forms for computer processing, would ever see an individual student's answers. Further, no members of the work education program's staff, including classroom teachers, were allowed in the room while the questionnaire was being administered to the students (although on several occasions this did create problems with the program staff necessitating great tact from the interview team to restore good rapport). These interview sessions generally lasted from 30-40 minutes, with up to 35 students being interviewed at one time.

Union interviews were administered under conditions similar to those of the employer interviews.

E. TECHNICAL NOTE

Throughout this document, the empirical findings of this study are displayed by means of contingency tables. These tables were generated on an IBM 360/91 computer[1] using the Statistical Package for the Social Sciences (SPSS). To guide readers unfamiliar with this analysis technique, Figure I-1 on the following page explains how the numbers in a contingency table should be interpreted.

[1]Computing assistance was obtained from the Health Sciences computing facility, UCLA, sponsored by NIH Special Research Resources Grant RR-3.

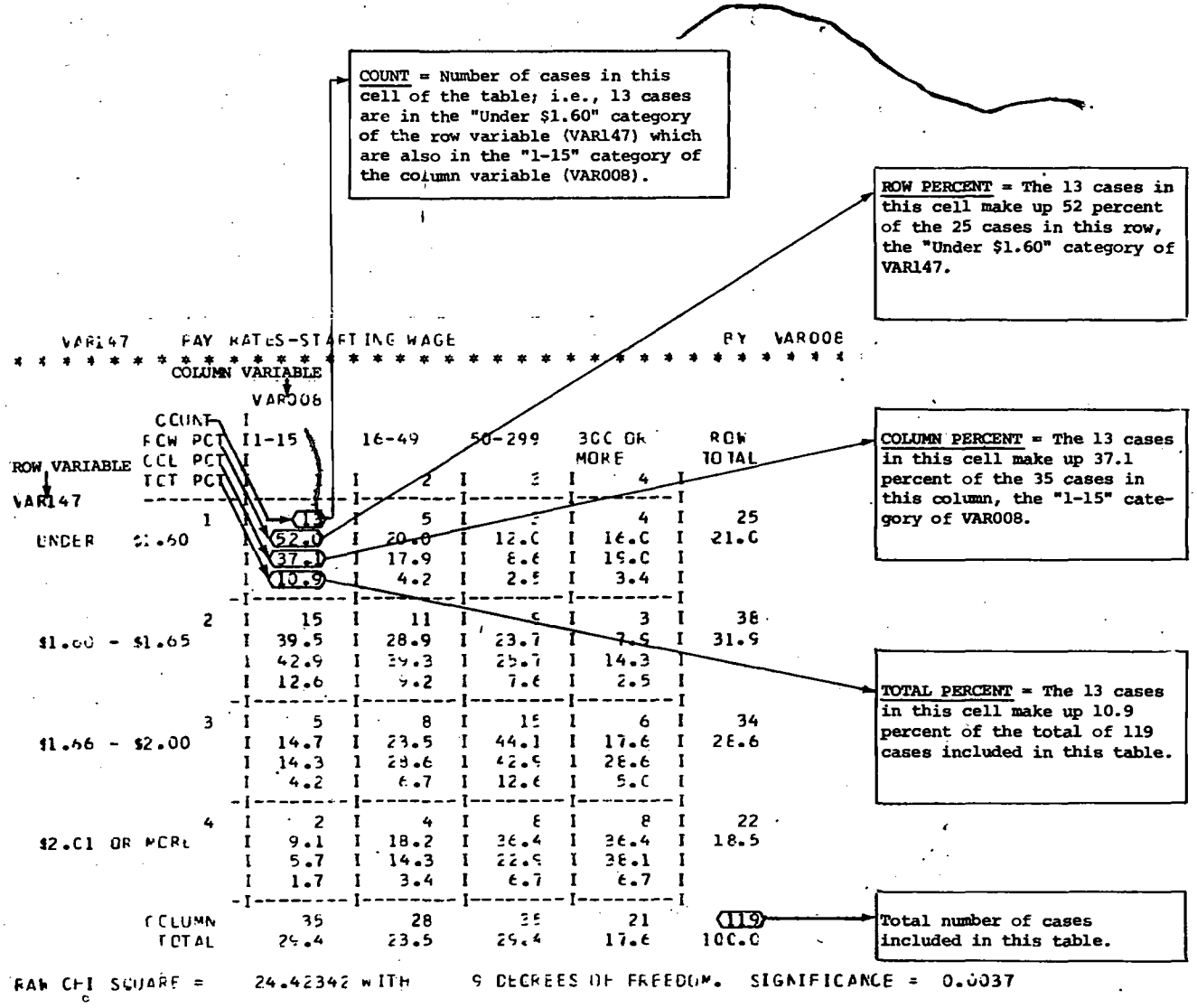


Table xxx Starting Wage by Company

Figure I-1. How to Interpret the Numbers in a Contingency Table

II. STUDENT DATA ANALYSIS

A. OVERALL CHARACTERISTICS

1. Participating Students

a. Background Characteristics

Our sample of students participating in work education programs contains about 70 percent secondary students and 30 percent postsecondary students. Among the secondary students slightly over half are high school seniors. The postsecondary students are about evenly divided between first and second year students. Of the total sample of 1016 students about 68 percent are of other ethnic backgrounds. Male and female students are equally represented.

A complete set of frequency distributions for the participating student sample, as well as a comparison with the corresponding data for the working nonparticipating student sample is given in Tables A-1 to A-94 in Appendix A. A discussion of the more important items in the nonparticipating student data base is given in the next section of this report.

b. Program Types

The work education programs in which these students participated were classified into five types on the basis of educational level and primary purpose. Approximately 34 percent of the students were in secondary level programs whose primary purpose was training in specific occupations; 21 percent of the students were in secondary dropout prevention programs; 11 percent were in secondary programs whose major purpose was career exploration; 29 percent were in postsecondary specific occupational training programs; and 5 percent were in postsecondary dropout prevention programs.

c. Reasons for Joining a Work Education Program

The major reason students joined the work education program was for job training. Over half stated that the main reason they joined the program was either for training for a job or wanting to sample occupations. Only a quarter of the students joined because they needed work for pay. The reason students joined the programs varied according to the type of program in which they were participating. This, and other similar interrelationships, will be discussed in Section C below, which details the empirical findings related to our analysis model.

d. Student Job Types

We found that one-fifth held jobs in the professional category, one-fifth were in blue collar jobs, one-fifth had jobs in service occupations, one-tenth had sales jobs, and 30 percent of the students held jobs that were in the clerical classification.

e. Pay

The average pay the students are presently receiving for these jobs is $1.87 an hour. The average starting pay was $1.76 an hour. (The median length of time students had been working in the program was 6 months.) For purposes of analysis the students' hourly pay rates were divided into five categories. These were distributed as follows: 15 percent of the students were making under $1.60 an hour (below minimum wage); 30 percent were making between $1.60 and $1.65 (minimum wage levels); about 32 percent were earning between $1.66 and $2 an hour; just under 20 percent earned between $2 and $3 an hour; and slightly over 3 percent were making more than $3 an hour.

f. Career Plans and Preparation

The students were asked a number of questions exploring some of the links between the program, the students' jobs, and their career plans. Seventy

percent of the students responded that the work education program had helped them to decide on an occupation. In terms of the relation between their work and their classwork, one-third of the students felt they were very closely related, one-third felt they were somewhat closely related, and the final third felt they were not at all related. While two-thirds did indicate a link between work and classwork, they also indicated classwork was not the primary source for learning the skills needed on the job. Sixty-six percent said they learned the most of the required skills on the job, and 23 percent of the students said they learned the needed job skills at school. The rest of the students (11 percent) said they had learned their job skills elsewhere, usually at home. The correspondence between the job the student held in the program and his long-range career plans was rated as very good by 36 percent of the students and as moderately good by 39 percent of the students. The remaining quarter felt their present job did not fit in at all with their career plans.

g. Job Responsibility

A job responsibility score was computed from a subset of 34 questions students were asked about their jobs. Eleven of those items were used to indicate the degree of responsibility the student was given in his job, and these were combined into a single score. Examples of these items include: "Do you sometimes take over a job for an adult who isn't there?"; "Can you do your job without thinking?"; "Do you learn something new most days on your job?". The score was derived by computing the percentage of a student's total responses that indiciated he was given some responsibility in his job. Thus, the score could range from 0 to 100, and the mean responsibility score for the sample was 58.1. This variable was used in the analysis as a major intervening variable, as described in Section II.B of this report, "Description of Analysis Model."

h. Satisfaction Measures

Three major dependent variables were used to measure various components of the

students' satisfaction with the work education programs. One of these questions was whether or not the student felt he would recommend that a friend enter his work education program. Ninety-four percent of the students responded that they would recommend their program. While this response precluded the use of this variable as a dependent measure of the varying degrees of student satisfaction, it is an extremely interesting and important finding that there is such a uniform and strong student satisfaction with the overall work education program. However, the other two variables, which measure more specialized aspects of the students' satisfaction with the programs, have much more balanced distributions and can differentiate the sample into groups with varying degrees of satisfaction. The first of these is related to the school component of the program; the other relates to the work component of the programs.

(1) School Satisfaction. Students were asked if they liked school better, worse, or the same after joining the program. Only 5 percent of the students liked school better before they joined the program. The remainder divide evenly between those who like school better since joining the program and those who reflect no difference in their attitude.

(2) Job Satisfaction. Students were asked a series of 34 questions about the characteristics of their job and their attitudes toward it. Sixteen of these items relating directly to the student's satisfaction with his job were combined into a single job satisfaction score. The following are three examples of the specific items used (the complete set of 16 is included in Appendix B): "Would you do this job as a volunteer?"; "Do you often wish you didn't have to go to work?"; and "Does your boss tell you when you do a good job?". The score was derived by computing the percentage of a student's total responses that indicated satisfaction with his job. Thus the score could range from 0 to 100, and the mean score for the total sample of participating students was 66.7.

2. Nonparticipating Students

We compared the participating students' data to that of the nonparticipating student sample. Both sets of students were asked a large number of identical questions concerning their background and school experiences. If the nonparticipating student was working or had worked in the past 12 months, he was also asked the same questions about his job in the program. Comparison on the first set of corresponding data items (background and school experience) enabled us to determine if program enrollees differed significantly on these characteristics from students not in the program, thus indicating that a process of self-selection was at work, and/or that most programs have a common set of unofficial selection criteria. Comparisons on the second set of corresponding data items (about students' jobs) allowed us to discover if the jobs of participating students are significantly different from the types of jobs nonparticipating students typically find. For example, are the participating students' jobs more closely related to their career interests, more closely linked to their classwork, or, by various criteria, better jobs? To make these comparisons we used the chi-square test, and for ordinal (rank-order) data, we also employed an appropriate statistical measure of association, such as Somer's d or Kendall's tau.

Since a primary focus of this study was the student's work, and at least half of the items comprising the student data base dealt with the student's job, the analysis of nonparticipating students was restricted to those who were presently working or who had worked within the past year. While this reduced the comparison group from 975 to 641, it added far more relevance to the comparison process.

a. Background Characteristics

The above restriction leads to a somewhat different distribution of background characteristics for the nonparticipating sample than for the participating students. For example, there are fewer nonwhites (19 percent, as opposed to

32 percent among participating students) and fewer females (40 percent, compared to 50 percent of the participating student sample that is female). Since, from general sociological knowledge, we expect a smaller proportion of these groups to be working than of Whites and males, this finding is not surprising and will not have any biasing influence on our results. The two groups of students are quite similar in age and have almost identical distributions of school grades.

b. Reasons for Working

In terms of the structural and attitudinal independent and dependent variables, there are a number of striking and interesting differences between the participating and nonparticipating students. As noted earlier, students in the programs were more likely to join work education programs for job training than for pay. The nonparticipating students showed the opposite tendency. Twenty-five percent of the participating students joined for pay while 75 percent of the nonparticipating students listed pay as their prime motivation. While this is not at all unexpected, it is interesting that, given this fact, the nonparticipating students are not any better paid than the participating students.

c. Student Jobs

The types of jobs the two groups of students have are quite different. The nonparticipating students are heavily represented in the blue collar and service occupations classifications and have significantly fewer in the professional and clerical categories.

d. Pay

The overall pay rates for nonparticipating students are similar to those of the participating students. The average pay for nonparticipating students was $1.85 an hour (as compared to $1.87 for students participating in work education programs).

e. Career Plans and Preparations

In terms of this set of variables, the nonparticipating students again are generally quite different from the participating students. They are much less likely to have classwork that is related to their work or to have a job that fits in with their career plans.

f. Job Responsibility

The nonparticipating students generally rate their jobs as lower in level of responsibility than do the participating students. The mean responsibility score for nonparticipating students was 53.9, as compared to an average responsibility score of 58.1 for students participating in work education programs.

g. Satisfaction Measures

(1) School Satisfaction. The jobs of the nonparticipating students have made much less impact on their satisfaction with school than the program has for participating students. While half of the participating students like school better now that they are in the program than they did before, only 15 percent of the nonparticipating students like school better since they got their jobs.

(2) Job Satisfaction. The nonparticipating students are only slightly less satisfied with their jobs than are the participating students. Their average job satisfaction score was 64.3, while that of the participating students was 66.7. While we do not have the data to clearly test it, it is our tentative hypothesis that the nonparticipating students have more limited expectations (their goals are primarily financial), thus explaining why they are almost equally satisfied with what appear to be, overall, less satisfying jobs.

B. DESCRIPTION OF STUDENT ANALYSIS MODEL

Two basic types of analyses are used to relate predictor variables and outcome measures. First, individual predictor items are related to outcome measures by means of crosstabulation, and tested for statistical significance and strength of association with the chi-square statistic and the appropriate measure for the strength of association (phi or contingency coefficient for nominal variables and gamma, tau or Somer's d for ordinal variables). The second mode of analysis explores what combinations of the independent variables can constitute even more powerful predictors of the outcome measures of program success.

The predictor variables in the participating student data base have been further subdivided into two groups: Independent variables and intervening variables. Intervening variables are those which can be treated as independent variables when related to the dependent outcome measures of student satisfaction; but, in relation to the other independent variables, they can be considered as casually dependent. Thus in the analysis they will be treated in both ways--as independent predictors of the outcome variables and as dependent variables of other independent variables. The complete set of independent, intervening, and dependent variables is illustrated in Figure II-1. Instructions for interpreting Figure II-1, and similar tables, are given in the next section, II-C, Empirical Findings.

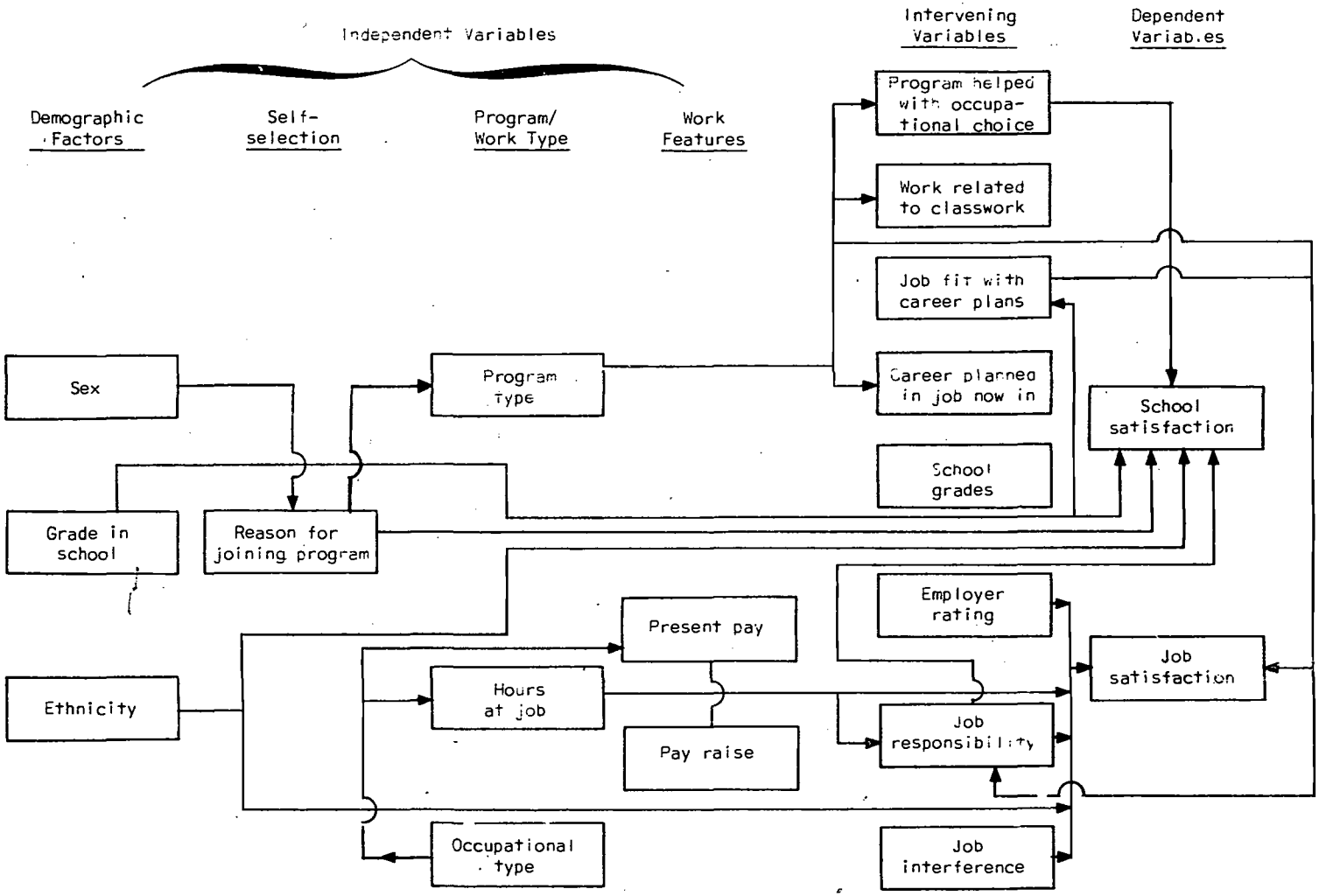


Figure II-1. Student Analysis Model

C. EMPIRICAL FINDINGS

1. Student Satisfaction

In Figure II-1 we see a summary of the major empirical links that were found between the variables of our analysis model. Each arrow from one box to another in the figure indicates that there is a significant relation between those two variables. For example, the arrow connecting job responsibility to job satisfaction indicates that the student's degree of satisfaction with his job is significantly related to the level of responsibility his job affords him. Looking at the links between all the variables in the set of antecedant factors and the two dependent variables, we note that school satisfaction, as compared to job satisfaction, is influenced less by the independent and intervening variables in both strength and numbers. Most of the variables which do relate to school satisfaction are ones which are less easily influenced by program components or program behavior. Job satisfaction is more strongly influenced by a wider range of variables, which are more likely to be controlled or at least strongly effected by specific actions or characteristics of the work education. Thus one implication of these findings for work education programs might be that they should place more emphasis in areas in which they are able to have a positive influence; i.e., placing students in jobs which fit well with the students' career plans and which give the students a high level of responsibility. However, the data also indicate that this must be done with care to ensure that students are not placed in jobs which are too difficult for them to do well. This can be seen from the very strong positive influence the employer's rating of the student has on the student's level of job satisfaction. Assuming that a high employer rating is, at least to some extent, a measure of how well the student is doing on the job, then the ideal job would be responsible and challenging, yet at the same time within the limits of the student's capabilities for doing well. The level of responsibility appears to be especially crucial since it is also one of the few manipulable variables which has a positive influence on the student's school satisfaction. (See Table II-1.)

VAR052 DID YOU LIKE SCHOOL BY JOBRESP

VAR052		JOBRESP 1 LOWER WING	2 LOWER MIDSPREA	3 UPPER MIDSPREA	4 UPPER WING	ROW TOTAL
	2	66	143	100	91	400
BETTER AFTER		16.5	35.8	25.0	22.8	48.3
		37.9	45.8	51.5	61.1	
		8.0	17.2	12.1	11.0	
	3	94	156	84	52	386
THE SAME		24.4	40.4	21.8	13.5	46.6
		54.0	50.0	43.3	34.9	
		11.3	18.8	10.1	6.3	
BETTER BEFORE	4	14	13	10	6	43
		32.6	30.2	23.3	14.0	5.2
		8.0	4.2	5.2	4.0	
		1.7	1.6	1.2	0.7	
COLUMN TOTAL		174	312	194	149	829
		21.0	37.6	23.4	18.0	100.0

RAW CHI SQUARE = 21.15627 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0017

Table II-1. Improvement in School Satisfaction by Job Responsibility Score (for participating students)

2. Program Types

A major finding that appears in the pattern of empirical relationships between the independent, intervening and dependent variables is that of the existence of typical program configurations.

a. Specific Occupational Training Programs

Students who join a work education program primarily to receive training--not pay, are more likely to join a program with orientation toward specific occupational training. Students in these programs are more likely, by their own report, to receive classwork that is related to their work, to have a job that fits into their career plans, to have received help from the program in deciding on an occupation, and to have a job with a high level of responsibility (see Table II-2). These highly interrelated variables are likely to lead to a greater degree of job satisfaction and, to a small extent, an improvement in the student's attitude towards school. Taken in conjunction with a complementary set of findings from the program administrator data (reported on elsewhere), it appears that the co-op type of program is basically successful in its approach to fulfilling its own set of goals. Clearly not all such programs are equally successful, nor are any totally successful, but what seems to be needed are changes in degree, and not any basic restructuring of approach. Not all co-op students receive closely related enough classwork, nor a job that fits in well with their career plans or provides enough responsibility. Thus greater emphasis needs to be placed on these facets. Nevertheless, it would appear that the general approach is highly viable and is liked by students, teachers, and employers.

b. Dropout Prevention Programs

While it is true that the occupational training programs do seem to have a greater impact, both from student and program point of view on the variables under study, this does not imply that the dropout prevention programs are

TYPE BY JOBRESP

TYPE	JOBRESP 1	2	3	4	ROW TOTAL
1 SECNDRY SPECOCC	55	101	75	50	281
	19.6	35.9	26.7	17.8	33.7
	31.6	32.1	38.3	33.6	
	6.6	12.1	9.0	6.0	
2 POSTSEC SPEC OCC	22	69	57	71	219
	10.0	31.5	26.0	32.4	26.3
	12.6	21.9	29.1	47.7	
	2.6	8.3	6.8	8.5	
3 SECNDRY DROPOUT	63	86	28	12	189
	33.3	45.5	14.8	6.3	22.7
	36.2	27.3	14.3	8.1	
	7.6	10.3	3.4	1.4	
4 POSTSEC DROPOUT	11	20	9	3	43
	25.6	46.5	20.9	7.0	5.2
	6.3	6.3	4.6	2.0	
	1.3	2.4	1.1	0.4	
5 SECNDRY EXPLORE	25	39	27	13	102
	24.5	38.2	26.5	12.7	12.2
	13.2	12.4	13.8	8.7	
	3.0	4.7	3.2	1.6	
COLUMN TOTAL	174	315	196	149	834
	20.9	37.9	23.5	17.9	100.0

RAW CHI SQUARE = 86.31435 WITH 12 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0000

Table II-2. Program Type by Job Responsibility Score (for participating students)

unsuccessful. Given that their only stated goals are to provide students with a minimal income so they do not have to drop out of school, which they do provide, they are relatively successful within that framework. They are about as likely as the secondary occupational training program, and more likely than other program types, to improve the student's attitude toward school (See Table II-3).

c. Career Exploration Programs

The goals of the career exploration programs are much more ambiguous and thus it is more difficult to determine from our data how successful they have generally been as compared to the other types of work education programs. One inherent aim of such a program would be to aid the student in deciding on his occupational choice and none of these programs has provided students with job rotation to expose them to different types of jobs which would better enable them to choose a career best suited to their own needs. The data tends to show that this type of program often does not assist the student in making his occupational choice. Since, as seen in Table II-4, this type of program is least likely of any of the types studied to have assisted the student in his choice of occupation, then we would have to conclude that, at least in this regard, this type of program has been less successful than the occupational training and dropout prevention type of programs. Given the organizational problems of programs of this type, as discussed elsewhere in this report, this finding is not surprising.

VAR052 DID YOU LIKE SCHOOL BY TYPE

VAR052	TYPE	1 SECONDRY SPECOCC	2 POSTSEC SPEC OCC	3 SECONDRY DROPOUT	4 POSTSEC DROPOUT	5 SECONDRY EXPLORE	ROW TOTAL
1 BETTER BEFORE	COUNT	22	11	12	1	6	52
	ROW PCT	42.3	21.2	23.1	1.9	11.5	5.2
	COL PCT	6.4	3.8	5.6	2.1	5.3	
2 BETTER AFTER	COUNT	186	137	109	20	46	498
	ROW PCT	37.3	27.5	21.9	4.0	9.2	49.7
	COL PCT	54.4	47.7	51.2	42.6	40.4	
3 THE SAME	COUNT	134	139	92	26	62	453
	ROW PCT	29.6	30.7	20.3	5.7	13.7	45.2
	COL PCT	39.2	48.4	43.2	55.3	54.4	
COLUMN TOTAL		342	287	213	47	114	1003
		34.1	28.6	21.2	4.7	11.4	100.0

RAW CHI SQUARE = 14.08158 WITH 8 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0797

Table II-3. Improvement in School Satisfaction by Program Type (for participating students)

VAR049 PROGRAM HELP DECIDE ON OCCUPATION BY TYPE

VAR049	COUNT / ROW PCT / COL PCT	TYPE 1 SECONDRY SPEC OCC	2 POSTSEC SPEC OCC	3 SECONDRY DROPOUT	4 POSTSEC DROPOUT	5 SECONDRY EXPLORE	ROW TOTAL
1 YES		243	236	127	26	60	692
		35.1	34.1	18.4	3.8	8.7	69.7
		71.9	83.4	60.8	53.1	52.6	
2 NO		95	47	82	23	54	301
		31.6	15.6	27.2	7.6	17.9	30.3
		28.1	16.6	39.2	46.9	47.4	
COLUMN TOTAL		338	283	209	49	114	993
		34.0	28.5	21.0	4.9	11.5	100.0

RAW CHI SQUARE = 55.92842 WITH 4 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0000

Table II-4. Program Helped Student Decide on Occupation by Program Type (for participating students)

3. Student Jobs

In addition to the more general findings discussed above, we have explored in further detail some of the ramifications of the specific types of jobs in which students in work education programs are likely to be placed. We found that 70 percent of the students had been placed in jobs in a limited set of 20 occupations, with a sufficient number of students to allow for more detailed analysis of the impact of these specific occupational categories. These jobs are ones in which students in various types of programs have been placed, and are not necessarily careers for which the students are being trained.

These 20 groups consisted of the following job types: Nurses, medical technicians, teacher aides, library workers, correctional aides, secretaries, cashiers, account-recording clerks, stock clerks, sales clerks, waiters and waitresses, kitchen workers, hospital attendants, janitors and cleaning workers, auto mechanics, body and fender men, telephone installers, carpenters, gas station attendants, and moving and storage workers. Table II-5 gives the overall number in each of these job categories, as well as the breakdown by type of program.

From this data, we note several significant trends:

a. By Program Type

First, the professional jobs are predominantly in the domain of the post-secondary occupational training programs. Sales, clerical, and skilled blue collar jobs are most typical of the secondary occupational training programs. Unskilled blue collar jobs are more common among students in the secondary dropout prevention and career exploration programs, and especially in the former type. The relative frequency of clerical jobs in all program types is probably partly a function of the finding discussed below relating the student's sex to the typical jobs provided in work education programs.

TYPE BY SPECCCC

TYPE (COUNT / ROW PCT / COL PCT / TOT PCT)	SPECOCC: NURSING 1	MED TECH 2	EDUCATN 3	LIBRARY WORK 4	SOCIAL WELFARE 5	SECRETRY 6	CASHIER 7	ACCOUNT-RECORDING 8	STOCK CLERK 9	SALES 10	ROW TOTAL
1 SECONDARY SPECOCC	0	0	15	1	0	49	11	6	20	41	228
	0.0	0.0	6.6	0.4	0.0	21.5	4.8	2.6	8.8	18.0	32.0
	0.0	0.0	28.3	5.6	0.0	32.0	40.7	33.3	62.5	50.0	
	0.0	0.0	2.1	0.1	0.0	6.9	1.5	0.8	2.8	5.8	
2 POSTSEC SPEC OCC	35	24	17	3	28	43	4	7	3	20	214
	16.4	11.2	7.9	1.4	13.1	20.1	1.9	3.3	1.4	9.3	30.1
	100.0	100.0	32.1	16.7	100.0	28.1	14.8	38.9	9.4	24.4	
	4.9	3.4	2.4	0.4	3.9	6.0	0.6	1.0	0.4	2.8	
3 SECONDARY DROPOUT	0	0	13	12	0	20	7	0	7	3	148
	0.0	0.0	8.8	8.1	0.0	13.5	4.7	0.0	4.7	2.0	20.8
	0.0	0.0	24.5	66.7	0.0	13.1	25.9	0.0	21.9	3.7	
	0.0	0.0	1.8	1.7	0.0	2.8	1.0	0.0	1.0	0.4	
4 POSTSEC DROPOUT	0	0	4	2	0	13	1	4	0	0	36
	0.0	0.0	11.1	5.6	0.0	36.1	2.8	11.1	0.0	0.0	5.1
	0.0	0.0	7.5	11.1	0.0	8.5	3.7	22.2	0.0	0.0	
	0.0	0.0	0.6	0.3	0.0	1.8	0.1	0.6	0.0	0.0	
5 SECONDARY EXPLORE	0	0	4	0	0	28	4	1	2	18	86
	0.0	0.0	4.7	0.0	0.0	32.6	4.7	1.2	2.3	20.9	12.1
	0.0	0.0	7.5	0.0	0.0	18.3	14.8	5.6	6.3	22.0	
	0.0	0.0	0.6	0.0	0.0	3.9	0.6	0.1	0.3	2.5	
COLUMN TOTAL	35	24	53	18	28	153	27	18	32	82	712
	4.9	3.4	7.4	2.5	3.9	21.5	3.8	2.5	4.5	11.5	100.0

(CONTINUED)

Table II-5. Program Type by Specific Occupational Clusters (1 of 2) (for participating students)

TYPE BY SPECCCC

TYPE	SPECCCC	12 WAITING	13 KITCHEN WORK	14 HOSPITL ATTENDNT	15 JANITOR	16 AUTO REPAIR	17 BODYWORK	18 PHONE INSTALLR	19 CARPNTRY	20 GAS STA. ATTENDT	21 MOVING & STORING	ROW TOTAL
1 SECONDARY SPECOCC	COUNT	10	3	4	7	9	1	13	15	14	9	228
	ROW PCT	4.4	1.3	1.8	3.1	3.9	0.4	5.7	6.6	6.1	3.9	32.0
	COL PCT	22.7	23.1	18.2	11.9	60.0	5.9	100.0	78.9	51.9	69.2	
	TOT PCT	1.4	0.4	0.6	1.0	1.3	0.1	1.8	2.1	2.0	1.3	
2 POSTSEC SPEC OCC	COUNT	3	0	9	0	0	16	0	0	2	0	214
	ROW PCT	1.4	0.0	4.2	0.0	0.0	7.5	0.0	0.0	0.9	0.0	30.1
	COL PCT	6.8	0.0	40.9	0.0	0.0	94.1	0.0	0.0	7.4	0.0	
	TOT PCT	0.4	0.0	1.3	0.0	0.0	2.2	0.0	0.0	0.3	0.0	
3 SECONDARY DROPOUT	COUNT	15	7	5	36	5	0	0	4	9	1	148
	ROW PCT	10.1	4.7	6.1	24.3	3.4	0.0	0.0	2.7	6.1	0.7	20.8
	COL PCT	34.1	53.8	40.9	61.0	33.3	0.0	0.0	21.1	33.3	7.7	
	TOT PCT	2.1	1.0	1.3	5.1	0.7	0.0	0.0	0.6	1.3	0.1	
4 POSTSEC DROPOUT	COUNT	0	0	0	10	0	0	0	0	1	1	36
	ROW PCT	0.0	0.0	0.0	27.8	0.0	0.0	0.0	0.0	2.8	2.8	5.1
	COL PCT	0.0	0.0	0.0	16.9	0.0	0.0	0.0	0.0	3.7	7.7	
	TOT PCT	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.1	0.1	
5 SECONDARY EXPLORE	COUNT	16	3	0	6	1	0	0	0	1	2	86
	ROW PCT	18.6	3.5	0.0	7.0	1.2	0.0	0.0	0.0	1.2	2.3	12.1
	COL PCT	36.4	23.1	0.0	10.2	6.7	0.0	0.0	0.0	3.7	15.4	
	TOT PCT	2.2	0.4	0.0	0.8	0.1	0.0	0.0	0.0	0.1	0.3	
COLUMN TOTAL		44	13	22	59	15	17	13	19	27	13	712
		6.2	1.8	3.1	8.3	2.1	2.4	1.8	2.7	3.8	1.8	100.0

RAW CHI SQUARE = 574.50244 WITH 76 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0

Table II-5. Program Type by Specific Occupational Clusters (2 of 2)
(for participating students)

b. By Sex of Student

Almost all of these programs tend to perpetuate the traditional differentiation of jobs in terms of sex. Only three of the 20 jobs mentioned above have a balanced distribution of males and females (i.e., no more than 60 percent of one of the sexes); these are the correctional aides, the cashiers, and the waiters and waitresses. This general social phenomenon is also found as often among the nonparticipating students who have found jobs on their own but clearly the work education programs have not expanded students' career opportunities by breaking down any of the carriers relating to the "normal" sex for various occupational positions. Further study is required for an understanding of the impact of this social phenomenon on work education programs and of the impact work education can have on this phenomenon.

c. By Level of Responsibility and Satisfaction

These 20 occupational groups differ significantly in terms of the level of responsibility and the degree of satisfaction they afford the students. Before we can explore this, one extremely important caveat must be mentioned. A few of these job types are comprised of the students from only one program. Thus it is impossible to determine if any relationship between these occupations and any other variables is due to the influence of the type of job or due to some other unique phenomenon that is characteristic of that particular site. The jobs that are in this category are: Correctional aides (Yuba City), telephone installers (New Haven), body and fender men (Honolulu), and medical technicians (the Bronx). In addition, all of the nurses are found exclusively in two of the program sites (Raymond and Lakewood Center). The occupations that have the highest degree of satisfaction for the students are the correctional aides, the auto mechanics and those in moving and storage jobs. The jobs in which the students express the lowest degree of satisfaction are nurses and telephone installers. Both of these jobs are found at only one or two sites, and thus the satisfaction level found may easily be due to preculiarities of these sites, and not a function of nursing and telephone installation careers

in general. The jobs which students feel give them the greatest degree of responsibility are nurses, correctional aides, and auto mechanics. The lowest degree of responsibility is expressed by the students who are janitors and teacher aides. However, a large proportion of these jobs which scored especially high or low in both job satisfaction and responsibility are represented at only one or two sites. Thus, it would require additional study to determine if this phenomenon were a function of the particular type of occupation or of the specific program site.

d. By Source of Skills Training

The students were asked where they had learned the most about the skills they need for their jobs. Two-thirds had learned most of the required skills on the job, about 23 percent had learned them at school, and 10 percent had learned them somewhere else. However, these 20 specific job types differed significantly in terms of where the students learned their skills. The jobs in which the highest proportions of students had learned the needed skills at school were teacher aides, secretaries, account-recording clerks and body and fender workers. Also, the nurses, medical technicians, library workers, and correctional aides were somewhat more likely than those in other jobs to learn their skills at school. In general, then, it appears that students in professional or clerical jobs are most likely to learn skills at school, while those in sales, service, or blue collar jobs are most likely to learn their needed skills on the job rather than at school; whereas, somewhat surprisingly, students in trade and industrial programs are learning their skills on the job. This should cause doubts about the relevency of instruction being offered by schools in these areas.

4. Pay, Ethnicity, and Sex

While exploring some of the more central phenomena related to students of work education programs, an interesting pattern was discovered in the relationship between rate of pay, ethnicity and sex. While basically outside the general focus of this study, it did seem interesting and relevant enough to warrant this brief description. Figures II-2 through II-11 show the various components of these findings. Figure II-2 gives the overall pay rate distribution for students participating in a work education program. Figure II-3 gives the same data for nonparticipating students. Figures II-4 and II-5 show the pay breakdown by sex, for participating and nonparticipating students respectively. Similarly, Figures II-6 and II-7 give the participating and nonparticipating breakdown by ethnicity. Finally, Figures II-8 and II-9 show the ethnic breakdown for males only, for participating and nonparticipating students respectively, and Figures II-10 and II-11 the same data is given for females only. First, looking at Figure II-7, we find that outside of the work education programs, Blacks tend to do better economically than do Whites. Next, comparing Figures II-9 and II-11, we find that this phenomenon is especially true in the case of Black females. While these findings appear to be in direct contradistinction to many commonly held assumptions, it should be noted that it is also true that, outside the work education programs, Blacks are much less likely to have any job. Nevertheless, if they can find a job at all, it appears they fare quite well, in terms of pay, as compared to Whites.

Next, we can look at the impact the work education programs make on this set of relationships. Looking at Figures II-4 and II-5, we see that the programs have a positive impact on the pay rates of females. Similarly, comparing Figures II-6 and II-7, we find that the programs have a negative impact on the pay rates of Blacks. We can see the separate and combined impact of these forces in Figures II-8 through II-11. Comparing Figure II-10 with Figure II-11, we note how the two forces of opposite direction tend to almost balance out, so that Black females, while less well paid when in a work education program,

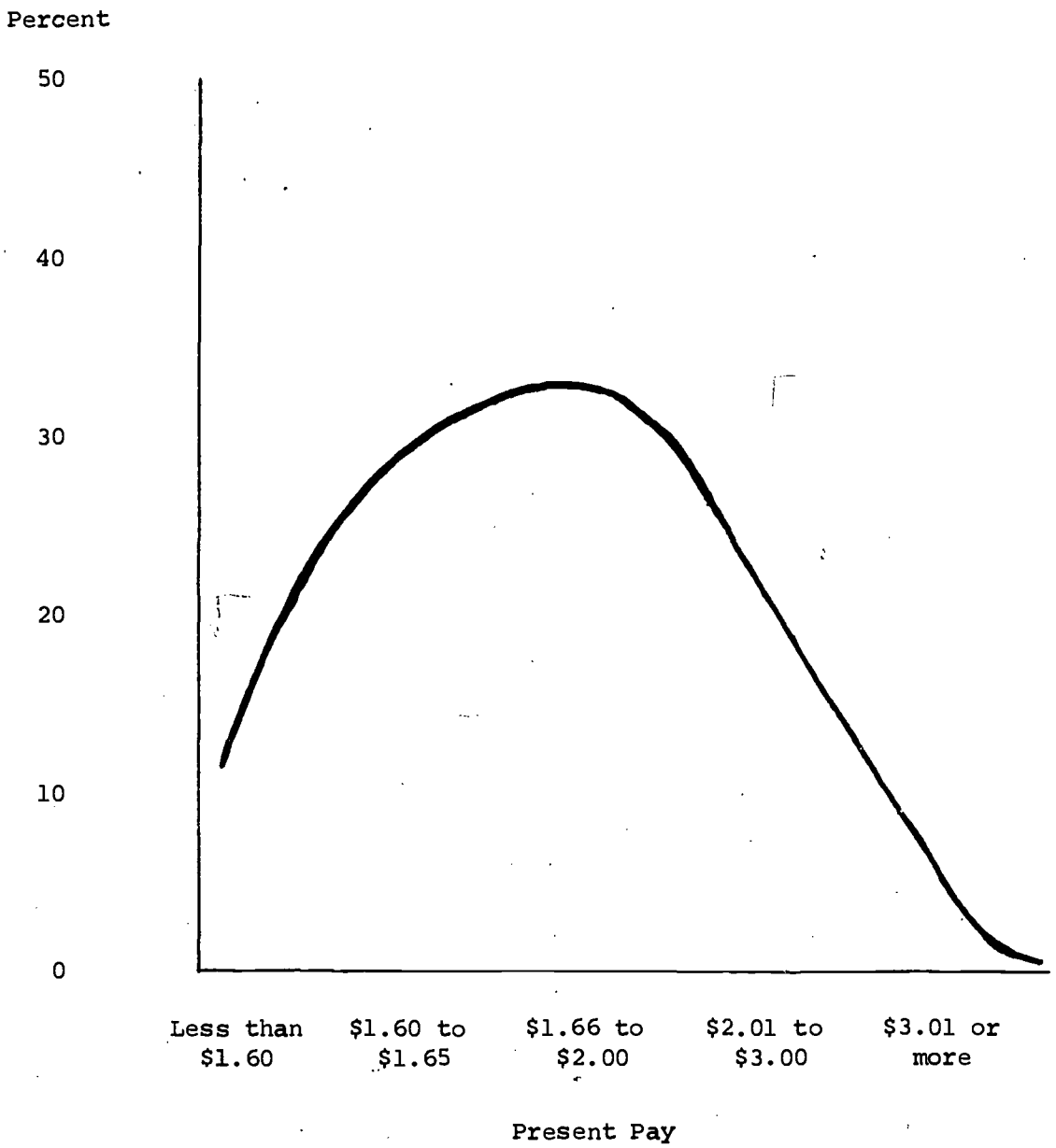


Figure II-2. Participating Students Pay Distribution

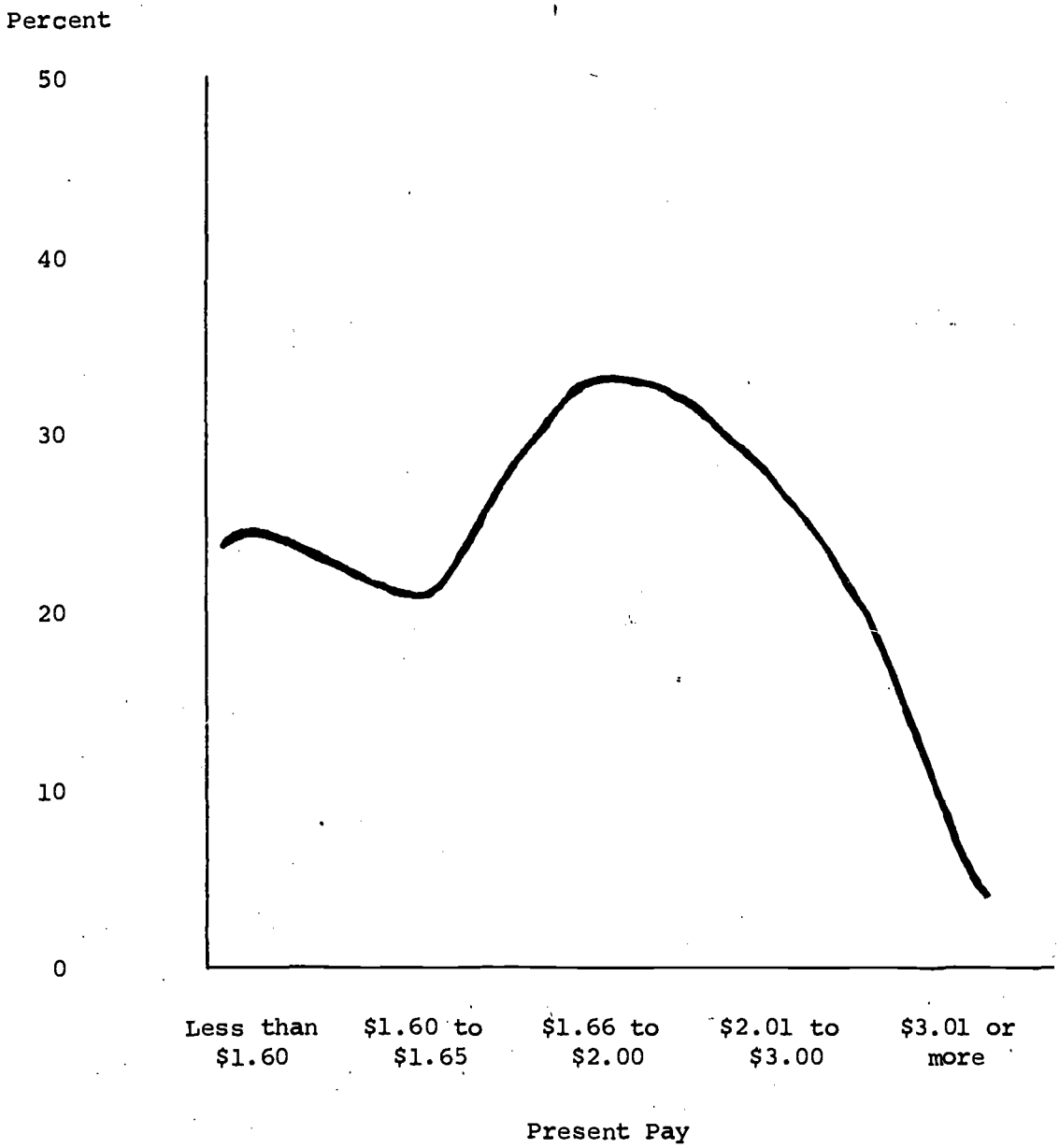


Figure II-3. Nonparticipating Students Pay Distribution

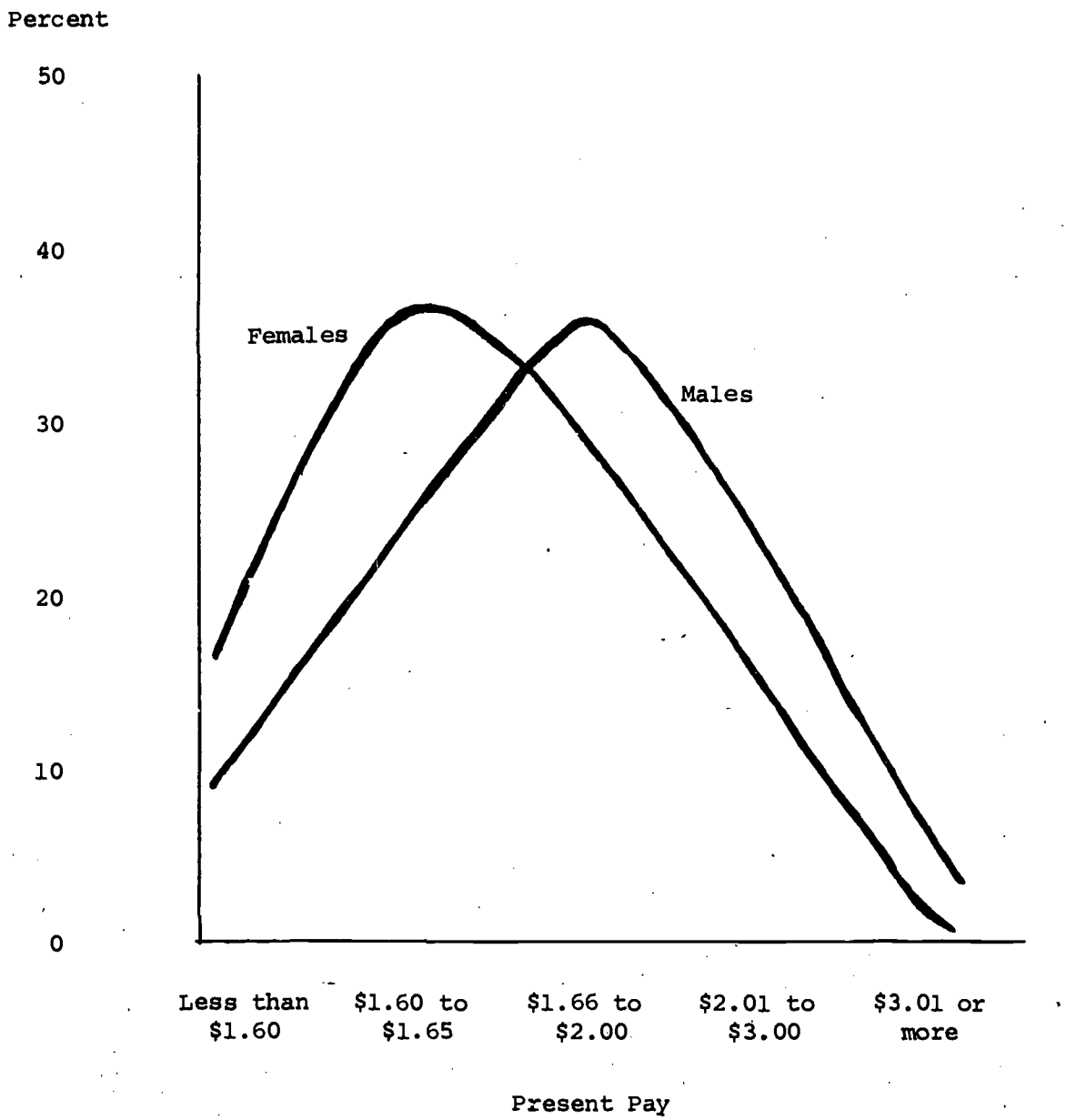


Figure II-4. Participating Students Pay Distribution by Sex

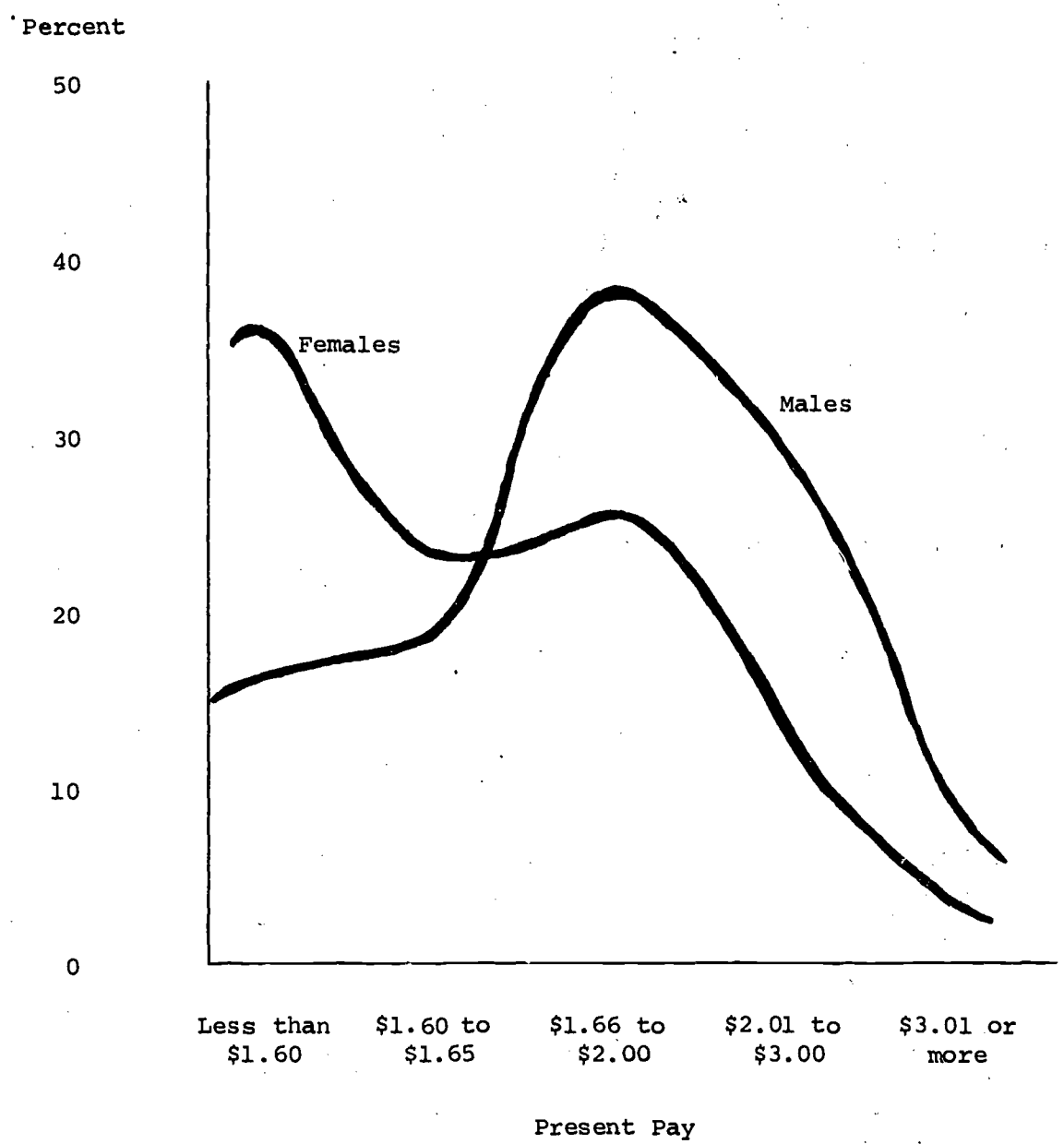


Figure II-5. Nonparticipating Students Pay Distribution by Sex

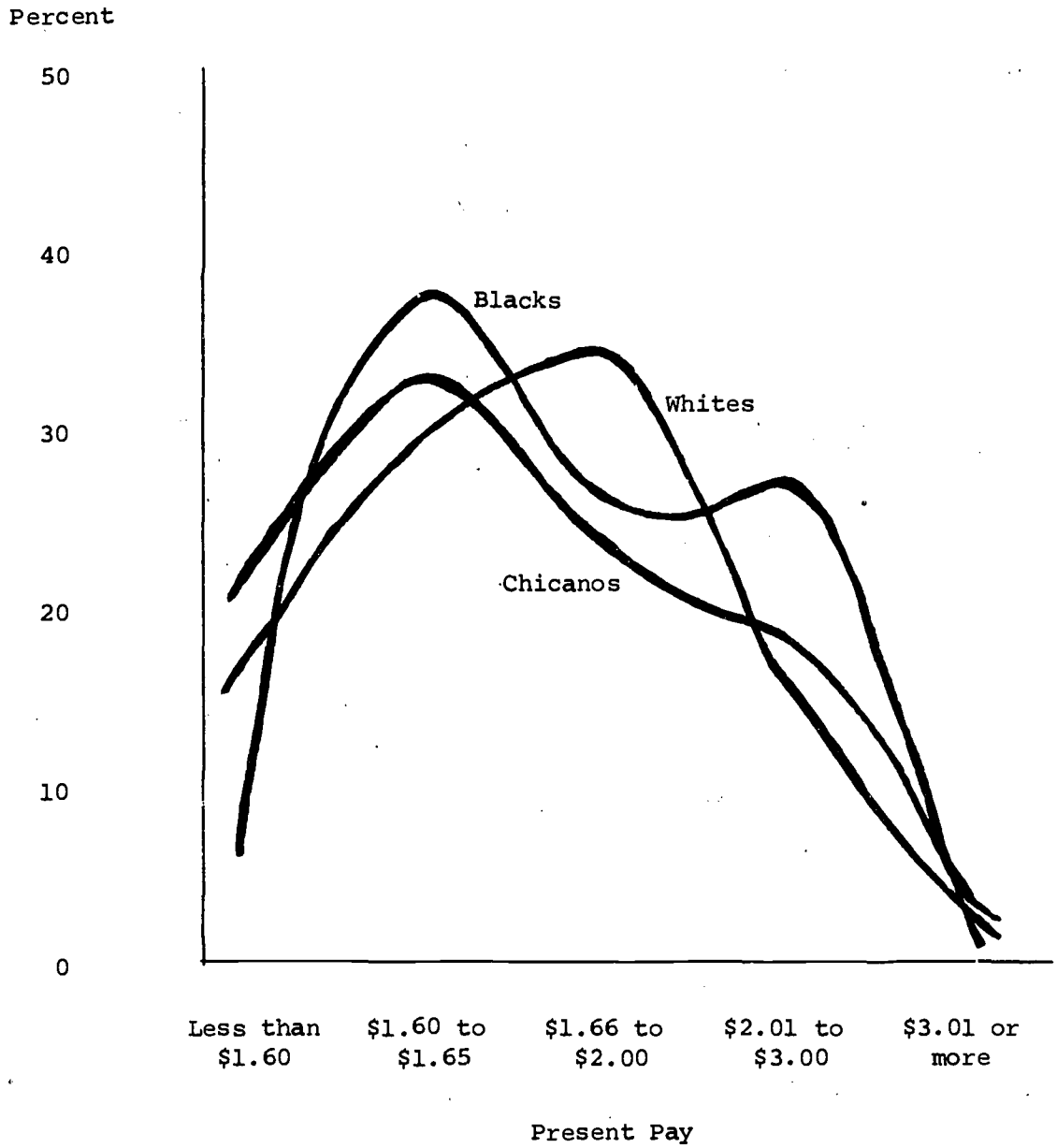


Figure II-6. Participating Students Pay Distribution by Ethnic Group

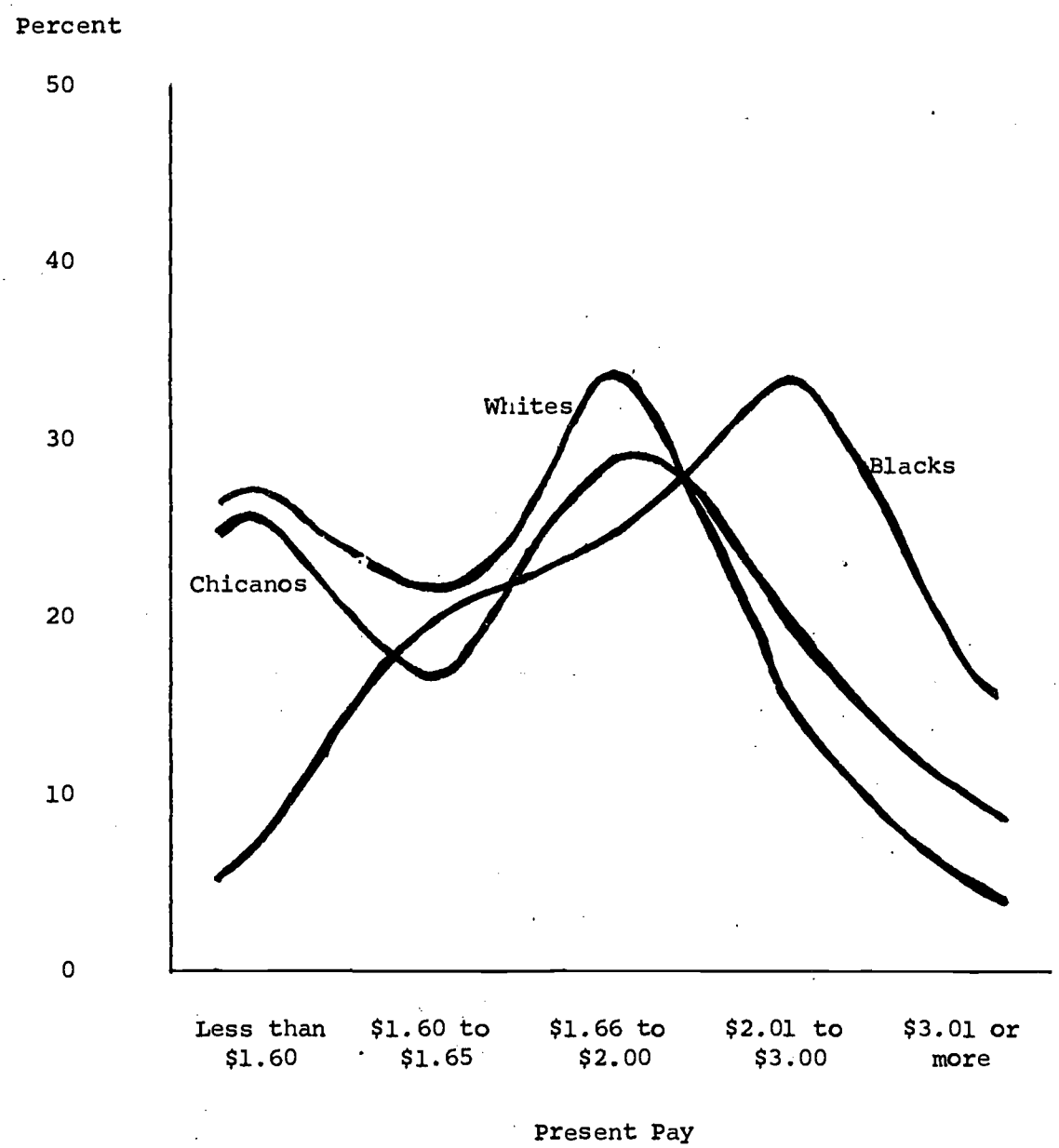


Figure II-7. Nonparticipating Students Pay Distribution by Ethnic Group

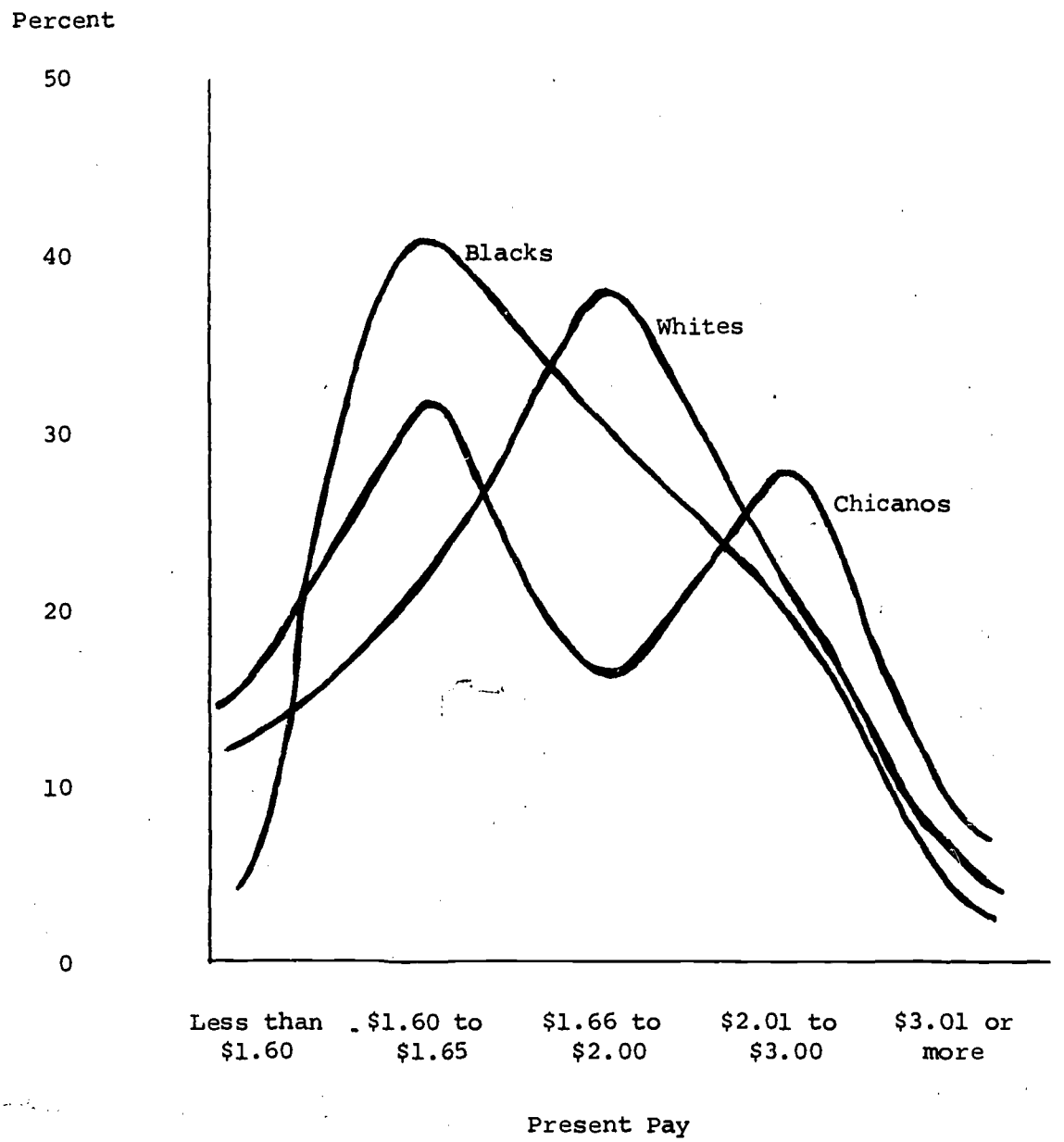


Figure II-8. Participating Male Students Pay Distribution by Ethnic Group

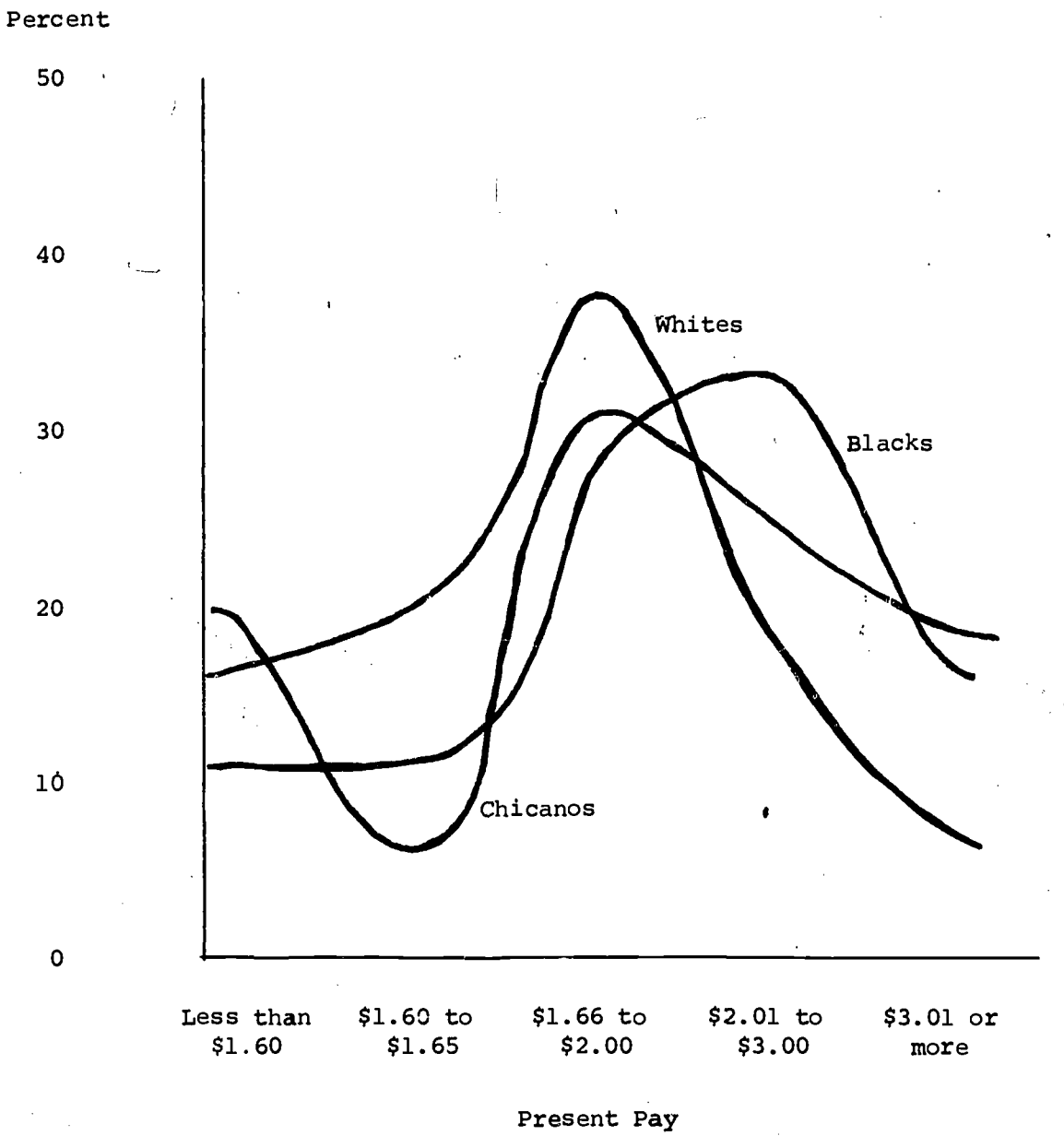


Figure II-9. Nonparticipating Male Students Pay Distribution by Ethnic Group

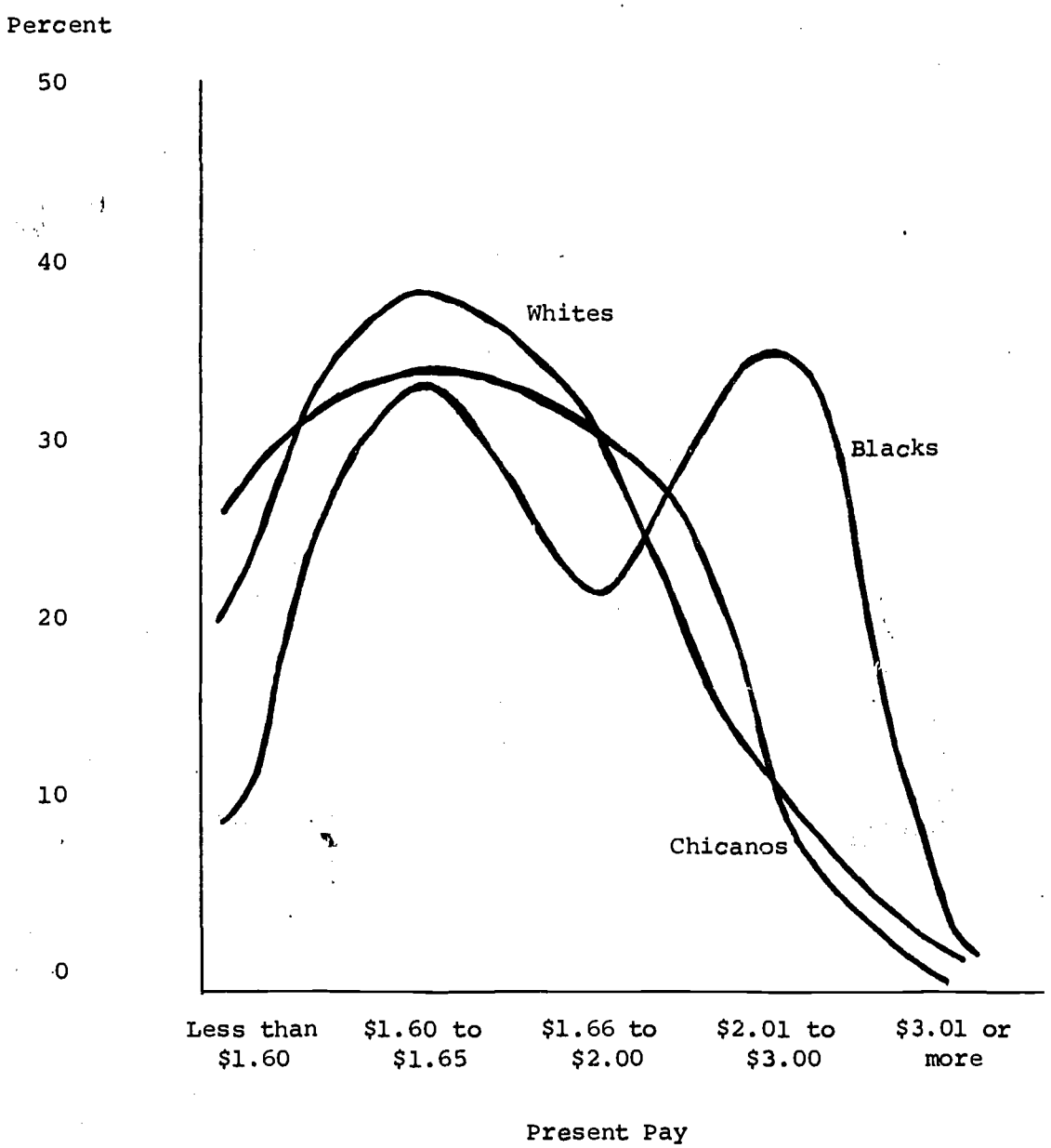


Figure II-10. Participating Female Students Pay Distribution by Ethnic Group

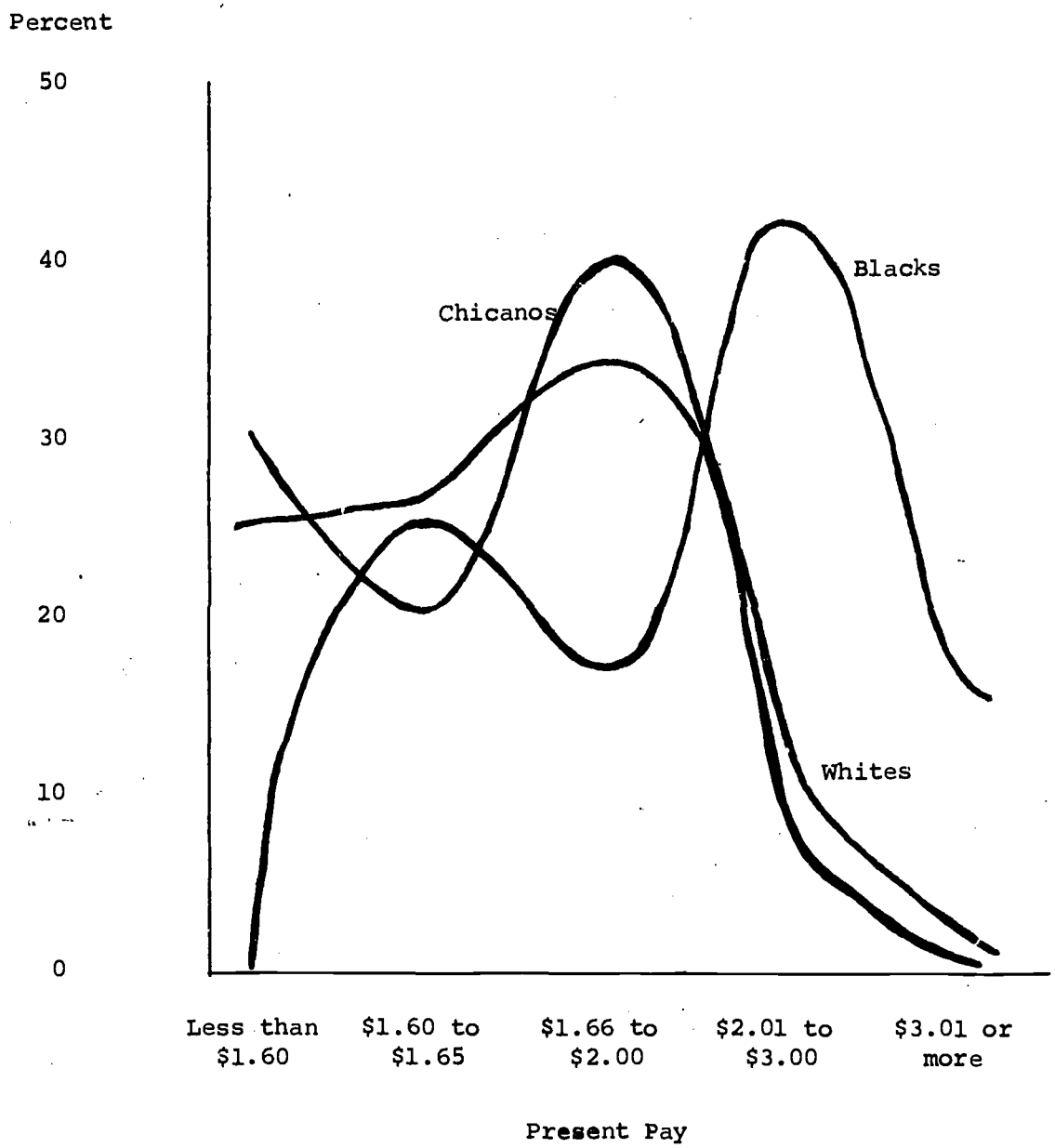


Figure II-11. Nonparticipating Female Students Pay Distribution by Ethnic Group

still do better than White females. On the other hand, in comparing Figures II-8 and II-9, we see that the Black males, not only get paid less in jobs in the work education programs than they do in jobs they find on their own, but also in the program they are less well off economically than are the White males, while out of the program Black males tended to do better than Whites in terms of pay. Since these findings are outside the basic scope of the study, we do not have the necessary data to more fully explore and explain them. Further analysis has tended to show that these results are not an artifact of a few unusual program sites, nor of any unusual ethnically-linked pattern of job types, and we have not uncovered any other clues as to their explanation. Other hypotheses might be that a Black student, to get a job, must have better qualifications and/or abilities than a White student, and thus commands a higher salary or that Black students tend to stay longer at one job gaining seniority and higher pay. While limited, our data do not support these hypotheses. Blacks and Whites do not differ significantly in school grades (an indirect measure of ability) or in the length of time they have been working in their present jobs. Another hypothesis is that these distributions may simply be an extension of the current trends toward reduction of the economic gaps between Blacks and Whites (See Figure II-12). A followup study is needed to fully understand this set of findings and its implications for work education programs.

Blacks Gain Strongly on Whites, Job Bias Dying, Study Finds

From a Times Staff Writer

WASHINGTON—The progress of black men and women in catching up economically with whites has been much greater in the last two decades than is generally believed, according to statistics assembled by Harvard economist Richard B. Freeman.

"While black-white differences have not disappeared," Freeman wrote in a paper published today by the nonprofit Brookings Institution, the convergence in the economic positions of blacks and whites in the 1950s and 1960s "suggests a virtual collapse in traditional discriminatory patterns in the labor market."

In an analysis of data compiled by the Census Bureau and the Bureau of Labor Statistics, Freeman found that black women had made significant gains in income during the 1950s, whereas the income of black men did not begin to surge upward relative to that of white men until the mid-1960s.

The changes were particularly marked for the youngest black men and women, whose incomes by 1969 were close to those of whites in their age groups.

For example, in 1949 the average black woman 25 to 34 years old earned only 46% as much as a white woman in the same age bracket. In 1959, a black woman in that age group earned 70% as much as the white woman, and in 1969 she earned 95% as much.

In 1949, a black man 25 to 34 years old earned 59% as much as his white counterpart. In 1959 his income had risen to 61% of the white's. By 1969 it was 70%, Freeman found.

By 1969 the youngest black college graduates, those under 24, were earning almost as much as whites in the same age and education categories—98% in the case of men and 97% for women.

The biggest reason for the gains of black women, Freeman said, was

Please Turn to Page 14, Col. 5

GAINS OF BLACKS

Continued from First Page

the ability of the women to leave low-paying housekeeping jobs beginning in the 1950s and take higher-paying office, factory and service jobs.

For men, Freeman found, the biggest impetus to change was the 1964 Civil Rights Act and the step-up of government enforcement activity against discrimination.

Some of the improvements among blacks found by Freeman may have been falsely accentuated by cultural and social differences. For example, Freeman found that in 1969 black female college graduates 25 to 44 years old had annual incomes averaging at least 14% above those of their white counterparts.

This need not mean that black women were higher paid than white women. A greater percentage of white women than black women are full-time housewives, and this would pull down the average cash income of white women as a group.

Freeman acknowledged that additional research might well mitigate or overturn some of the individual findings of his paper, which is sure to be controversial. And he noted that there was still considerable inequality between blacks and whites, particularly in the older male categories.

Nevertheless, Freeman contended, his findings clearly demonstrated that the 1960s brought "dramatic economic progress for black Americans in a relatively short time."

Figure II-12. Article from the Los Angeles Times, July 4, 1973

5. Program Setting

The industrial setting in which the programs are located (rural, bedroom communities, single industry areas, or urban) plays a significant role for only two of the main variables with which we are concerned. First, as would be expected, the rates of pay students receive are significantly higher in urban areas (See Table II-6). Second, and more surprisingly, the level of job satisfaction of the students is higher in rural areas (See Table II-7). Nothing in our data seems to explain this fact, nor is it intuitively obvious why this would be the case. It is clearly something that any future study of work education programs would be well-advised to explore.

VAR031 HOURLY PAY - NOW BY SETTING

SETTING

VAR031	COUNT / ROW PCT / COL PCT / TOT PCT	1 RURAL	2 BEDROOM COMMUNTY	3 SINGLE INDUSTRY	4 URBAN	ROW TOTAL
1 UNDER $1.66		69	20	20	6	115
		60.0	17.4	17.4	5.2	14.9
		31.8	10.2	13.5	2.8	
		8.9	2.6	2.6	0.8	
2 $1.60 - 1.65		95	45	35	60	235
		40.4	19.1	14.9	25.5	30.4
		43.8	22.8	23.6	28.3	
		12.3	5.8	4.5	7.8	
3 $1.66 - 2.00		46	102	48	55	251
		18.3	40.6	19.1	21.9	32.4
		21.2	51.8	32.4	25.9	
		5.9	13.2	6.2	7.1	
4 $2.01 - 3.00		4	26	42	76	148
		2.7	17.6	28.4	51.4	19.1
		1.8	13.2	28.4	35.8	
		0.5	3.4	5.4	9.8	
5 $3.01 OR MORE		3	4	3	15	25
		12.0	16.0	12.0	60.0	3.2
		1.4	2.0	2.0	7.1	
		0.4	0.5	0.4	1.9	
COLUMN TOTAL		217	197	148	212	774
		28.0	25.5	19.1	27.4	100.0

RAW CHI SQUARE = 207.31207 WITH 12 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0

Table II-6. Present Pay by Industrial Setting
(for participating students)

JCBSATIS BY SETTING

JOBSATIS		SETTING: RURAL 1	BEDROOM COMMUNTY 2	SINGLE INDUSTRY 3	URBAN 4	ROW TOTAL
1 LOWER WING	COUNT	41	52	33	91	217
	ROW PCT	18.9	24.0	15.2	41.9	21.9
	COL PCT	15.8	22.5	18.1	28.4	
	TOT PCT	4.1	5.2	3.3	9.2	
2 LOWER MIDSPRED	COUNT	47	57	51	87	242
	ROW PCT	19.4	23.6	21.1	36.0	24.4
	COL PCT	18.1	24.7	28.0	27.2	
	TOT PCT	4.7	5.7	5.1	8.8	
3 UPPER MIDSPRED	COUNT	88	61	45	82	276
	ROW PCT	31.9	22.1	16.3	29.7	27.8
	COL PCT	34.0	26.4	24.7	25.6	
	TOT PCT	8.9	6.1	4.5	8.3	
4 UPPER WING	COUNT	83	61	53	60	257
	ROW PCT	32.3	23.7	20.6	23.3	25.9
	COL PCT	32.0	26.4	29.1	18.8	
	TOT PCT	8.4	6.1	5.3	6.0	
COLUMN TOTAL		259	231	182	320	992
		26.1	23.3	18.3	32.3	100.0

RAW CHI SQUARE = 33.70943 WITH 9 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0001

Table II-7. Job Satisfaction Score by Industrial Setting
(for participating students)

III. PROGRAM DATA ANALYSIS

A. OVERALL CHARACTERISTICS

1. Program Types

The 50 work education programs included in this study were classified into five types based on their educational level and primary purpose:

- Secondary level programs whose primary purpose was specific occupational training
- Postsecondary specific occupational training programs
- Secondary programs whose main purpose was dropout prevention programs
- Postsecondary dropout prevention programs
- Secondary programs whose major focus was on career exploration.

Since there were only two postsecondary dropout prevention programs in the sample, they were not included in the statistical analysis. The remaining program types were distributed as follows:

- Six secondary career exploration programs (12 percent of the sample)
- Twelve secondary dropout prevention programs (25 percent)
- Eighteen secondary specific occupational training programs (38 percent)
- Twelve postsecondary specific occupational training programs (25 percent)

2. Program Coordinator

The typical program had one coordinator, who usually also had teaching responsibilities for the program. Most often, this coordinator had 5 or 6 years of college training and from 1 to 5 years of vocational experience. Among programs of all types, 60 percent had a coordinator who devoted 100 percent of his time to the particular work education program under study. When he did have other functions they were most often administrative duties for other work education programs.

3. Organizational Characteristics

In almost all cases, the school had taken the initiative in organizing the program. Slightly over half of the programs had been in existence for 5 years or less. The median enrollment in the work education programs was 35 students. In 90 percent of the cases this met or exceeded the planned enrollment, and in two-thirds they were not able to accept all students who applied. The median student-teacher ratio maintained by these programs was approximately 20 to 1, and over three-quarters of the programs had a student-teacher ratio no greater than 30 to 1.

4. Program Impact

In general, these programs, according to the report of the administrators, have had a positive impact on student problems. Over 90 percent stated that the program has influenced some students to stay in school rather than drop out. Also, 86 percent felt the program has had a positive influence on student absenteeism, 70 percent claimed a positive impact on tardiness, over three-fourths felt the program had been a positive influence on the students' grades, and about 85 percent stated it had a positive effect on the students' motivation.

5. Provisions for Students

In most of these programs (83 percent) students are given job-related instruction in school. Counseling of the work education students is typically done by the coordinator himself or by the school's counseling staff. Most programs claim to have special provisions for academically or socioeconomically disadvantaged students, for example, special remedial classes in reading and math, transportation, tuition or fee waivers, etc.; however, the majority (66 percent) do not have any special provisions for the physically handicapped (it should be noted that programs specifically designed for physically handicapped students were excluded from this study). Over half (61 percent) of the programs have a followup program to evaluate the job success of former students. About the same proportion conduct job placement activities for students who have completed the program. Among all programs, the median percentage of students who were placed in positions related to their training (with or without the help of the program staff) was 70 percent, with 72 percent of the secondary cooperative programs having formal placement programs and 58 percent of the postsecondary cooperative programs having formal placement programs. It should be noted that the nonplaced students often included those continuing their education.

6. Program Quality

Program administrators were asked to rate, on a 5-point scale from poor to excellent, 24 separate components of their program. A complete list is on page 12 of Interview Schedule I, Part B, included in Appendix B. Sample program components that were to be rated included the enthusiasm of the students, the enthusiasm of the teachers, relevance of training to real-world working conditions, quality of training materials, counseling, placement, followup, coordination and direction, and overall quality of the program. Not surprisingly, the program administrators were quite generous in their ratings. Because of this the bottom three categories were combined yielding a three-point scale of average or below, above average, and excellent. On this basis, we were able to distinguish the ratings of the relative degrees of success these programs were able to achieve among these various components of program operation. They estimate they were least successful in following up on former students. They felt they were most successful in terms of the relevance of the training to real-world working conditions.

B. DESCRIPTION OF PROGRAM ANALYSIS MODEL

The program data is comprised of two distinct sets of variables: The independent or predictor variables, which are measures of the structural, organizational, procedural and operational characteristics of these work education programs; and the dependent or outcome variables which tap the various components of success of these programs. The first type of analysis to which both of these categories of variables has been subjected is a complete set of descriptive statistics. These frequency distributions, reported in the previous section of this report, serve as the first step in describing and understanding factors in work education programs. Also, as we have seen, such analysis has distinguished conceptually distinct categories of predictor (independent) variables such as those predictor variables which showed little variance along all the programs under study.

When it is kept in mind that all the programs visited first had to be identified as being among the more successful or innovative programs with which at least one person was familiar, we have established what common features and levels of effort remain constant across most of the programs being examined. For example, it is important to have learned that nearly all the programs under scrutiny maintain a teacher-student ratio no greater than 1:40, as well as having identified the other clusterings of characteristics common to most of these programs.

It also allowed us to distinguish a second set of independent variables--those which show a moderate or wide range of variation among the programs under study. These variables, then, will become important in the next section to test as explanatory predictors of differential rates of program success, or to analytically and empirically determine the distinguishing characteristics which differentiate the various program types. Figure III-1 shows the analytical framework of the various categories of independent and dependent variables in this model.

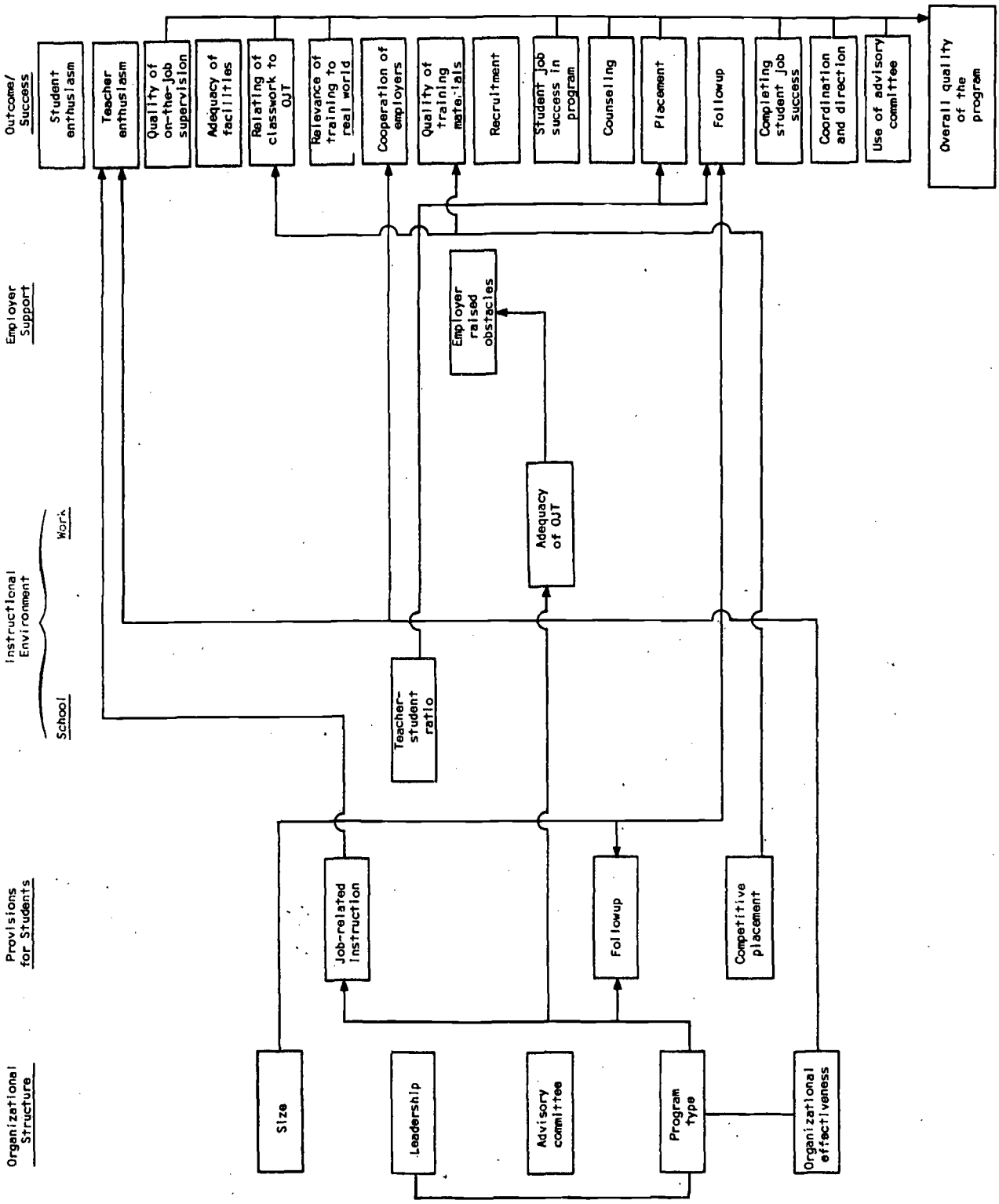


Figure III-1. Program Analysis Model

C. EMPIRICAL FINDINGS

In this section we will report our findings concerning the interrelations between the type of work education program and the various independent and dependent variables measured by this study.

In addition to general patterns of characteristics linked to different types of work education programs, some of the specific empirical interrelations between the program administrator's rating of the overall quality of the program, the ratings of the various components of program quality, and the program's characteristics in terms of the structural and environmental factors included in our analysis model (cf. Figure III-1) will be discussed. We will also explore the relationships between these variables and a subjective rating of program success as made by the interview team which visited the site, and with three measures of program success vis-à-vis the students participating in the program. These measures included the average scores of the students at each site indicating their level of satisfaction with their jobs, the level of responsibility afforded by the jobs, and the proportion of students who like school better since joining the program. A more detailed description of these measures can be found in the Student Data Analysis Section of this report.

1. Overall Quality of the Program

In terms of the rating of overall quality of the program, there is no statistically significant difference between the four types of programs included in this analysis. The administrators of secondary dropout prevention programs do tend to give a lower rating to the overall quality of their programs, but this difference is not statistically significant, and the remaining types have almost identical patterns of overall quality ratings (See Table III-1).

This rating of overall quality was also not significantly related to any of the structural or environmental features of the programs included in our model, nor was it related to the average job or school satisfaction scores of the students. There was, however, a weak, though not statistically significant, relationship between the average student job responsibility level and this rating of overall quality; i.e., programs where students indicated a higher level of responsibility in their jobs tended to be rated higher in overall quality by the administrators (See Table III-2).

VAR206 OVERALL QUALITY OF PROGRAM BY TYPE

VAR206	TYPE COUNT ROW PCT COL PCT TOT PCT	SECONDY SPEC OCC 1	POSTSEC SPEC OCC 2	SECONDY DROPOUT 3	SECONDY EXPLORE 5	ROW TOTAL
3		1	0	0	0	1
AVERAGE		100.0	0.0	0.0	0.0	2.1
		5.6	0.0	0.0	0.0	
		2.1	0.0	0.0	0.0	
4		7	5	8	3	23
ABOVE AVERAGE		30.4	21.7	34.8	13.0	47.9
		38.9	41.7	66.7	50.0	
		14.6	10.4	16.7	6.3	
5		10	7	4	3	24
EXCELLNT		41.7	29.2	16.7	12.5	50.0
		55.6	58.3	33.3	50.0	
		20.8	14.6	8.3	6.3	
COLUMN TOTAL		18 37.5	12 25.0	12 25.0	6 12.5	48 100.0

RAW CHI SQUARE = 3.90096 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.6901

Table III-1. Rating of Overall Quality by Program Type

VAR206 OVERALL QUALITY OF PROGRAM BY JRESP

* *

VAR206	COUNT / ROW PCT / COL PCT / TOT PCT	LOW 1	LOW-MIDDLE 2	HIGH-MIDDLE 3	HIGH 4	ROW TOTAL
AVERAGE	3	0	1	0	0	1
		0.0	100.0	0.0	0.0	2.0
		0.0	10.0	0.0	0.0	
		0.0	2.0	0.0	0.0	
ABOVE AVERAGE	4	8	5	7	4	24
		33.3	20.8	29.2	16.7	48.0
		61.5	50.0	43.8	36.4	
		16.0	10.0	14.0	8.0	
EXCELLENT	5	5	4	9	7	25
		20.0	16.0	36.0	28.0	50.0
		38.5	40.0	56.3	63.6	
		10.0	8.0	18.0	14.0	
	COLUMN TOTAL	13	10	16	11	50
		26.0	20.0	32.0	22.0	100.0

RAW CHI SQUARE = 5.95549 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.4282

Table III-2. Rating of Overall Quality by Average Student Job Responsibility Score

2. Components of Program Quality

The administrators were also asked to rate the programs' success in terms of a large number of specific program components (as described in Section III-A, Overall Characteristics).

In Figure III-2, we see the relative impact of each of these components on the rating of overall quality. What is most noteworthy is that overall quality is a function of such a large number of disparate components and not an easily isolated single identity. Thus it becomes understandable why we have found it to be not predictable from the various structural and environmental program features that we measured. Figures III-3 to III-5 give the same information for secondary occupational training programs, postsecondary occupational training programs, and secondary dropout prevention programs, respectively. Secondary career exploration programs are not included since the small number of cases does not allow such statistics to be reliably interpreted.

We will now explore the relationships of the individual components of program quality with other program characteristics.

a. Teacher Enthusiasm

First, we note that the rating of the enthusiasm of the teachers is related to the type of program. As we see in Table III-3, the rating of teacher enthusiasm is significantly lower for the secondary dropout prevention programs. However, this finding must be viewed with great caution. In most of the programs under study, the administrator making this rating is one of the program teachers, or, if not, at least in a very close working relationship with them within the school structure. On the other hand, in many of the dropout prevention programs the administrator is organizationally and functionally separate from the teaching staff, as is the case, for example, in all NYC programs. Thus this relationship may be largely a function of the rater's bias that stems from the degree of his personal involvement. Teacher enthusiasm is also highly related to whether or not the organization and staffing of the program is felt to be effective. As seen in Table III-4, where this is felt to be effective, 58 percent rate the teachers' enthusiasm

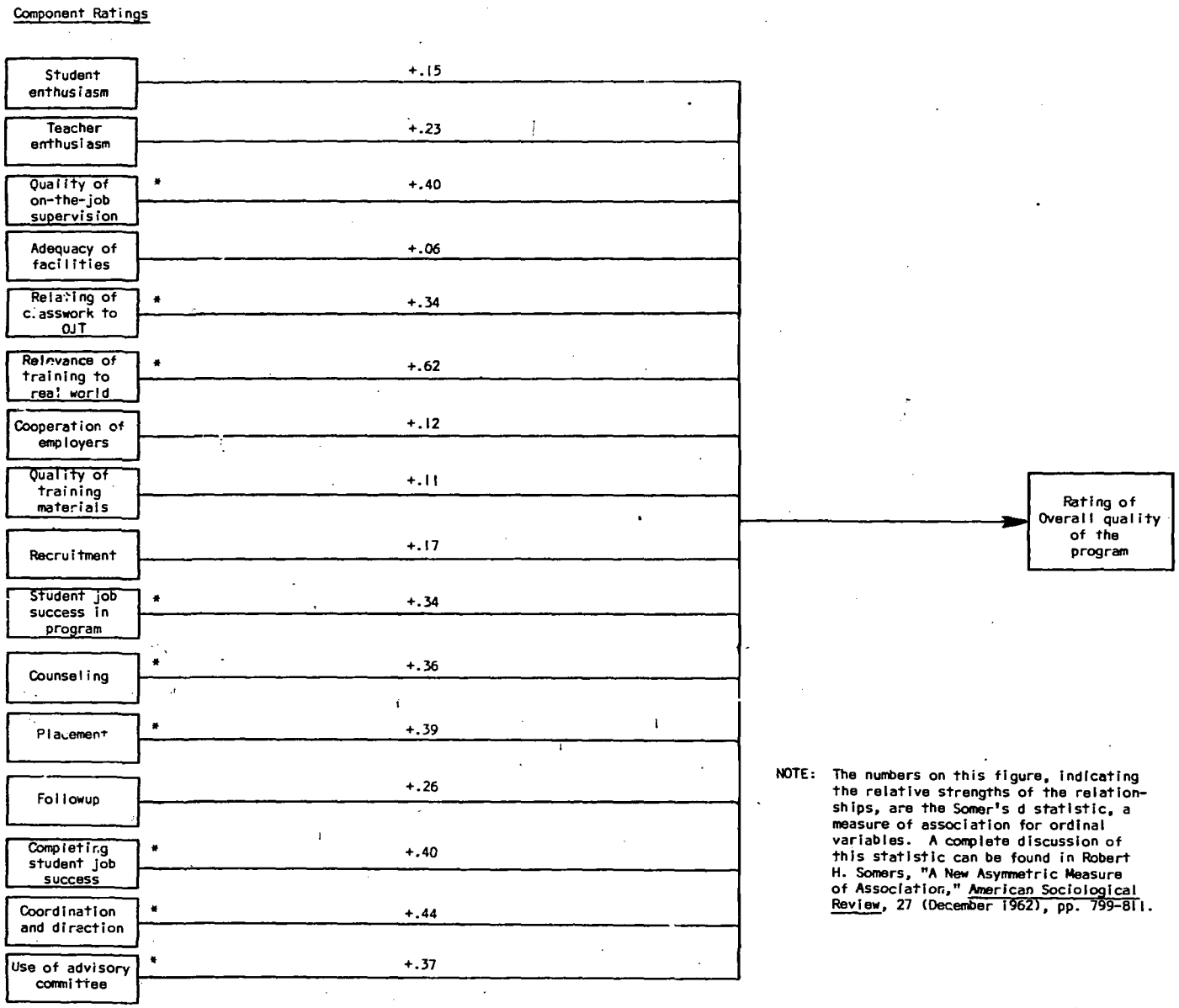


Figure III-2. Components of Self-rated Success

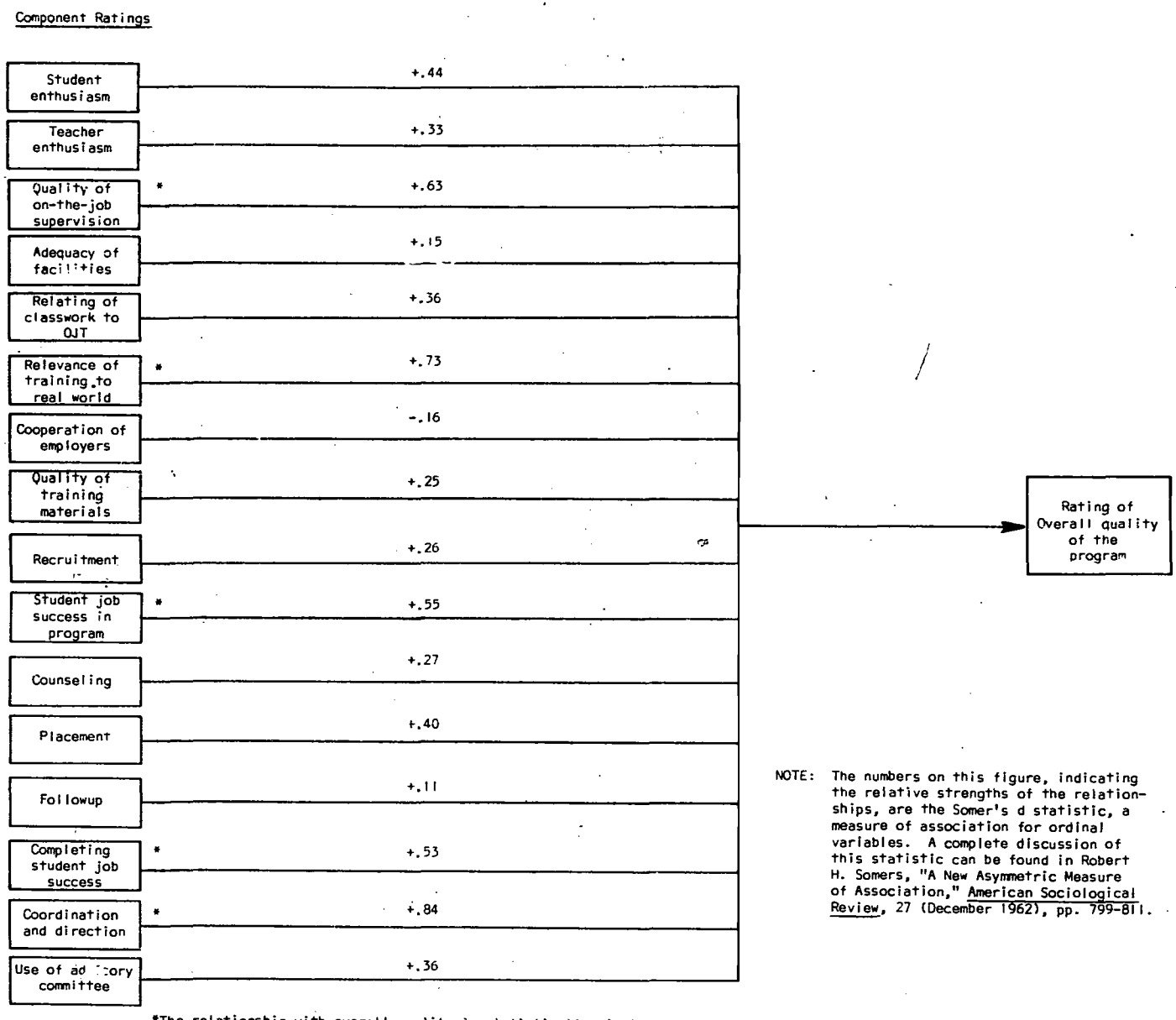
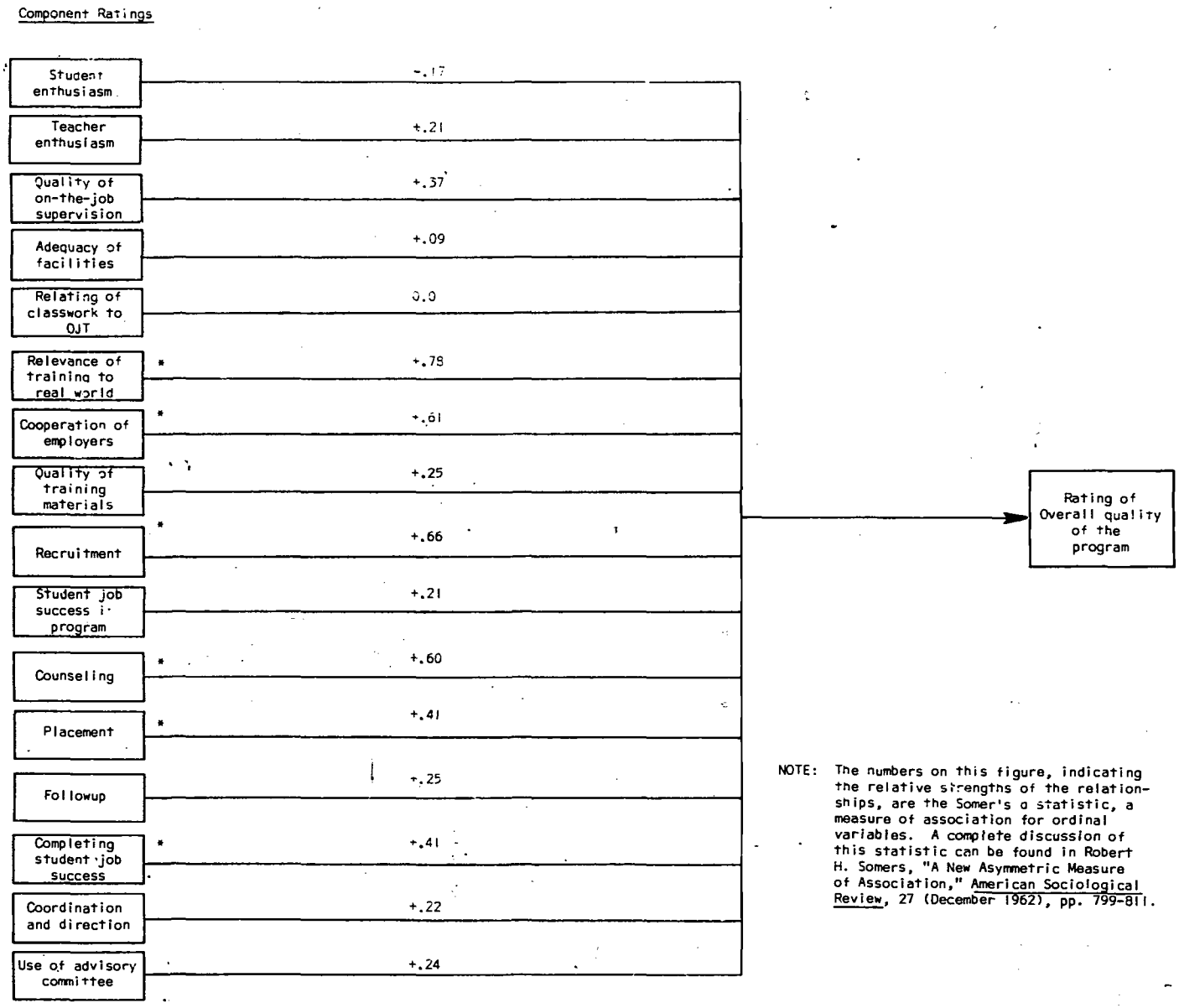
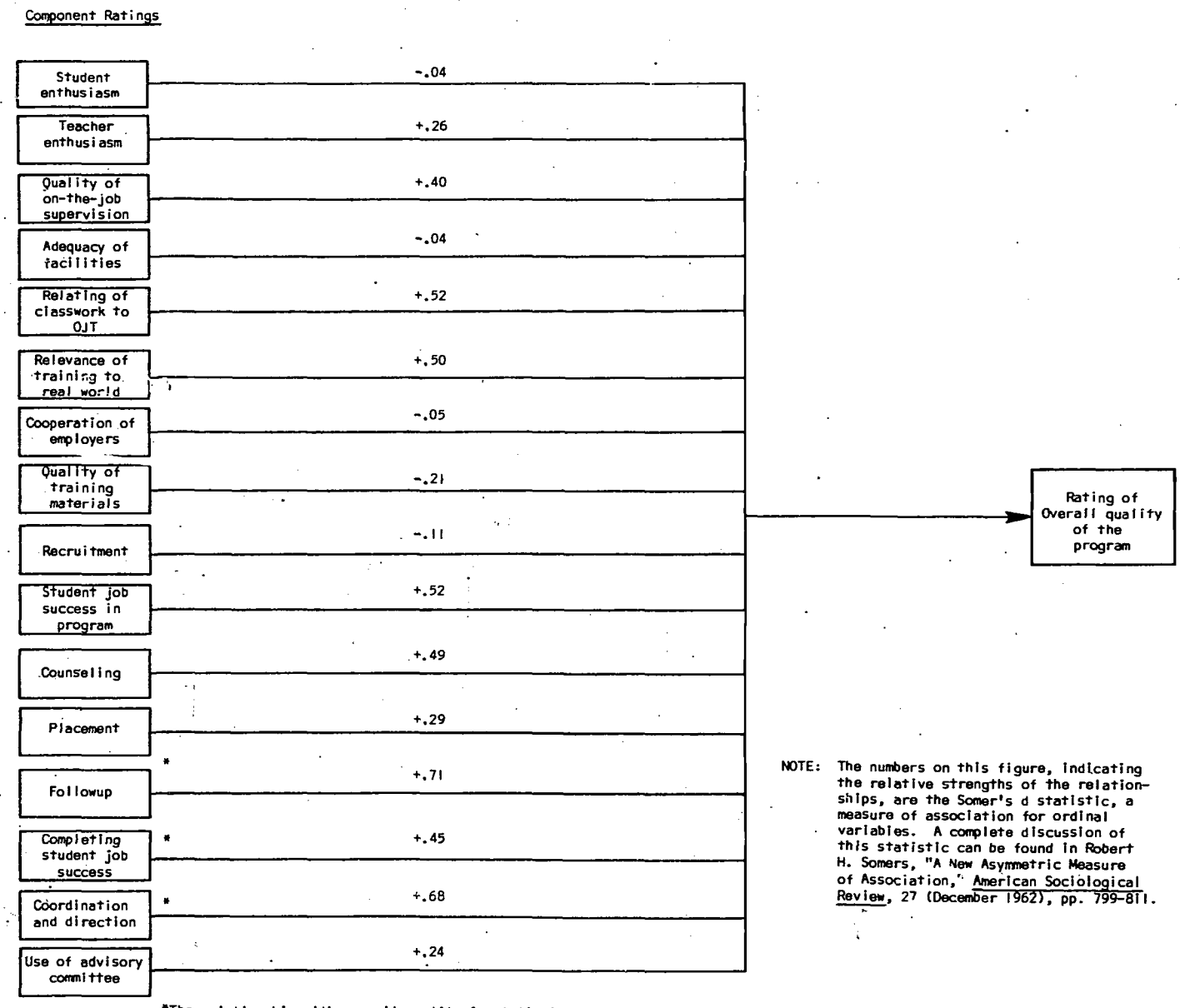


Figure III-3. Components of Self-rated Success for Secondary Specific Occupational Training Programs



NOTE: The numbers on this figure, indicating the relative strengths of the relationships, are the Somer's d statistic, a measure of association for ordinal variables. A complete discussion of this statistic can be found in Robert H. Somers, "A New Asymmetric Measure of Association," American Sociological Review, 27 (December 1962), pp. 799-811.

Figure III-4. Components of Self-rated Success for Postsecondary Specific Occupational Training Programs



NOTE: The numbers on this figure, indicating the relative strengths of the relationships, are the Somer's d statistic, a measure of association for ordinal variables. A complete discussion of this statistic can be found in Robert H. Somers, "A New Asymmetric Measure of Association," American Sociological Review, 27 (December 1962), pp. 799-811.

Figure III-5. Components of Self-rated Success for Secondary Dropout Prevention Programs

VAR186 ENTHUSIAM OF TEACHERS BY TYPE

* *

	TYPE				
COUNT / ROW PCT / COL PCT / TOT PCT	SECONDY SPEC OCC 1	POSTSEC SPEC OCC 2	SECONDY DROPOUT 3	SECONDY EXPLORE 5	ROW TOTAL
VAR186					
3	1	1	5	3	10
AVERAGE	10.0	10.0	50.0	30.0	21.3
	5.6	8.3	45.5	50.0	
	2.1	2.1	10.6	6.4	
4	7	4	3	0	14
ABOVE AVERAGE	50.0	28.6	21.4	0.0	29.8
	38.9	33.3	27.3	0.0	
	14.9	8.5	6.4	0.0	
5	10	7	3	3	23
EXCELLNT	43.5	30.4	13.0	13.0	48.9
	55.6	58.3	27.3	50.0	
	21.3	14.9	6.4	6.4	
COLUMN TOTAL	18	12	11	6	47
	38.3	25.5	23.4	12.8	100.0

RAW CHI SQUARE = 12.18044 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0581

Table III-3. Rating of Teacher Enthusiasm by Program Type

VAR186 ENTHUSIASM OF TEACHERS BY VAR128

VAR186	COUNT / ROW PCT / COL PCT / TOT PCT	VAR128 YES (1)	VAR128 NO (2)	ROW TOTAL
3 AVERAGE		5	5	10
		50.0	50.0	20.4
		13.2	45.5	
		10.2	10.2	
4 ABOVE AVERAGE		11	3	14
		78.6	21.4	28.6
		28.9	27.3	
		22.4	6.1	
5 EXCELLNT		22	3	25
		88.0	12.0	51.0
		57.9	27.3	
		44.9	6.1	
COLUMN TOTAL		38	11	49
		77.6	22.4	100.0

RAW CHI SQUARE = 5.93627 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0514

Table III-4. Rating of Teacher Enthusiasm by Whether or Not Organization is Considered Effective

as excellent, and only 13 percent rate it as no better than average. On the other hand, where it is felt that there is a lack of organizational effectiveness, then only 27 percent rate the teachers' enthusiasm as excellent, while 46 percent feel it is no better than average. However, we cannot determine from our data the causal relationship; i.e., whether the feeling that the organization and staffing is not effective because the program is staffed with unenthusiastic teachers, or if the teachers' lack of enthusiasm is a function of the lack of organizational effectiveness. In Table III-5, we find that the rating of teacher enthusiasm is also related to the provision of job-related instruction in school. In programs where job-related instruction is provided in school, there is a much higher rating of teacher enthusiasm. Since, as noted, dropout prevention programs had lower teacher enthusiasm ratings and since these are less likely to provide job-related instruction in school, we checked to see if the relationship were a spurious function of the relationship between type of program and the provision of job-related instruction. Instead we found a more complex interactive effect of program type on the relationship between job-related instruction and teacher enthusiasm. For dropout prevention programs, for which job-related instruction would not be a central requirement given the goals of this type of program, we find that the presence or absence of such instruction has no impact on the enthusiasm of the teachers. However, for specific occupational training programs, where the provision of job-related instruction is important, we find that the lack of job-related instruction in school does dampen the enthusiasm of the teachers.

b. Relatedness of Classwork to On-the-Job Training

The rating of the relatedness of classwork and on-the-job training is not significantly related to the type of program. There is a slight tendency for dropout prevention programs to rate themselves somewhat lower, but again this component is much less central to their goals. However, there is a strong relationship between this component and the typical work placement

VAR186 ENTHUSIAM OF TEACHERS BY VAR121

* *

VAR186	COUNT / ROW PCT / COL PCT / TOT PCT	VAR121 YES (1)	VAR121 NO (2)	ROW TOTAL
3		6	4	10
AVERAGE		60.0	40.0	20.4
		14.3	57.1	
		12.2	8.2	
4		13	1	14
ABOVE AVERAGE		92.9	7.1	28.6
		31.0	14.3	
		26.5	2.0	
5		23	2	25
EXCELLNT		92.0	8.0	51.0
		54.8	28.6	
		46.9	4.1	
COLUMN TOTAL		42	7	49
		85.7	14.3	100.0

RAW CHI SQUARE = 6.79000 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0335

Table III-5. Rating of Teacher Enthusiasm by Whether or Not Job-Related Instruction is Provided in School

procedures for the students; i.e., whether several students are sent to compete for a job slot or if typically only one student is sent to fill each available job slot. As seen in Table III-6, programs with competitive placement of students also rate the relatedness of classwork and OJT much higher.

c. Quality of Training Materials

A relationship exists between competitiveness of placement and the rating of the quality of training materials (See Table III-7). This rating of the quality of training materials is also influenced by the teacher-student ratio. Among programs with the lowest teacher-student ratio (1:15 or less), two-thirds rate the quality of training as excellent; in the low-middle teacher-student ratio category (1:16-1:20), 56 percent rate the quality of training materials as excellent; 36 percent rate it as excellent in the next higher category (1:21-1:30); and among programs with the highest teacher-student ratio (1:31 or greater), none rate the quality of training materials as excellent (See Table III-8).

d. Cooperation of Employers

Looking at the rating given to the cooperation of employers, we find no relationship with type of program. We do find that this rating is linked to whether or not the program's organization and staffing is felt to be effective. About two-thirds of the programs that state they have an effective organizational structure rate the employers' cooperation as excellent; for programs without an effective organization, only 36 percent feel the employers' cooperation has been excellent (See Table III-9).

e. Job Success of Students

The rating of the job success of students in the program is very strongly a function of program type. Specific occupational training programs feel their students are much more successful in their jobs than either secondary dropout prevention or career exploration programs (See Table III-10). A

VAR189 RELATE CLASSWORK TO OJT BY VAR165

* *

		VAR165		
	COUNT / ROW PCT / COL PCT / TOT PCT	1 SENT PER SLOT	SEVERAL COMPETE 2	ROW TOTAL
VAR189				
3 AVERAGE		8 / 66.7 / 44.4 / 20.5	4 / 33.3 / 19.0 / 10.3	12 / 30.8
4 ABOVE AVERAGE		8 / 61.5 / 44.4 / 20.5	5 / 38.5 / 23.8 / 12.8	13 / 33.3
5 EXCELLNT		2 / 14.3 / 11.1 / 5.1	12 / 85.7 / 57.1 / 30.8	14 / 35.9
COLUMN TOTAL		18 / 46.2	21 / 53.8	39 / 100.0

RAW CHI SQUARE = 8.99092 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0112

Table III-6. Rating of Relatedness of Classwork and OJT by Type of Student Placement

VAR196 QUALITY OF TRAINING MATERIALS BY VAR165

* *

VAR196	COUNT / ROW PCT / COL PCT / TOT PCT	VAR165: II SENT PER SLOT 1	SEVERAL COMPETE 2	ROW TOTAL
AVERAGE	3	8 80.0 44.4 21.1	2 20.0 10.0 5.3	10 26.3
ABOVE AVERAGE	4	7 58.3 38.9 18.4	5 41.7 25.0 13.2	12 31.6
EXCELLNT	5	3 18.8 16.7 7.9	13 81.3 65.0 34.2	16 42.1
	COLUMN TOTAL	18 47.4	20 52.6	38 100.0

RAW CHI SQUARE = 10.10606 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0064

Table III-7. Rating of Training Material Quality by Type of Student Placement

VAR196 QUALITY OF TRAINING MATERIALS BY VAR089

	VAR089				
COUNT / ROW PCT / COL PCT / TOT PCT	1:15 or less (1)	1:16 to 1:20 (2)	1:21 to 1:30 (3)	1:31 or greater (4)	ROW TOTAL
VAR196					
3	2	3	3	4	12
AVERAGE	16.7	25.0	25.0	33.3	28.6
	16.7	33.3	27.3	40.0	
	4.8	7.1	7.1	9.5	
4	2	1	4	6	13
ABOVE AVERAGE	15.4	7.7	30.8	46.2	31.0
	16.7	11.1	36.4	60.0	
	4.8	2.4	9.5	14.3	
5	8	5	4	0	17
EXCELLENT	47.1	29.4	23.5	0.0	40.5
	66.7	55.6	36.4	0.0	
	19.0	11.9	9.5	0.0	
COLUMN TOTAL	12	9	11	10	42
	28.6	21.4	26.2	23.8	100.0

RAW CHI SQUARE = 12.52906 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0512

Table III-8. Rating of Training Material Quality by Teacher-Student Ratio

VAR191 COOPERATION OF EMPLOYERS BY VAR128

VAR191	COUNT / ROW PCT / COL PCT / TOT PCT	VAR128 YES (1)	VAR128 NO (2)	ROW TOTAL
3		4	0	4
AVERAGE		100.0	0.0	8.2
		10.5	0.0	
		8.2	0.0	
4		9	7	16
ABOVE AVERAG		56.3	43.8	32.7
		23.7	63.6	
		18.4	14.3	
5		25	4	29
EXCELLNT		86.2	13.8	59.2
		65.8	36.4	
		51.0	8.2	
COLUMN TOTAL		38	11	49
		77.6	22.4	100.0

RAW CHI SQUARE = 6.57596 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0373

Table III-9. Rating of Employer Cooperation by Whether or Not Organization is Considered Effective

VAR19 STUDENTS JOB SUCCESS IN PROGRAM BY TYPE

VAR198	TYPE				
COUNT / ROW PCT / COL PCT / TOT PCT	SECONDY SPEC OCC 1	POSTSEC SPEC OCC 2	SECONDY DROPOUT 3	SECONDY EXPLORE 5	ROW TOTAL
3 AVERAGE	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 33.3 8.3 2.2	2 66.7 40.0 4.3	3 6.5
4 ABOVE AVERAGE	8 32.0 44.4 17.4	4 16.0 36.4 8.7	10 40.0 83.3 21.7	3 12.0 60.0 6.5	25 54.3
5 EXCELLNT	10 55.6 55.6 21.7	7 38.9 63.6 15.2	1 5.6 8.3 2.2	0 0.0 0.0 0.0	18 39.1
COLUMN TOTAL	18 39.1	11 23.9	12 26.1	5 10.9	46 100.0

RAW CHI SQUARE = 21.20265 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0017

Table III-10. Rating of Student Job Success in Program by Program Type

very similar, though not statistically significant, pattern exists in the rating of the job success of students completing the program. Again, this is an aspect of program operation much more relevant to the goals of the specific occupational training programs. However, it is interesting to note that in the employers' view, this is generally not the case. There is no significant relation between the type of program the employer is associated with and his rating of this same component.

f. Counseling

The rating given to the counseling component is not related to type of program. It is, however, related to the perception of effective organization and staffing (See Table III-11).

g. Placement

The rating of the placement of students completing the program is strongly linked to program type; specific occupational training programs, especially those at the postsecondary level, rate their placement programs significantly higher. This corresponds to a very similar pattern for the actual placement rates the various types of programs have achieved. Seventy percent of the postsecondary occupational training programs had placed at least 90 percent of their graduates in positions related to their training.

h. Followup

Even though, as noted earlier, occupational training programs are more likely to have an organized program to followup on their former students, there is only a very weak and not statistically significant relationship between program type and the rating given to the program's followup on former students. Instead, this rating appears to be strongly related to the size of the program (in terms of the number of students enrolled). The smaller the program (and thus the more manageable this task), the higher the rating of their followup activities. As seen in Table III-12, 54 percent of the smallest programs

VAR199 COUNSELING BY VAR128

* *

VAR199	COUNT / ROW PCT / COL PCT / TOT PCT	VAR128: YES 1	NO 2	ROW TOTAL
AVERAGE	3	9	3	12
		75.0	25.0	24.0
		23.1	27.3	
		18.0	6.0	
ABOVE AVERAGE	4	9	6	15
		60.0	40.0	30.0
		23.1	54.5	
		18.0	12.0	
EXCELLNT	5	21	2	23
		91.3	8.7	46.0
		53.8	18.2	
		42.0	4.0	
COLUMN TOTAL		39	11	50
		78.0	22.0	100.0

RAW CHI SQUARE = 5.26756 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0718

Table III-11. Rating of Counseling by Whether or Not Organization is Considered Effective

VAR201 FOLLOW-UP ON FORMER STUDENTS BY VAR079 ENROLLMENT

		VAR C79				
	COUNT / ROW PCT / COL PCT / TOT PCT	25 or less 1	26-34 2	40-99 3	100 or more 4	ROW TOTAL
VAR201						
3 AVERAGE		2	4	9	4	19
		10.5	21.1	47.4	21.1	46.3
		15.4	44.4	69.2	66.7	
		4.9	9.8	22.0	9.8	
4 ABOVE AVERAGE		4	3	3	2	12
		33.3	25.0	25.0	16.7	29.3
		30.8	33.3	23.1	33.3	
		9.8	7.3	7.3	4.9	
5 EXCELLNT		7	2	1	0	10
		70.0	20.0	10.0	0.0	24.4
		53.8	22.2	7.7	0.0	
		17.1	4.9	2.4	0.0	
COLUMN TOTAL		13	9	13	6	41
		31.7	22.0	31.7	14.6	100.0

RAW CHI SQUARE = 12.55636 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0506

Table III-12. Rating of Followup by Number of Students Enrolled

(25 or fewer students) rate their followup on former students as excellent; among slightly larger programs (26-39 students) this percentage drops to 22 percent; for the moderately large programs (40-99 students) it is only 8 percent; and none of the very largest programs (100 or more) rate their followup programs excellent. In the two largest enrollment groups, two-thirds feel their followup is no better than average (the lowest rating used by the respondents).

i. Coordination and Direction

The secondary career exploration programs rate themselves significantly lower in coordination and direction and are more likely to feel their organization was not effective. However, it is very interesting to find that, overall, the rating of coordination and direction was not related to the perception of organizational effectiveness (See Table III-13).

VAR203 COORDINATION AND DIRECTION BY VAR128

VAR203	COUNT / ROW PCT / COL PCT / TOT PCT	VAR128 YES (1)	VAR128 NO (2)	ROW TOTAL
3 AVERAGE		5	3	8
		62.5	37.5	16.0
		12.8	27.3	
		10.0	6.0	
4 ABOVE AVERAGE		16	3	19
		84.2	15.8	38.0
		41.0	27.3	
		32.0	6.0	
5 EXCELLENT		18	5	23
		78.3	21.7	46.0
		46.2	45.5	
		36.0	10.0	
COLUMN TOTAL		39	11	50
		78.0	22.0	100.0

RAW CHI SQUARE = 1.54802 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.4612

Table III-13. Rating of Coordination and Direction by Whether or Not Organization is Considered Effective

3. Coordinator Characteristics

While there was little quantitative data available to explore what impact the personal characteristics of the coordinator had on program quality, some analysis of this factor was made. In this vein, the major finding was that the number of years of college training the coordinator had did relate to certain measures of program success. Coordinators with greater amounts of college education were more often associated with programs with higher rates of growth, with fewer unresolved problems, and with higher average student job and school satisfaction scores. On the other hand, these coordinators with more college seem to be more critical of themselves, since they rate their programs as lower in overall quality than do coordinators with fewer years of college training.

4. Program Success Vis-à-Vis the Students

Next we will examine the interrelations between program features, the administrators' ratings of various components of program quality, and the success of the program vis-à-vis the students, i.e., the average level of job responsibility, job satisfaction and increase in school satisfaction that the programs have been able to achieve. Most interesting about our empirical findings is the infrequency of any relation between the program and the student measures. Job responsibility and job satisfaction are related to program type. As we see in Tables III-14 and III-15, occupational training programs, especially those at the postsecondary level, tend to provide students with jobs that have a higher average level of responsibility and satisfaction. However, the three student variables show no significant relationship to any of the other structural and programmatic characteristics under study. In addition, there is very little correspondence between these student variables and the administrator's ratings of program success in terms of overall quality or in specific components. What relationships do exist are generally extremely weak and often negative.

Tables III-16 and III-17 show the relationship between the student measures of job and school satisfaction and the rating of the overall quality of the program. Both are extremely weak and not statistically significant; in fact, the relationship with job satisfaction is negative; i.e., higher student job satisfaction is associated with lower ratings of overall program quality. The same general lack of clear correspondence exists with the ratings of the various program components, discussed above. The one significant correspondence, as seen in Table III-18, was between level of job responsibility and the rating of teacher enthusiasm. Thus it would seem that program quality, from the administrator's point of view, is not very heavily influenced by the program impact on the students.

JRESP BY TYPE

JRESP	COUNT / ROW PCT / COL PCT / TOT PCT	SECONDY SPEC OCC 1	POSTSEC SPEC OCC 2	SECONDY DROPOUT 3	SECONDY EXPLORE 5	ROW TOTAL
LOW	1	1	0	9	2	12
		8.3	0.0	75.0	16.7	25.0
		5.6	0.0	75.0	33.3	
		2.1	0.0	18.8	4.2	
LOW-MIDDLE	2	6	0	1	2	9
		66.7	0.0	11.1	22.2	18.8
		33.3	0.0	8.3	33.3	
		12.5	0.0	2.1	4.2	
HIGH-MIDDLE	3	8	6	1	1	16
		50.0	37.5	6.3	6.3	33.3
		44.4	50.0	8.3	16.7	
		16.7	12.5	2.1	2.1	
HIGH	4	3	6	1	1	11
		27.3	54.5	9.1	9.1	22.9
		16.7	50.0	8.3	16.7	
		6.3	12.5	2.1	2.1	
	COLUMN TOTAL	18	12	12	6	48
		37.5	25.0	25.0	12.5	100.0

RAW CHI SQUARE = 33.33577 WITH 9 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0001

Table III-14. Average Student Job Responsibility Score by Program Type

JSATIS BY TYPE

JSATIS		TYPE 1 SECONDY SPEC OCC	2 POSTSEC SPEC OCC	3 SECONDY DROPOUT	5 SECONDY EXPLORE	ROW TOTAL
LOW	1	5	2	2	2	11
		45.5	18.2	18.2	18.2	22.9
		27.8	16.7	16.7	33.3	
		10.4	4.2	4.2	4.2	
LOW-MIDDLE	2	3	1	3	4	11
		27.3	9.1	27.3	36.4	22.9
		16.7	8.3	25.0	66.7	
		6.3	2.1	6.3	8.3	
HIGH-MIDDLE	3	7	2	6	0	15
		46.7	13.3	40.0	0.0	31.3
		38.9	16.7	50.0	0.0	
		14.6	4.2	12.5	0.0	
HIGH	4	3	7	1	0	11
		27.3	63.6	9.1	0.0	22.9
		16.7	58.3	8.3	0.0	
		6.3	14.6	2.1	0.0	
COLUMN TOTAL		18 37.5	12 25.0	12 25.0	6 12.5	48 100.0

RAW CHI SQUARE = 21.07474 WITH 9 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0123

Table III-15. Average Student Job Satisfaction Score by Program Type

VAR206 OVERALL QUALITY OF PROGRAM BY JSATIS

VAR206	JSATIS 1 LOW	2 LOW-MIDDLE	3 HIGH-MIDDLE	4 HIGH	ROW TOTAL
3 AVERAGE	0	1	0	0	1
	C.C	100.0	0.0	0.0	2.0
	C.0	9.1	0.0	0.0	
	0.C	2.0	0.0	0.0	
4 ABOVE AVERAGE	5	3	9	7	24
	20.8	12.5	37.5	29.2	48.0
	45.5	27.3	60.0	53.8	
	10.0	6.0	18.0	14.0	
5 EXCELLNT	6	7	6	6	25
	24.C	28.0	24.0	24.0	50.0
	54.5	63.6	40.0	46.2	
	12.0	14.0	12.0	12.0	
COLUMN TOTAL	11	11	15	13	50
	22.0	22.0	30.0	26.0	100.0

RAW CHI SQUARE = 5.88041 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.4367

Table III-16. Rating of Overall Quality by Average Student Job Satisfaction Score

VAR206 ,OVERALL QUALITY OF PROGRAM BY SCHSATIS

* *

VAR206	COUNT / ROW PCT / COL PCT / TOT PCT	LOW 1	LOW-MIDDLE 2	HIGH-MIDDLE 3	HIGH 4	ROW TOTAL
AVERAGE	3	0	1	0	0	1
		0.0	100.0	0.0	0.0	2.0
		0.0	6.3	0.0	0.0	
		0.0	2.0	0.0	0.0	
ABOVE AVERAGE	4	4	7	4	9	24
		16.7	29.2	16.7	37.5	48.0
		57.1	43.8	30.8	64.3	
		8.0	14.0	8.0	18.0	
EXCELLNT	5	3	8	9	5	25
		12.0	32.0	36.0	20.0	50.0
		42.9	50.0	69.2	35.7	
		6.0	16.0	18.0	10.0	
	COLUMN TOTAL	7	16	13	14	50
		14.0	32.0	26.0	28.0	100.0

RAW CHI SQUARE = 5.48919 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.4828

Table III-17. Rating of Overall Quality by Average Student Improvement in School Satisfaction Score

VAR186 ENTHUSIAM OF TEACHERS BY JRESP

VAR186	JRESP LOW 1	LOW-MIDDLE 2	HIGH-MIDDLE 3	HIGH 4	ROW TOTAL
3 AVERAGE	4	3	2	1	10
	40.0	30.0	20.0	10.0	20.4
	33.3	30.0	12.5	9.1	
	8.2	6.1	4.1	2.0	
4 ABOVE AVERAGE	2	2	9	1	14
	14.3	14.3	64.3	7.1	28.6
	16.7	20.0	56.3	9.1	
	4.1	4.1	18.4	2.0	
5 EXCELLNT	6	5	5	9	25
	24.0	20.0	20.0	36.0	51.0
	50.0	50.0	31.3	81.8	
	12.2	10.2	10.2	18.4	
COLUMN TOTAL	12	10	16	11	49
	24.5	20.4	32.7	22.4	100.0

RAW CHI SQUARE = 12.49261 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0518

Table III-18. Rating of Teacher Enthusiasm by Average Student Job Responsibility Score

5. Interviewers' Subjective Rating of Program Quality

To fully explore all facets of differences in program quality and success, consideration was also given to a subjective rating of the programs made by the interviewers. Each interviewer was asked to single out no more than three programs that stood out as significantly higher and lower in overall quality respectively. On this basis, 19 programs were identified as better than others and nine as less successful. This variable was then related to the other measures included in this study. While not statistically significant, there was a tendency for occupational training programs to be in the better than most category more frequently than other types, and for the secondary drop-out and career exploration programs to be disproportionately represented in the category of significantly lower (See Table III-19). What impacted most on this subjective rating was the rating of teachers' enthusiasm. As seen in Table III-20, when teacher enthusiasm was rated as excellent, the program was very likely (60 percent of the time) to impress the interviewer as being better than most; when the teacher enthusiasm was rated as no better than average, the program never was considered by the interviewer as better than most and was likely to impress that interviewer as worse than most others. Since, as noted above, teacher enthusiasm was related to program type, we explored the effect of this relationship upon the effect of each of these variables on the interviewers' impressions. While both program type and teacher enthusiasm appear to influence the interviewer, the stronger influence on the interviewer actually seemed to stem from the enthusiasm of the teachers.

The level of job responsibility of the students also played a role in the interviewers' subjective ratings, although the even stronger impact of teacher enthusiasm tended to obscure this effect. Thus, when teacher enthusiasm was rated as excellent, this was of overriding importance to the interviewers and student job responsibility had no impact. However, when the teacher enthusiasm was rated as above average other factors could enter into the

SUBRATNG BY TYPE

SUBRATNG	COUNT / ROW PCT / COL PCT / TOT PCT	TYPE 1 SECONDY SPEC OCC	2 POSTSEC SPEC OCC	3 SECONDY DROPOUT	5 SECONDY EXPLORE	ROW TOTAL
1 GOOD		9	6	1	2	18
		50.0	33.3	5.6	11.1	37.5
		50.0	50.0	8.3	33.3	
		18.8	12.5	2.1	4.2	
2 MIDDLE		7	5	7	2	21
		33.3	23.8	33.3	9.5	43.8
		38.9	41.7	58.3	33.3	
		14.6	10.4	14.6	4.2	
3 BAD		2	1	4	2	9
		22.2	11.1	44.4	22.2	18.8
		11.1	8.3	33.3	33.3	
		4.2	2.1	8.3	4.2	
COLUMN TOTAL		18	12	12	6	48
		37.5	25.0	25.0	12.5	100.0

RAW CHI SQUARE = 8.13750 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.2282

Table III-19. Interviewers' Subjective Rating by Program Type

SUBRATNG BY VAR186

* *

SUBRATNG	COUNT / ROW PCT / COL PCT / TOT PCT	VAR186: AVERAGE 3	ABOVE AVERAGE 4	EXCELLNT 5	ROW TOTAL
GOOD	1	0	4	15	19
		0.0	21.1	78.9	38.8
		0.0	28.6	60.0	
		0.0	8.2	30.6	
MIDDLE	2	5	8	8	21
		23.8	38.1	38.1	42.9
		50.0	57.1	32.0	
		10.2	16.3	16.3	
BAD	3	5	2	2	9
		55.6	22.2	22.2	18.4
		50.0	14.3	8.0	
		10.2	4.1	4.1	
	COLUMN TOTAL	10	14	25	49
		20.4	28.6	51.0	100.0

RAW CHI SQUARE = 15.66900 WITH 4 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0035

Table III-20. Interviewers' Subjective Rating by Rating of Teacher Enthusiasm

interviewers' judgment; in this case we find a very strong positive relationship between the interviewer's subjective rating and the average level of job responsibility of the students (See Table III-21). This strong impact of the rating of teacher enthusiasm on the interviewer's subjective rating of overall program quality seems to be capable of being interpreted in two alternative ways. The first of these possibilities is that the staff's enthusiasm is actually a significant component, essential in the development of a quality program. However, it might be alternatively hypothesized, that this enthusiasm is more accurately a measure of the staff's salesmanship abilities, and thus that the interviewers' subjective rating is primarily a function of how convincingly the program staff could "sell" the program to the interview team.

VAR186 ENTHUSIAM OF TEACHERS VALUE.. 4

SUBRATNG	JRESP	1 LOW	2 LOW-MIDDLE	3 HIGH-MIDDLE	4 HIGH	ROW TOTAL
1 GOOD	COUNT	0	0	3	1	4
	ROW PCT	0.0	0.0	75.0	25.0	28.6
	COL PCT	0.0	0.0	33.3	100.0	
	TOT PCT	0.0	0.0	21.4	7.1	
2 MIDDLE	COUNT	1	1	6	0	8
	ROW PCT	12.5	12.5	75.0	0.0	57.1
	COL PCT	50.0	50.0	66.7	0.0	
	TOT PCT	7.1	7.1	42.9	0.0	
3 BAD	COUNT	1	1	0	0	2
	ROW PCT	50.0	50.0	0.0	0.0	14.3
	COL PCT	50.0	50.0	0.0	0.0	
	TOT PCT	7.1	7.1	0.0	0.0	
COLUMN TOTAL		2 14.3	2 14.3	9 64.3	1 7.1	14 100.0

RAW CHI SQUARE = 8.75000 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.1881

Table III-21. Interviewers' Subjective Rating by Average Student Job Responsibility Score (only for those programs where teacher enthusiasm was above average)

6. Program Setting

Finally, consideration was given to the possible impact of the program's industrial setting on the other variables under study, since the programs were located in four diverse types of settings: Farming regions (rural); bedroom communities; single industry areas; and major industrial/business centers (urban). In general, however, this setting did not seem to have much impact on program characteristics. There was a moderate, though not quite statistically significant, relationship between the rating of teacher enthusiasm and the industrial setting; enthusiasm was greatest in urban areas (rated as excellent in 81 percent of the cases) and lowest in rural areas, where only 23 percent rated teacher enthusiasm as excellent. Industrial setting did show a significant relationship with whether or not employers provided the program with personnel support: This occurred most often in urban areas (in 62 percent of the cases); was fairly common in rural areas (54 percent); was fairly infrequent in bedroom communities (36 percent); and very rare in single industry areas (10 percent). There were no significant differences between the types of programs in terms of their industrial setting, though there were no career exploration programs located in urban areas.

7. Overall (Empirical) Trends

The first overall finding is that of an unusual pattern on a certain set of variables displayed by the secondary career exploration programs that distinguish this type of program from any of the others, and that might best be labeled as a "syndrome of organizational nonintegration." First, among all other types of programs, about 70 percent of the administrators devote 100 percent of their time to the particular work education program that was being studied. None of the career exploration program coordinators devote 100 percent of their time to this one program. Next, they are more likely than any other type of program to feel that the organization and staffing of their program is not effective for achieving their goals. Also, they are least likely to rate as excellent the administration's support of their program, even though they are just as likely as the other types of programs to rate the administration's commitment to work education in general as excellent. Finally they rate the programs' coordination and direction significantly lower than do any of the other types of programs.

The next major finding deals with the specific occupational training (cooperative) type of programs. These programs, regardless of whether at the secondary or postsecondary level, exhibit a consistent pattern, that also corresponds with the trends reported in the analysis of student data (cf., Student Data Analysis section of this report). As seen also in those student data findings, it appears that these cooperative programs, given the framework of expectations and goals in which they operate, are basically successful in doing what these programs can and should accomplish. Thus, we find that these programs are most likely to provide job-related instruction in school, to have a followup program, to have an advisory committee, to provide job placement, to have a high rate of placements in related fields (this is especially true at the postsecondary level), to feel they have enthusiastic teachers, to rate highly the relevance of training to real-world conditions, and to rate more highly

the job success of students while in the program. Taken in conjunction with the similar set of findings from the student data it appears that these cooperative programs are, overall, fulfilling their aims of adequately training students for and placing them in skilled jobs for which there is a demand in present-day society.

IV. EMPLOYER DATA ANALYSIS

A. CHARACTERISTICS OF PARTICIPATING EMPLOYERS

1. Company Characteristics

At each of the 50 sites, the program coordinator was asked to supply the names of four employers participating in his work education program. If there were more than four employers, the coordinator was asked to list the four that employed the largest number of students. Using this procedure a total of 178 employers were interviewed. The respondent was the reason responsible for coordination of the company's involvement with the work education program. Since a large proportion of the employers were smaller companies, the respondent was very often the owner or manager of the company. In the larger companies, the respondent was typically a personnel manager or a second-level supervisor.

The typical company participating in these work education programs had a median of 45 employees. Only 18 percent had 300 or more employees. They were fairly evenly divided between independent companies (56 percent) and divisions of larger companies (44 percent). They were generally stable or increasing in size (only 11 percent had a decline in the number of employees over the past year, while 41 percent had grown and 48 percent had remained about the same size).

2. Length of Involvement

The typical company had been associated with the work education program for about 3 years. The respondent had personally been connected with the program for about 2 years (the respondent was the person in the company responsible for the coordination of the company's involvement with the program).

3. Student Characteristics

Generally only a small number of students from the program were employed by each company at one time; the average number of students was five, and the median between two and three. The number of students in the program employed by the company was constant 58 percent of the time and had been decreasing in only about 10 percent of the companies studied. The number of students employed was most often (in 82 percent of the cases) the intended number, although 44 percent of the employers said they could employ more students.

The student work force within a company was likely to be segregated in terms of ethnicity and sex. Only 30 percent of the employers reported that the students in their employ were ethnically heterogeneous, and only 39 percent stated that their student employees contained both male and females. (The specific figures for employers of nonintegrated work forces of students were as follows: Fifty-seven percent of the employers stated that none of the students they employed were members of ethnic minorities and 13 percent said that all of the students they employed were members of ethnic minorities; 32 percent of the employers had only female students and 29 percent said that their entire student work force was male). The overrepresentation of smaller towns and more rural areas may be a partial determinant of this observed ethnic homogeneity.

4. Training of Students

The most typical pattern, in 65 percent of the cases, was a 1 to 1 supervisor-student ratio. Ninety percent of the employers never had more than three students assigned to any one supervisor. The staff members, supervising the work education students, had an average of 12 years of vocational experience and an average of 2.9 years of college training. In 22 percent of the companies the supervisor did not have any college, while in 50 percent the supervisor had an average of 4 years of college.

The on-the-job training was informal in 55 percent of the cases, although formal classroom instruction was given in 22 percent of the cases.

5. Employer Goals and Benefits

The three most common goals of the work education program, from the employer's point of view, were: Youth development (51 percent), development of the occupational field (39 percent), and the development or screening of potential permanent employees (26 percent). However, when asked what were the actual benefits to the company from its participation in the work education program, the most common answer, (27 percent) was in terms of a good source of part-time or temporary employees. The above three goals were mentioned as an actual benefit by only 12, 13, and 18 percent of the employers, respectively. Both the goals and benefits questions were categorized within the same six categories: The company's community image; the development or screening of potential employees; a good source of part-time or temporary employees; a good source of low-cost labor; youth development; and development of the occupational field. It is extremely interesting to observe the relative correspondence within each of these six categories between its status as a goal and the fulfillment of that goal in terms of being perceived as a benefit received by the company.

The following table shows for each of these six areas, the proportion of those who, having listed it as a goal, stated it was actually a benefit that the company received. Listed in order of their rates of fulfillment:

Listed as a Goal	Percent Receiving as a Benefit
Source of low-cost labor	57
Source of part-time employees	48
Source of potential permanent employees	42
Development of the occupational field	24
Youth development	16
Community image	10

From this it is very clear that, with the possible exception of community image, the frequency of fulfillment of the employer's goals for the work

education program in which he participates is directly related to the concreteness of that goal. There are two possible explanations of this very clear trend. These are:

- Success if more often achieved for simply measured and immediately practical goals, or
- Employer responses on goals reflected a desire to respond with more socially acceptable answers.

6. Potential Problems

The work education program has had no effect on the company's safety record in 95 percent of the cases. In fact, of the 5 percent who said it did have an effect, half stated that it was a positive effect. Problems with the students' attendance were also very rare; 7 percent of the employers reported problems with absenteeism and 4 percent with tardiness. Regular employees' reaction to company participation has generally been quite favorable; 75 percent of the employers felt their regular employees have had a positive reaction; 20 percent noticed no reaction; 1 percent of the employers felt a negative reaction and 4 percent a mixed reaction. Only 3 percent of the employers felt that there was any adverse effect on the regular employees' work habits due to their exposure to the work education trainees, while three-fourths of the employers cited specific ways in which they felt their regular employees had benefitted. A wide variety of benefits were mentioned. The ones most commonly given were the exposure to youth (by 6 percent), motivation to further their own training (11 percent), and lightening their workload (15 percent). Nonetheless, about 25 percent of these employers have involuntarily terminated some of the work education students, usually because of problems with the students' behavior and/or attitude.

7. Advisory Committee

When asked if there was an advisory committee for the work education program, 26 percent of the employers indicated that there was one, 62 percent said there was not an advisory committee, and 12 percent did now know whether or not there was an advisory committee for the program. The program administrator data shows that 75 percent of these work education programs did have an advisory committee, which almost always included members of the business community. Thus if the employer was not a member of the advisory committee he was very likely to be unaware of the committee's existence. The typical work education program could make substantial improvements in this area.

8. Employer Satisfaction

Most of these employers had an overall favorable impression of the program. When asked how they would evaluate the program, 73 percent said it was very satisfactory, 25 percent satisfactory, and only 3 percent said it was unsatisfactory. Because the specific employers interviewed were suggested by the program coordinators, our data may give a biased estimate of satisfaction among all employers participating in work education programs. Few saw any components of the program in need of improvements; 23 percent said improvements could be made in terms of the school administration; 20 percent in the quality of the students, and 22 percent in terms of teaching. The largest proportion (33 percent) indicated that improvements could best be made in the area of employer support to the program. From other qualitative information collected, it appears that these participating employers were obviously implying that many of these nonparticipating employers could, with only a little encouragement, be induced to become participants in the work education program.

Almost all of the participating employers (98 percent) plan to continue in the program and virtually all would recommend the program to other employers (99 percent). About two-thirds of the employers stated that they will expand the program. Almost half of these employers said they have not had any problems in the conduct of this program; one-third stated they have had no more than one problem, and one-sixth stated they have had more than one problem in the conduct of this program.

9. Employer Ratings of Program Quality

The participating employers rated the same list of program components as the program administrators. In terms of overall quality of the program, 59 percent of the employers rated the program as excellent, as compared to 50 percent of the program administrators. However, 11 percent of the employers rated the program's overall quality as average or below, as compared to only 2 percent of the program administrators. Employers felt that program success was because of the enthusiasm of the teacher (rated excellent by 70 percent). The employers felt that the programs were least successful in two areas. First, in the use of the advisory committee; from the findings discussed above, it appears this is a very accurate perception. The other lowest rated component was the followup on former students. Several employers commented to interviewers that they would very much like to know what happens to students after they leave their employ. This was also the component rated lowest by the program administrators. The reinforcement of this component rating by these two different points of view indicates that most work education programs have not treated this area successfully.

B. DESCRIPTION OF ANALYSIS MODEL

A model, similar to the ones used for the program and student data bases, was developed to view and analyze the data from the participating employers. The same modes of analysis used for the student and program data have been used on the employer data to determine which of the independent variables or combinations of them can best explain the relative degree of satisfaction of the employers with the program's quality, overall and in some of its major components. Figure IV-1 shows the major categories of independent variables; including characteristics of the company, characteristics of the students employed by the company, some of the features of the on-the-job training provided the students, the economic factors, the extent of the employer's involvement in the program, and the students' levels of performance.

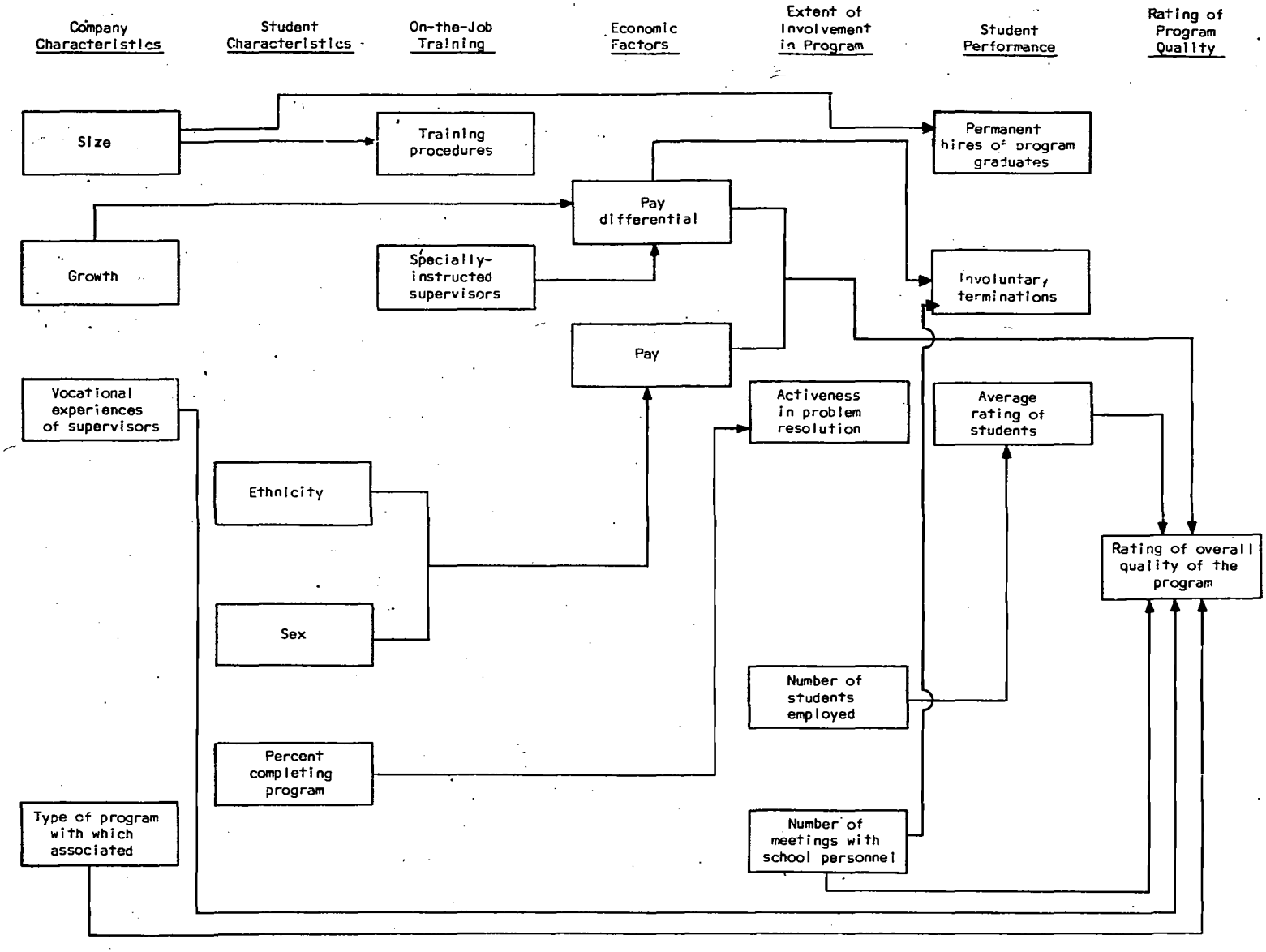


Figure IV-1. Employer Analysis Model

C. EMPIRICAL FINDINGS

1. Overall Quality of the Program

First we will look at those factors which appear to determine the overall rating the employer gives the program, as measured by his rating of the overall quality of the program on a scale ranging from poor to excellent.

a. By Type of Program

The type of work education program with which the employer is associated plays a role in his estimate of its success. However, it is only the educational level component, and not the primary purpose of the program, that has significant influence. Employers who are associated with a secondary program regardless of its purpose rate the program's overall quality as significantly higher than do employers participating in postsecondary programs (see Table IV-1). This stands in marked contrast to earlier findings from the program and student data in which program type, in terms of primary purpose, is an important factor.

b. By Employers' Rating of Students

More important than program type is the influence of the employer's average rating of the students in his employ. Each employer was asked to rate each of his work education students in terms of their potential as regular employees on a 5-point scale of very poor, below average, average, above average, or outstanding. The average for all students in his employ was computed for each employer. This variable turned out to be the most significant influence on the employer's rating of the program's overall quality. As seen in Table IV-2, among employers in the lowest category in terms of their average rating of the students, 36 percent rated the overall quality of the program as excellent, 32 percent rated it as above average, and 32 percent rated it as average or below; among employers in the highest category, 70 percent rated the program as excellent and 30 percent rated it as above average.

VAR191 BY TYPE

VAR191	COUNT / ROW PCT / COL PCT / TOT PCT	SECONDRY SPECOCC 1	POSTSEC SPEC OCC 2	SECONDARY DROPOUT 3	POSTSEC DROPOUT 4	SECONDRY EXPLORE 5	ROW TOTAL
AVERAGE OR BELOW	3	1	7	7	2	2	19
		5.3	36.8	36.8	10.5	10.5	11.4
		1.8	17.1	16.7	28.6	10.0	
		0.6	4.2	4.2	1.2	1.2	
ABOVE AVERAGE	4	17	19	6	4	4	50
		34.0	38.0	12.0	8.0	8.0	29.9
		29.8	46.3	14.3	57.1	20.0	
		10.2	11.4	3.6	2.4	2.4	
EXCELENT	5	39	15	29	1	14	98
		39.8	15.3	29.6	1.0	14.3	58.7
		68.4	36.6	69.0	14.3	70.0	
		23.4	9.0	17.4	0.6	8.4	
	COLUMN TOTAL	57	41	42	7	20	167
		34.1	24.6	25.1	4.2	12.0	100.0

RAW CHI SQUARE = 26.09468 WITH 8 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0010

Table IV-1. Rating of Overall Quality by Program Type

VAR191 BY AVRATING

* *

VAR191	COUNT / ROW PCT / COL PCT / TOT PCT	LOW 1	LOW-MIDDLE 2	HIGH-MIDDLE 3	HIGH 4	ROW TOTAL
AVERAGE OR BELOW	3	7	4	7	0	18
		38.9	22.2	38.9	0.0	11.9
		31.8	19.0	9.3	0.0	
		4.6	2.6	4.6	0.0	
ABOVE AVERAGE	4	7	5	22	10	44
		15.9	11.4	50.0	22.7	29.1
		31.8	23.8	29.3	30.3	
		4.6	3.3	14.6	6.6	
EXCELENT	5	8	12	46	23	89
		9.0	13.5	51.7	25.8	58.9
		36.4	57.1	61.3	69.7	
		5.3	7.9	30.5	15.2	
	COLUMN TOTAL	22	21	75	33	151
		14.6	13.9	49.7	21.9	100.0

RAW CHI SQUARE = 15.46655 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0169

Table IV-2. Rating of Overall Quality by Average Rating of Students

c. By Vocational Experience of Supervisors

The amount of vocational experience of the supervisors of the work education students has a positive relationship with the employer's rating of program quality. As seen in Table IV-3, when the supervisors have a great deal of vocational experience (16 years or more), then the employers are significantly more likely to rate the program as excellent. In many of the programs under study, the respondent to this questionnaire, who was most responsible for coordination of the program, was also directly involved in the immediate day-to-day supervision of the students. Thus, it is not clear whether this relationship is a function of the respondent's own background, or if the use of more experienced supervisors in fact leads to a program of higher quality. While we have no definitive evidence on this point, we can gain some insight by looking at the effect of company size on the above relationship, since, the larger the company and thus the more levels in the organizational structure, then the less likely the respondent was also directly involved in student supervision. This effect of company size lends support to the first alternative--that vocational experience as a background characteristic of the respondent influences his judgment of program quality. In smaller companies there is a positive relationship between vocational experience of the supervisors and the respondent's rating of overall program quality; among the largest employers (with work forces of 300 or more) this relationship does not exist.

d. By Economic Factors

Economic factors also seem to play a role in the employer's rating of program quality. In Table IV-4, we see the relationship between the typical work education student's starting pay rates and his employer's rating of program quality. Employers who paid students higher wages are significantly less likely to rate the program as excellent. Further explorations show that factors other than the absolute amount of pay are important. For about half the employers we determined the typical starting pay rates for regular

VAR191 BY VAR019

* *

VAR191	COUNT / ROW PCT / COL PCT / TOT PCT	VAR019: 0-5 (0)	6-10 (6)	11-15 (11)	16 OR MORE (16)	ROW TOTAL
AVERAGE OR BELOW	3	5	2	0	0	7
		71.4	28.6	0.0	0.0	9.1
		19.2	12.5	0.0	0.0	
		6.5	2.6	0.0	0.0	
ABOVE AVERAGE	4	7	5	9	2	23
		30.4	21.7	39.1	8.7	29.9
		26.9	31.3	50.0	11.8	
		9.1	6.5	11.7	2.6	
EXCELENT	5	14	9	9	15	47
		29.8	19.1	19.1	31.9	61.0
		53.8	56.3	50.0	88.2	
		18.2	11.7	11.7	19.5	
COLUMN TOTAL		26	16	18	17	77
		33.8	20.8	23.4	22.1	100.0

RAW CHI SQUARE = 13.42002 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0368

Table IV-3. Rating of Overall Quality by Supervisor's Years of Vocational Experience

VAR191 BY VAR147

VAR191 \ VAR147 (COUNT / ROW PCT / COL PCT / TOT PCT)	UNDER $1.60 (1)	$1.60 - $1.65 (2)	$1.66 - $2.00 (3)	$2.01 OR MORE (4)	ROW TOTAL
3 AVERAGE OR BELOW	3	5	3	2	13
	23.1	38.5	23.1	15.4	11.4
	12.0	13.9	9.7	9.1	
	2.6	4.4	2.6	1.8	
4 ABOVE AVERAGE	6	6	9	13	34
	17.6	17.6	26.5	38.2	29.8
	24.0	16.7	29.0	59.1	
	5.3	5.3	7.9	11.4	
5 EXCELENT	16	25	19	7	67
	23.9	37.3	28.4	10.4	58.8
	64.0	69.4	61.3	31.8	
	14.0	21.9	16.7	6.1	
COLUMN TOTAL	25	36	31	22	114
	21.9	31.6	27.2	19.3	100.0

RAW CHI SQUARE = 12.65267 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0489

Table IV-4. Rating of Overall Quality by Students' Starting Pay

employees with the same jobs as the work education students. From this we computed whether or not there was a pay differential between work education students and regular employees who held the same jobs. It was found that 68 percent of the employers stated that they paid the students and the regular employees the same wages, while 32 percent paid the students less than they did regular employees in the same positions. In Table IV-5, we see the effect of this pay differential on the employer's rating of program quality. Because of the much smaller number of cases for which this information was obtainable, the relationship is not statistically significant. However, inspection of the pattern shows a clearer and stronger relationship when we consider this pay differential rather than the absolute amount of pay given the students. When we look at the relationship between pay and rating of program quality controlling for this effect of pay differential, we find that, while the absolute amount of pay does play a role, the existence of a pay differential between students and regular workers has a much stronger impact. This finding appears to have strong implications for work education programs in that, if partial compensation for the students' salaries were available so that the students would be paid a wage comparable to others while the employers could employ them for less than others, the employers would have a more favorable orientation toward participation in work education programs.

e. By Interaction with School

The employer's rating of program quality is also influenced by the extent of his involvement with the work education program as measured by the number of meetings he has had with school personnel over a year's period. As shown in Table IV-6, those employers who meet with school personnel most frequently have the most favorable impression of the program's quality. Perhaps they too were impressed by "good salesmen" just as our interview teams were, as reflected in their subjective ratings of the programs.

VAR191 BY PAYDIFF

* *

VAR191 (COUNT / ROW PCT / COL PCT / TOT PCT)	PAYDIFF NO 0	YES 1	ROW TOTAL
3 AVERAGE OR BELOW	3	1	4
	75.0	25.0	7.0
	7.7	5.6	
	5.3	1.8	
4 ABOVE AVERAGE	15	4	19
	78.9	21.1	33.3
	38.5	22.2	
	26.3	7.0	
5 EXCELENT	21	13	34
	61.8	38.2	59.6
	53.8	72.2	
	36.8	22.8	
COLUMN TOTAL	39	18	57
	68.4	31.6	100.0

RAW CHI SQUARE = 1.75170 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.4165

Table IV-5. Rating of Overall Quality by Whether or Not Pay Differential Exists Between Students and Regular Workers

VAR191 BY VAR098

* *

VAR191	COUNT / ROW PCT / COL PCT / TOT PCT	VAR098: AT LEAST WEEKLY 1	1-2 TIME A MONTH 2	ONCE 2-3 MONTHS 3	2 A YEAR OR LESS 4	ROW TOTAL
AVERAGE OR BELOW	3	0	10	2	7	19
		0.0	52.6	10.5	36.8	11.5
		0.0	17.9	4.8	21.9	
		0.0	6.1	1.2	4.2	
ABOVE AVERAGE	4	10	17	15	7	49
		20.4	34.7	30.6	14.3	29.7
		28.6	30.4	35.7	21.9	
		6.1	10.3	9.1	4.2	
EXCELENT	5	25	29	25	18	97
		25.8	29.9	25.8	18.6	58.8
		71.4	51.8	59.5	56.3	
		15.2	17.6	15.2	10.9	
COLUMN TOTAL		35	56	42	32	165
		21.2	33.9	25.5	19.4	100.0

RAW CHI SQUARE = 13.28409 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0387

Table IV-6. Rating of Overall Quality by Frequency of Employer-School Interaction

2. Employers' Rating of Students

Since the average rating of the students by the employer played such a major role in the employer's rating of program quality, we looked at those factors within our analysis model that had an influence on this rating of students. The variable having the most effect on this rating was the average number of students he had in his employ at any one time. The relationship between number of students typically served at one time and the average rating given the students, as indicated in Table IV-7, clearly shows that students are rated much higher when the employer has no more than 20 students at one time (and especially if there are only one or two), and are rated much lower when the employer has a large number of students (over 20) working in the company at the same time. From these findings, and from the findings discussed earlier in relation to data obtained from the students, it becomes clear that work education programs can be most successful when they place their students in those jobs in which the students can succeed; and in places where only few students need be assigned at one time.

AVRATING BY VARC13

AVRATING	VARC13 1	2	3	4	5	ROW TOTAL
1	5	2	6	10	2	25
	20.0	8.0	24.0	40.0	8.0	15.9
	10.4	5.6	25.0	21.7	66.7	
	3.2	1.3	3.8	6.4	1.3	
2	3	2	6	10	1	22
	13.6	9.1	27.3	45.5	4.5	14.0
	6.3	5.6	25.0	21.7	33.3	
	1.9	1.3	3.8	6.4	0.6	
3	26	20	12	19	0	77
	33.8	26.0	15.6	24.7	0.0	49.0
	54.2	55.6	50.0	41.3	0.0	
	16.6	12.7	7.6	12.1	0.0	
4	14	12	0	7	0	33
	42.4	36.4	0.0	21.2	0.0	21.0
	29.2	33.3	0.0	15.2	0.0	
	8.9	7.6	0.0	4.5	0.0	
COLUMN TOTAL	48	36	24	46	3	157
	30.6	22.9	15.3	29.3	1.9	100.0

RAW CHI SQUARE = 32.27275 WITH 12 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0013

Table IV-7. Average Rating of Students by Average Number of Students Employed

3. Industrial Setting

The impact of industrial setting, as was found earlier, played some role in terms of the employer variables under study, although not an especially significant one. As might be expected, employers in urban areas (often from larger companies), employed a larger proportion of minority students, and paid higher wages. They also employed a higher proportion of male students, and were more likely to have increased the number of student placements in the past few years.

D. CHARACTERISTICS OF NONPARTICIPATING EMPLOYERS

1. Company Characteristics, Compared with Participating Employers

The participating and nonparticipating employers were similar in terms of structural characteristics.

Table IV-8. Comparison of Nonparticipating and Participating Company Characteristics

	Nonparticipating Employers	Participating Employers
Company size:		
Median number of employees	50	45
Company growth:		
Increasing	28%	41%
Stable	56%	48%
Decreasing	16%	11%
Organization:		
Independent company	69%	56%
Division of large company	31%	44%

The major difference, as seen in this table, was a smaller proportion of companies expanding in size among the nonparticipating employers.

2. Nonparticipating Employer Attitudes

a. Reasons for Nonparticipation

About 45 percent of the sample were nonparticipating employers simply because they had never been asked to participate. The remaining 55 percent had been contacted regarding participation in the work education program, and the median number of times they had been contacted was 1.5. Only 5 percent of these nonparticipating employers had participated in the work education program in the past. Among those employers who had declined to participate, 6 percent said it was because adjustments to normal hiring standards would be required; 4 percent stated it was because of unsatisfactory experiences with other programs; and only 1 percent said it was due to young person's unsatisfactory attitudes; the remainder gave a wide range of reasons that had few common denominators.

b. Awareness of Work Education Programs

Somewhat more than one-third were now or had been participating in other work education programs. Over half (55 percent) knew other employers participating in work education but in only 4 percent of the cases had their experiences affected the employer's decision not to participate.

c. Attitudes Toward Vocational Students and Youth

About 53 percent of the employers had hired vocational education graduates; all but one of the employers found the vocational graduates to be satisfactory employees. Almost three-fourths of these nonparticipating employers generally hired young people and all found them to be satisfactory employees.

d. Conditions for Participation

Most of these employers (78 percent) indicated they would be willing to participate in a work education program. In order to participate, changes in the program would be required by only 6 percent of these employers; changes

in internal policy by 8 percent; and changes in Federal or State laws to allow cooperation would be needed by 10 percent.

e. Anticipated Problems

Anticipation of problems caused by participation in work education programs did not seem to be an important factor as no factors could be agreed upon by any significant number of respondents. The two areas most likely to be anticipated as problematic were quality control (maintaining the usual company standards for the quality of its product or service when using student trainees). These, however, were listed by only 12 percent of the employers interviewed.

f. Incentives for Participation

The most commonly chosen incentives for participation were heavy publicity and the limiting of enrollment to students approved by the employer (each mentioned by 34 percent of the respondents).

3. Overall Implications

The most obvious implication of the foregoing is that by and large the nonparticipating employers are not antagonistic to work education programs. Many of these employers were simply unaware of the program and would readily participate if the program were better publicized and if they were asked to participate. From the qualitative data reported by the interview teams, this lack of public relations appears to be the major factor in employers' lack of participation, even among those who had been contacted. Many of these employers reported that because of their general unawareness of the program, they were not able to give a definite answer about participation when they were initially contacted but that the coordinators often made no periodic followup efforts to provide further information, check present needs or otherwise encourage their participation. Many times the employer said that he simply did not need any part-time employees at the present time, but that he would be glad to fill future needs for this type of employee with students from the work education program.

In addition, many of these employers (34 percent) were participating in other work education programs. Greater coordination between different work education programs operating in the same community should result in the most appropriate distribution of students, making optimum use of existing employer resources.

V. UNION DATA ANALYSIS

A. SAMPLING PROBLEMS

The original sampling plan adopted by the project called for selecting 12 sites which reported to have active union participation in their work education programs; and then selecting nonparticipating unions to interview at those or other sites where unions had refused to participate, so that comparisons could be made between participating and nonparticipating unions. Using this strategy, 12 sites which reported active union participation were selected to be included in the sample. After arriving at the sites it was found that in only eight of these cases was there real participation by the union in work education. At the other four sites, the unions were permitting students to work at jobs within their jurisdiction but were having absolutely nothing else to do with the work education programs. They were not communicating with school officials regarding the program, they were not participating in project advisory committees, they were not offering students membership or preapprenticeship status, and they were not supporting the programs in any other manner. Consequently, the status of these four sites were changed and union interviews were not conducted at these places. This reduced the number of participating union sites to eight, and interviews were conducted at all of these sites.

A total of five nonparticipating unions were located at four sites. One site had both a participating and nonparticipating union. Three sites had potential union groups that had chosen not to participate in the work education program or had never been asked to participate. Unfortunately with a total of eight participating unions and five nonparticipating unions in the study, only descriptive type data was generated.

B. PARTICIPATING UNIONS

As mentioned earlier, a total of eight participating unions were interviewed for this study. The locals ranged in size from 200 to 17,500 workers and most had been involved with the work education program for 2 or 3 years. Five of these unions report that they're expanding their membership, two say that membership is declining, and one considers its size to be stable.

Seven of the eight locals make students pay dues and half of them give students full membership rights and voting privileges. The two reasons listed by most of them for participating in the program are to use the work education program as a screening instrument to help them recruit future union members with desirable characteristics, and to use the programs to promote professional development in their occupational field.

Only one union rated the program as unsatisfactory and all planned to continue with work education programs. Also, all would recommend programs of these types (all training in specific career fields) to other unions.

In terms of their opinions regarding student growth in the work education programs, all of the union representatives were very positive. They nearly all reported gains on the parts of the students in occupational knowledge, manipulative skills, personal and social qualities, and work habits.

Three of the programs have had to have students involuntarily terminated at the union's request. Reasons were mostly in the behavior/attitudinal realm with dropping out of school and changes in eligibility status making up most of the remainder.

All of the programs have had some of their graduates later join the cooperating unions as full members. Half of the unions provide the students with

assistance in finding jobs; and nearly all said that completion of the work education program would qualify students for entrance into the regular apprenticeship program

Nearly all of the unions rated their cooperation with the schools as being excellent. None of the unions claimed that participating in these programs has had negative effects on their memberships but half of them claimed that student dress and hair length were offensive to some of their members. In three of the cases, it was claimed that student dress and hair length constituted a safety problem.

None of the unions interviewed were getting any type of reimbursement for their efforts; but they all claimed that their participation had not caused them any out-of-pocket expenditures. Three of them said that reimbursement would allow them to expand their programs.

In summary, the union representatives interviewed were as positive toward the programs as were the participating employers. This is significant because many of the program administrators mentioned that they were reluctant to solicit job slots in union-controlled operations because of problems which they anticipated in having to deal with a union. Similarly, several of the administrators claimed that one of the favorite excuses given by employers who would refuse to make training slots available to the program was the fear that admittance of students would lead to problems, or a weakened bargaining position, with the plant union local. Based on our cursory analysis, such fears appear to be largely "paper tigers". The union officials interviewed by the project researchers gave the same reasons for cooperating with school programs as their employer counterparts and they raised no new obstacles. While seven of the eight locals had ongoing apprenticeship programs, only one saw the school's program as conflicting with theirs, and even this local intended to keep working with the school's program.

C. NONPARTICIPATING UNIONS

Only five interviews were completed with nonparticipating unions and this makes these findings even more suspect. In contrast to the participating unions, only one of the nonparticipating unions said that its membership was increasing. The others said that memberships were going down or that they were fighting to hold membership at its present level.

Three of the five unions have participated in these kinds of programs in the past, but at only one of the sites were the interviewers able to find out why cooperation had ceased. In this case, a food service union local, economic reasons were cited for the present failure to participate. The union representative stated that because of the economic conditions in the area and the competition from fast food operations, the union was concerned with maintaining its membership at its present level. He also said that the union would participate again only if "all employers supported the program 100 percent." This site also claimed that cooperation with the school had been unsatisfactory.

An urban local in the Midwest claimed that it wasn't interested in cooperating because of all the Blacks who then might enter the program. The representative claimed that of his union's trades, only body and fender repairwork was within the competencies of Blacks. He felt that automotive mechanics was above their ability level.

Four of the five union representatives gave as their opinions that young persons today are not as concerned about doing quality work and don't appreciate jobs as much as youth did in the past. Interestingly, all of these five representatives claim to have regular contact with local schools by either accepting speaking engagements or serving on vocational advisory committees. Among incidents cited by these representatives for downgrading today's young workers were punching of each other's time cards, sabotage (putting toothpicks in bread), and carelessness.

When asked to anticipate problems which might accompany participation in a work education program, morale of journeymen headed the list. Next was quality control with one representative remarking, "that's the bosses' problem," and problems relating to insurance.

About two-thirds of the way through the interview, representatives were asked "Now that you are aware of this program, do you think that your union, if approached by the school, might be interested in participating next year?" Despite all the negative comments, three of the five said yes. This implies that the schools in these cities probably haven't been selling their programs as hard as they might. When asked what incentives might further facilitate cooperation, total compensation for all training expenses was tied with promises of employer cooperation, each getting three votes of five (it should be noted that none of the participating unions claimed that they had any expenses for which they needed to be compensated) and these were followed by the possibility of heavy publicity, tax incentives, and approaches to union officials by politicians and leading businessmen.

VI. SIGNIFICANT FINDINGS AND POLICY RECOMMENDATIONS

A. SIGNIFICANT FINDINGS

1. Analysis of Program Types

According to this study's findings, specific occupational training programs (cooperative education programs for the most part) appear to be generating the most enthusiasm among students, employers, and school officials because they are meeting the expressed needs and objectives of all three groups. Students feel that cooperative education programs are providing them with valuable job training. Employers feel that they are getting their money's worth out of their student workers and are contributing to their occupation. School administrators and teachers are satisfied with the learnings and job placements after the training period resulting from these programs.

Specifically, it was found that a cooperative education program is more likely than any other type of program to:

- Provide students with job-related instruction in school
- Have a followup program for its graduates
- Have an advisory committee
- Provide job placement services
- Have a high rate of job-related placements
- Provide students with jobs that offer formal on-the-job training
- Help students in deciding on an occupation
- Provide students with jobs that fit into their career plans
- Provide students with jobs that have a high level of responsibility
- Provide students with jobs that afford a high degree of satisfaction

From a negative standpoint cooperative programs, when compared to the other types of work education programs, are most apt to discriminate against students on the basis of student attitude; they are less effective in reducing

student absenteeism; and, because they place students in more responsible jobs, they are more apt to interfere with a student's other activities such as school work, dating, sports, etc. Cooperative programs were more likely than other types to restrict their programs to students with rather conforming middle-class behaviors; and at the secondary level they were also more apt to segregate their job placements by sex with only men or women being assigned to a specific employer.

Dropout prevention programs are limited by their basic objective which is to keep students in school by providing them with financial assistance. While many of these programs have additional goals such as improving disadvantaged youngsters' attitudes toward school and work, practically none of these programs attempt to offer students related classwork or intensive vocational training. When viewed in terms of their limited objectives, dropout prevention programs appear to be successful. It was found that they are more likely than any other type of program to offer students jobs paying at least the minimum wage, but they were second (by a slight amount) to specific occupational training programs as most likely to improve students' attitudes toward school.

The inherent aim of career exploration programs is to assist students in deciding on their occupational choices. However, none of the career exploration programs studied provided students with systematic exposure to several different types of jobs which would better enable them to choose a career best suited to their own needs. This type of program was the least likely to have assisted the student in his choice of occupation, so in this regard, has been much less successful than the occupational training and dropout prevention programs since career exploration is the stated purpose of these programs. These programs have not constructed effective job rotation mechanisms; they receive the lowest level of support from the schools of all three types of programs; and they do not have standardized formats or operational configurations that are widely accepted or written into Federal statutes. Among all other types

of programs, it was found that 70 percent of the administrators devote 100 percent of their time to their work education programs, while none of the career exploration program administrators devoted 100 percent of their time to their work education programs. In querying these administrators, supporting evidence was found that they were more likely than the administrators from any other type of program to feel that the organization and staffing of their programs were not effective for meeting their goals; and that they rate their program's coordination and direction significantly lower than do the administrators of the other types of programs. One area in which career familiarization programs were more successful than the other types was racially integrated job placements with this type of program being more likely to provide a given employer with a racially-mixed student work force.

2. Analysis of Employer-related Factors

One of the most significant findings concerning the employer's point of view is that the purpose of the program had very little impact on his attitudes toward the program (possibly because the employers have never been oriented regarding the different purposes of various work education program configurations), even though these types of programs possess very different characteristics. However, the educational level of the program with which the employer was associated did make a significant difference in his outlook. Employers participating in secondary level work education programs, regardless of purpose, rated overall program quality significantly higher than did employers participating in postsecondary programs. Yet, from the standpoint of related placements and quality of training, the postsecondary occupational training programs were superior to their secondary level counterparts.

The employer ratings of individual work education students proved to be a very significant variable in gaining an understanding of work education programs. It had significant impact on the attitudes of both the students and the employers. For students, a higher rating by the employer was associated with greater job satisfaction; and for employers a higher average rating of his students was associated with a higher rating of overall program quality. Thus, careful matching of students to jobs which meet their career objectives, so that they are likely to succeed and be highly rated by their employers, appears to be one of the most crucial tasks for work education programs, in terms of both student satisfaction and employer acceptance.

3. Analysis of Pay Factors

Pay factors played an important role in the way the employers viewed work education programs. Employers who paid students higher wages were significantly less likely to rate the program's overall quality as excellent. More important than the absolute rate of pay given to the work education students, was whether or not students were paid less than the regular employees for the same work. Where students were paid less, employers were significantly more likely to rate the program's overall quality as excellent. Specifically, 54 percent of the employers who paid students the same wages as regular workers rated the program as excellent in overall quality, while 72 percent of the employers who paid the students less than they did their regular workers rated the program's overall quality as excellent.

From the student's point of view, pay factors play a minor and somewhat ambiguous role. Whether or not the student is paid for his work has only a weak impact on his satisfaction, and, in fact, this influence is opposite for two types of satisfaction measures. Students who are paid for their work are slightly, though not significantly, more satisfied with their jobs, while students who are not paid for their work are somewhat more likely to like school better after joining the program. The reasons for this are unclear and need further study.

4. Analysis of Program Setting

The industrial setting in which the program was located played a minor role in the characteristics displayed by the work education programs under study. Most of these findings were not unexpected; e.g., pay rates and the proportion of ethnic minorities were higher in programs in urban areas. A surprising finding was that the level of students' satisfaction with the jobs was significantly higher among programs in rural settings than among programs in any of the other three types of industrial settings.

5. Analysis of Educational Level

The educational level of a program (secondary or postsecondary) was examined in relation to specific occupational training programs and dropout prevention programs. In examining specific occupational training programs, it was found that postsecondary programs are more effective than secondary programs in performing nearly all aspects of program operation. They had higher ratings on job-related instruction, student followup, job-related placements, helping students to decide on an occupation, providing students with jobs that fit into their career plans, providing students with jobs with high responsibility ratings, and providing students with jobs with which they are highly satisfied. The two areas where postsecondary programs scored lower than secondary programs were employer satisfaction with the students and student pay. It was found that employers rated secondary students higher than their postsecondary counterparts and that, somewhat surprisingly, secondary students earned slightly more than postsecondary students. When the differential between what employers pay their regular workers and their student workers was examined by educational level, there was no significant difference. No reasons can be given as to why employers prefer secondary cooperative students to postsecondary cooperative students, or as to why they pay the older postsecondary students less. Both of these questions should be subjected to more intensive study.

Educational level was not a significant variable in examining dropout prevention programs. In this type of program, educational level was not related to the students' pay, type of work, or perceptions of the job. The one exception to this was employer satisfaction ratings with employers preferring the secondary students.

6. Analysis of Student-related Factors

Two components of student satisfaction were considered in this study. One was their degree of satisfaction with the jobs they had. The other measured improvement with their satisfaction toward school since they had joined the work education program. These two measures of satisfaction were analyzed in two ways. First, students participating in work education programs were compared to students not participating in such programs in terms of these measures. It was found that the two groups differed little in terms of their satisfaction with their jobs. On the other hand, satisfaction with school was increased to a significantly greater degree by participating in a work education program, while only 15 percent of the nonparticipating students have improved attitudes toward school since they began working.

The other way in which student satisfaction was analyzed was to determine, for participating students, the factors that most impacted on their degree of satisfaction with their jobs and school. The most important influences on the student's job satisfaction were how well he was rated by his employer and the degree to which he felt his job afforded him responsibility. This same level of job responsibility also had a positive impact on improving a student's attitude toward school. Other than this, only the non-manipulable background characteristics of the student--mainly ethnicity, sex, and age--had an impact on whether or not his satisfaction with school was improved since enrolling in the program.

The study was also concerned with determining to what degree these programs were fostering discriminatory practices. It was found that while no programs would admit to overt discrimination, subtler forms were rather common. Thus, while the majority of the programs were integrated, only 30 percent of the interviewed employers had been assigned students of more than one race. Sexual stereotypes were being fostered in a similar manner with only 39 percent of the employers receiving students of both sexes.

In terms of pay rates, it appears that when compared to nonparticipating students with jobs from the same schools, work education programs tend to pay female students more than their contemporaries earn but pay Black students at lower rates than are being earned by Black students not in work education programs. Explaining this will also require further study.

B. POLICY RECOMMENDATIONS

While there is a definite risk in suggesting ways in which the structure of work education programs can be improved when the suggestions are based upon a sample of only 50 programs with widely varying characteristics and goals, certain findings of this study were sufficiently definitive to allow policy recommendations to be developed. These recommendations are:

1. Further Explore the Concept of Establishing Occupational Training Programs with a Nonpaid Work Experience Component

An interesting finding of this study is that at least some students can enjoy and benefit from nonpaid work experience. A number of specific occupational training programs were examined in which students were not paid for work performed in on-the-job settings. Nearly all of these were clinical programs in the health field where financial compensation is not normally provided for work experiences gained in working in hospitals and other medical facilities during training. Other programs in the study which did not pay students, included one similar to a diversified cooperative program which offered work experience in many occupational fields and at the same time also located training classrooms within the plants of employers where students were working without pay; and another program which allowed college students, not qualifying for financial assistance but desiring vocational experience, to perform work identical to that done by students being paid for their work on a volunteer basis. According to this study's findings, clinical programs and the two additional programs in which students were not paid for work, were very successful in providing students with good job training and work experience.

Another finding of the study was that one of the best predictors of employer satisfaction with a work education program is the difference between what he normally pays for labor of a given type and what he pays for student labor; and there were some evidence that employers who paid students less were willing to provide them with more training time.

This suggests that there might well be a place for work education programs in all occupational fields, incorporating a component in which students spend part of their time performing supervised work within an employer's facilities without pay. While such programs should never take the place of traditional cooperative programs, they can open up training slots and job placement opportunities with employers who are unable or unwilling to take on part-time student employees under a cooperative training agreement.

For such programs to operate at present, special arrangements have to be made to satisfy the Fair Labor Standards Act, workmen's compensation programs in different States and other labor laws that impact on student employment. Vocational educators are often unaware of the procedures for doing this; and they are often concerned with the reaction of labor unions toward such programs.

It is recommended that a more detailed study be conducted of the programs of this type presently in existence with the objectives of documenting program configurations capable of meeting training needs without exploiting students or antagonizing labor organizations, and setting forth specific recommendations regarding changes in labor laws and workmen's compensation statutes which would allow these programs to operate on a standardized basis.

2. Expand the Scope of Dropout Prevention Programs

Most of the dropout prevention programs exmained were either Work-Study, Neighborhood Youth Corps, or WECEP programs. In most of these, students were receiving part-time jobs in government offices or nonprofit institutions which either provided them with funds needed to stay in school or else served as an incentive to stay in school. While these programs appeared to be meeting their basic objective of keeping students in school, they were less successful than cooperative education programs in improving high school students' attitudes toward school. Also, it was apparent that far too many

students in the dropout prevention programs were placed in rather boring dead-end jobs which didn't challenge their capabilities, gave them no real appreciation for the world of work and failed to allow them to explore career interests on their own. As indicative of this, only 6 percent of the secondary students in specific occupational training programs were in the lowest category on the job responsibility scale whereas 75 percent of the secondary dropout prevention students were located in this category. Similarly, when asked whether or not their work education programs helped them to decide on an occupation, 35 percent of the secondary students in specific occupational training programs said yes as compared to only 18 percent of the students in the dropout prevention programs.

It is strongly recommended that consideration be given to expanding the scope of dropout prevention programs by requiring the employers participating in such a program to offer students at least one of two alternatives:

- The opportunity to link working for pay to specific occupational training offered at the job site by the employer. The employer (usually a government office or a nonprofit agency) would provide the training in return for obtaining a student's services without having to pay the student's wages. Under this type of plan, which would entail changes in the present legislation, it would probably be possible to involve more private employers in dropout prevention programs, since they would be operating as a training facility, and not obtaining free labor at the taxpayer's expense.
- The opportunity to explore different occupational areas while enrolled in a dropout prevention program. This would involve rotating students among employers on a scheduled basis and arranging for the student to have different responsibilities at each job site so that students would be given the opportunity to study the different environments in which jobs exist. Again, since most students in dropout prevention programs are performing rather menial work with little training being

required, rotating a student every 30 or 60 days should work no hardship on employers who would adopt this option in place of the training option given above.

Efforts should also be made, within the scope of the present legislation, to place students in jobs far more interesting than are available at present in most of these programs. While dropout prevention programs at the secondary level often have students enrolled who are significantly lower in academic ability than students found in the cooperative and career familiarization programs, the spread is not so great that the scope of these programs cannot be broadened considerably.

3. Develop Formal Structures for Career Exploration Programs

Unlike specific occupational training and dropout prevention programs, there are no Federal statutes which support career exploration programs of any specific types. This has resulted in career exploration becoming a catchall category into which many different types of programs place themselves by claiming that their primary objective is to familiarize students with the world of work and to help them to make an informed career choice.

A rather disturbing finding of this study was that only 9 percent of the students in secondary career exploration programs stated that their programs had helped them to decide on a career whereas 35 percent of the students in secondary specific occupational training programs and 18 percent of the students in secondary dropout prevention programs made this assertion. Another distressing finding was that none of the career exploration programs included in the study had provisions for allowing students to sample different types of jobs on a scheduled and predetermined basis. Instead, they were usually placed with a given employer for the complete semester, as was the case with students from other types of work education programs. In fact, without looking at the program's specified objective, there was no way of differentiating career

exploration programs from other types of work education programs and we are forced to conclude that in nearly all cases, career exploration programs are actually no different in configuration from specific occupational training programs or from dropout prevention programs. There was one notable exception to this where the program was structured around helping Eskimo students to decide whether or not they wanted to leave their villages and move to cities to obtain jobs.

Also, it was found that career exploration programs were far less apt to have a full-time program coordinator and, according to the coordinators of these programs, these programs are far more poorly organized than are the other types of programs.

All of this suggests that an organized structure for career exploration programs is needed, and should be developed and incorporated into law with guidelines similar to those established for other types of work education programs. At a very minimum, these programs should include work familiarization, diagnostic testing for skills and interests, and scheduled job rotation within their configuration. In this way, it can be ensured that students will be offered a program giving them a wide perspective of the world of work.

4. Develop More Effective Followup Components

Program coordinators in all three types of programs agreed that student followup was the weakest component in their work education programs. Similarly, one of the employers' most voiced complaints was that they never find out what happens to students after they leave school. This lack of followup information is hindering programs by making it very difficult to base program revisions on solid data. Also, several employers stated that, if they were regularly informed on accomplishments of students formerly in their employ--especially those who entered the field on a full-time basis--they might be more inclined to expand their programs and accept more students.

It is recommended that work education programs be strongly encouraged to follow up on all students for 5 or 10 years after leaving school. This could be done by each district or school on an individual basis, or it might be done on a statewide or national basis with a central operation responsible for collecting data, disseminating results to individual schools for transmission to employers, and for program planning purposes. The data might also be analyzed on a regional or national basis in order to document trends, successes, and problems with different types of work education programs. Similarly the data could be used to improve local programs and curriculum materials.

5. Encourage Unions to Actively Participate in Work Education Programs

This study included only a small sample of programs in which unions actively participated. Nearly all of these unions rated their cooperation with the schools as being excellent and their representatives were as positive toward the programs as were the participating employers. This is important because many of the program administrators mentioned that they were reluctant to solicit job slots in union-controlled operations because of anticipated problems; and because several of the administrators reported that a favorite excuse given by employers who refuse to make training slots available, was the fear that admittance of students would lead to problems, or a weakened bargaining position, with the plant union local. Interviews with nonparticipating unions showed that, like the nonparticipating employers, the majority of them claimed that they would participate in a work education program if someone would actively pursue them.

Aggressive solicitation of union participation appears to be well worth the effort. Programs with active participation benefited in permanent job placements of graduating students; in students being granted automatic acceptance into union apprenticeship programs with time in the work education program sometimes being credited toward the completion of these programs; and by

students being allowed to become fullfledged voting members of some locals while they are still in school.

Programs should be actively encouraged to seek union participation and coordinators should offer to approach union officials directly when a businessman is reluctant to participate in a work education program because of a fear of union problems. Union officials should be made members of program advisory committees and should be given the special charter of soliciting union support for these programs. In addition, funding priorities should be assigned to programs was active union participation.

6. Improve the Effectiveness of Public Relations Activities

In a similar vein, many programs of all three types have not paid sufficient attention to other forms of public relations. The most common reason given by employers for not hiring work education students was that they had never been approached about participating--even indirectly by means of advertisements or newspaper articles--and/or that they didn't feel that they had enough knowledge of the programs in their community to offer to participate. Similarly as mentioned earlier, many employers weren't even familiar with the objectives of the program with which they were involved. As has been demonstrated by programs with strong public relations components, this situation can be rectified by arranging for frequent newspaper, radio, television, and trade magazine coverage; hosting annual banquets to which present and prospective employers are invited (along with school administrators, students, parents, union officials, and local political officials); involving parents of students in the work education program; and establishing contacts within the local political structure.

Public relations activities of these types can be promoted by means of in-service seminars and training materials; by requiring that a public relations' plan be included in all project proposals; and by encouraging States to set

up work education public relations offices which would serve the dual purpose of assisting and training local coordinators, and promoting work education on a statewide basis.

7. Strengthen the Role of Program Advisory Committees

Study results indicate that advisory committees are an effective tool for building ties with the business and industrial community, but most of these committees seemingly maintain a very low profile. Invariably, employers who are not members of advisory committees associated with their industry do not know of, or have not been contacted by, these committees. This means that the effectiveness of these committees is severely limited since the members appear to interact only among themselves and not bring other employers and union officials, whom they supposedly represent, into the picture.

A lesson might be learned from the community advisory committees being established under the Emergency School Assistance Act (ESAA) to promote desegreation: Appointments to advisory committees are announced in the newspaper--in classified advertisements as well as in news stories when coverage can be obtained--and announcements of meetings are publicized in a similar manner with nonmembers encouraged to attend and voice their concerns and opinions.

A similar strategy might well enchance the effectiveness of the program advisory committees. Certainly, at a minimum, such meetings should be publicized in trade and local newspapers and magazines so that nonaffiliated employers are informed as to who the members are in their community, when different issues will be discussed, and the results of these discussions.

8. Discourage Discrimination on the Basis of Student Attitude

Several of the programs included in the study used "proper student attitude" as a program entry requirement. In some of these cases, it appeared that only students of a given race possessed the proper attitude; in other cases it

appeared that this requirement was causing program entry to be limited to middle-class youngsters who could have obtained their jobs (often in distributive education) without the school's assistance or with any special training being required. In both of these types of instances, the programs ended up excluding students who could have benefited from the training. Rather than exclude students on such a basis, it would be far better for program coordinators to handle problems such as these on an individual basis and work with these students in order to make them more eligible for employment. In many cases, regulations of these types appeared to have been adopted more for the convenience of the program coordinator and the ease of the program operation than for any overt desire on the part of the school or employer to discriminate against a particular group.

It is recommended that plans or proposals for any work education programs incorporating Federal funds be required to state, in specific terms, any behaviors that can cause students to be prohibited from entering a particular program, and that regulations should require schools to notify students excluded on this basis as to why they are excluded and what they can do to make themselves eligible for admission at the next entry date.

9. Use Vocational Aptitude and Interest Instruments in the Counseling of Students

The study found that the counseling components of all types of programs were relatively ineffective and did not contribute significantly in any manner to student success. It also found that careful matching of students to jobs results in satisfied employers and students. Yet, the use of standardized measures to counsel students prior to entry in work education programs does not appear to be especially common and the placement of students in jobs in which they have little aptitude or interest is not unusual. These problems are fewest in specific occupational training programs where the classwork that preceeds work experience serves to screen out many of the poorly matched students. Fifty-nine percent of the secondary students and 74 percent of the

postsecondary students in this type of program report that they intend to work full time in the occupations for which they are training. In the other types of programs, 41 percent of the postsecondary dropout prevention students, and 38 percent of the career familiarization students (all secondary) reported that they intend to work full time in the occupational field in which they are training. In the dropout prevention programs in particular, it is fairly common to find students working in jobs in which they have little interest and for which they are overqualified from a cognitive standpoint.

To increase the effectiveness of counseling components, it should be required that students be given vocational interest and aptitude tests before entering any work education program, and have a chance to discuss their test results with a qualified person before being assigned to their first work station.

10. Establish Internship Programs for Work Education Coordinators

Approximately 70 percent of the programs studied in this project have full-time coordinators or administrators, whose capabilities varied greatly. Most were knowledgeable in the vocational fields for which they were responsible, but they differed widely in their ability to sell their programs to employers, students, and the community; their ability to safeguard students from being exploited by employers or working in unsafe or unpleasant working situations; their management skills; and their knowledge of vocational counseling techniques.

Internship programs should be established in which inexperienced or comparatively ineffective coordinators would have a chance to work under the direction of more successful coordinators for at least one or two semesters. Such a program should be supplemented by formal coursework in fields such as career counseling, public relations, marketing, finance, and occupational safety legislation since even many of the most successful coordinators were deficient in some of these areas.

11. Increase Funding of Cooperative Education Programs

This study presents very strong evidence that cooperative education programs are highly successful in the United States. They appear to be meeting their intended objectives and generating support from participating students, vocational instructors and administrators, and employers. They also appear able to serve far larger numbers of students than are presently enrolled. Further, it appears that expanded student involvement would not be deterred by lack of employer interest and ability to accept student placement. Therefore, it is strongly recommended that funding be increased for this type of work education configuration.

APPENDIX A

CROSS TABULATIONS BY STUDENT GROUPS

NOTE CODE IN THE FOLLOWING TABLES:

* = significant at .05 level
** = significant at .01 level
*** = significant at .001 level

JOBRESP BY GROUP

* *

JOBRESP	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
LOWER WING	1.	178	155	333
		17.8	24.6	20.5
LOWER MIDSPREAD	2.	315	228	543
		31.6	36.2	33.4
UPPER MIDSPREAD	3.	221	121	342
		22.1	19.2	21.0
UPPER WING	4.	284	125	409
		28.5	19.9	25.1
COLUMN TOTAL		998	629	1627
		61.3	38.7	100.0

CHI SQUARE = 24.13219 WITH 3 DEGREES OF FREEDOM ***

Table A-1. Student Job Responsibility Score

JOBSATIS BY GROUP

* *

JOBSATIS	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
LOWER WING	1.	217	163	380
		21.9	26.0	23.5
LOWER MIDSPRED	2.	242	151	393
		24.4	24.1	24.3
UPPER MIDSPRED	3.	276	178	454
		27.8	28.4	28.1
UPPER WING	4.	257	134	391
		25.9	21.4	24.2
	COLUMN TOTAL	992	626	1618
		61.3	38.7	100.0

CHI SQUARE = 6.11394 WITH 3 DEGREES OF FREEDOM

Table A-2. Student Job Satisfaction Score

VAR006 GRADE BY GROUP

VAR006	COUNT / COL PCT	GROUP 1 PARTIC STUDENTS	GROUP 2 WORKING NONPART	ROW TOTAL
	9.	126	102	228
9-10		13.8	17.2	15.2
	11.	127	114	241
		14.0	19.3	16.0
	12.	375	225	600
		41.2	38.0	39.9
	13.	128	85	213
		14.1	14.4	14.2
	14.	154	66	220
14-18		16.9	11.1	14.6
	COLUMN TOTAL	910	592	1502
		60.6	39.4	100.0

CHI SQUARE = 18.09309 WITH 4 DEGREES OF FREEDOM **

Table A-3. Grade in School

VAR008 GRADUATION DATE-YEAR BY GROUP

* *

VAR008	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
	73.	615	327	942
		65.4	53.1	60.5
	74.	218	178	396
		23.2	28.9	25.4
	75.	107	111	218
75 OR MORE		11.4	18.0	14.0
	COLUMN TOTAL	940	616	1556
		60.4	39.6	100.0

CHI SQUARE = 25.81888 WITH 2 DEGREES OF FREEDOM ***

Table A-4. Graduation Date by Year

VARO09 SEX BY GROUP

* *

VAR009	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
MALE	1.	508	382	890
		50.0	59.6	53.7
FEMALE	2.	508	259	767
		50.0	40.4	46.3
	COLUMN TOTAL	1016	641	1657
		61.3	38.7	100.0

CORRECTED CHI SQUARE = 14.16866 WITH 1 DEGREE OF FREEDOM ***

Table A-5. Sex of Students

VAR010 MARITAL STATUS BY GROUP

* *

VAR010	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
MARRIED	1.	106 10.6	46 7.3	152 9.3
SINGLE	2.	869 86.9	577 91.3	1446 88.6
DIVORCED	3.	25 2.5	9 1.4	34 2.1
	COLUMN TOTAL	1000 61.3	632 38.7	1632 100.0

CHI SQUARE = 7.58428 WITH 2 DEGREES OF FREEDOM *

Table A-6. Marital Status of Students

ERIC

VAR011 ETHNIC GROUP BY GROUP

* *

VAR011	GROUP COUNT / COL PCT	IPARTIC ISTUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
WHITE	1.	680	519	1199
		68.1	82.4	73.6
BLACK	2.	162	45	207
		16.2	7.1	12.7
CHICANO	4.	74	32	106
		7.4	5.1	6.5
OTHER	5.	82	34	116
		8.2	5.4	7.1
	COLUMN TOTAL	998	630	1628
		61.3	38.7	100.0

CHI SQUARE = 43.28001 WITH 3 DEGREES OF FREEDOM ***

Table A-7. Ethnic Group of Students

VAR013 DATE OF BIRTH-YEAR BY GROUP

* *

VAR013	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
14-42	14.	46	23	69
		4.7	3.6	4.3
43-52	43.	146	62	208
		14.8	9.8	12.8
	53.	263	165	428
		26.7	26.0	26.4
	55.	331	207	538
		33.6	32.6	33.2
56 OR MORE	56.	198	178	376
		20.1	28.0	23.2
	COLUMN TOTAL	984	635	1619
		60.8	39.2	100.0

CHI SQUARE = 19.33916 WITH 4 DEGREES OF FREEDOM ***

Table A-8. Birth Date by Year

VARO16 SCHOOL STANDING BY WAY OF GRADES BY GROUP

VARO16	COUNT / COL PCT	GROUP 1. PARTIC STUDENTS	2. WORKING NONPART	ROW TOTAL
A	1.	127	70	197
		12.9	11.0	12.1
B	2.	430	276	706
		43.6	43.5	43.5
C	3.	382	261	643
		38.7	41.1	39.6
D OR BELOW	4.	48	28	76
		4.9	4.4	4.7
	COLUMN TOTAL	987	635	1622
		60.9	39.1	100.0

CHI SQUARE = 1.81318 WITH 3 DEGREES OF FREEDOM

Table A-9. School Standing of Students by Way of Grades

VAR017 NEEDED WORK FOR PAY BY GROUP

* *

VAR017	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	251	463	714
		24.8	74.6	43.7
NO	2.	762	158	920
		75.2	25.4	56.3
	COLUMN TOTAL	1C13	621	1634
		62.0	38.0	100.0

CORRECTED CHI SQUARE = 385.73999 WITH 1 DEGREE OF FREEDOM ***

Table A-10. Students Needing Work for Pay

VAR018 BORED WITH SCHOOL BY GROUP

* *

VAR018	GROUP COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	60 5.9	21 3.4	81 5.0
NO	2.	953 94.1	600 96.6	1553 95.0
	COLUMN TOTAL	1013 62.0	621 38.0	1634 100.0

CORRECTED CHI SQUARE = 4.75188 WITH 1 DEGREE OF FREEDOM *

Table A-11. Students Bored With School

VAR019 WANTED TRAINING FOR JOB BY GROUP

* *

VAR019	GROUP COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	480	94	574
		47.4	15.1	35.1
NO	2.	533	527	1060
		52.6	84.9	64.9
	COLUMN	1013	621	1634
	TOTAL	62.0	38.0	100.0

CORRECTED CHI SQUARE = 174.26569 WITH 1 DEGREE OF FREEDOM ***

Table A-12. Students Wanting Training for Job

VAR020 WANTED TO SAMPLE OCCUPATIONS BY GROUP

VAR020	GROUP COUNT / COL PCT	PARTICIPATING STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
1. YES		100	57	157
		9.9	9.2	9.6
2. NO		913	564	1477
		90.1	90.8	90.4
	COLUMN TOTAL	1013	621	1634
		62.0	38.0	100.0

CORRECTED CHI SQUARE = 0.14053 WITH 1 DEGREE OF FREEDOM

Table A-13. Students Wanting to Sample Occupations

VARO21 SCHOOL POLICY BY GROUP

		GROUP		
	COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VARO21				
1. YES		9 / 0.9	4 / 0.6	13 / 0.8
2. NO		1004 / 99.1	617 / 99.4	1621 / 99.2
	COLUMN TOTAL	1013 / 62.0	621 / 38.0	1634 / 100.0

CORRECTED CHI SQUARE = 0.06390 WITH 1 DEGREE OF FREEDOM

Table A-14. School Policy

VAR022 OTHER REASON FOR JOINING PROGRAM BY GROUP

* *

VAR022	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	154 15.2	99 15.9	253 15.5
NO	2.	859 84.8	522 84.1	1381 84.5
	COLUMN TOTAL	1013 62.0	621 38.0	1634 100.0

CORRECTED CHI SQUARE = 0.10939 WITH 1 DEGREE OF FREEDOM

Table A-15. Other Reasons for Students Joining Program

VAR023 FIRST TOLD ABOUT PROGRAM BY GROUP

* *

VAR023	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
TEACHER-PRINCIPL	1.	177	35	212
		17.5	5.6	13.0
COUNSELR	2.	243	22	265
		24.0	3.5	16.2
PARENT- RELATIVE	3.	88	0	88
		8.7	0.0	5.4
FRIEND	4.	380	342	722
		37.6	55.0	44.2
PAPER	6.	17	100	117
		1.7	16.1	7.2
OTHER	8.	106	123	229
		10.5	19.8	14.0
	COLUMN TOTAL	1011	622	1633
		61.9	38.1	100.0

CHI SQUARE = 357.16333 WITH 5 DEGREES OF FREEDOM ***

Table A-16. How Students First Heard About the Program

VAR024 MONTHS WORKING IN PROGRAM BY GROUP

* *

VAR024	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
1-3	1.	204	164	368
		20.8	29.0	23.8
4-6	4.	403	140	543
		41.1	24.7	35.1
7-12	7.	231	125	356
		23.6	22.1	23.0
13 OR MORE	13.	142	137	279
		14.5	24.2	18.0
	COLUMN TOTAL	980	566	1546
		63.4	36.6	100.0

CHI SQUARE = 56.57510 WITH 3 DEGREES OF FREEDOM ***

Table A-17. Months Students Have Been Working in Program

VAR025 DISCUSS COURSE CHOICES WITH COUNSELOR BY GROUP

	GROUP		
COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VAR025			
1. YES	627 / 62.1	399 / 62.4	1026 / 62.2
2. NO	383 / 37.9	240 / 37.6	623 / 37.8
COLUMN TOTAL	1010 / 61.2	639 / 38.8	1649 / 100.0

CORRECTED CHI SQUARE = 0.00914 WITH 1 DEGREE OF FREEDOM

Table A-18. Students Discuss Course Choices With Counselor

VAR026 HOW HELPFUL WERE DISCUSSIONS BY GROUP

* *

VAR026	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VERY HELPFUL	1.	266 41.4	109 26.9	375 35.8
SOMEWHAT HELPFUL	2.	330 51.4	252 62.2	582 55.6
NOT HELPFUL	3.	46 7.2	44 10.9	90 8.6
	COLUMN TOTAL	642 61.3	405 38.7	1047 100.0

CHI SQUARE = 23.80061 WITH 2 DEGREES OF FREEDOM ***

Table A-19. How Helpful Were Discussions for Students

VAR027 HOW OFTEN DO YOU GO TO WORK BY GROUP

* *

VAR027	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
EVERYDAY	1.	775	344	1119
		78.3	55.8	69.6
ALTERNTE DAYS	2.	145	133	278
		14.6	21.6	17.3
IRREGLAR	7.	23	78	101
		2.3	12.6	6.3
OTHER	8.	47	62	109
		4.7	10.0	6.8
	COLUMN TOTAL	990	617	1607
		61.6	38.4	100.0

CHI SQUARE = 118.33743 WITH 3 DEGREES OF FREEDOM ***

Table A-20. Frequency Students Go to Work

VAR028 HOURS A WEEK AT JOB BY GROUP

* *

VAR028	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
1-10	1.	242	147	389
		24.9	25.3	25.1
11-15	11.	212	76	288
		21.8	13.1	18.6
16-20	16.	156	105	261
		16.1	18.1	16.8
21-25	21.	207	154	361
		21.3	26.6	23.3
36 OR MORE	36.	154	98	252
		15.9	16.9	16.2
	COLUMN TOTAL	971	580	1551
		62.6	37.4	100.0

CHI SQUARE = 20.33698 WITH 4 DEGREES OF FREEDOM ***

Table A-21. Hours a Week at Job

VAR029 HOURS IN CLASS EVERY WEEK BY GROUP

* *

VAR029	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
1-10	1.	217 22.3	22 3.5	239 14.9
11-15	11.	200 20.6	47 7.5	247 15.4
16-20	16.	278 28.6	90 14.3	368 23.0
21-25	21.	94 9.7	81 12.9	175 10.9
	26.	87 9.0	232 36.9	319 19.9
	31.	72 7.4	109 17.4	181 11.3
36 OR MORE	36.	24 2.5	47 7.5	71 4.4
	COLUMN TOTAL	972 60.8	628 39.3	1600 100.0

CHI SQUARE = 375.18848 WITH 6 DEGREES OF FREEDOM ***

Table A-22. Hours in Class Every Week

VAR030 PAID FOR WORK BY GROUP

* *

VAR030	GROUP: COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	836	596	1432
		84.1	95.8	88.6
NO	2.	158	26	184
		15.9	4.2	11.4
	COLUMN TOTAL	994	622	1616
		61.5	38.5	100.0

CORRECTED CHI SQUARE = 50.88855 WITH 1 DEGREE OF FREEDOM ***

Table A-23. Students Paid for Work

VAR031 HOURLY PAY - NOW BY GROUP

* *

VAR031	GROUP COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
UNDER $1.60	1.	115 14.9	130 24.2	245 18.7
$1.60 - 1.65	2.	235 30.4	105 19.5	340 25.9
$1.66 - 2.00	3.	251 32.4	179 33.3	430 32.8
$2.01 - 3.00	4.	148 19.1	90 16.7	238 18.1
$3.01 OR MORE	5.	25 3.2	34 6.3	59 4.5
	COLUMN TOTAL	774 59.0	538 41.0	1312 100.0

CHI SQUARE = 36.93108 WITH 4 DEGREES OF FREEDOM ***

Table A-24. Hourly Pay Now Earning

VAR032 BEGINNING HOURLY PAY BY GROUP

* *

VAR032	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
UNDER $1.60	1.	145 19.1	174 32.8	319 24.7
$1.60 - 1.65	2.	265 34.9	135 25.4	400 31.0
$1.66 - 2.00	3.	232 30.6	145 27.3	377 29.2
$2.01 - 3.00	4.	102 13.4	64 12.1	166 12.9
$3.01 OR MORE	5.	15 2.0	13 2.4	28 2.2
	COLUMN TOTAL	759 58.8	531 41.2	1290 100.0

CHI SQUARE = 34.58766 WITH 4 DEGREES OF FREEDOM ***

Table A-25. Beginning Hourly Pay

VARO33 CONTRIBUTE TO SUPPORT PARENTS FAMILY BY GROUP

VARO33	GROUP COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
1. YES		70	39	109
		8.0	6.4	7.3
2. NO		806	572	1378
		92.0	93.6	92.7
COLUMN TOTAL		876	611	1487
		58.9	41.1	100.0

CORRECTED CHI SQUARE = 1.14343 WITH 1 DEGREE OF FREEDOM

Table A-26. Students Contribute to Support Parents' Family

VAR034 SUPPORT MYSELF BY GROUP

* *

VAR034	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	213 24.3	82 13.4	295 19.8
NO	2.	663 75.7	529 86.6	1192 80.2
	COLUMN TOTAL	876 58.9	611 41.1	1487 100.0

CORRECTED CHI SQUARE = 26.18315 WITH 1 DEGREE OF FREEDOM ***

Table A-27. Students Support Themselves

```
  VARO35    SPENDING MONEY                                                    BY  GROUP
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                       GROUP
              COUNT   I
              COL PCT IPARTIC   WORKING    ROW
                      ISTUDENTS NONPART   TOTAL
                      I       2.I     3.I
VARO35        --------I--------I--------I
                  1.  I   344  I   335  I   679
  YES                 I  39.3  I  54.8  I  45.7
                     -I--------I--------I
                  2.  I   532  I   276  I   808
  NO                  I  60.7  I  45.2  I  54.3
                     -I--------I--------I
              COLUMN      876      611      1487
               TOTAL     58.9     41.1     100.0

CORRECTED CHI SQUARE =     34.49324    WITH 1 DEGREE OF FREEDOM ***
```

Table A-28. Students Need Money for Spending Money

VAR036 SAVINGS BY GROUP

		GROUP		
	COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VAR036				
1. YES		232 / 26.5	155 / 25.4	387 / 26.0
2. NO		644 / 73.5	456 / 74.6	1100 / 74.0
	COLUMN TOTAL	876 / 58.9	611 / 41.1	1487 / 100.0

CORRECTED CHI SQUARE = 0.17841 WITH 1 DEGREE OF FREEDOM

Table A-29. Students Need Money for Savings

VAR037 OTHER USE OF MONEY BY GROUP

* *

VAR037	COUNT / COL PCT (GROUP)	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	75	47	122
		8.6	7.7	8.2
NO	2.	801	564	1365
		91.4	92.3	91.8
	COLUMN TOTAL	876	611	1487
		58.9	41.1	100.0

CORRECTED CHI SQUARE = 0.25499 WITH 1 DEGREE OF FREEDOM

Table A-30. Students Have Other Use of Money

VAR038 OTHER PART TIME WORK NOW BY GROUP

* *

VAR038	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	195 19.6	99 15.9	294 18.2
NO	2.	801 80.4	524 84.1	1325 81.8
	COLUMN TOTAL	996 61.5	623 38.5	1619 100.0

CORRECTED CHI SQUARE = 3.26287 WITH 1 DEGREE OF FREEDOM

Table A-31. Students Now Have Other Part Time Work

VAR039 WORK DURING SUMMER BY GROUP

* *

VAR039	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	838	533	1371
		84.1	85.6	84.7
NO	2.	158	90	248
		15.9	14.4	15.3
	COLUMN TOTAL	996	623	1619
		61.5	38.5	100.0

CORRECTED CHI SQUARE = 0.48922 WITH 1 DEGREE OF FREEDOM

Table A-32. Students Working During Summer

VAR040 EXTRA CURRICULAR ACTIVITIES BY GROUP

* *

VAR040	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	232	194	426
		23.1	30.8	26.1
NO	2.	773	436	1209
		76.9	69.2	73.9
	COLUMN TOTAL	1005	630	1635
		61.5	38.5	100.0

CORRECTED CHI SQUARE = 11.54839 WITH 1 DEGREE OF FREEDOM ***

Table A-33. Students Having Extra Curricular Activities

VAR041 HOURS PER WEEK ON EXTRA ACTIVITIES BY GROUP

VAR041	COUNT / COL PCT	GROUP 2. PARTIC STUDENTS	GROUP 3. WORKING NONPART	ROW TOTAL
4-7	4.	101 / 51.3	66 / 40.7	167 / 46.5
8 OR MORE	8.	96 / 48.7	96 / 59.3	192 / 53.5
	COLUMN TOTAL	197 / 54.9	162 / 45.1	359 / 100.0

CORRECTED CHI SQUARE = 3.54883 WITH 1 DEGREE OF FREEDOM

Table A-34. Hours Students Spend a Week on Extra Activities

VAR042 SCHOOLWORK BY GROUP

* *

	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VAR042	0.	876	353	1229
		38.8	68.9	82.0
YES	1.	111	159	270
		11.2	31.1	18.0
	COLUMN TOTAL	987	512	1499
		65.8	34.2	100.0

CORRECTED CHI SQUARE = 88.23631 WITH 1 DEGREE OF FREEDOM ***

Table A-35. Students Have Time for School Work

VAR043 SOCIAL LIFE BY GROUP

* *

VAR043	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
	0.	774	262	1036
		78.4	51.2	69.1
	1.	213	250	463
YES		21.6	48.8	30.9
	COLUMN TOTAL	987	512	1499
		65.8	34.2	100.0

CORRECTED CHI SQUARE = 115.97456 WITH 1 DEGREE OF FREEDOM ***

Table A-36. Students Have Time for Social Life

VAR044 CHORES AT HOME BY GROUP

* *

VAR044	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
	0.	859	396	1255
		87.0	77.3	83.7
YES	1.	128	116	244
		13.0	22.7	16.3
	COLUMN TOTAL	987	512	1499
		65.8	34.2	100.0

CORRECTED CHI SQUARE = 22.51085 WITH 1 DEGREE OF FREEDOM ***

Table A-37. Students Have Time for Chores at Home

VAR045 SPORTS ACTIVITIES BY GROUP

* *

VAR045	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
	0.	844	354	1198
		85.5	69.1	79.9
	1.	143	158	301
YES		14.5	30.9	20.1
	COLUMN TOTAL	987	512	1499
		65.8	34.2	100.0

CORRECTED CHI SQUARE = 55.28558 WITH 1 DEGREE OF FREEDOM ***

Table A-38. Students Have Time for Sports Activities

VAR046 HOBBIES BY GROUP

* *

VAR046	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
	0.	837	365	1202
		84.8	71.3	80.2
YES	1.	150	147	297
		15.2	28.7	19.8
	COLUMN TOTAL	987	512	1499
		65.8	34.2	100.0

CORRECTED CHI SQUARE = 37.90254 WITH 1 DEGREE OF FREEDOM ***

Table A-39. Students Have Time for Hobbies

VAR047 OTHER WORK INTERFERENCE BY GROUP

* *

VAR047	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
	0.	953	470	1423
		96.6	91.8	94.9
	1.	34	42	76
YES		3.4	8.2	5.1
	COLUMN TOTAL	987	512	1499
		65.8	34.2	100.0

CORRECTED CHI SQUARE = 14.88596 WITH 1 DEGREE OF FREEDOM ***

Table A-40. Student Jobs Interfere With Other Work.

VAR048 NO WORK INTERFERENCE BY GROUP

* *

VAR048	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	586 59.4	58 11.3	644 43.0
NO	2.	401 40.6	454 88.7	855 57.0
	COLUMN TOTAL	987 65.8	512 34.2	1499 100.0

CORRECTED CHI SQUARE = 315.59058 WITH 1 DEGREE OF FREEDOM ***

Table A-41. Student Jobs Not Interferring With Work

VAR049 PROGRAM HELP DECIDE ON OCCUPATION BY GROUP

* *

VAR049	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	692 69.7	254 40.6	946 58.5
NO	2.	301 30.3	371 59.4	672 41.5
	COLUMN TOTAL	993 61.4	625 38.6	1618 100.0

CORRECTED CHI SQUARE = 132.08919 WITH 1 DEGREE OF FREEDOM ***

Table A-42. Program Helped Students Decide on Occupation

VAR050 HOW CLOSELY IS WORK RELATED TO CLASSWORK BY GROUP
* *

VAR050	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VERY CLOSELY	1.	315 31.5	94 14.8	409 25.0
SOMEWHAT	2.	353 35.3	140 22.0	493 30.1
NOT AT ALL	3.	332 33.2	403 63.3	735 44.9
	COLUMN TOTAL	1000 61.1	637 38.9	1637 100.0

CHI SQUARE = 144.93295 WITH 2 DEGREES OF FREEDOM ***

Table A-43. How Closely is Work Related to Classwork

VAR051 JOB FIT WITH JOB AND CAREER INTERESTS BY GROUP

* *

VAR051	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VERY WELL	1.	354	114	468
		35.6	18.2	28.9
MODERATE	2.	385	182	567
		38.8	29.1	35.0
NOT AT ALL	3.	254	330	584
		25.6	52.7	36.1
	COLUMN TOTAL	993	626	1619
		61.3	38.7	100.0

CHI SQUARE = 129.08678 WITH 2 DEGREES OF FREEDOM ***

Table A-44. Does Job Fit With Job and Career Interests

VAR052 DID YOU LIKE SCHOOL BY GROUP

VAR052	COUNT / COL PCT	GROUP 2. PARTICIPANTS	GROUP 3. WORKING NONPART	ROW TOTAL
2. BETTER AFTER		498	92	590
		49.7	15.2	36.6
3. THE SAME		453	468	921
		45.2	77.1	57.2
4. BETTER BEFORE		52	47	99
		5.2	7.7	6.1
COLUMN TOTAL		1003	607	1610
		62.3	37.7	100.0

CHI SQUARE = 194.22903 WITH 2 DEGREES OF FREEDOM ***

Table A-45. Do Students Like School

VAR053 AGE STARTED WORKING REGULARLY BY GROUP

* *

VAR053	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
UNDER 16	1.	494	350	844
		49.4	55.1	51.6
16-17	2.	371	225	596
		37.1	35.4	36.5
18 AND OVER	3.	135	60	195
		13.5	9.4	11.9
	COLUMN TOTAL	1000	635	1635
		61.2	38.8	100.0

CHI SQUARE = 8.10049 WITH 2 DEGREES OF FREEDOM *

Table A-46. Age Student Started Working Regularly

VAR055 FORMAL INSTRUCTION AT WORK BY GROUP

* *

VAR055	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	243	73	316
		25.1	11.9	19.9
NO	2.	726	542	1268
		74.9	88.1	80.1
	COLUMN TOTAL	969	615	1584
		61.2	38.8	100.0

CORRECTED CHI SQUARE = 40.27199 WITH 1 DEGREE OF FREEDOM ***

Table A-47. Students Receive Formal Instruction at Work

VAR057 WHERE LEARNED MOST ABOUT SKILLS FOR JOB BY GROUP

* *

VAR057	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
SCHOOL	1.	229 23.0	126 20.1	355 21.9
ON THE JOB	2.	656 65.9	410 65.3	1066 65.7
ELSEWHRE	3.	110 11.1	92 14.6	202 12.4
	COLUMN TOTAL	995 61.3	628 38.7	1623 100.0

CHI SQUARE = 5.55401 WITH 2 DEGREES OF FREEDOM

Table A-48. Where Students Learned Most About Skills for Job

VAR058 FULL TIME JOB IN OCCUPATION NOW WORKING BY GROUP

* *

VAR058	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	530	191	721
		54.0	30.4	44.8
NO	2.	451	437	888
		46.0	69.6	55.2
	COLUMN TOTAL	981	628	1609
		61.0	39.0	100.0

CORRECTED CHI SQUARE = 85.36951 WITH 1 DEGREE OF FREEDOM ***

Table A-49. Students Now Working in Full Time Job in Occupation

VAR059 WITH SAME EMPLOYER BY GROUP

* *

VAR059	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	271	96	367
		29.4	16.1	24.2
NO	2.	650	501	1151
		70.6	83.9	75.8
	COLUMN TOTAL	921	597	1518
		60.7	39.3	100.0

CORRECTED CHI SQUARE = 34.45981 WITH 1 DEGREE OF FREEDOM ***

Table A-50. Students Working With Same Employer

VAR060 MONTHS UNTIL FULL TIME JOB BY GROUP

VAR060	COUNT / COL PCT	GROUP: PARTIC STUDENTS (1.)	GROUP: 2.	ROW TOTAL
0-3	0.	229		229
		28.2		28.2
4-6	4.	294		294
		36.3		36.3
7-12	7.	91		91
		11.2		11.2
13-24	13.	117		117
		14.4		14.4
25 OR MORE	25.	80		80
		9.9		9.9
	COLUMN TOTAL	811		811
		100.0		100.0

Table A-51. Months Until Students Have Full Time Job

VAR061 DOING A YEAR FROM NOW BY GROUP

* *

VAR061 (COUNT / COL PCT)	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
1. WORKING FULLTIME	405 40.0	187 29.3	592 35.9
2. SCHOOL	229 22.6	210 32.9	439 26.6
4. WORK AND STUDY	244 24.1	176 27.5	420 25.4
5. OTHER	51 5.0	27 4.2	78 4.7
6. DO NOT KNOW	83 8.2	39 6.1	122 7.4
COLUMN TOTAL	1012 61.3	639 38.7	1651 100.0

CHI SQUARE = 32.76511 WITH 4 DEGREES OF FREEDOM ***

Table A-52. What Will Students Be Doing a Year From Now

VAR062 WORK FOR OTHER EMPLOYERS IN PROGRAM BY GROUP

* *

VAR062	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	1.	252	436	688
		25.3	69.2	42.3
NO	2.	746	194	940
		74.7	30.8	57.7
	COLUMN TOTAL	998	630	1628
		61.3	38.7	100.0

CORRECTED CHI SQUARE = 304.00439 WITH 1 DEGREE OF FREEDOM ***

Table A-53. Have Students Worked for Other Employers in the Program

VAR063 HOW MANY OTHER EMPLOYERS BY GROUP

* *

VAR063 (COUNT / COL PCT)	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
1.	155	119	274
	63.5	28.0	41.0
2.	61	117	178
	25.0	27.5	26.6
3. 3 OR MORE	28	189	217
	11.5	44.5	32.4
COLUMN TOTAL	244	425	669
	36.5	63.5	100.0

CHI SQUARE = 100.16107 WITH 2 DEGREES OF FREEDOM ***

Table A-54. How Many Other Employers Have the Students Worked for

VAR064 RECOMMEND PROGRAM TO FRIEND BY GROUP

		GROUP		
	COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VAR064				
1. YES		946	307	1253
		94.0	50.6	77.7
2. NO		60	300	360
		6.0	49.4	22.3
COLUMN TOTAL		1006	607	1613
		62.4	37.6	100.0

CORRECTED CHI SQUARE = 409.90796 WITH 1 DEGREE OF FREEDOM ***

Table A-55. Would Students Recommend Program to a Friend

VAR066 ADULTS WHO DO SAME WORK BY GROUP

* *

VAR066	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	92 9.5	81 13.5	173 11.0
YES	1.	879 90.5	521 86.5	1400 89.0
	COLUMN TOTAL	971 61.7	602 38.3	1573 100.0

CORRECTED CHI SQUARE = 5.61500 WITH 1 DEGREE OF FREEDOM *

Table A-56. Are There Adults Who Do Same Work as Students

VAR067 TAKE OVER FOR AN ADULT BY GROUP

* *

VAR067	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	235 24.1	145 23.4	380 23.8
YES	1.	740 75.9	474 76.6	1214 76.2
	COLUMN TOTAL	975 61.2	619 38.8	1594 100.0

CORRECTED CHI SQUARE = 0.06208 WITH 1 DEGREE OF FREEDOM

Table A-57. Could Students Take Over for an Adult

VAR068 USUALLY WORK ALONE BY GROUP

* *

VAR068	GROUP COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	608	358	966
		61.8	57.8	60.3
YES	1.	376	261	637
		38.2	42.2	39.7
	COLUMN	984	619	1603
	TOTAL	61.4	38.6	100.0

CORRECTED CHI SQUARE = 2.31761 WITH 1 DEGREE OF FREEDOM

Table A-58. Do Students Usually Work Alone

VAR069 DECIDE HOW THINGS ARE DONE BY GROUP

		GROUP		
	COUNT / COL PCT	PARTICIPATING STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VAR069				
0. NO		559 / 56.6	308 / 49.4	867 / 53.8
1. YES		429 / 43.4	316 / 50.6	745 / 46.2
COLUMN TOTAL		988 / 61.3	624 / 38.7	1612 / 100.0

CORRECTED CHI SQUARE = 7.73268 WITH 1 DEGREE OF FREEDOM **

Table A-59. Do Students Decide How Things Are Done

VAR070 TOUGHER JOB NOW THAN WHEN FIRST HIRED BY GROUP

* *

VAR070	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	558	393	951
		56.1	63.2	58.8
YES	1.	436	229	665
		43.9	36.8	41.2
	COLUMN TOTAL	994	622	1616
		61.5	38.5	100.0

CORRECTED CHI SQUARE = 7.55609 WITH 1 DEGREE OF FREEDOM **

Table A-60. Are Jobs Tougher Now Than When First Hired

VAR071 JOB DIFFICULT TO LEARN BY GROUP

* *

VAR071	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	795	539	1334
		81.3	87.1	83.5
YES	1.	183	80	263
		18.7	12.9	16.5
	COLUMN	978	619	1597
	TOTAL	61.2	38.8	100.0

CORRECTED CHI SQUARE = 8.81441 WITH 1 DEGREE OF FREEDOM **

Table A-61. Was Job Difficult to Learn

VAR072 ASSUME NEW RESPONSIBILITIES BEFORE READY BY GROUP

* *

VAR072	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	0.	413	213	626
		41.7	34.1	38.8
NO	1.	577	411	988
		58.3	65.9	61.2
	COLUMN TOTAL	990	624	1614
		61.3	38.7	100.0

CORRECTED CHI SQUARE = 8.95217 WITH 1 DEGREE OF FREEDOM **

Table A-62. Did Students Assume New Responsibilities Before Ready

VAR073 - BOSS OFTEN ASK OPINION BY GROUP

VAR073	GROUP COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	439	311	750
		45.4	50.2	47.3
YES	1.	527	308	835
		54.6	49.8	52.7
	COLUMN TOTAL	966	619	1585
		60.9	39.1	100.0

CORRECTED CHI SQUARE = 3.29297 WITH 1 DEGREE OF FREEDOM

Table A-63. Does Boss Often Ask Students' Opinion

VAR074 DO JOB WITHOUT THINKING BY GROUP

* *

	GROUP		
COUNT / COL PCT	PARTICIPATING STUDENTS	WORKING NONPART	ROW TOTAL
	2.	3.	
VAR074			
0. YES	247	250	497
	24.8	39.9	30.7
1. NO	747	376	1123
	75.2	60.1	69.3
COLUMN TOTAL	994	626	1620
	61.4	38.6	100.0

CORRECTED CHI SQUARE = 40.40346 WITH 1 DEGREE OF FREEDOM ***

Table A-64. Students do Job Without Thinking

VAR075 REGULAR EMPLOYEES JUST LIKE YOU BY GROUP

VAR075	COUNT / COL PCT	GROUP 1 PARTIC STUDENTS	GROUP 2 WORKING NONPART	ROW TOTAL
0. NO		508	282	790
		55.0	51.6	53.7
1. YES		416	265	681
		45.0	48.4	46.3
COLUMN TOTAL		924	547	1471
		62.8	37.2	100.0

CORRECTED CHI SQUARE = 1.48578 WITH 1 DEGREE OF FREEDOM

Table A-65. Regular Employees Just Like Students

VAR076 LEARN SOMETHING NEW MOST DAYS ON JOB BY GROUP

VAR076	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
0. NO		324	282	606
		32.7	45.1	37.5
1. YES		668	343	1011
		67.3	54.9	62.5
COLUMN TOTAL		992	625	1617
		61.3	38.7	100.0

CORRECTED CHI SQUARE = 24.87050 WITH 1 DEGREE OF FREEDOM ***

Table A-66. Do Students Learn Something New Most Days on Job

VAR077 INTERESTED ENOUGH TO LEARN AFTER WORK BY GROUP

VAR077	COUNT / COL PCT	GROUP 2. PARTICIPATING STUDENTS	GROUP 3. WORKING NONPARTICIPANTS	ROW TOTAL
0. NO		432	394	826
		43.6	63.2	51.2
1. YES		558	229	787
		56.4	36.8	48.8
	COLUMN TOTAL	990	623	1613
		61.4	38.6	100.0

CORRECTED CHI SQUARE = 58.04552 WITH 1 DEGREE OF FREEDOM ***

Table A-67. Students Interested Enough to Learn After Work

VAR078 WORK WITH ADULTS BY GROUP

* *

VAR078	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	250	229	479
		25.5	37.3	30.0
YES	1.	732	385	1117
		74.5	62.7	70.0
	COLUMN TOTAL	982	614	1596
		61.5	38.5	100.0

CORRECTED CHI SQUARE = 24.64491 WITH 1 DEGREE OF FREEDOM ***

Table A-68. Do Students Work With Adults

VAR079 LOT OF STUDENTS WORK WITH SAME ADULT BY GROUP

VAR079	COUNT / COL PCT	GROUP 1 PARTIC STUDENTS	2 WORKING NONPART	ROW TOTAL
0. NO		615	382	997
		65.6	65.9	65.7
1. YES		322	198	520
		34.4	34.1	34.3
COLUMN TOTAL		937	580	1517
		61.8	38.2	100.0

CORRECTED CHI SQUARE = 0.00122 WITH 1 DEGREE OF FREEDOM

Table A-69. Do a Lot of Students Work With Same Adult

VAR080 BOSS KNOWS HIS JOB BY GROUP

* *

VAR080	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	54	42	96
		5.6	7.2	6.2
YES	1.	905	538	1443
		94.4	92.8	93.8
	COLUMN TOTAL	959	580	1539
		62.3	37.7	100.0

CORRECTED CHI SQUARE = 1.33925 WITH 1 DEGREE OF FREEDOM

Table A-70. Does Boss Know His Job

VAR081 PEOPLE ANGRY WHEN YOU MAKE MISTAKE BY GROUP

VAR081	COUNT / COL PCT	GROUP 2. PARTICIPATING STUDENTS	GROUP 3. WORKING NONPART	ROW TOTAL
0. YES		133	156	289
		14.0	26.2	18.7
1. NO		819	440	1259
		86.0	73.8	81.3
COLUMN TOTAL		952	596	1548
		61.5	38.5	100.0

CORRECTED CHI SQUARE = 35.15314 WITH 1 DEGREE OF FREEDOM ***

Table A-71. Are People Angry When Students Make Mistakes

VAR082 BOSS TELL YOU WHEN YOU DO A GOOD JOB BY GROUP

* *

VAR082	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	246	206	452
		24.8	33.4	28.1
YES	1.	745	411	1156
		75.2	66.6	71.9
	COLUMN TOTAL	991	617	1608
		61.6	38.4	100.0

CORRECTED CHI SQUARE = 13.38001 WITH 1 DEGREE OF FREEDOM ***

Table A-72. Does Boss Tell Students When a Good Job Is Done

VAR083 ADULTS BOSSY WHERE YOU WORK BY GROUP

* *

VAR083	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	0.	168 17.0	139 22.3	307 19.0
NO	1.	823 83.0	484 77.7	1307 81.0
	COLUMN TOTAL	991 61.4	623 38.6	1614 100.0

CORRECTED CHI SQUARE = 6.78798 WITH 1 DEGREE OF FREEDOM **

Table A-73. Are Adults Bossy Where You Work

VAR084 CLEAR INSTRUCTIONS WHEN YOU NEED THEM BY GROUP

VAR084	COUNT / COL PCT	GROUP: PARTICIPATING STUDENTS (2.)	GROUP: WORKING NONPARTICIPANTS (3.)	ROW TOTAL
0. NO		139	125	264
		14.3	20.4	16.6
1. YES		836	488	1324
		85.7	79.6	83.4
COLUMN TOTAL		975	613	1588
		61.4	38.6	100.0

CORRECTED CHI SQUARE = 9.78256 WITH 1 DEGREE OF FREEDOM **

Table A-74. Do You Get Clear Instructions When Needed

VAR085 SOCIALIZE WITH EMPLOYEES OFF JOB BY GROUP

* *

VAR085	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	545	246	791
		54.8	39.4	48.9
YES	1.	449	379	828
		45.2	60.6	51.1
	COLUMN TOTAL	994	625	1619
		61.4	38.6	100.0

CORRECTED CHI SQUARE = 36.13112 WITH 1 DEGREE OF FREEDOM ***

Table A-75. Do Students Socialize With Employees Off Job

VAR086 DOES JOB HELP ANYBODY BY GROUP

* *

VAR086	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	495 52.1	371 61.4	866 55.7
YES	1.	456 47.9	233 38.6	689 44.3
	COLUMN TOTAL	951 61.2	604 38.8	1555 100.0

CORRECTED CHI SQUARE = 12.77518 WITH 1 DEGREE OF FREEDOM ***

Table A-76. Does Students Job Help Anybody

VAR087 TALK ABOUT YOUR BELIEFS BY GROUP

VAR087	COUNT / COL PCT	GROUP 2. PARTIC STUDENTS	GROUP 3. WORKING NONPART	ROW TOTAL
0. NO		422	248	670
		42.5	39.7	41.5
1. YES		570	376	946
		57.5	60.3	58.5
COLUMN TOTAL		992	624	1616
		61.4	38.6	100.0

CORRECTED CHI SQUARE = 1.12191 WITH 1 DEGREE OF FREEDOM

Table A-77. Do Students Talk About Their Beliefs

VAR088 DO JOB AS VOLUNTEER BY GROUP

* *

VAR088	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	558	393	951
		61.9	66.7	63.8
YES	1.	343	196	539
		38.1	33.3	36.2
	COLUMN TOTAL	901	589	1490
		60.5	39.5	100.0

CORRECTED CHI SQUARE = 3.33794 WITH 1 DEGREE OF FREEDOM

Table A-78. Would Students Do Job as a Volunteer

VAR089 WORKING WITH PEOPLE YOU DONT LIKE BY GROUP

* *

VAR089	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	0.	206	140	346
		21.7	23.2	22.3
NO	1.	745	464	1209
		78.3	76.8	77.7
	COLUMN TOTAL	951	604	1555
		61.2	38.8	100.0

CORRECTED CHI SQUARE = 0.40784 WITH 1 DEGREE OF FREEDOM

Table A-79. Are Students Working With People They Don't Like

VAR090 PAID LESS THAN ADULTS WITH SAME JOB BY GROUP

* *

VAR090	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	0.	562	282	844
		66.9	50.1	60.2
NO	1.	278	281	559
		33.1	49.9	39.8
	COLUMN TOTAL	840	563	1403
		59.9	40.1	100.0

CORRECTED CHI SQUARE = 39.06950 WITH 1 DEGREE OF FREEDOM ***

Table A-80. Are Students Paid Less Than Adults With Same Job

VAR091 FREE TO TALK AT WORK BY GROUP

* *

VAR091	COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	157	92	249
		15.9	14.8	15.5
YES	1.	832	528	1360
		84.1	85.2	84.5
	COLUMN TOTAL	989	620	1609
		61.5	38.5	100.0

CORRECTED CHI SQUARE = 0.23846 WITH 1 DEGREE OF FREEDOM

Table A-81. Are Students Free to Talk at Work

VAR092 FIND REPLACEMENT WHEN ABSENT BY GROUP

* *

VAR092	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	606	304	910
		64.7	50.5	59.2
YES	1.	330	298	628
		35.3	49.5	40.8
	COLUMN TOTAL	936	602	1538
		60.9	39.1	100.0

CORRECTED CHI SQUARE = 30.18600 WITH 1 DEGREE OF FREEDOM ***

Table A-82. Are Replacements Found When Students Are Absent

VAR093 SAY IN HOURS YOU WORK BY GROUP

* *

VAR093	COUNT / COL PCT	GROUP 1 PARTIC STUDENTS	2. WORKING NONPART	3.	ROW TOTAL
NO	0.	458	250		708
		46.2	40.2		43.9
YES	1.	533	372		905
		53.8	59.8		56.1
	COLUMN TOTAL	991	622		1613
		61.4	38.6		100.0

CORRECTED CHI SQUARE = 5.38726 WITH 1 DEGREE OF FREEDOM *

Table A-83. Do Students Have Say in Hours They Work

VAR094 HANDLE HARDER JOB BY GROUP

* *

VAR094	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	80	21	101
		8.9	3.5	6.7
YES	1.	818	582	1400
		91.1	96.5	93.3
	COLUMN TOTAL	898	603	1501
		59.8	40.2	100.0

CORRECTED CHI SQUARE = 16.07034 WITH 1 DEGREE OF FREEDOM ***

Table A-84. Can Students Handle Harder Job

VAR095 LIKE TO QUIT YOUR JOB BY GROUP

* *

VAR095	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
YES	0.	156	178	334
		17.3	32.8	23.1
NO	1.	747	365	1112
		82.7	67.2	76.9
	COLUMN TOTAL	903	543	1446
		62.4	37.6	100.0

CORRECTED CHI SQUARE = 45.02498 WITH 1 DEGREE OF FREEDOM ***

Table A-85. Would Students Like to Quit Their Jobs

VAR096 WISH YOU DIDNT HAVE TO GO TO WORK BY GROUP

VAR096	COUNT / COL PCT	GROUP: PARTIC STUDENTS (2.)	WORKING NONPART (3.)	ROW TOTAL
0. YES		418	328	746
		43.9	55.0	48.2
1. NO		534	268	802
		56.1	45.0	51.8
COLUMN TOTAL		952	596	1548
		61.5	38.5	100.0

CORRECTED CHI SQUARE = 17.72977 WITH 1 DEGREE OF FREEDOM ***

Table A-86. Do Students Wish They Didn't Have to Go to Work

VAR097 BOSS WOULD PROMOTE IF HE COULD BY GROUP

VAR097	COUNT / COL PCT	GROUP 2. PARTIC STUDENTS	GROUP 3. WORKING NONPART	ROW TOTAL
0. NO		448	289	737
		45.5	46.9	46.0
1. YES		537	327	864
		54.5	53.1	54.0
COLUMN TOTAL		985	616	1601
		61.5	38.5	100.0

CORRECTED CHI SQUARE = 0.25838 WITH 1 DEGREE OF FREEDOM

Table A-87. Would Boss Promote Students if He Could

VAR098 EASIER TO TALK TO ADULTS BECAUSE OF JOB BY GROUP

		GROUP		
	COUNT / COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
VAR098				
0. NO		337	221	558
		38.2	38.9	38.5
1. YES		546	347	893
		61.8	61.1	61.5
	COLUMN TOTAL	883	568	1451
		60.9	39.1	100.0

CORRECTED CHI SQUARE = 0.05231 WITH 1 DEGREE OF FREEDOM

Table A-88. Easier for Students to Talk to Adults Because of Job

VAR099 MANY DIFFERENT ASSIGNMENTS ON JOB BY GROUP
* *

VAR099	GROUP COUNT COL PCT	PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
NO	0.	255 25.7	230 36.7	485 29.9
YES	1.	739 74.3	396 63.3	1135 70.1
	COLUMN TOTAL	994 61.4	626 38.6	1620 100.0

CORRECTED CHI SQUARE = 21.98518 WITH 1 DEGREE OF FREEDOM ***

Table A-89. Do Students Have Many Different Assignments on Job

ERIC

PAYRAISE BY GROUP

* *

PAYRAISE (COUNT / COL PCT)		GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
None	0.	545	303	848
		71.8	57.3	65.8
25¢ per hour or less	1.	125	127	252
		16.5	24.0	19.6
Over 25¢ per hour	2.	89	99	188
		11.7	18.7	14.6
COLUMN TOTAL		759	529	1288
		58.9	41.1	100.0

CHI SQUARE = 29.47763 WITH 2 DEGREES OF FREEDOM ***

Table A-90. Amount of Pay Raise

SELFSLEC BY GROUP

* *

SELFSLEC	COUNT / COL PCT	GROUP: PART.C STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
FOR PAY	1.	229	401	630
		29.2	84.6	50.1
TRAINING	2.	554	73	627
		70.8	15.4	49.9
	COLUMN TOTAL	783	474	1257
		62.3	37.7	100.0

CORRECTED CHI SQUARE = 359.65210 WITH 1 DEGREE OF FREEDOM ***

Table A-91. Reason for Joining Program/Going to Work

INTERFER BY GROUP

* *

INTERFER	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
None	0.	586	57	643
		59.4	11.1	42.9
Little	1.	192	238	430
		19.5	46.5	28.7
Some	2.	115	109	224
		11.7	21.3	14.9
Much	3.	94	108	202
		9.5	21.1	13.5
COLUMN TOTAL		987	512	1499
		65.8	34.2	100.0

CHI SQUARE = 323.19849 WITH 3 DEGREES OF FREEDOM ***

Table A-92. Amount Job Interferes With Other Activities

OCCGROUP BY GROUP

* *

OCCGROUP	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
PROF	0.	197	28	225
		20.5	4.5	14.3
CLERICAL	2.	287	130	417
		29.9	21.0	26.4
SALES & MANAG	3.	100	43	143
		10.4	6.9	9.1
BLUE COLLAR	4.	196	197	93
		20.4	31.8	24.9
SERVICE	10.	179	221	400
		18.7	35.7	25.3
	COLUMN TOTAL	959	619	1578
		60.8	39.2	100.0

CHI SQUARE = 146.73563 WITH 4 DEGREES OF FREEDOM ***

Table A-93. Type of Occupation

SPECOCC BY GROUP

SPECOCC	GROUP		
COUNT / COL PCT	PARTIC STUDENTS (2.)	WORKING NONPART (3.)	ROW TOTAL
1. NURSING	35 / 4.9	0 / 0.0	35 / 3.2
2. MED TECH	24 / 3.4	0 / 0.0	24 / 2.2
3. EDUCATN	53 / 7.4	10 / 2.7	63 / 5.8
4. LIBRARY WORK	18 / 2.5	0 / 0.0	18 / 1.7
5. SOCIAL WELFARE	28 / 3.9	0 / 0.0	28 / 2.6
6. SECRETRY	153 / 21.5	47 / 12.8	200 / 18.6
7. CASHIER	27 / 3.8	24 / 6.6	51 / 4.7
8. ACCOUNT-RECORDNG	18 / 2.5	5 / 1.4	23 / 2.1
9. STOCK CLERK	32 / 4.5	26 / 7.1	58 / 5.4
10. SALES CLERK	82 / 11.5	33 / 9.0	115 / 10.7
11. BABY SITTING	0 / 0.0	50 / 13.7	50 / 4.6
COLUMN TOTAL	712 / 66.0	366 / 34.0	1078 / 100.0

Table A-94. Specific Occupational Clusters (1 of 2)

SPECOCC BY GROUP

* *

SPECOCC	COUNT / COL PCT	GROUP: PARTIC STUDENTS 2.	WORKING NONPART 3.	ROW TOTAL
WAITING	12.	44	47	91
		6.2	12.8	8.4
KITCHEN WORK	13.	13	26	39
		1.8	7.1	3.6
HOSPITL ATTENDNT	14.	22	11	33
		3.1	3.0	3.1
JANITOR	15.	59	32	91
		8.3	8.7	8.4
AUTO REPAIR	16.	15	8	23
		2.1	2.2	2.1
BODYWORK	17.	17	2	19
		2.4	0.5	1.8
PHONE INSTALLR	18.	13	1	14
		1.8	0.3	1.3
CARPNTRY	19.	19	5	24
		2.7	1.4	2.2
GAS STA. ATTENDT	20.	27	30	57
		3.8	8.2	5.3
MOVING & STORING	21.	13	9	22
		1.8	2.5	2.0
	COLUMN TOTAL	712	366	1078
		66.0	34.0	100.0

CHI SQUARE = 231.79784 WITH 20 DEGREES OF FREEDOM ***

Table A-94. Specific Occupational Clusters (2 of 2)

ERIC

OMB No. 51-S-72055
Approval Expires: September 1973
To be completed by Program Administrator

Group Code_____

Program_____

Institution_____

Date_____

Interviewer_____

SCHEDULE I
PROGRAM INFORMATION - PART A

Note to Respondent: As explained in our meeting, would you please complete these forms and return them to Cleone Geddes, System Development Corporation, 2500 Colorado Avenue, Santa Monica, California 90406.

Official Title of Program_____

1. Name of Respondent_____

2. Title of Respondent_____

3. Telephone Number_____
Area Code Number Extension

4. What is your responsibility for work education programs in the school or district?

_____

_____

_____

5. Please give the following information for your school and district:

SCHOOL	DISTRICT
a. Name_____	g. Name_____
b. Address_____	h. Address_____
_____	_____
c. School Telephone_____	i. District Office Telephone_____
d. Chief Administrator_____	j. Chief Administrator_____
e. Program Administrator_____	k. Approx. No. of Students in entire district_____
f. Approx. No. of Students in entire school_____	

6. Approximately how many students are in this work education program in your school at present?_____

7. What are the student eligibility requirements for this program (e.g. restricted to vocational education majors, assigned to program on basis of financial need, a regular part of the automotive technology program, etc.)?

_____

_____

_____

8. Please list the general occupational fields in which students in your school's program work and give the number of students in each.

	OCCUPATIONAL FIELD	NUMBER OF STUDENTS
VAR004	a. Agriculture (food production, agricultural mechanics, forestry, etc.)	_____
VAR005	b. Distributive education (advertising, sales, retail buying, etc.)	_____
VAR006	c. Health occupations (nursing, medical technician, rehabilitation, etc.)	_____
VAR007	d. Occupational home economics (food management, home decorating, etc.)	_____
VAR008	e. Office occupations (bookkeeping, typing, programming, etc.)	_____
VAR009	f. Technical occupations (engineering related technology, pilot training, etc.)	_____
VAR010	g. Trade and industrial occupations (appliance repair, aircraft maintenance, construction, etc.)	_____ (use separate sheet if more room is needed)
	IF NOT SURE OF THE CATEGORIES INTO WHICH CERTAIN OCCUPATIONS SHOULD BE PLACED, PLEASE LIST THE NAMES OF THOSE OCCUPATIONS BELOW AND THE NUMBER OF STUDENTS IN EACH.	
VAR011	_____	_____
	_____	_____
	_____	_____

9. Please list the kinds of jobs (e.g., keypunch operator, sales person, mechanic, etc.) to which students in your school's program are assigned and give the number of students assigned to each type.

	JOB	NUMBER OF STUDENTS
VAR012		

(use separate sheet if more room is needed)

10. Please list the other schools or districts in which this program is operating.

	SCHOOL	DISTRICT
VAR013		VAR014

(use separate sheet if more room is needed)

11. What is the organization and staffing for your school's program? (Please provide information on the items below.)

a. In your school, what is the title of the person to whom you report? (attach current organization chart if available)

b. What are the job titles, number and responsibilities of school personnel in your school's program?

Job Title	Number	Responsibilities

c. Academic preparation and experience of program staff in your school.

Job Title #	Average Years College	Average Years Voc. Exp.	Minimum Years College	Minimum Years Voc. Exp.
	VAR015	VAR016	VAR017	VAR018	VAR019
Non-teaching adm.	VAR020	VAR021	VAR022	VAR023	VAR024
Teaching adm.	VAR025	VAR026	VAR027	VAR028	VAR029
Counselor	VAR030	VAR031	VAR032	VAR033	VAR034
Job placement spec.	VAR035	VAR036	VAR037	VAR038	VAR039
Probation spec.	VAR040	VAR041	VAR042	VAR043	VAR044
Recruiter	VAR046	VAR047	VAR048	VAR049	VAR050
Teaching aides	VAR051	VAR052	VAR053	VAR054	VAR055
Teacher					

(use separate sheet if more room is needed)

12. a. Does your district have a written policy on work education that affects your school's program?

VAR056 ☐ Yes ☐ No

b. If yes, please attach a copy.

13. Have you developed general goals of measurable program objectives for your school's program this year (e.g., number of enrollments, completions, placements in program, quality of job slots, full-time employment placements, etc.)?

VAR057 ☐ Yes ☐ No

If yes, please list below or provide a copy of any written statements.

_____

_____

_____

_____

_____

_____

14. a. Is this program a line item in your school's budget?

VAR058 ☐Yes ☐No

If yes, please give the amount budgeted for the following years:

VAR059 b. 1970-1971_____

VAR060 c. 1971-1972_____

VAR061 d. 1972-1973_____

15. Please indicate the sources of support that have financed this school's program. (please check all that apply.)

VAR062	☐Federal Government	VAR065 ☐Parent Institution	VAR068 ☐Foundations
VAR063	☐State Government	VAR066 ☐Industry	VAR069 ☐Student Tuition or Fees
VAR064	☐Local Taxes	VAR067 ☐Labor Unions	VAR070 ☐Other (specify)_____

16. If Federal funding was checked above, please indicate the Federal source (e.g. 1968 Amendments to Vocational Education Act, Part G; Neighborhood Youth Corps in School, WECEP, etc.).

VAR071 _____

_____

17. Please identify two employers who were asked to participate in this work education project in your school but refused to do so. Please provide the following information and then proceed to question 19. If less than two employers refused to participate, go to question 18.

a. EMPLOYER #1_____

b. Address and telephone number_____

_____

c. Name and position of person approached (if known)_____

_____

d. Employer's occupational field_____

e. Titles of positions in which students might have been placed_____

_____

a. EMPLOYER #2 _____

b. Address and telephone number _____

_____

c. Name and position of person approached (if known) _____

_____

d. Employer's occupational field _____

e. Titles of positions in which students might have been placed _____

_____

18. Please name two local employers who, to your knowledge, have never been asked to participate in your school's program but might be asked to do so in the future. (Do not answer this question if two employers were named above.)

a. EMPLOYER #1 _____

b. Address and telephone number _____

_____

c. Name of General Manager (if known) _____

d. Employer's occupational field _____

e. Titles of positions in which students might be placed _____

_____

a. EMPLOYER #2 _____

b. Address and telephone number _____

_____

c. Name of General Manager (if known) _____

_____

d. Employer's occupational field _____

e. Titles of positions in which students might be placed _____

_____

19. a. Have you ever contacted a union about participating in this program?

☐ Yes ☐ No

b. If yes, did you ever receive a refusal?

☐ Yes ☐ No

c. If so, please list the name of the local, the approximate date of the refusal and the name and address of the person contacted.

_____

_____

_____

_____

_____

_____ _____

20. Please complete the following chart (as shown in the example) on the employers and unions affiliated with your school's program. If there are more than 4 employers, please list those employing the largest number of students.

EMPLOYER	EMPLOYER'S OCCUPATIONAL FIELD	EMPLOYER CONTACT (Address & Phone)	TITLES OF POSITIONS IN WHICH STUDENTS ARE PLACED	COOPERATING UNION (Name, Address, and Telephone Number of of Shop Stewart)	NUMBER OF STUDENTS AT THIS LOCATION
Example: ABC Corporation	dress manufacturing	J. Watson General Manager 1410 Green Street Los Angeles, CA (213) 692-1111	Sewing Machine Operator	ILGWU, Local 42 John James 1200 Blue Street Los Angeles, CA (213)782-5311	14

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Approval Expires: September 1973
To be completed by Program Administrator

Group Code_____

Program_____

Institution_____

Date_____

Interviewer_____

INTERVIEW SCHEDULE I
PROGRAM INFORMATION - PART B

1. Name of Respondent_____

2. Title of Respondent_____

3. Telephone Number_____
Area Code Number Extension

Instructions to Interviewer: If respondent has not already been briefed, describe the purpose of the project briefly and identify the program you are studying at that institution. The respondent should understand that whenever the term program is used, unless otherwise modified, the term refers to the work education program under study.

VAR072 4. How long has your program been in operation?_____years

VAR073 5. How long have you been with the program?_____years

6. Are you a full-time employee of the school or district?

a. ☐ Yes

b. ☐ No

c. If no, how many hours per week do you work part-time?_____

VAR076 7. a. What part of your time is allocated to this work education program?_____%

VAR077 b. If less than 100%, what are your other functions?

_____

_____

8. Who took the initiative in organizing this program in your school? (Check only one).

VAR078 ☐ School ☐ Union

☐ Employer ☐ Other (specify)_____

Please explain._____

_____

VAR079 9. How many students are enrolled in the program in this school?_____

VAR080 10. Were you able to accept all students who applied?

☐ Yes ☐ No

11. Was your planned enrollment

VAR081 a. ☐ Met?

☐ Not Met?

☐ Exceeded?

VAR082 b. By how much? + _____ - _____

VAR083 12. a. How many students were enrolled last year?_____

VAR084 b. The year before?_____

VAR085 13. What enrollment do you anticipate next year?_____

14. What is the breakdown of time in school and time on the job for a typical student enrolled in your program?

VAR086 _____

VAR087 _____

VAR088 _____

VAR089 15. What is the teacher-student ratio in the program at school?_____

16. a. Please describe how you advertise to recruit students for your school's program.

_____

_____

_____

_____

b. What are the student eligibility requirements for your school's program?

VAR090 _____ VAR094 VAR096

VAR097

VAR091 _____

VAR092 _____

VAR093 _____ VAR095

17. Have some students dropped out or been terminated this year?

a. ☐ Yes ☐ No

VAR098 b. If yes, how many?_____

c. What were the reasons for their leaving?

VAR099
VAR100 _____ VAR103 _____ VAR106

VAR101 _____ VAR104 _____
VAR102 VAR105

18. As a basis for evaluating student performance, have you written measurable learner objectives for your program?

VAR107 a. ☐ Yes ☐ No

b. If yes, please discuss. (To interviewer: obtain copy if available)

_____

_____

19. Do you have a system and forms for recording student progress in your program?

a. ☐ Yes ☐ No

b. If yes, please describe. (To interviewer: obtain printed materials)

_____

_____

_____

_____

20. In your judgment, has your program influenced some students to remain in school rather than drop out?

☐ Yes ☐ No ☐ Don't know

(To interviewer: if yes, obtain evidence if possible)

21. What influence has your program had on:

VAR110 a. Student absenteeism:

_____

_____

VAR111 b. Tardiness?

_____

_____

VAR112 c. Grades?

_____

_____

VAR113 d. Motivation?

_____

_____

e. Other student problems? (specify)

_____

_____

22. What procedures do you use for reviewing and modifying your program?

_____

_____

_____

23. Do you have arrangements for articulating your program with the same or similar programs of other schools or districts in your area?

VAR115 a. ☐ Yes ☐ No

b. If yes, with which organizations? _____

_____

c. For what purposes? VAR116 _____

_____ VAR117 _____

_____ VAR118 _____

VAR119

VAR120

24. Are students receiving job-related instruction in school?

VAR121 a. ☐ Yes ☐ No

b. If yes, what instructional methods and procedures (e.g., lectures, programmed instructions, supervised shop or laboratory experience, etc.) are used to relate the instruction to the working experience?

_____

_____

25. Do you have special provisions in your school's program for the "disadvantaged" (i.e., academic, socioeconomic?)

VAR122 a. ☐ Yes ☐ No

b. If yes, what are the special provisions?

_____

_____

26. Do you have special provisions in your school's program for handicapped students?

VAR123 a. ☐ Yes ☐ No

b. If yes, what are the special provisions?

_____

_____

27. What provision is made for counseling the work education students in your program?

VAR124 _____

VAR125 _____

VAR126 _____

VAR127

28. Do you consider the organization and staffing of your program effective for the achievement of your program goal and objectives?

VAR128 a. ☐ Yes ☐ No

b. If no, how could the situation be improved?

VAR129 _____

VAR130 _____

VAR131 _____

29. Do you consider the following aspects of your school's program adequate?

VAR132 a. Job slot development? Yes____ No____

VAR133 b. Counseling? Yes____ No____

VAR134 c. Recruitment of students? Yes____ No____

VAR135 d. Placement of students Yes____ No____

e. If no, how could each area be improved?

_____

_____

_____

30. Do you have an organized follow-up program to evaluate job success of former students of your school's program?

VAR136 a. ☐ Yes ☐ No

b. If yes, please describe.

_____

_____

_____

_____

31. In what ways do you promote and communicate information on your program to others in the school and community? (To interviewer: consider items like news media, radio, TV, personal appearances.)

VAR137 _____

VAR138 _____

VAR139 _____

32. Do you have inservice education opportunities such as a conference budget and curriculum development funds for professionals and paraprofessionals in your program?

VAR140 a. ☐ Yes ☐ No

b. If yes, what are they?

_____

_____

33. Do you have provisions for the inservice program education (e.g. conferences, seminars, courses) for work station supervisors responsible for on-the-job training?

VAR141 a. ☐ Yes ☐ No

b. If yes, what are the provisions?

_____

_____

34. Does your school, district or any government agency compensate employers for operating this program?

VAR142 a. ☐ Yes ☐ No

b. If yes, how?

VAR143 _____

_____

35. Does your school, district or any government agency directly compensate or reimburse any enrollees in your program?

VAR144 a. ☐ Yes ☐ No

b. If yes, what are the amount per hour and the provisions for compensation?

VAR145 _____ VAR146 _____

_____

36. Please describe the facilities used by your school's program.

What are their?

	Good Features	Inadequacies
	School training facilities	
VAR147	a.	b.
VAR148		
VAR149		
	Work facilities	
VAR150	c.	d.
VAR151		
VAR152		

37. Do you have suggestions for the improvement of the on-the-job training by work station supervisors?

a. ☐ Yes ☐ No

b. If yes, what are your suggestions?

_____

_____

_____

38. Do you have an advisory committee to your program?

VAR15[illegible] a. ☐ Yes ☐ No

b. What groups, organizations or professions are represented?

VAR155 _____ VAR157 _____ VAR159

VAR156 _____ VAR158 _____ VAR160

VAR161

VAR162 c. How often does it meet?_____/year

d. What is its role?

_____

_____

39. Are there other work education programs in your school?

VAR163 a. ☐ Yes ☐ No ☐ Don't know

b. If yes, what are they and approximately how many students does each serve?

_____

_____

c. If don't know, from whom can I obtain this information?_____
(To interviewer: obtain from other person. This list should provide an indication of emphasis on work education in general.)

40. What procedures do you follow for making arrangements with employers for work placement of students?

VAR164 _____ VAR165 _____

_____

_____

41. Do you conduct any job placement activities for students who have completed the program?

VAR166 a. ☐ Yes ☐ No

b. If yes, please describe and indicate what percentage of students who graduated from this program last year were placed through your

VAR167 placement program? _____ %

_____

_____

_____

42. Do you maintain placement records?

VAR168 a. ☐ Yes ☐ No

b. If yes, what was the total percentage of students who graduated from this program last year who were placed in positions related to their training (with or without the assistance of your placement officer)?

VAR169 _____ %

If no, what was the <u>estimated</u> percentage of students who graduated from this program last year who were placed in positions related to their training (with or without the assistance of your placement officer)? _____ %

43. What kinds of support (financial, equipment, personnel) have employers made available to the program?

VAR170 _____ VAR173 _____ VAR176 _____

VAR171 _____ VAR174 _____

VAR172 _____

44. Have employers raised obstacles that have hindered the program?

VAR177 a. ☐ Yes ☐ No

b. If yes, explain.

VAR178 _____

_____

_____

45. Do employers screen the students in any manner?

VAR179 a. ☐ Yes ☐ No

b. If yes, please explain.

_____

_____

_____

_____

46. Have unions raised obstacles that have hindered the program?

VAR180 a. ☐ Yes ☐ No

b. If yes, please explain.

VAR181 _____

_____

_____

47. Have any students in your school's program been involved in serious industrial accidents this year or last year?

VAR182 a. ☐ Yes ☐ No

b. If yes, please indicate how many and what types.

_____

_____

_____

48. Please list the main reasons for the degree of success that has been achieved by your school's program.

_____

_____

_____

_____

_____

49. Please list problems that still remain to be resolved.

VAR184 _____

_____

_____

50. If asked to name the most interesting and unusual feature of your school's program, what would it be?

_____

_____

_____

51. On a 5-point scale from poor to excellent, with 1 for poor and 5 for excellent, please rate the program on each of the following:

			1 poor	2	3 Average	4	5 Excellent	Don't know	Not applicable
VAR185	a.	Enthusiasm of students . . . . . a.							
VAR186	b.	Enthusiasm of teachers . . . . . b.							
VAR187	c.	Quality of on-the-job supervision . . . c.							
VAR188	d.	Adequacy of facilities . . . . . d.							
VAR189	e.	Relating of classroom work to on-the-job training . . . . . e.							
VAR190	f.	Relevance of training to real-world working conditions . . . . . f.							
VAR191	g.	Cooperation of employers . . . . . g.							
VAR192	h.	Cooperation of unions. . . . . h.							
VAR193	i.	Intellectual ability of students in their field . . . . . i.							
VAR194	j.	Vocational skills of students at beginning of program. . . . . j.							
VAR195	k.	Vocational skills of students at end of program. . . . . k.							
VAR196	l.	Quality of training materials. . . . . l.							
VAR197	m.	Recruitment of students. . . . . m.							
VAR198	n.	Job success of students in the program. . . . . n.							
VAR199	o.	Counseling . . . . . o.							
VAR200	p.	Placement of students completing program. . . . . p.							
VAR201	q.	Follow-up on former students . . . . . q.							
VAR202	r.	Job success of students completing program . . . . . r.							
VAR203	s.	Coordination and direction . . . . . s.							
VAR204	t.	Use of advisory committee. . . . . t.							
VAR205	u.	Articulation with similar programs in other institutions and districts. . . u.							
VAR206	v.	Overall quality of program . . . . . v.							
VAR207	w.	Administration's support of this program. . . . . w.							
VAR208	x.	Administration's commitment to work education in general. . . . . x.							

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Program_____

Institution_____

Date_____

Interviewer_____

SCHEDULE II
PARTICIPATING STUDENT

NOTE TO STUDENT: NONE OF THIS INFORMATION WILL BE SHARED WITH YOUR SCHOOL OR EMPLOYER.

1. Name_____

2. School Attending_____

VAR006 3. Grade_____

VAR008 4. Expected Graduation Date_____

5. Are you: (Check only one in each column)

VAR009 a. ☐ Male ☐ Female

VAR010 b. ☐ Married ☐ Single ☐ Divorced, Separated, Widowed, etc.

VAR011 c. ☐ White ☐ Black ☐ Oriental ☐ Spanish Descent (Chicano, Puerto Rican, etc.) ☐ Other (specify)_____

VAR013 6. Date of Birth_____
month day year

VAR014 7. What is your school major?_____

VAR015 8. About how much did you earn in the past 12 months before taxes? $_____total

VAR016 9. What category best classifies your overall school standing by way of grades?

☐ A (90 +) ☐ C (70-80) ☐ F (below 60)

☐ B (80-90) ☐ D (60-70)

10. What was your main reason for joining this program? (Check only one)

VAR017 a. ☐ Needed work for pay

VAR018 b. ☐ Bored with school

VAR019 c. ☐ Wanted training for job

VAR020 d. ☐ Wanted to sample occupations

VAR021 e. ☐ School policy

VAR022 f. ☐ Other (specify)_____

11. Who first told you about the program?

VAR023 a. ☐ Teacher or principal
b. ☐ Counselor
c. ☐ Parent or relative
d. ☐ Friend
e. ☐ Employer
f. ☐ Newspaper
g. ☐ Poster
h. ☐ Other (specify)_____

VAR024 12. How many months have you been working in the program?_____months.

13. Did you ever discuss your course and occupational choices with a guidance counselor?

VAR025 a. ☐ Yes ☐ No

VAR026 b. If yes, how helpful do you think these discussions were?

☐ Very helpful
☐ Somewhat helpful
☐ Not at all helpful

VAR027 14. How often are you supposed to go to your work assignment?

a. ☐ Every day
b. ☐ On alternate days
c. ☐ On alternate weeks - every day
d. ☐ On alternate weeks - alternate days
e. ☐ Other (specify)_____

VAR028 15. How many hours a week are you supposed to work at your job?_____hours.

VAR029 16. How many hours are you in regular school classes every week?_____hours.

17. Are you paid for your work?

VAR030 a. ☐ Yes ☐ No

VAR031 b. What is your hourly pay? $_____/hour.

VAR032 c. What was your beginning hourly pay? $_____/hour.

18. What is the main use you make of this money? (Check one)

VAR033 a. ☐ Contribute to support of parent's family

VAR034 b. ☐ Support myself (rent, food, etc.)

VAR035 c. ☐ Spending money (dates, car, clothes, etc.)

VAR036 d. ☐ Savings

VAR037 e. ☐ Other (specify)_____

19. Do you have any other part time work?

VAR038 ☐ Yes ☐ No

20. Do you work during the summer?

VAR039 ☐ Yes ☐ No

21. Do you spend more than four hours each week participating in a single extra curricular school activity or in a community activity such as the football team, drama group, service club, church group, etc?

VAR040 a. ☐ Yes ☐ No

b. If yes, what activity?_____

VAR041 How many hours per week?_____

22. Do you feel that your work interferes with any of the activities below? (Check all that apply)

VAR042 a. ☐ Schoolwork

VAR043 b. ☐ Social life

VAR044 c. ☐ Chores at home

VAR045 d. ☐ Sports activities

VAR046 e. ☐ Hobbies

VAR047 f. ☐ Other (please specify)_____

VAR048 g. ☐ None of the above

23. Has the work education program helped you to decide on an occupation?

VAR049 ☐ Yes ☐ No

24. How closely is your work related to your classwork?

VAR050 a. ☐ Very closely

b. ☐ Somewhat

c. ☐ Not at all

25. On the whole, does this job fit in well with your overall job and career interests?

VAR051 a. ☐ Fits very well

b. ☐ Fits moderately well

c. ☐ Doesn't fit at all

26. Did you like school

VAR052 a. ☐ Better before you got into program?

b. ☐ Better after you got into program?

c. ☐ About the same after as before you got into the program?

27. How old were you when you first started working regularly?

VAR053 a. ☐ Under 16 c. ☐ 18-19

VAR054 b. ☐ 16-17 d. ☐ 20 and over

28. What is the name of the company you work for?_____

29. What does the company you work for make or do?_____

30. Do you have formal instruction (classes) at work?

VAR055 ☐ Yes ☐ No

31. What is your job title?_____

VAR056 32. What do you do (job description)?_____

33. Where have you learned the most about the skills needed for your job?

VAR057 a. ☐ At school

b. ☐ On the job

c. ☐ Elsewhere (specify)_____

34. Do you expect to find a full time job in the occupation in which you are now working?

VAR058 ☐Yes ☐No

With the same employer?

VAR059 ☐Yes ☐No

VAR060 35. How soon do you expect to get a full time job?_____months.

36. What do you expect to be doing one year from now?

VAR061
a. ☐Working full time
b. ☐In school
c. ☐In armed services
d. ☐Part-time work and part-time study
e. ☐Other (specify)_____
f. ☐Don't know

37. Did you work for any other employers in this program?

VAR062 ☐Yes ☐No

VAR063 If yes, how many?_____

38. Would you recommend that a friend enter this program?

VAR064 ☐Yes ☐No

39. What changes would you like to see made in the program?_____

VAR065 _____

_____

_____

Please give your reasons_____

_____

_____

40. Please check the boxes which best describe your job.

		Yes	No	Don't Know
VAR066	Are there adults who do the same work as you do?	( )	( )	( )
VAR067	Do you sometimes take over a job for an adult who isn't there?	( )	( )	( )
VAR068	Do you usually work alone?	( )	( )	( )
VAR069	Do you decide how things are done on your job?	( )	( )	( )
VAR070	Are you doing a tougher job now than when you were first hired?	( )	( )	( )
VAR071	Was your job difficult to learn?	( )	( )	( )
VAR072	Do you have to assume new responsibilities before you are ready?	( )	( )	( )
VAR073	Does your boss often ask your opinion?	( )	( )	( )
VAR074	Can you do your job without thinking?	( )	( )	( )
VAR075	Are the regular employees you work with just like you?	( )	( )	( )
VAR076	Do you learn something new most days on your job?	( )	( )	( )
VAR077	Does your job get you interested enough in things to try to learn about them after work?	( )	( )	( )
VAR078	Do you mostly work with adults?	( )	( )	( )
VAR079	Do a lot of students work with the same adult?	( )	( )	( )
VAR080	Does your boss know his job?	( )	( )	( )
VAR081	Do people get very angry at you when you make a mistake?	( )	( )	( )
VAR082	Does your boss tell you when you do a good job?	( )	( )	( )
VAR083	Are the adults bossy where you work?	( )	( )	( )
VAR084	Do you get clear instructions when you need them?	( )	( )	( )
VAR085	Do you do things off the job with the people you work with?	( )	( )	( )

		Yes	No	Don't Know
VAR086	Do you ever talk with the people at work about whether your job helps anybody?	( )	( )	( )
VAR087	Do you ever talk to anyone on the job about your beliefs?	( )	( )	( )
VAR088	Would you do this job as a volunteer?	( )	( )	( )
VAR089	Are you working with people you don't like?	( )	( )	( )
VAR090	Do you get paid less than adults who do the same job?	( )	( )	( )
VAR091	Are you free to talk and joke around with the people at work?	( )	( )	( )
VAR092	Do they have to find a replacement for you when you are absent?	( )	( )	( )
VAR093	Do you have any say in what hours you work?	( )	( )	( )
VAR094	Could you handle a harder job?	( )	( )	( )
VAR095	Would you like to quit your job?	( )	( )	( )
VAR096	Do you often wish you didn't have to go to work?	( )	( )	( )
VAR097	Do you think your boss would promote you if he could?	( )	( )	( )
VAR098	Is it easier for you to talk to adults because you had this job?	( )	( )	( )
VAR099	Have you had many different assignments on this job?	( )	( )	( )

That's the end of our questions for today.

We may need your help again, about a year from now, to complete our survey. At that time we hope you will be willing to complete another questionnaire which will be used to learn what changes have occurred in your life after one year.

We will write you a letter in about a year, with a return postcard in it, to set up a time and place for a new interview. Please give us your name and address, so that we can write to you next year.

Name_____ Social Security #_____
Last First

Present mailing address_____
Street address Apt. no

_____
City State Zip

Present telephone number_____
Area Code Number

Could you give us two addresses and phone numbers of people that might help us contact you next year, in case you have moved? Please list relatives, friends, or other people in the community who know you through church, school, work, etc.

Back-up #1 Name_____

_____
Street address Apt. no

_____
City State Zip

Present telephone number_____
Area code Number

Back-up #2 Name_____

_____
Street address Apt. no

_____
City State Zip

Present telephone number_____
Area code Number

Father's full name_____

Father's address if different from your own_____

Mother's full name_____

Mother's address if different from your own_____

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Institution_____

Date_____

Interviewer_____

SCHEDULE IV
PARTICIPATING EMPLOYER

1. Name of Company_____

2. Address_____

3. Name of Respondent_____

4. Title of Respondent_____

5. Phone Number_____
Area Code Number Extension

Instructions to Interviewer: If respondent has not already been briefed, describe the purpose of the project briefly and identify the program you are studying. The respondent should understand that whenever the term program is used, unless otherwise modified, the term refers to the work education program under study.

BACKGROUND OF COMPANY

6. What are your main products or services?

_____

_____

7. Is this (please check one)

VAR007 a. ☐ An Independent company

VAR008 b. What is the total number of persons employed by the company?_____

c. ☐ A division of a larger company

d. How many persons are employed by the division?_____

8. In the past year, has the number of employees in the division or independent company (Check one)

VAR009 a. ☐ Increased

b. ☐ Decreased

c. ☐ Remained the same

DESCRIPTION OF PROGRAM

VAR010 9. How long has your company been participating in this work education program? _____ months

VAR011 10. How long have you been connected with the program? _____ months

VAR012 11. How many students are in the work education program in your company now? _____

VAR013 12. What has been the average number of students you have served at any one time (students on board on an average day)? _____

VAR014 13. How many students were served last year? _____

VAR015 14. Is the number of student placements in the program: (Check one)

a. ☐ Increasing

b. ☐ Decreasing

c. ☐ Remaining the same

VAR016 15. Approximately what percentage of the student trainees in the work education program here represent minority ethnic or racial groups? _____ %

VAR017 16. What percent of the students are male? _____ %

17. What is the company's organization pattern and staffing for the work education program? (To interviewer: obtain items below.)

a. What is the title of your immediate supervisor?

_____

VAR018 b. Number, type and title of work education supervisors

_____

VAR019 c. Training and experience of work education supervisors

VAR020 VAR021

_____

VAR022 d. Work education supervisor/student ratio

_____

VAR023 e. Supporting services such as program liaison, counseling, placement and follow-up for student in plant

_____

18. What are the goals of the program from the employer point of view?

VAR024 _____
VAR025
VAR026 _____
VAR027
VAR028 _____
VAR029
VAR030 _____

19. a. Have you developed measurable program objectives for this program this year e.g., number of slots for training, full time placements?

VAR031 ☐ Yes ☐ No (If no, go to question 19c)

If yes, what are they?

VAR032 _____

_____

b. Have you achieved all of these objectives?

VAR033 ☐ Yes ☐ No

(To interviewer: obtain specific data)

c. Is the program operating with the intended number of students?

VAR034 ☐ Yes ☐ No

d. Could you handle more?

VAR035 ☐ Yes ☐ No

20. a. What was the basis for selection of student trainees?

VAR036 _____

_____

b. Was it satisfactory from your viewpoint?

VAR037 ☐ Yes ☐ No

If no, why not?

_____

_____

EVALUATION OF WORK EDUCATION PROGRAM

21. In general, how would you evaluate the program?

VAR039 a. ☐ Very satisfactory

b. ☐ Satisfactory

c. ☐ Unsatisfactory

22. How could each of the following be improved in the program?

VAR040 a. School administration

VAR041 b. Quality of students included

VAR042 c. Teaching

VAR043 d. Employer support

VAR044 e. Union support

23. Does the company plan to continue this program?

VAR045 ☐ Yes ☐ No ☐ Don't know

24. Would you recommend this program to other employers?

VAR046 ☐ Yes ☐ No

Why or why not?

_____

_____

25. Would you expand this program?

VAR047 ☐ Yes ☐ No

If not, what adjustments would be necessary to interest you in expanding the program?

_____

_____

_____

26. What would you say is the most unusual feature of the work education program in your plant?

_____

Why?

_____

_____

27. a. Have you had any experience with governmental training programs not related to this program?

VAR048 ☐ Yes ☐ No (If no, go to question 28)

If yes, please list programs.

VAR049 _____ VAR050 _____

_____

b. How do these compare with your experience in this work education program?

VAR051 _____

_____

28. What problem(s) have you encountered in the conduct of this program?

VAR052 _____

_____

_____

_____

29. What steps have you taken to resolve the problem(s)?

VAR053 _____

_____

_____

_____

_____

30. a. What effect has the work education program had on your plant or company safety record? (To interviewer: get specific data)

_____

_____

b. If there have been any serious accidents, please describe briefly.

VAR055 _____

_____

c. Has the company been involved in any lawsuits in connection with the students?

☐ Yes ☐ No

If yes, please explain.

_____

_____

31. What percent of the students complete the program? VAR060 _____ %

32. What percent of the students drop out:

Within the first 30 days? _____ %

After the first 30 days? _____ %

33. Have any students been involuntarily terminated at your company's request?

VAR063 ☐ Yes ☐ No

VAR064 If yes, what percent last year?_____%

34. What were the reasons for students' leaving the program?

	a. Voluntary	b. Involuntary
VAR065	VAR068	VAR071
VAR066	VAR069	VAR072
VAR067	VAR070	

35. What is the average

VAR073 a. absence rate per trainee? Absent_____% of the time

VAR074 b. tardiness rate per trainee? Late_____% of the time

36. I'm going to show you a list of different types of student gains. For each, rate the amount of improvement for the average trainee.

a. Occupational knowledge (technical, mathematical, sciences, communications)

VAR075
1. ☐ No improvement
2. ☐ Little improvement
3. ☐ Considerable improvement

b. Manipulative skills (output, quality, job know-how, use of tools and equipment, etc.)

VAR076
1. ☐ No improvement
2. ☐ Little improvement
3. ☐ Considerable improvement

c. Personal and social qualities (cooperativeness, self-control, reaction to advice and criticism, adaptability)

VAR077
1. ☐ No improvement
2. ☐ Some improvement
3. ☐ Considerable improvement

d. Work qualities and habits (dependability, safety, attendance, punctuality, industry).

VAR078 1. ☐ No improvement

2. ☐ Some improvement

3. ☐ Considerable improvement

RELATIONSHIP WITH SCHOOL

37. Who has primary responsibility for each of the following? Describe the employer's functions in each area.

Primary responsibility for:		Employer's Function:
a. Selection of student trainees		
VAR079	1. ☐ School	_____
VAR080	2. ☐ Employer	_____
VAR081	3. ☐ Union	_____
b. School Curriculum (job related)		
VAR082	1. ☐ School	_____
VAR083	2. ☐ Employer	_____
VAR084	3. ☐ Union	_____
	4. ☐ No job related school curriculum	
c. Teaching (in plant)		
VAR085	1. ☐ School	_____
VAR086	2. ☐ Employer	_____
VAR087	3. ☐ Union	_____
	4. ☐ No teaching in plant	

Primary Responsibility for:		Employer's Function:
d. Teaching aids and equipment (on the job)		
VAR088	1. ☐ School	_____
VAR089	2. ☐ Employer	_____
VAR090	3. ☐ Union	_____
	4. ☐ No teaching aids or equipment used at job site	
e. Teaching aids and equipment (job related for use in school)		
VAR091	1. ☐ School	_____
VAR092	2. ☐ Employer	_____
VAR093	3. ☐ Union	_____
	4. ☐ No teaching aids and equipment that are job related are used in school	
f. Placement of graduates		
VAR094	1. ☐ School	_____
VAR095	2. ☐ Employer	_____
VAR096	3. ☐ Union	_____
	4. ☐ No placement system	

38. How would you rate your company's overall relationship with the school? (Check one)

VAR097
- a. ☐ Excellent
- b. ☐ Average
- c. ☐ Poor

39. How many times have you or your representatives met with school personnel during the past year?_____

VAR098

EVALUATION OF TRAINEES

40. How do you evaluate student progress? Please describe procedures. (To interviewer: obtain rating sheets if available)

VAR099 _____

VAR100 _____

_____

_____

41. a. Have you hired on a permanent basis any graduates of the program?

VAR101 ☐ Yes ☐ No

VAR102 b. How many in the past year?_____

c. What jobs were they hired for?

VAR103 _____ VAR104 _____

d. Were these jobs for which they were trained in the program?

VAR105 ☐ Yes ☐ No

GENERAL INFORMATION

42. For what percent of the trainees does your company

VAR106 a. Guarantee employment?_____%

VAR107 b. Provide assistance in finding employment?_____%

43. Did the employment of these students as regular workers require any adjustments in your hiring standards?

VAR108 ☐ Yes ☐ No

If yes, what were they?

VAR109 _____ VAR111 _____ VAR113 _____

VAR110 _____ VAR112 _____

44. Did the employment of these students for work education require any adjustments in your hiring standards?

VAR114 ☐ Yes ☐ No

If yes, what were they?

VAR115 _____ VAR117 _____ VAR119 _____

VAR116 VAR118

45. Do student dress and hair style:

VAR120 a. Offend other workers? Yes____ No____

VAR121 b. Cause safety problems? Yes____ No____

46. Please describe your procedures for training students for the work to which they are assigned.

VAR122 _____

_____

_____

47. Do you consider these procedures to be fully effective?

VAR123 ☐ Yes ☐ No

If not, please explain how they might be improved.

_____

_____

48. Do you provide any special classroom instruction for the student trainees?

VAR124 ☐ Yes ☐ No

If yes, please list the subjects covered and whether or not you consider them to be fully effective? If not, please explain how they might be improved.

_____

_____

_____

49. Please provide a breakdown of student time by activity at your facility.

	Activity	% of Time
VAR125	a. Observation	_____
VAR126	b. Classroom training at place of employment	_____
VAR127	c. Actual work	_____
VAR128	d. Maintenance	_____
	e. Other (please list)	_____
		100%

50. What is the average number of work/training hours per student per week? VAR130 VAR131 _____

51. Do your supervisors know these trainees are in a "work-education" program when they are assigned?

VAR132 ☐ Yes ☐ No

52. Do people supervising or working with student trainees receive any special instruction?

VAR133 ☐ Yes ☐ No VAR134

If yes, what?

_____

_____

_____

53. How have the regular employees reacted to the company's participation in the work education program and/or hiring of its graduates?

VAR135 _____

_____

_____

54. Has the exposure of the regular workers to your trainees affected the workers adversely in any way that you have noticed? (e.g. more goofing off, sloppier work habits, etc.?

VAR136 ☐ Yes ☐ No

If yes, specify

_____

_____

_____

55. In what ways (if any) have the regular workers benefited?

VAR137 _____

_____

_____

56. In what ways (if any) has the company benefited?

VAR138 _____ VAR142 _____

VAR139 _____ VAR143 _____

VAR140 _____ VAR144 _____

VAR141 _____

57. Has your company expressed a strong commitment to work education in general?

VAR145 ☐ Yes ☐ No

If yes, in what ways? (e.g. budgetary support, written statements, public expressions.)

_____

_____

_____

58. a. Are the trainees paid by your company?

VAR146 ☐ Yes ☐ No

If yes, what are the pay rates? (To interviewer: obtain compensation schedule for different types of jobs. Also obtain compensation schedule for regular employees in these jobs.)

VAR147 _____ VAR149 _____

VAR148 _____ VAR150 _____

_____

b. If trainees are not paid, what compensation (if any) is provided?

VAR151 _____

_____

59. Is your company reimbursed for its participation in the program?

VAR152 ☐ Yes ☐ No

If yes, please provide a cost breakdown of reimbursed expenses.

VAR153 _____

_____

_____

60. Are there expenses which are non-reimbursed?

VAR154 ☐ Yes ☐ No

If yes, please provide a cost breakdown of non-reimbursed expenses.

VAR155 _____

_____

_____

61. Would compensation or increased compensation for non-reimbursed expenses allow you to expand the program?

VAR156 ☐ Yes ☐ No

62. Do you consider the on-the-job training facilities as generally adequate?

VAR157 ☐ Yes ☐ No

Why or why not?

_____

_____

_____

63. a. Do you have an advisory committee for this program?

VAR158 ☐ Yes ☐ No

If yes, what groups or organizations are represented?

_____

_____

_____

b. How often does it meet?_____

c. What is its role?

_____

_____

_____

_____

_____

_____

_____

_____

_____

UNION PARTICIPATION

65. Are any of your employees members of a union?

VAR159 ☐ Yes ☐ No

66. Are the jobs held by students normally covered by a union contract?

VAR160 ☐ Yes ☐ No

67. Are students members of the union?

VAR161 ☐ Yes ☐ No

68. Does any union cooperate with you in operating the program?

VAR162 ☐ Yes ☐ No

69. If yes, what is the name of the union_____, local_____ and the name and telephone number of:

a. The shop steward? Name_____

Telephone number_____

b. President of the union local? Name _____

Telephone number_____

70. a. Was this union involved in the decision to participate in the work education program?

VAR163 ☐ Yes ☐ No

b. At what stage was the union brought in? (e.g. planning, organization, initial operation, later operation.)

VAR164 _____

71. Please think of the work education students in your employ in terms of their potential as a regular employee and list each in the appropriate category below. List each students name in the appropriate category below.

Outstanding	Above Average		Below Average	Very Poor
VAR165	VAR166	VAR167	VAR168	VAR169

72. On a 5-point scale from poor to excellent, with 1 for poor and 5 for excellent, please rate the program on each of the following:

			1 Poor	2	3 Average	4	5 Excellent	Don't know	Not applicable
VAR170	a.	Enthusiasm of students . . . . . a.							
VAR171	b.	Enthusiasm of teachers . . . . . b.							
VAR172	c.	Quality of on-the-job supervision . . . c.							
VAR173	d.	Adequacy of facilities . . . . . d.							
VAR174	e.	Relating of classroom work to on-the-job training . . . . . e.							
VAR175	f.	Relevance of training to real-world working conditions . . . . . f.							
VAR176	g.	Cooperation of employers . . . . . g.							
VAR177	h.	Cooperation of unions. . . . . h.							
VAR178	i.	Intellectual ability of students in their field . . . . . i.							
VAR179	j.	Vocational skills of students at beginning of program. . . . . j.							
VAR180	k.	Vocational skills of students at end of program. . . . . k.							
VAR181	l.	Quality of training materials. . . . . l.							
VAR182	m.	Recruitment of students. . . . . m.							
VAR183	n.	Job success of students in the program. . . . . n.							
VAR184	o.	Counseling . . . . . o.							
VAR185	p.	Placement of students completing program. . . . . p.							
VAR186	q.	Follow-up on former students . . . . . q.							
VAR187	r.	Job success of students completing program . . . . . r.							
VAR188	s.	Coordination and direction . . . . . s.							
VAR189	t.	Use of advisory committee. . . . . t.							
VAR190	u.	Articulation with similar programs in other institutions and districts. . . u.							
VAR191	v.	Overall quality of program . . . . . v.							
VAR192	w.	Administration's support of this program. . . . . w.							
VAR193	x.	Administration's commitment to work education in general. . . . . x.							